

LITERACIES AND DEAF EDUCATION

A theoretical analysis of the international
and Swedish literature

FORSKNING I FOKUS NR 23



Sangeeta Bagga-Gupta



Sangeeta Bagga-Gupta

LITERACIES AND DEAF EDUCATION

A theoretical analysis of the international
and Swedish literature

Forskning i Fokus nr 23

ISSN 1651-3460

Myndigheten för skolutveckling 2004

www.skolutveckling.se

Contents / Innehåll

<i>Förord</i>	4
<i>Acknowledgements</i>	5
<i>Svensk sammanfattning</i>	8
<i>English Summary</i>	11
<i>Abbreviations and translations</i>	14
1. DEAF EDUCATION. WHAT CAN WE LEARN FROM RESEARCH?	15
1.1 Introduction and background	15
1.2 Notes on the data and analysis	20
1.3 Book outline	23
1.4 Sweden – Deaf education status today	24
1.5 A brief reflective note on this study	29
2. THEORETICAL ISSUES IN LITERACY AND LANGUAGE RESEARCH	30
2.1 Literacy and multilingual practices	30
2.2 Perspectives	35
2.3 A note on language spheres, communication and research methodologies	39
3. PERSPECTIVES AND METHODOLOGICAL DISCUSSIONS IN DEAF EDUCATION AND LITERACY RESEARCH. MANUAL-ORAL-TOTAL-COMMUNICATION-BILINGUAL	43
3.1. Issues – past and present	43
3.2. Research discussions on what constitutes language	49
3.3. Achievement issues. An introduction	53
3.4. Philosophical perspectives in research and the shaping of polarized discourses in Deaf education	55
3.5. Some current cross-cultural issues in Deaf education with a focus on understanding the latest phase in Deaf education	60

4. TEXTUAL, THEORETICAL AND METHODOLOGICAL TRENDS IN THE LITERATURE	70
4.1. Introduction	70
4.2. Nature of texts	71
4.3. Theoretical and methodological orientation in the literature. Some comments	83
4.4. Central assumptions in the (emerging) literature that focuses communicationpractices	86
5. SPECIFIC RESEARCH THEMES IN THE LITERATURE	89
5.1. Introduction	89
5.2. “Better model” studies or reporting	92
5.3. Demographic research	104
5.4. Cross-cultural comparative research	111
5.5. Research on impact of technologies	129
6. DEAF BILINGUALISM. AN ESTABLISHED THEME IN THE LITERATURE	132
6.1. Introduction	132
6.2. Revisiting Deaf bilingual approaches. A conceptual analysis	133
6.3. Bilingualism and literacy	139
6.4. Swedish literature on the Deaf bilingual educational model	145
6.4.1. Introduction	145
6.4.2. Different issues in earlier studies	146
6.4.3. Historically focused studies and studies on achievement issues	147
6.4.4. Other studies on achievement issues	151
6.4.5. Further discussions on achievement and language issues	155
6.4.6. Some individual studies on the Swedish Deaf education system during the 1980s and 1990s	158
6.4.7. Projects related to the Swedish Deaf bilingual model and underlying assumptions	160
6.4.8. <i>Reflections</i> on the bilingual model projects and underlying assumptions	171
6.5. Concluding remarks	178
7. RESEARCH ON COMMUNICATION-PRACTICES. EMERGING TRENDS FROM A NEW THEME IN THE LITERATURE	181
7.1. Introduction	181
7.2. Revisiting the significance of studies that focus communication-practices	183
7.3. A brief note on the research-methodological issues in this body of research	185
7.4. Research focused on routine communication-practices or socialization activities	187

7.4.1.	Introduction to studies of <i>language use</i> in Deaf education	187
7.4.2.	Individual micro-level studies	188
7.4.3.	Studies by Maxwell and her colleagues since 1980	193
7.4.4.	Some other studies on early acquisition and exposure to fingerspelling	196
7.4.5.	Other developmental case studies	197
7.4.6.	C. Erting's 1982 doctoral study	199
7.4.7.	Studies by Padden and her colleagues during the 1990s	201
7.4.8.	Ramsey's 1993 doctoral study	203
7.4.9.	Studies at the Signs of Literacy, SOL, project	205
7.4.10.	Some further studies on fingerspelling and their implications' in signing settings	210
7.4.11.	Studies within the "Deaf students as readers and writers" projects	211
7.4.12.	Literature on ethnically diverse Deaf educational settings	215
7.4.13.	Some Ph.D. studies at the turn of the millennium	217
7.4.14.	Concluding note on research focused on routine communication-practices	223
7.5.	Swedish literature on communication-practices	224
7.6.	Concluding remarks	235
8.	A CONCEPTUALLY PUSHED SUMMARIZING DISCUSSION AND FUTURE RESEARCH DIRECTIONS IN SWEDEN	238
8.1.	Introduction	238
8.2.	Situating research in comparative terms	240
8.3.	Situating category research within issues of representation and diversity	246
8.4.	Some further salient findings	254
8.5.	Concluding suggestions for future research directions	262
	<i>Appendix 1: further notes on the data and analysis</i>	271
	<i>Appendix 2: summary of projects and work Experiences (related to the Swedish Deaf bilingual model)</i>	274
	<i>Appendix 3: Central grass root level movements that enabled deaf voices to become visible within academia and deaf education in the united states at the end of the 20th century</i>	276
	<i>References</i>	278
	<i>Internet Resources</i>	305
	<i>Serien Forskning I Fokus vid Myndigheten för skolutveckling</i>	308

Förord

Det finns en omfattande litteratur om Dövpedagogik. För att få hjälp med att reda ut begreppen literacy och Dövpedagogik och för att gå igenom den forskning som finns inom forskningsområdet gav Skolverket i uppdrag till Sangeeta Bagga Gupta att genomföra den översikt som nu föreligger.

I denna kunskapsöversikt försöker författaren urskilja perspektiv och frågor i svensk och internationell forskning. Hon beskriver historiska förskjutningar och mönster som går att avläsa tack vare denna litteraturgenomgång. Intressanta brytningar tas upp. Fokus riktas mot både språk och lärande i såväl formella utbildningssammanhang som i vardagliga situationer inom och utanför skolan. Bagga Gupta säger själv, att hon vill lyfta fram de texter som förekommer, de teoretiska och metodologiska mönster som syns, de teman som träder fram samt de röster som hörs och ges uppmärksamhet. Hon efterlyser ett kritiskt tänkande och en diskussion som tar pedagogiska forskningsperspektiv som utgångspunkt.

Det är Myndigheten för skolutvecklings förhoppning att denna forskningsöversikt blir ett kritiskt och konstruktivt bidrag i den pedagogiska diskussionen om literacy och Dövpedagogik.

Annika Andrae Thelin
Forskningschef

Acknowledgements

Every project and every text has its own history and constitutes a unique journey. This book is no exception. The meta-research study that is presented here has been conducted in three different geographical settings in Sweden and the United States and has stretched over four distinct phases during the last nine years. The opportunity to focus on an area that has been at the center of controversies since the establishment of Deaf education in the 1600s has been a unique experience. This journey has also taken place in two other important senses. Studying the literature has allowed a journey back into time in order to understand the present philosophically oriented tensions in the field. The analysis has also required a meta approach to academic and faculty boundaries in order to critically understand issues in the area of literacies and Deaf education.

A number of researchers and professionals have been involved in shaping the narrative presented in this book. Different drafts of different chapters and/or the entire text have been commented by research colleagues and professionals in Deaf education as well as researchers working in the field of education more generally. In addition to thanking everyone, I would like to mention the following researchers (presented in alphabetic order) who have played a key role in shaping this narrative: Carol Erting, Gallaudet University, USA, Carol Padden, University of California, San Diego, USA, Lars-Åke Domfors, Örebro University, Sweden, Michael Karchmer, Gallaudet University, USA, Roger Säljö, Gothenburg University, Sweden and Yerker Andersson, Gallaudet University, USA. Roger Säljö, in his role of scientific leader of this project, has raised important issues and skillfully assisted in negotiating what I experienced as dilemmas during the different phases. I am indebted to him and each of the above for critically important intellectual companionship at different stages. Each of the following colleagues have also, during the last few years, commented either the entire manuscript or major sections of it and/or have engaged in one on one discussions of the many issues that have emerged in the context of this study: Karin Allard, Birgittaskolan/Örebro University, Sweden, Lena Wiklander, Stiftelsen teckenspråkscentrum/Örebro University, Sweden, Päivi Fredang, Örebro University, Sweden, Ross Mitchell, Gallaudet University, USA, Stein-Erik Ohna, Stravanger University, Norway and Franz Dotter, University of Klagenfurt, Austria. Acknowledging feedback from colleagues does not amount to holding any of them responsible for the

interpretations and reflections that are offered in this book. Despite the collective authorship that any text of necessity should pay homage to, it is the finger-punching author who can be held responsible for omissions, choices made and representations in any text.

Discussions with members of three research groups on an *everyday* basis during the last few years have also had important bearing on the analysis presented here: the “Communication, Culture and Diversity – Deaf Studies” (KKOM-DS) research group at Örebro University, Sweden, the “Signs of Literacy” (SOL) research group at Gallaudet University and demographic researchers at the Gallaudet Research Institute (GRI) at Gallaudet University, USA. Discussions with members of a fourth research setting – Department of Communication Studies, Linköping University, Sweden – my home setting during the initial phase of the project were also significant in shaping the research questions. Drafts of different parts of this text have also been discussed at seminars at Gallaudet University, USA and Örebro University, Sweden. The analysis of the literature, selection of foci, presentation of ideas, etc has been enriched by these dialogues and my own journey as a researcher has benefited in a number of ways through these discussions.

Leading two empirically focused projects and one national developmental project in the area of Deaf education and literacy issues in Sweden during the last decade has also shaped this meta-research study (the study has also shaped the projects in ways that I have not clearly understood or previously acknowledged). The close contact with teachers, school leaders and students and an understanding of the everyday realities of the Swedish special schools for the Deaf and hard-of-hearing during the second half of the 1990s has contributed to my own understanding of the research issues and questions that have guided this research project.

Librarians and library assistants working at three different university libraries have played a key role in both assisting in the literature searches that formed the basis of this meta-research study and also in raising critical awareness regarding central research pitfalls during the research process at a time when internet resources became available at universities. Christina Brage and Rosemari Malmgård’s unflinching support at Linköping University library, Sweden in the mid-1990s and Monica Norr’s every ready support at Örebro University library, Sweden during a number of years is gratefully acknowledged here. This narrative would have never been completed if Kevin Cole at Gallaudet Research Institute, GRI, Gallaudet University and Stig-Ove Nilsson at the Department of Education, Örebro University had not helped out with prompt salvaging operations and assisted with other technological pitfalls that this project has experienced.

This study grew from initial support received from Skolverket, The Swedish National Agency for Education. Annika Andrae Thelin, at Skolverket during the initial stages of the study and currently head of the research division at Myndigheten för skolutveckling, The Swedish National Agency for School

Improvement, has played an important role during the different phases of this project. As outlined later in this book, the empirical searches in this project were “re-conducted” during 2001. A one year visiting chair position at GRI, Gallaudet University made this possible. The material and intellectual support accorded by GRI and the Signs of Literacy research group at Gallaudet University during this phase are most gratefully acknowledged.

My family has traveled with me in every sense of the word on the journeys that this project have taken me to. My children’s – Anish and Rushi’s – educational life experiences and my husband’s – Anil’s – research projects in Sweden and the USA have allowed me to understand education and meta-research studies in new light. I owe a growing respect for the need for (and also the problems inherent with) “evidence based research” to Anil’s parallel meta-research studies in the field of anaesthesia during the last couple of years.

This project would have possibly never been initiated if Bo “bobo” Hammarstedt, my late friend who worked in the area of Deaf education in Sweden, had not gently raised counter-questions and offered reflections to some of my naïve questions during the mid 1990s. Bo’s keen observations grew in part from his lifelong work as psychologist at Birgittaskolan, Sweden’s largest regional special school for the Deaf and hard-of-hearing. I have felt Bo’s absence on numerous occasions during the latter phases of this project and it is in his memory that I dedicate this book.

Sangeeta B-G

Örebro, Sweden
Summer 2004

SVENSK SAMMANFATTNING

Literacy¹ och Dövpedagogik

En teoretisk analys av internationell och svensk litteratur

Litteraturen som rör literacy och Dövpedagogik är både komplex och omfattande. Utöver den stora volymen finns flera olika akademiska fält och specialiteter inom de humanistiska, socialvetenskapliga, naturvetenskapliga och teknologiska disciplinerna representerade. Den vetenskapliga bredden har haft och har fortfarande en stor betydelse för hur utbildningen för döva formuleras och skapas. Bakom detta metaforskningsprojekt finns ingen avsikt att presentera en förteckning över den omfattande litteratur som finns tillgänglig om döva/Döva². Avsikten har däremot varit att leta efter ”röster” för att kunna följa historiska förskjutningar och beskriva tendenser och mönster som går att avläsa i litteraturen. Man kan betrakta projektet som en begreppsmässig analys av litteratur där språk och lärande studerats i formella utbildningssammanhang för Döva och i vardagskontexter inom och utanför skolan. Analysen av svensk och internationell litteratur inom området dövpedagogik och literacy har genomförts med ”epistemologiska mångfaldsglasögon” (Sleeter 2001, 210, min översättning), när det gäller både akademisk och annan dokumentation. Exempel på frågor som tas upp är vilka typer av texter som ingår i den akademiska litteraturen, vilka teoretiska och metodologiska mönster som går att urskilja, vilka tema man kan upptäcka i litteraturen och vilkas röster som hörs och ges uppmärksamhet inom området.

Den dominerande bild som vuxit fram antyder att forskare och professionella inom området för det mesta har inriktat sig på kommunikationsformer när de försökt att (implicit eller explicit) beskriva ”vad språket är”. Den orala-manuella-totalkommunikativa-tvåspråkiga debatten är tydlig i Dövpedagogikens historia. Dessa diskussioner utformar också nutidsförståelsen av döv/Döv literacies och tvåspråkighet. Den flera sekel gamla och polariserade diskussionen kring modalitetsfrågor har dels haft en kompensatorisk normalitetssträvan, dels varit uppfylld av frågor om hur man kan göra döva/

¹ Se kapitel 2 för en begreppsdiskussion.

² Se fotnot 1 i kapitel 1 för en begreppsdiskussion.

Döva barn läs- och skrivkunniga. Man kan säga att forskare och fackmän förstår döva/Döva elever i termer av ”språkliga” elever vars prestation i läsning och skrivning står i centrum. Det vetenskapliga erkännande som tilldelats världens olika teckenspråk och som därmed gav dem status av ”riktiga mänskliga” språk – under 60 och 70-talet – skapade nyare sätt att förstå Dövpedagogiken. Medan man kan notera en förskjutning i utbildningsinriktning och policy i och med att en tvåspråkighetsfas har etablerats, har icke-ideologisk och icke-normativ forskning kring dessa nya trender rapporterats primärt under 90-talet.

I litteraturen finns starka tendenser att okritiskt jämställa en utbildningsmodell med de vardagskommunikativa-praktiker³ som utgör och skapar modellen. Detta oavsett hur dövutbildningen har organiserats eller vilken kommunikativ modell eller ideologi de flesta forskare och/eller fackmän varit allierade med under olika perioder. Tendenser i den senaste litteraturen antyder däremot att fältet – kanske för första gången under ett sekel av rapportering – är föremål för ett mindre men dock stabilt skifte, som är teoretiskt inriktat på kommunikativt *innehåll* i dessa språkliga arenor och mindre på större kommunikativa debatter.

De primära inriktningar som går att identifiera i litteraturen inom området Dövpedagogik och literacy har kategoriserats inom följande övergripande teman:

- i. litteratur som på ett eller annat sätt förespråkar *bättre modeller eller praktik* i skolvärlden
- ii. *demografisk forskning*
- iii. *tvärkulturella studier* (begreppet används i projektet på ett bredare sätt än det som förekommer vanligtvis)
- iv. forskning kring ljud/tal förstärknings-*teknologier* och/eller literacy-*teknologier*
- v. *tvåspråkighetsforskning*
- vi. *forskning som fokuserar* kommunikativa-praktiker.

Tvåspråkighet är ett etablerat tema inom såväl den internationella (engelskspråkiga) som den svenska litteraturen. Dock har rapporteringen inom detta tema mestadels en ”bättre modell eller praktik” och ideologisk karaktär. I det tema som dyker upp i den senaste litteraturen (och som också primärt inriktar sig på olika tvåspråkiga modeller) intresserar man sig däremot av de kommunikativa-praktiker som konstituerar dessa olika tvåspråkiga modeller. Med andra ord har litteraturen som ingår i det sjätte temat en mer deskriptiv utgångspunkt (istället för en normativ). Att forskarna primärt har försökt att studera den tvåspråkiga modellens kommunikativa-praktiker är kanske inte så svårt att förstå. Dels dominerar denna modell Dövpedagogiken just nu, dels kan man förklara denna inriktning med att forskningen ofta bedrivs av Döva och hörande forskare som behärskar ett nationellt teckenspråk och ett nationellt majoritetsspråk. Denna forskning visar hur kompetenta användare

³ Se kapitel 2 för en begreppsdiskussion kring ”kommunikation” och ”kommunikativa-praktiker”.

av dessa två primära språk *bygger broar* mellan ett nationellt teckenspråk (t.ex. ASL, BSL, SSL, NSL, m.m.) och samhällets majoritetsspråk (t.ex. amerikansk engelska, brittisk engelska, svenska, norska, m.m.) i skolor och i hemmet och hur visuellt orienterade barn socialiseras i tvåspråkiga sammanhang.

Jag har försökt att urskilja perspektiv och frågor i den svenska litteraturen mot bakgrund av de tendenser som har kunnat identifieras i den internationella litteraturen. Utöver att jag har inriktat mig på tendenser i såväl den internationella som den svenska kontexten, har jag även uppmärksammat själva litteraturens art. Dessutom har jag också gjort ett försök att belysa de teoretiska och forskningsmetodologiska ramar som används av forskare inom området. Ett utmärkande drag i t.ex. den svenska litteraturen, är att man primärt diskuterar forskning och projekt i icke-vetenskapliga och icke referer-ee-bedömda sammanhang och/eller primärt i dövkonferenssammanhang (och inte i mer breda akademiska sammanhang). Detta karakteristiska drag skiljer sig från tendenser i den internationella litteraturen. Tillsammans med kritik som nyligen riktats mot svensk specialpedagogisk forskning, kan man även förstå denna rapportering i den svenska kontexten som mindre stringent i jämförelse med den internationella litteraturen.

Medan ett handikappsperspektiv och ett medicinskt perspektiv har dominerat forskningsdagordningen i Sverige under hela det förra seklet, har de lingvistiska, psykologiska och sociologiska perspektiven blivit mer synliga under de senaste 30 åren. Utbildningsideologiska strömningar under hela denna period – från ett ”parallellfokus på olika modaliteter” till den ”orala” och senare den ”total-kommunikativa” och nu till den ”tvåspråkiga” modellen – verkar ha skett i frånvaro av ett kritiskt tänkande som haft det pedagogiska forskningsperspektivet som utgångspunkt.

De patologisk-normaliserings- och kulturellt-lingvistiskt filosofiska traditionerna fortsätter att samexistera som ömsesidigt exkluderande perspektiv. Som en följd av att de har sina rötter i helt skilda filosofiska traditioner är det svårt att hitta möjligheter som kan skapa dialogutrymme och *sammansfoga den akademiska* – och den resursmässiga – *klyftan* mellan dem. Litteraturen som jag har analyserat visar dessvärre hur det teknologiskt-medicinska perspektivet formar dagens organisering av Dövpedagogiken. I litteraturen saknas också diskussioner som behandlar de etiska och demokratiska perspektiv som driver dessa två dominerande traditioner.

Utöver att identifiera de framtida forskningsinriktningarna i den svenska kontexten, uppmärksammar jag också frånvaron av inhemska (engelska: emic) röster i litteraturen. Tre nyckelområden som behöver beaktas är

- i. avsaknad av en pedagogiskt definierad agenda och forskning som inspirerats från pedagogiskt teoretiska perspektiv
- ii. samklang mellan paradigmatiska skiften inom olika vetenskapliga discipliner och spridning av resultat i etablerade akademiska kontexter
- iii. frånvaro av Dövrepresentation inom forskning och högre utbildningsväsende i den svenska kontexten.

ENGLISH SUMMARY

Literacies and Deaf Education

A theoretical analysis of the international and Swedish literature

Complexity, as well as scale, is an issue as far as literature in the area of literacy and Deaf education is concerned. In addition to being huge, this body of literature also encompasses many disciplines and sub-specialties not only in the social sciences and humanities, but also in the natural sciences and technology-oriented disciplines. This is an important qualification and has critical bearing on the way deaf/Deaf education has been shaped historically and continues to be shaped today. While this meta-research project has *not* made an attempt to catalogue and present the large amount of literature that is available on the deaf/Deaf, it has traced “voices” in the literature that make available historical shifts and has also described trends in the previous and current literature as being shaped by these voices. This project can be understood in terms of a conceptual analysis of literature that has attempted to study both language and learning in the formal, Deaf educational setting and in natural, everyday settings inside and outside schools. The study of Swedish and international literature – both academic and other documentation – in the area of Deaf education and literacy and has been conducted using “the lens of epistemological diversity” (Sleeter 2001, 210). Mundane issues like what kinds of texts make up the academic literature, what theoretical and methodological trends, if any, can be observed, what themes, if any, can be discerned in the literature and whose voices can be heard and are given primacy in this area have been focused.

The dominant picture that emerges suggests that researchers and professionals have for a very long time focused on the *form* of communication in order to (implicitly or explicitly) describe “what language is”. The oral-manual-total-communication-bilingual debates appear to stand out in the history of Deaf education and also seem to shape current understandings of deaf/Deaf literacies and bilingualism. The centuries’ old polarized discussions in the field of Deaf education regarding modality issues have in addition to a compensatory normalizing agenda been occupied with how deaf/Deaf children can be made literate. One can say that researchers and professionals understand deaf/Deaf students in terms of “language” students whose

performance in literacy is of particular interest. The scientific recognition accorded to different Signed Language's, in the 1960s and in the 1970s, as “real human” languages shaped newer ways of understanding Deaf education. However, while a shift in educational policy has been noted – in for instance the establishment of a bilingual phase in Deaf education – non-prescriptive research on the more recent trends in Deaf education have been reported primarily during the 1990s.

In other words, no matter how Deaf education has been organized or which communicative model or ideology the majority of researcher/s or professional/s have been aligned towards, a tendency to uncritically equate the label of the model with the everyday communicative-practices at the institutional level can be discerned in the literature. Emerging trends in the most recent literature, however suggests that the field of Deaf education and literacy is, perhaps for the first time in over a century of reporting, experiencing a small but concerted movement that is theoretically focused more on the communicative *content* of language arenas and less concerned with the great communication debates.

The overriding foci that have been identified in the literature in the area of Deaf education have been conceptualized in terms of the following themes: (i) literature that in one way or another advocates for better practices in the field; (ii) *demographic studies*; (iii) *cross-cultural studies* (the term is applied in the project in a broader sense than is generally the case); (iv) research on sound/speech amplifying-*technologies* and/or literacy-*technologies*; and (v) research on *bilingualism*. Emerging trends in the literature are identified through research in the area of *communication-practices* and this constitutes the sixth theme.

While bilingualism is an established theme in both the international and Swedish literature, this reporting tends to have a “better model” and prescriptive nature. The emerging trends in the recent literature, while also focusing primarily the bilingual models, study the communicative-practices that constitute these models. This recent literature takes a descriptive point of departure. The primary focus on understanding the communicative-practices that constitute the (different) bilingual models in Deaf education can perhaps be explained by the fact that this is the ideologically dominating model at present and also because of the fact that the Deaf and hearing researchers conducting these studies are themselves bilingual in a particular national Signed Language and the national majority language. This research shows how competent users of the two primary languages in schools and homes *build bridges* between a given Signed Language (eg. ASL, BSL, SSL, NSL, etc) and the majority societal language (eg. American English, British English, Swedish, Norwegian, etc) and also how visually oriented children are socialized into bilingual ways with words.

The project reported in this book has attempted to look at perspectives and issues in the Swedish research arena against the backdrop of the international

trends. In addition to examining trends in the international and Swedish contexts thematically, the very *nature of texts* that make up the literature in the two contexts have been focused. An attempt has also been made to throw light on the theoretical frameworks and research methodologies employed by researchers and professionals working in the area. The tradition of discussing research and projects in primarily non-peer reviewed contexts and/or primarily in Deaf related conference contexts can be noted as an overriding feature of the Swedish literature. This differs from the trends that have been noted in the international literature. In addition, and in line with recent criticism levelled at Swedish special education research, the reporting in the Swedish context can be understood as being less stringent as compared to the international literature.

While a handicap and medical perspective has dominated the research agendas in Sweden during the previous century, the last 30 years have seen the emergence of linguistic, psychological and sociological perspectives. The ideologies of education at the school level during this entire period – from the “parallel focus on different modalities” to an “oral” to a “total-communication” to a “bilingual” model – seem to have occurred in the absence of critical thinking that takes educational research perspectives as points of departure.

The pathological-normalizing and cultural-linguistic philosophical traditions continue to, in the international and Swedish research arenas, co-exist as mutually exclusive perspectives. While they have historical roots in different philosophical traditions, it is difficult to see possibilities for dialoguing and *bridging the academic* – and also significantly the resource allocation – *gulf* between them at present. The literature analyzed does however suggest important ways in which the technological-medical perspective shapes the present day organization of Deaf education. There is however a paucity of discussion regarding the ethical and democratic perspectives that underlie these two dominating traditions.

In addition to identifying future research directions in the Swedish context, the critical need for recognizing the absence of emic voices in the literature are highlighted. The near absence of (i) educationally defined agendas and research inspired from educational-theoretical perspectives, (ii) the need for research to be situated within paradigmatic shifts and the dissemination of results in regular peer-reviewed academic contexts together with (iii) the absence of Deaf representation within academics in the Swedish context represent three key elements that need to be addressed.

ABBREVIATIONS AND TRANSLATIONS

ASL:	American Sign Language
BSL:	British Sign Language
CI:	Cochlear Implant/s
DCDA:	Deaf Children of Deaf Adults
DCDP:	Deaf Children of Deaf Parents
DCHA:	Deaf Children of Hearing Adults
DCHP:	Deaf Children of Hearing Parents
DHB:	Swedish National Parents Association
DSL:	Danish Sign Language
FSL:	Finnish Sign Language
GRI:	Gallaudet Research Institute
GU:	Gallaudet University
HSFR:	The Swedish Council for Research in the Humanities and Social Sciences
RGD:	Swedish National Upper Secondary Schools for the Deaf
RGH:	Swedish National Upper Secondary Schools for the Hard-of-Hearing
Lgr 80:	The 1980 Swedish National Curriculum for the compulsory comprehensive school
Lpf 94:	The 1994 Swedish National Program Curriculum for the upper secondary school
Lpo 94:	The 1994 Swedish National Curriculum for the compulsory comprehensive school
MCE:	Manually Coded English
RPH-HÖR:	Rikscentralen för Pedagogiska Hjälpmedel, The Swedish National Centre for Educational Aid; Hörsel, Hard-of-hearing
SDR:	Swedish National Deaf Federation
SEE:	Signing Exact English
Skolveket:	Swedish National Agency for Education
SL:	Signed Language/s
SLN:	Sign Language of the Netherlands
SOU:	Swedish Official Report Series
SPM:	Swedish National Special School Authority
SS:	Swedish Special schools (for the deaf and hard-of-hearing)
SSL:	Swedish Sign Language
SÖ:	Skolöverstyrelsen, Swedish Board of Education
TTY:	Text-telephones or minicomms

CHAPTER I

Deaf Education.

What can we learn from research?

“The question ‘What is a review?’ is disconcertingly complex. (...) Equally complex is the question ‘What counts as research?’ The more we consider multiple forms of human diversity and multiple ways of knowing that emerge from different histories and disciplines, the more complicated these questions become” (Sleeter 2001, 209).

I. I. INTRODUCTION AND BACKGROUND

A focus on literacy and language issues for Deaf⁴ people has interested researchers and educators for over two centuries (Chamberlain & Mayberry 2000, Moores 2001). Decoding the orthographic form of written text based on an alphabetic language and understanding the meaning of the decoded form, while an intricate and complex task for hearing children, presents a set of very different challenges for Deaf children and adults. Schools for Deaf children were established in several countries, among them many countries in Europe and the United States, already at the end of the 18th and the beginning of the 19th centuries (Eriksson 1998). In other words, Deaf children in these societies had access to a system of institutionalized schooling when many hearing groups of their societies did not. Since this point in time researchers and professionals interested in Deaf education have presented, discussed and published reports, research and commentaries that focus literacy and language issues in different languages around the world. However, after almost two centuries of educating the deaf/Deaf and a century of investigations in the area of deaf/Deaf education and literacy, *questions continue by far to outweigh answers* and controversies continue to rage:

“At the heart of [these controversies] is the question of what is the best way to teach deaf children to read and write and thus acquire the language of society. However, the ‘best way’ is elusive. The ebb and flow of educational practice for

⁴ Following established convention at least since the early 1970s, here the upper case Deaf is used to suggest a sociocultural understanding of human identity and the lower case deaf to suggest a normative audiologically centred understanding of human beings who cannot hear. The concept Deaf describes human beings who usually, though not always, “share a ‘visual way of knowing’ and experience the small oppressions of being deaf (...) but also self-describe to being members of Deaf culture” (Fjord 1996, 67). Even though both the terms are “in a state of constant flux within the deaf community” (Fjord 1996, 66) the term Deaf is used instead of deaf to mark a sociocultural understanding instead of a technical-medical understanding of the minority group. See Chapter 3.4 for a further discussion on this issue.

most of this century, and much of the last, brought into vogue first one method (sign only), then the other (oral only), then a combination of the two, then back again to the first. All of this effort notwithstanding, deaf students on average still read at about a fourth-grade level when they leave high school (Allen & Schoem 1997, Holt, Traxler & Allen 1997). This level is about the same as Pintner and his colleagues found in the early part of this century when deaf students reading skills were first tested (Pintner 1916, 1927, Reamer 1921)” (Chamberlain & Mayberry 2000, 221).⁵

The above quote neatly captures present day concerns in Deaf education generally. By placing findings from studies from the beginning and end of the 20th century side by side, the quote also draws attention to the well intentioned, though elusive, attempts to rectify what is seen as the failure of different methodological and organizational strategies in institutional educational settings. In addition, there is recognition of the paucity of critical research regarding the contexts of Deaf education and the learning and teaching processes in the different methodological orientations:

“There are inexcusable gaps in our knowledge of the linguistic and social contexts of deaf education and of the communication processes at work in these settings” (Ramsey 1997, 2).

There is need already in this introductory chapter of this meta-research study to draw attention to an important distinction between Deaf education and literacy as research areas and Deaf education and literacy as *activity and institutional fields*.⁶ As a research enterprise “Deaf education” represents critical analysis and reflection on the institutional activity field of “Deaf education”. This means that the analysis of the institutional field of Deaf education is done from an explicit theoretical perspective and through the use of scientifically driven questions, methodologies and theories (see also Jacob 2001). Another specific issue that can be related to the above distinction is the overriding focus in the literature on educational or school systems, programs or methods. The analysis of international and Swedish literature presented in this book suggests that this ideological and prescriptive focus on systems, models and methods colors our understanding of the area. This distinction is fundamental and an attempt is made here to use it in the analysis of the literature on issues of Deaf education generally and Deaf literacy issues specifically.

The general background and purpose of the meta-research study presented in this book is reflected in an interest in the growing recognition of the “visual orientation” of Deaf and hard-of-hearing children, with a particular focus on their literacy development in preschool, school and out-of school activities. It will be worthwhile to point out here, and this will be elaborated later in Chapter 2, that even though the main purpose of this study is to critically analyze the literature and research trends, there is an interest in taking a closer

⁵ The controversies and some of the studies referred to in this quote are further discussed in Chapters 3 and 5. See also Pintner (1918) and Pintner and Paterson (1915).

⁶ Nilholm (2003) makes a parallel distinction between special education as a research enterprise and special education as an institutional field. See also Bagga-Gupta (in press-a, 2002a).

look at literature which has studied reading and writing skills in a broader sense than is normally the case (see Chapter 2 for the theoretical framework that motivates this idea). In addition, an analysis of literature that studies reading and writing in a more traditional and technical sense is also presented.

This meta-analytical study aims to review and analyze past literature and research trends within the area of “literacy and the language spheres of the Deaf”. It makes an attempt to cover both international and Swedish literature and aims to present analyses of both research and developmental work in the area (in as far as they have been documented in a sufficient manner). This has, in addition, necessitated the study of the underlying assumptions about Deaf children’s literacy that has formed the point of departure for research and practical developmental work in educational contexts. The type of questions that have framed the analysis of the literature have included:

How and in what kind of practices are Deaf children allowed to participate in literacy activities in different settings? What relationship, if any, has been reported between different communicative strategies (oral language, SL⁷, written language) in different activities and situations? What are the different communicative strategies employed by different actors – children, siblings, parents, teachers, peers, etc. – in different settings that have been studied? When and in what contexts in pre-school, school and out-of-school activities, do Deaf children meet SL and written texts and are confronted by literate tasks (eg. communicating through text-telephone, reading captioning on foreign film broadcasts or regular TV programs, text-TV, etc.)? To what extent, and with what communicative strategies and demands do hearing parents read for their Deaf children? Are these strategies and demands different when Deaf parents read for their Deaf or hearing children? What sort of relationship prevails between the home (parents) and the school vis-à-vis these literacy activities?

The type of reading and writing activities that are of interest here encompass more than the reading of books or other longer pieces of text. The theoretical orientation that is subscribed to in this study views literacy activities as integrated parts of different meaning making, communicative contexts in modern, complex societies where instructions, catalogues, manuals, rules of games, bus and railway time-tables, internet communication, etc. become more and more meaningful for children’s development of modern written language competencies. *In other words, the initial interest in this meta-research study focused on understanding whether researchers and projects had been interested in literacy in this broader sense. And if they were, what directions have their findings taken?*

⁷ Signed Language; While acknowledging the manual and visual nature of different SLs, this abbreviation also implies that the different Signed Languages have similarities to one another as different spoken languages have to one another. It is also important to note that SL is not an international language, nor are different SLs primitive or newly created languages. Research during the past 30-40 years has shown that different SLs i.e. ASL (American Sign Language), SSL (Swedish Sign Language), BSL (British Sign Language), etc. are each rule-governed languages with the systematicity and breadth of any other oral language, and each has its own complex (and different) phonology, morphology, syntax, and discourse structure (Armstrong, Karchmer & Van Cleve 2002, Bergman 1982, Grosjean 1982, Lucas 1990, Stokoe 1978; see also Chapter 3).

Some other issues that are related to the above questions include an attempt to survey how, and to what end researchers have treated the vast and complex *field of bilingualism* in the literature that deals with Deaf people. The majority of the world's population is bi- or multilingual, and it is suggested that the use of two or more languages in everyday life is as natural to the bi(multi)lingual as using only one language is for monolinguals (Grosjean 1982). Recent shifts in conceptualizations of Deaf people have enabled understanding their linguistic status as minority and bilingual human beings (see analysis and discussions in Chapter 3). The shift from a focus on their hearing status, and concomitant ability to speak an oral-majority language, to their visually oriented modes of communication in a Signed Language and written and or oral dimensions of a majority language has played an important role in re-thinking the organization of Deaf education in the past few decades in different parts of the world. This motivates a special focus on bilingualism in this meta-research study.

SLs have, and continue to exist as minority (and in general oppressed) languages in different societal contexts (Jankowski 1997; compare also Ladd 2003, Monaghan, Schmaling, Nakamura & Turner 2003). The socio-historical analysis of the literature presented in Chapter 3 shows that, like oral languages, SLs are human languages, that are transmitted from one generation to another through “natural” everyday interaction between old-timers and newer members of a social group. But it is only in the very recent past – in the last three to four decades – that the research community has systematically tried to analyze these languages (Armstrong, Karchmer & Van Cleve 2002). An important aim of the analyses presented in this book is to systematically look at studies in Deaf education, in order to understand how “first” and “second” language literacy issues have been dealt with in the literature. The type of questions that have guided this aspect of the analyses include:

Does documentation exist which could throw light on literacy vis-à-vis SL – a minority language, and literacy vis-à-vis the majority language? Have researchers systematically looked at SL-literacy, and if so, what do they imply by this, since SLs are visual-spatial languages and so far no systematically accepted symbolic system exists whereby they can be written down on paper?⁸ How has “second” language literacy been treated in the case of Deaf groups in different societies? What kinds of relationships are reported as existing between the use of SL, and the use and development of the majority language, in different societies and during different time periods? Have theoretically driven, non-prescriptive studies systematically documented the consequences for the development of “second” or secondary language literacy in groups where SL is accorded a status of a, so called, mother tongue? Can we further our understanding of *biliteracy* issues by comparing results from countries where a SL has a weaker status as compared to countries or educational programs where a SL has a stronger status? Do cross-cultural comparative studies exist which attempt to compare these issues?

⁸ Different on-going attempts by scholars in different parts of the world to create symbolic systems for different SLs can be noted here. William Stokoe's notational system, conceived of in the 1960s was one of the earliest such efforts, and has influenced international work in this area.

Another set of questions that are raised and which define the broad interests in the present study have a salient bearing on the *democratic representativeness of voices within academia* itself. Thus for instance:

To what extent can one hear Deaf people narrate their own experiences vis-à-vis their everyday language use, their everyday biliteracies, their everyday experiences of bilingualism/ monolingualism, their formal educational bilingualism/monolingualism, etc. in the academic or other literature? Does any literature authored by Deaf researchers or Deaf professionals exist where these members of the Deaf communities have articulated their views on issues related to their language use, biliterate status? Is the majority of research reported in the area of Deaf education and literacy, by people who see the topic through hearing eyes?

In this respect it is relevant to note that in the United States Deaf people have had opportunities to pursue university level studies for a longer time period than in any other nation. In addition, Deaf people from around the world have and continue to move to the United States to pursue higher studies. One specific university setting – Gallaudet University, Washington DC – has for over a century been regarded as a Mecca that draws to it international and American Deaf students at the university level (see <http://www.gallaudet.edu/>, September 2001).

“A multipurpose academic, research, and public service center [Gallaudet University, GU] provides a wide range of programs for deaf and hard of hearing people, as well as for professionals who work with this population. Gallaudet offers both undergraduate and graduate degrees and attracts students from all 50 states, U.S. territories, and many foreign countries” (King, DeCaro, Karchmer & Cole 2001, 15).

According to the 11th edition of “College & Career Programs for Deaf Students” (King, DeCaro, Karchmer & Cole 2001), over 120 other colleges, institutes and universities, in addition to the unique services offered by Gallaudet University, currently provide services in higher education for Deaf and hard-of-hearing students in the United States. University level studies in Scandinavia and other European countries have become more accessible and viable propositions for Deaf students, only more recently. Excluding the United States, there is a token representation of Deaf researchers in academia in countries through out the world. For instance Sweden, often discussed as a model country with a unique Deaf bilingual education system in place following a landmark political acceptance of SSL⁹ as one of two primary languages in Deaf education in the early 1980s, today has two deaf researchers who have obtained Ph.D’s.¹⁰ The question that can be asked in the present context is whether access to higher studies and jobs within academia allow Deaf voices to be represented in the research literature on issues related to Deaf education and literacy?

⁹ Swedish Sign Language (see also footnote 4).

¹⁰ A third Deaf researcher is working towards his Ph.D degree. All three have/are doing work in the area of structural linguistics.

The questions raised in the first section of this introductory chapter represent the *kinds* of issues that were seen to be interesting at the start of this meta-research project. These issues have been raised from theoretical points of departure and the aims of the project can be summarized in the following: This book is based on a meta-research study of the available literature in order to throw light on the extent, and the means through which Deaf people (primarily children) have received possibilities to participate in written language activities. An interest in these problems is also closely related to the social construction of Deaf children's ability, and the kind of roles and opportunities that parents, teachers and other significant adults in the child's environment attribute to Deaf children's ability to develop literacy skills. An attempt is made to look at literature that has studied different forms of language learning and modes of communication in the Deaf educational communities. Thus, the present study is a conceptual analysis of literature that has attempted to study both language learning in the formal, educational setting and in natural, everyday settings inside and outside schools.

1.2. NOTES ON THE DATA AND ANALYSIS¹¹

Different types of resources have been covered and make up the empirical basis of this meta-research study. These resources cover international and Scandinavian literature available primarily in English and Swedish. In addition an attempt has been made to cover unpublished reports, manuscripts and Ph.D thesis. Details regarding the conventional literature searches conducted in the mid 1990s and the database internet searches and use of e-resources at the turn of the millennium are presented in Appendix 1.

This review of research conducted in the area of literacy and language spheres of the Deaf does *not* make an attempt to catalogue and present the amazing amount of literature that is available on the deaf/Deaf. Literature on "Deafness" is already large and is constantly being added to. Complexity, as well as scale, is an issue that is well beyond the scope of the present study. In addition to being huge, it also encompasses many disciplines and sub-specialties in the social sciences, humanities, natural sciences and technology-oriented disciplines. This is an important qualification and has critical bearing on the way deaf/Deaf education has been shaped historically and continues to be shaped today. This dilemma is addressed here by tracing "voices" in the literature that make available historical shifts and then describing trends in the previous and current literature as being shaped by these voices.

A large amount of literature that exists today is available online and is archived in print and e-resources in different centers around the world. Covering this entire body of work is, as outlined above, not an aim of the present study and a selection is necessitated not only because of practical

¹¹ Appendix 1 complements this section with regards to the process of data identification and analysis.

concerns but also because the analysis *aims to present broad thematic trends* that have, and in some cases, continue to engage researchers in the field of literacy and Deaf education.

While access to tools such as e-resources and proximity to the collective work of research groups or the internet allow for a greater amount of freedom and creativity in conducting searches, these e-tools have their own limitations. Relying on them as primary tools does not, for instance, give access to all available literature. An issue related to creating an upper-limit for kinds of and the number of texts that can be accessed through internet resources also needs to be considered. There is need to comment on what gets included and what gets excluded from scrutiny, what becomes relevant data for analysis and how the selected literature that is studied shapes the narrative that is presented here.

A theoretically driven analysis of literature addresses two significant issues: Firstly, the issue of neutrality is addressed within a theoretical framework of relevance to the area being covered. In the field of Deaf education, the ideological shifts that have shaped the organization of schooling (see further Chapter 3) – both historically and at present times – can most fruitfully be understood and addressed through an analysis that takes its point of departure in situated understandings of language and achievement and against the backdrop of a theoretical framework. The need for a theoretical framework – something quite obvious in general scholarship endeavors – is secondly motivated and made explicit here because the historical swings in this area appear to have been pushed more by ideological considerations and less by theoretical ones. This latter issue is further addressed here through an attempt where the very *nature* of the literature itself is scrutinized (in Chapter 4).

The thrust of the analysis can be understood as having a bearing on the future. More recent trends (presented in Chapter 7) that have emerged suggest that the field of Deaf education and literacy is, perhaps for the first time in over a century of reporting, experiencing a small but concerted movement that is theoretically informed and focused more on the communicative *content* of language arenas and less concerned with the “great communication debates” that exist in this field (see Chapter 3). In these debates the *form* of communication has been central in understanding “what language is” and how success in literacy should be achieved. By shifting focus from the past to the future, this book introduces new perspectives in the field of Deaf education in the hope that the findings from this meta-research study can contribute to furthering both theoretical frameworks and institutional practices.

The need to critically understand the field of Deaf education in Sweden and to specifically throw light on future research directions in Deaf education evolved during the analysis work. This agenda is also reinforced by emerging

trends and evaluations reported in other sectors of Swedish society.¹² The theoretically driven analysis of the literature has been conducted in the spirit of “moving ahead while glancing back” (Meadow-Orlans 2001). Thus while a more traditional review would cover, at least in quantitative terms, past literature more formally, the present focus is theoretically motivated and trends and themes in the literature are identified and presented through *selected* examples. While quantitative trends are suggested, the focus of the present study is not primarily on the quantitative aspects of the literature. Thus for instance, the research and reporting presented in Chapters 5 and 6 is organized around five (of the six) thematic areas that were identified during the analysis. The themes in these chapters are illustrated through examples from the literature. An attempt has been made to cover the emerging trends in the literature on communication-practices (the sixth theme) separately in Chapter 7. The endeavor has been the presentation of a conceptually driven analysis of the *content* of the literature in Chapters 5, 6 and 7.

The period that is covered (1600s to the present) has necessitated the use of many secondary sources. Swedish and international resources have been cross-checked to throw light on country specific understandings of literacy issues and Deaf education. In view of the fact that the present conceptual analysis of literature has only studied literature available in English and Swedish, and is thereby already quiet Euro- and linguacentric, limitations of calling this analysis, and especially the discussions presented in Chapter 3, *the history* of Deaf education needs to be acknowledged. It would be more appropriate to qualify these discussions in terms of aspects of *a history*. Situated in a particular context we, as researchers, need to highlight the limitations of our own contexts. We continue to know little about pre-colonial historical development of Deaf education in Asia, Africa or Latin America or developments in Deaf education in nations where logographic or syllabic languages are used in Deaf education. Understandings from these contexts could significantly further our knowledge of learning and literacies in Deaf education in our own settings.

Another qualification that needs to be mentioned is that while trends in the literature have been analyzed for a longer period, the last 40 years have been focused more systematically. Research in the early 1960s at Gallaudet University, USA, lead by the work of the late Professor William Stokoe, and later in the 1970s by researchers in other parts of the world, revolutionized conceptualizations of SLs in that they received legitimacy in scientific and newer ways (for a further discussion on this see Chapter 3.2). This “legitimacy discourse” was a key breakthrough and has shaped newer ways of thinking that have had a bearing both on education for Deaf children and

¹² For instance the findings of Proposition 1998/99 Nr. 105 related to Swedish “handicap” research and a national evaluation of Swedish research in education by The Swedish Council for Research in the Humanities and Social Sciences – HSFR – in 1997 (see Rosengren & Öhngren 1997).

research in Deaf education. This motivates a special focus on the literature from the last few decades of the 20th century.

In brief, the theoretical analysis of international and Swedish literature aims to throw light on the kinds of studies that have been conducted in the area over time, how d/Deaf education and communication are conceptualized over time and whose voices are salient in the literature. Against this analytical backdrop, the concluding chapter attempts to identify possible future areas of research with a particular focus on the Swedish context.

1.3. BOOK OUTLINE

The remainder of this introductory chapter briefly presents the current status of Deaf education in Sweden. Outlining this rather unique model of Deaf bilingual education will serve to form the backdrop against which the rest of the book unfolds. This is an important qualification for a number of reasons. While this issue becomes explicated in the chapters that follow, it is hoped that an understanding of research trends in the international literature will further an understanding of the Swedish context specifically. The theoretical framework that has inspired the conceptual analysis is presented in Chapter 2. This is followed by a historically focused chapter (Chapter 3) where shifts in ideology that have had a bearing on the (international and Swedish) organisation of Deaf education are presented. Chapter 3 also discusses these historical shifts via the lens of the two underlying philosophical orientations that have co-existed in the literature. Both primary and secondary literature sources have been used in the construction of this chapter.

Chapters 4, 5 and 6 shift foci to other conceptual trends in the literature. Chapter 4 focuses on the very *nature of texts* that make up the literature in Deaf education and literacies. It also attempts to throw light on the theoretical frameworks and research methodologies employed by researchers and professionals working in the area. The findings presented in this chapter represent a bias in that they have specific relevance to the Swedish context. Where that is explicitly the case, an attempt is made to compare the Swedish literature trends with trends in the international literature. Chapters 5, 6 and 7 examine trends in the literature more *thematically*. Four of the six themes are presented in Chapter 5 and the fifth and sixth themes in Chapters 6 and 7 respectively. Thus, the literature is discussed under the following themes that have emerged in the analysis: literature that in one way or another advocates for *better practices* in the field; demographic studies; *cross-cultural* studies – the term being understood here in a broader sense than is usually the case; research on (i) sound/speech amplifying and (ii) literacy-*technologies*; research on bilingualism; and research that focuses *communication-practices*. Following the theoretically motivated issues and questions that have guided this study (presented in section 1.1 above), the aim has been to *illustrate* each theme with different examples from the literature. While the first four themes are presented in Chapter 5, the literature on bilingualism (the fifth theme) is presented in Chapter 6. The bulk of the Swedish literature is presented in section 6.4 of Chapter 6.

Chapter 7 presents emerging trends in the literature and perhaps comes closest to throwing light on many of the issues and questions raised above in section 1.1 of this introductory chapter. Research in the area of *communication-practices* constitutes the sixth and final theme that has been identified in this meta-research study. The concluding chapter (Chapter 8) first presents a reflective discussion where a cross-cultural comparison between the Swedish and (primarily) the Northern American contexts are focused before discussing issues related to the politics of identity and representation. This chapter summarizes the findings of this study conceptually and its final section discusses and outlines specific directions for research in Swedish Deaf education.¹³ It is to this end that an understanding of the institutional context of Swedish Deaf education becomes essential. The next section of this introductory chapter lays the ground work for this.

1.4. SWEDEN – DEAF EDUCATION STATUS TODAY

“The new curriculum [in the 1980’s] establishes a new philosophy of special education which can be said to rest on three cornerstones: handicap seen as a relation, a holistic view of the pupil with special needs, and the principle of integration (...)

The trend towards integration (...) has not been unequivocal, and the practical import of integration has varied between different categories of disability, depending not least on historical background and traditions within different sectors. For the blind and visually handicapped and for the orthopedically handicapped, integration has had the effect of emptying special schools and most pupils with such disabilities nowadays attend ordinary schools and ordinary classes. For the deaf and hard of hearing, however, no such development has taken place. This is largely due to the nature of the communicative handicap resulting from such impairments, a handicap which, *according to the dominant ideology in the field*, can only be handled if children first get to develop communicative skills within the group by means of sign language” (SÖ 1986, 15, 17, emphasis added).

The democratic organizing principle of Swedish compulsory and upper secondary schools during the last few decades of the 20th century and at the beginning of the 21st century can be understood in terms of two widely used concepts: “one school for all” and “life long learning”. These two conceptual traditions have specific implications for potential understandings of *diversity* in particular, in how minority students and students in need of support are conceptualised in educational policies and in how institutionalised education in general is organized. The democratic ideologies of the inclusive school system in Sweden is conceptualized on *non-categorical* lines.¹⁴ This means that the same school form and school curricula is understood as being applicable and “good for all” students irrespective of their class, gender, sexual orientation, functional ability status, ethnicity, etc.¹⁵ The latest national curricula (Lpf 94 and Lpo 94) for instance, conceptualise similar

¹³ Many of the areas identified may also have a bearing to the international research arena.

¹⁴ However, as discussions in Chapter 3.5 suggest, the research that is conducted on this inclusive school system very often follows categorical lines.

¹⁵ While the curricula are the same for Deaf and hearing students, there are a few differences in the syllabi.

achievement goals for both Deaf and hearing (and most other analytical categories of) students. While almost the same curricula and achievement goals apply for Deaf and hearing students, education for the Deaf in Sweden is organized at five regional state financed and administered special schools, one national state financed special school¹⁶ and at least two local government financed schools (at the compulsory, comprehensive level)¹⁷. The situation for hard-of-hearing students varies at the compulsory school level. While there are no up-to-date demographic data available on hard-of-hearing students at this level (see also SPM 2000), there are reasons to believe that the majority of hard-of-hearing students are individually placed in hearing school environments; in a few instances – perhaps only three – groups of hard-of-hearing children attend *hard-of-hearing classes*¹⁸ in hearing school environments; and in three of the five regional special schools and at least one of the two local schools, hard-of-hearing students attend hard-of-hearing classes in signing school environments.¹⁹ Deaf and hard-of-hearing students have access to three national upper secondary schools²⁰ – RGD-RGH²¹ schools – that are physically situated within three hearing upper secondary school campuses in the city of Örebro. The largest regional special school for Deaf and hard-of-hearing students and the largest local preschool facility for both these groups is also situated in this city. Many hard-of-hearing children probably also attend hearing upper secondary schools in different parts of the country. While it was previously believed that no deaf school going child in Sweden receives his or her education in a hearing school environment, the recent dramatic increases in children receiving CI in Sweden makes this assumption difficult to hold onto. All children in Sweden currently begin their school education when they are six years of age.²²

While the “one school for all” ideological point of departure can be interpreted as an inclusive and an integrated organizing principle, the ideologically motivated bilingual education of Deaf students in Sweden has been organized in a more segregated school form (Bagga-Gupta 2001a). In other words even though schools for the Deaf constitute physically distinct spaces they are governed by the same national curricula and are bound by the same kinds of goals as are other school units in the country. In this respect Swedish schools for the Deaf and hard-of-hearing can be understood

¹⁶ The national state school admits deaf students with additional disabilities.

¹⁷ In the state schools students attend grades 1-10 and in the local schools grades 1-9 (children in hearing schools attend grades 1-9). See <http://www.skolverket.se/english/system/index.shtml/> May 2003 and http://www.skolverket.se/english/system/special_schools.shtml, May 2003.

¹⁸ Swedish: Hörsel klass.

¹⁹ This should, at best, suggest a crude landscape of the Swedish compulsory comprehensive school level organization of education for Deaf and hard-of-hearing students at the beginning of the new millennium.

²⁰ Grades 1-4 (children in hearing upper secondary schools attend grades 1-3). See <http://www.skolverket.se/english/system/upper.shtml>, May 2003.

²¹ Swedish: Riksgymnasium för Döva and Riksgymnasium för hörselskadade.

²² Until 1997, Deaf children in Sweden started school at the age of seven years.

as linguistically distinct physical spaces. In addition, Deaf students follow a “bilingual” school curricula in that SSL is considered their “first” language and “written Swedish” is understood as their “second” language.²³ This implies that present day Swedish schools for the Deaf can be seen as visually oriented educational arenas which, in Peder Haug’s²⁴ terminology, could in addition be understood as “segregating integrated” (Haug 1998). A couple of other distinctions can be highlighted here (see further Chapter 6.4). It has been argued recently that Swedish Deaf bilingualism has, in the national and local school curricula, in how time and space are distributed in schools and in teachers and researchers discourse, been conceptualized in terms of a mathematical equation:²⁵

SSL + written Swedish = Swedish Deaf bilingualism

This understanding of Swedish Deaf bilingualism is elaborated in the words of the Swedish Deaf linguist and doctoral candidate Ronny Andersson: “The two languages of the deaf are Sign Language and the written variant of the national Language. The element of spoken language in deaf (Swedish) bilingualism is very limited” (R. Andersson 1994, 93).

Yet another distinction can be understood in that the learning of Swedish is explicitly prescribed in terms of keeping the two languages separate and by contrasting the grammatical structures of the two languages.

“SL and Swedish are different languages. (...) Deaf bilingualism is monocultural [sic] in that both languages primarily give expression to the same culture. [Deaf] bilingualism does not come to being spontaneously. SSL is learnt naturally and spontaneously in a signing environment in connection with the child’s general development, while learning of the second language, Swedish, in large part is dependent on teaching” (SÖ 1983, 16, my translation).

“The model regards the importance of keeping the two languages – written Swedish and Swedish Sign Language – apart from each other in teaching. The linguistic structures and means for expressing content differ fundamentally from each other. (...) This must be clear to the children from the very beginning” (Svartholm 1998, 140).

“From the deaf students perspective it would be naturally best if the description could be based on SL and highlight the similarities and differences between it and Swedish language. Such a comparative, contrastive grammar is unfortunately not possible to write today” (Svartholm 1990, 9, my translation).

“Language teaching should be conducted in a contrastive and comparative manner” (Lundström undated, 166, my translation).

The “bilingual model” in Swedish Deaf education is, in other words, built upon a prescriptive understanding of the two language codes involved and

²³ See Bagga-Gupta (2003a) for an indepth sociohistorical and interactional analysis on this situation.

²⁴ Norwegian professor of education.

²⁵ See for instance Bagga-Gupta (2002a, 2001b, 2000a, 1999a).

what their relationships should be in the context of schools. Another significant premise of the Swedish Deaf bilingual ideology can be seen in the emphasis placed on a monolingual command of SSL during the first six or seven preschool years. This is viewed as necessary *before* written Swedish is introduced in school at the age of seven. These aspects of a *prescriptive ideology* of bilingualism was implemented in the national curriculum of the early 1980s (Lgr 80, SÖ 1983) after the political acceptance of SSL as the language of instruction in 1981. Of significance in the present context is that the bilingual model in Swedish Deaf education appears to be different from other approaches to Deaf bilingual education that have been described in the international literature (see particularly Prinx & Strong 1998; see further Chapters 3.5 and 6). Bilingual ideologies which exist in school education in Sweden in general (and this includes Deaf education) have, since the mid-1970s, been grounded on the principle that if minority and immigrant children received early stimulation in their “home” or “first” language then they would be better equipped to pick up their “second” language – ie. Swedish – more easily (see for instance Hyltenstam 1996, Svonni 1996, Viberg 1996, Wingstedt 1998). This line of thought has grown not only from the social policies on bilingualism for minority and immigrant children that exist in Sweden, but also from the work on Deaf language issues that has been conducted by Swedish linguists in the late 1970s and the first part of 1980s (this body of literature is focused upon in Chapters 3, 4 and 5).²⁶

While SSL existed as a “natural” human language long before researchers started describing it in linguistic terms and long before it was accorded political acceptance,²⁷ the acknowledgement of SSL as a language of instruction has had major consequences for the lives of Deaf and hard-of-hearing individuals, their immediate relatives and other people in their social spheres (see also Bagga-Gupta 1999a, Bagga-Gupta & Domfors 2003, 1997). SSL is now a school subject studied in many Swedish schools. It is regarded as the “first” school language for Deaf pupils, the “second” school language for hard-of-hearing children who study in hard-of-hearing classes in Deaf or hearing schools, and it can be studied by hearing children in hearing schools as their “third” language²⁸. At a time when researchers in other nations in the world were arguing for the acknowledgement of their SLs in their school systems, SSL had been accorded political recognition in Sweden and work to incorporate this into the existent Deaf educational settings was initiated. This perhaps explains why the Swedish bilingual model was seen as an exemplary system by scholars and professionals (see for instance Davies

²⁶ See Börestam and Huss (2001), Cromdal (2000) and Cromdal and Evaldsson (2003) for more recent Swedish and Scandinavian discussions on sociolinguistic aspects of (hearing) bi- and multilingualism that questions the comparative-contrastive ideologies (see further Chapters 3.5 and 6).

²⁷ Unlike Finnish Sign Language, SSL has not as yet received political recognition as a “minority language”. The political decisions in the early 1980s accorded it the status of “language of instruction”.

²⁸ Swedish and English are studied by nearly all hearing students as school based “first” and “second” languages.

1991, Mahshie 1995)²⁹. despite the absence of data-driven studies of the model (see also Knoors 1997 who highlights this issue).

Today Deaf and many hard-of-hearing children in Sweden have access to an organized educational system, which is probably *unique* in the world. Its uniqueness stems from two main facts. Firstly, as has been implied above, SSL's status makes it necessary for pre-schools, compulsory and upper secondary schools to employ staff competent in SSL and to implement programs in order to re-educate staff. Secondly, the tradition of compulsory schooling makes this expertise available to all Deaf and many hard-of-hearing children in the country.³⁰

Circa 650 Deaf children are currently enrolled at the five regional special compulsory, comprehensive schools and one national state special school for Deaf and hard-of-hearing in different parts of Sweden and circa 400 at the three National Upper Secondary Schools for the Deaf (RGD) and the hard-of-hearing (RGH) in Örebro. While compulsory schooling for the Deaf has existed since the early 19th century, Deaf students have had access to special upper secondary schools in the form of RGD since 1967 (and for the hard-of-hearing in the form of RGH since 1984).

It has been estimated that over 95% of Swedish Deaf students continue into the upper secondary school level after completing their compulsory school studies. In contrast to hearing students, whose compulsory schooling and upper secondary school studies extend over nine and three years respectively, bilingual Deaf students are required to spend ten and four years at the same levels. The extra school years for bilingual Deaf students in Sweden are generally described or understood (by school teachers and leaders for instance) in terms of extra time needed for students to become bilingual.³¹ The extra year at the compulsory school level was instituted in the 1950s in order to compensate for the longer time it took students to access oral language. The shift in the Deaf school model in the early 1980s – from an oral to a signing school ideology – did not address the continuing need for this extra year and the extra years at the compulsory and upper secondary school levels continue to be part of the current system.

Bilingual policies for Swedish *Deaf compulsory comprehensive schools* have received direction both structurally and in content areas in the special school supplements to the two national curricula during the post-1981 period: Lgr 80, supplement 1983 (SÖ 1983), Lpo 94, supplement 1996 (Skolverket 1996), and more recently in a revision to Supplement 1996 (Skolverket

²⁹ The two references cited here have been authored by the same person.

³⁰ It may be the case that the recent dramatic increase in CI operations and the resulting placements of deaf children with CI in hearing school settings changes the scenario as far as this issue is concerned.

³¹ The issue of extra school years for bilingual students raises interesting questions and would be worth exploring (see Bagga-Gupta 2004, 2002a).

2002). Bilingual policies for *RGD* earlier lacked this explicit direction in the national upper secondary school curricula – Lgy 70 & Lpf 94 – that have been in effect during the last two decades. This has now been rectified and the upper secondary schools have received national guidelines that explicitly reflect the Swedish Deaf bilingual model.

1.5. A BRIEF REFLECTIVE NOTE ON THIS STUDY

While the findings of this meta-research study attempts to lay a foundation for future directions in research in Deaf education and while a distinction has been identified between Deaf education as a research area and Deaf education as an institutional field, it would be in order to situate the present study as falling within a chosen theoretical perspective. In other words, no claim is made here to being “ideologically free” or of “accusing supporters [of different school models] of being political, subjective, and ideological” (Brantlinger 1997, 425). The issues and questions raised in section 1.1 that have shaped the present study are motivated from a particular position and this framework is presented in Chapter 2. Professor Christine Sleeter’s quote presented at the beginning of this chapter represents an explicit attempt to highlight the intellectual and moral choices that any critical analysis of research must of necessity make as well as the important endeavour to try and disentangle issues related to what can (and what cannot) count as research knowledge today. This issue appears to be particularly relevant not only in the field of education (Miller 1999) but also in the field of Deaf education (Schirmer 2001).

In addition, the title of this introductory chapter: “*Deaf Education: What can we learn from research?*” is intended to reflect the fact that while research is important, research itself has limitations and cannot be used as a neutral tool from which we can distil or arrive at “educational methods”. Education itself is an enterprise with strong historical traditions and is based on accumulated experiences both ontogenetically and phylogenetically.

This book has emerged from the study of international and Swedish literature – both academic and other documentation – in the area of Deaf education and literacy using, in Sleeter’s words, “the lens of epistemological diversity” (2001, 210). Mundane issues like what kinds of texts make up the academic literature, what theoretical and methodological trends, if any, can be observed, what themes, if any, can be discerned in the literature and whose voices can be heard and are given primacy in the area of Deaf education and literacies are interrelated. This suggests that despite the use of chapters to structure this book, strict boundaries should not be assumed to exist between theoretical, empirical and analytical issues and discussions. The chapters that follow are structured as a heuristic device that allows for exploratory discoveries.

CHAPTER 2

Theoretical issues in literacy and language research

“Theories of language acquisition and reading have traditionally been derived from studies of spoken language and unintentionally excluded signed languages – primarily languages perceived solely by eye. This exclusive focus on spoken languages has often produced theoretical principles based on the psycholinguistic mechanisms related to hearing and the articulation of speech, principles that do not necessarily apply to seeing and the gesticulation of signs” (Mayberry, Morford & Chamberlain 2000, xi).

2.1. LITERACY AND MULTILINGUAL PRACTICES

The theoretical interests of the issues and questions that are being focused in the study reported here can be found within the research on literacy and numeracy in general and is particularly represented by research in the Literacy Studies (or New Literacy Studies) field (Martin-Jones & Jones 2000, Street 2000). The terms literacy and numeracy have no adequate expressions in Swedish, though the last few years have seen Swedish researchers borrow the concept “literacy” into their Swedish writings and this borrowing is done often to *differentiate* between a technical understanding of reading and writing and a more expanded understanding of human language usage. Interestingly, Carol Padden and Claire Ramsey – Deaf Studies and Literacy Studies researchers³² – draw a distinction in English between “reading and writing” and “literacy” (1993), a distinction that some Swedish researchers have started making between “läsning och skrivning” and “literacy” both more generally and also in the area of Deaf Studies research (see for instance Allard 2003, Bagga-Gupta 2002a, 2001b, Hågbrandt 2003, Skoog 2001, Söderberg 1997a, Säljö 1997a):

“We suggest that the crucial contrast between literacy and reading and writing is that literacy focuses on practices outside the individual, whereas reading and writing focus on processes occurring inside the individual. Literacy moves away from the idea that knowledge of basic skills resides in individuals’ heads and

³² Padden and Ramsey are both fluent users of ASL and English; Padden, currently professor of Communication at University of California, San Diego, USA is a Deaf child of Deaf parents. [The use of category markers such as Deaf, hearing, girls, boys, immigrants, etc. is not unproblematic from a theoretical point of departure (see Bagga-Gupta 2004 for an indepth treatment of this issue). However, this analytical context presents a delicate dilemma since one of the explicit interests in this study is understanding if, and in what ways, “Deaf” and “visually oriented” voices are represented in the international and Swedish literature on issues of literacy and Deaf education (see research issues and questions identified earlier in Chapter 1.1). This explains the use of category markers and some discretion is used in such identification.]

toward groups of people who interact using print; who accomplish career, social and personal ends with print; and who hold sets of values and attitudes about print. Literacy also shifts our view away from classrooms and methods to a range of communication activities human beings engage in over their life spans. Reading might best be taught to six-year-olds, but literacy suggests a complex range of developmental moments that occur from infancy through schooling, to adult work, family and leisure. If young adults have failed to read and write by a certain age, it is often said that their opportunity to acquire basic skills has been lost. At worst, they are called ‘illiterate’, or perhaps only ‘functionally literate’. However, if reading is regarded as part of a set of practices called literacy, different developmental timetables can hold for different people. Hence, if literacy is the focus, the school years are crucial, but so are the years before young children enter school as well as the years after formal education” (Padden & Ramsey 1993, 96-7).

This rather lengthy quote neatly captures the conceptual framework that has been used in the present analysis. The insights that this quote offer also exemplifies how theoretically driven work can be used within the fields of Disability Studies and Deaf Studies in order to shape conceptualizations within disability and Deaf research agendas. Literacy and numeracy, thus, stand for much more than the ability to read, write and calculate as such. They indicate ways of relating to reality, and refer to communicative practices that form part of social activities in education, health care and other sectors in society. Being able to read and write in a technical sense of being able to decipher and produce written statements can be construed as one type of skill, to participate in textual practices and to master social processes which are mediated through literacy is a completely different and much more complex matter.

Within the Literacy Studies tradition, literacy is not conceived as a technique that people acquire and then master. Rather, literacy is construed as a means for mediating and manipulating reality and real world events. Here literacy refers to

“communicative practices which form a part of everyday social practices in different social arenas. As a technology for communication, reading and writing exist in relation to other systems of information exchange which are concerned with the reproduction and redistribution of knowledge in different arenas in society” (Bagga-Gupta 1995, 242).

The newer and pluralistic view of literacies as being socially distributed and dialogical, and not bound to the individual or monological, can be seen in the growing literature in the field of Literacy Studies (see for instance Barton 1999, 1994, Barton & Hamilton 1998, Heath 1983, Knobel 1999, Martin-Jones & Jones 2000, Scribner & Cole 1981, Street 1995, 1984).

However, reading and writing skills have and, for the most, continue to be generally seen as vital ingredients at both the *individual* and *societal* developmental levels. Projects which have attempted to promote literacy, in both industrialized and third world nations, have had difficulty in delivering the goods, and their meager outcomes can be ascribed to an essentially administrative and “a-cultural” (Hannerz 1983) conception of what literacy

is (for a critical analysis see for instance Barton 1994, Hannerz 1992, Martin-Jones & Jones 2000, Säljö 1997a). In this respect it is interesting to note that far too many studies seem to report that school leaving reading levels of deaf students in different countries and different historical periods rarely advance beyond the 4th grade level (see also Chapters 1, 3 and 5). Projects aimed at enhancing the reading and writing skills of Deaf and hard-of-hearing students and different models for organizing Deaf school education too have had difficulties in delivering the goods (see also Chamberlain & Mayberry 2000).

Literacy skills at the societal level in third world projects, have been conceived as essentially technical and autonomous, and as skills which can be acquired per se and applied outside the context of formal educational settings (LeVine & White 1986). When attempts to promote literacy through these usually large-scale undertakings fail, there is a tendency to construe this as *failures of teaching*, rather than understanding the need to focus on what literacy is, what role text-related activities play in the lives of children and adults, and, more generally, what it means to live in a “written world” (Säljö 1988; see also Olson 1994).

A *similar tendency* can be seen in how “bilingualism” is conceptualized in educational settings. Traditionally bilingualism is understood in terms of competencies in two language codes (Grosjean 1996, 1982). However, “few areas of linguistics are surrounded by as many misconceptions as is bilingualism” (Grosjean 1996, 20; see also Cromdal 2000, Cromdal & Evaldsson 2003). While many researchers situated within new paradigms in the Social Sciences acknowledge that a competencies view of two language codes is an *idealization*, the *misleading* nature of this conceptualization is more seldom highlighted. “Monolingualism” continues to be – incorrectly – understood as the human norm, despite the growing awareness that the majority of peoples in the world are in fact bi- and even multilingual. A growing body of data-driven literature during the last two to three decades has established that bilingual (and multilingual) human beings rarely ever have “matched” or “equal” competencies in both or all the language codes that they use in their different life domains:

“The failure to understand that bilinguals normally use their languages for different purposes, with different people, and in different domains of life has been a major obstacle to obtaining a clear picture of bilinguals and has had many negative consequences: bilinguals have been described and evaluated in terms of the fluency and balance they have in their two languages; language skills in bilinguals have almost always been appraised in terms of monolingual standards; research in bilingualism has in large part been conducted in terms of the bilingual’s individual and separate languages; and, finally, many bilinguals evaluate their language skills as inadequate. Some criticize their mastery of language skills, others strive their hardest to reach monolingual norms, others hide their knowledge of their ‘weaker’ language, and most simply do not perceive themselves as being bilingual even though they use two (or more) languages in their everyday lives” (Grosjean 1996, 22; for empirical accounts see Bagga-Gupta 2003a, 1995, Blackledge 2000, Cromdal 2000, Heath 1983, Scribner & Cole 1981, Street 1984).

Data driven research on the use of two or more languages in peoples everyday lives has important implications in the conceptual analysis of literacy issues. Studies of everyday life and languages used by human beings in different settings show that people develop the language/s they use to the level of competencies required in different domains and arenas in life (Bagga-Gupta 1995, Heath 1983, Knobel 1999, Street 1984).

To develop literate skills thus requires contact with practical tasks that support and make such skills functional and necessary. In research, this has been shown in different ways, among other things through studies that have shown that the capacity to read and write cannot be seen as something neutral which an individual carries with him/her for use in any social situation. In a classical ethnography from Iran, Street (1984) showed how literacy related skills (reading, writing, book-keeping, contract writing, etc.) were required and used in the contexts of commerce and trade but hardly ever outside those situations. It is for such tasks that literacy has become a culturally accepted tool for mediating practical everyday life activities.

Results pointing in a similar direction can also be derived from Scribner and Cole's (1981) classical studies of "the psychology of literacy". These studies were carried out in Liberia among the Vai who, at the time the studies were conducted, had contact with three different scripts; the alphabetic (through English), the indigenous syllabary, and Arabic (which moreover existed in two different versions). Scribner and Cole showed how these scripts (and the oral languages as well) were used in different contexts and therefore mediated different types of experiences; the use of English script was tied to formal schooling and social practices in production, administration and other similar contexts, while Vai script was used for personal letters and "informal" messages. High Arabic script was exclusively connected with religious practices and the reading of the Koran.

One of the main points of the accounts offered by Scribner and Cole and Street is that it is not mastery of written language that per se creates "a literate mind". Rather, the decisive issue is the connection between writing as a means for communicating experiences and codifying reality on the one hand, and certain *social practices* on the other. In particular, these accounts show how formal schooling of the Western type is an environment that makes extensive use of and reinforces practices in which written language becomes functional. But what is functional *inside* the school setting may not be functional in everyday life and work *outside* this setting, since literate activities may play no significant role here. One also has to be involved in social practices in which written language is a genuinely productive means of mediating work activities. This is an important theoretical point of departure in the analysis of the international and Swedish literature on literacies and Deaf education. An interesting question which arises is whether this more *activity and practice oriented perspective* on literacy, in general, could help throw light on some of the more pragmatic issues related to school achievement that have been a concern in Deaf education for almost two centuries.

In one sense, the attempts to study the relation between written language and concrete social practices in different sectors of society form the background for abandoning the conception of a “Great Divide” between societies and groups which have or do not have access to scripts.³³ The notion of a Great Divide, epitomized by statements such as “speech makes us human and literacy makes us civilized” (Olson 1977), characterized research on literacy through the influences of pioneers such as Goody (1977), Havelock (1982, 1963), Olson (1994), Ong (1982) and others. It was not until the 1980s that this practice oriented perspective on literacy (and other cognitive competencies) became more prominent. Part of the background for this change in perspective were studies which showed that in supposedly “fully literate” societies, too, the concrete uses of literacy varied in systematic ways between groups (see for instance Barton & Hamilton 1998, Heath 1983, Knobel 1999).

A classical study of this type was carried out by Heath (1983) in southeastern USA, where she showed how different groups relate very differently to written language. In a more recent study, Knobel (1999) – like Heath’s American study – analyzes everyday life, both inside and outside classrooms. By focusing on four very different Australian students Knobel’s study shows how everyday literacies vary dramatically in the same time and place. A common thread in both Heath’s and Knobel’s research is that they take seriously language practices *outside* of institutionalized school settings (see also Barton & Hamilton 1998). Studies like these show that on closer scrutiny written language is part of very different activities for different groups and the prototypical literate activity – the reading of an extended piece of text – may be an infrequent activity even among groups who, in conventional terms, can be understood as being literate. In this sense, there are many different kinds of literacies within the same community, and these literacies may or may not fit those employed within formal institutions such as the school. Such studies also show that while some kinds of *language skills* are focused upon in school settings, these may be quite dissimilar to – or at worst be at conflict with – everyday language practices that are focused outside classrooms. Knobel’s study for instance shows that some students are often unwittingly denied opportunities to become members of meaningful literacy discourses inside classrooms.

Similar analyses of numeracy, i.e. the mastery of systems for quantification, measurement and calculation, as a practice driven competence rather than an abstract and neutral knowledge about mathematics in an academic sense, have been done during recent years (see Carraher, Caraher & Schliemann 1985, Khan 1999, Lave 1988, Saxe 1991, Säljö & Wyndhamn 1990, 1988a,

³³ Of interest in this context is the fact that only about 100 of the world’s estimated approximately 6000 existent languages, have a written script that is associated with it. A further point of interest relates to the situation of the world’s different SLs. They, like the overriding majority of the world’s oral languages, do not have commonly accepted written scripts associated with them.

1988b, 1987, Wyndhamn 1993). In the present context numeracy can be understood as an aspect of the wider concept of literacy, i.e. as a mode of codifying and manipulating reality through the symbolic means of scripts.

In summary: classical studies since primarily the early 1980s have led to a major shift in how issues related to literacy are being understood – at least at the theoretical level. These newer, pluralistic and dynamic understandings of literacies have grown from studies of *language use* with an empirically ethnographically inspired approach to the study of communication. Two decades down the road it is interesting to reflect whether these newer understandings have in any way shaped the very institution that is seen as having responsibility for the teaching of literacy.

2.2. PERSPECTIVES

The conceptual shifts in the theoretical understandings of literacy and numeracy have occurred within a larger shift in the Social Sciences and Humanities that have shaped newer understandings of human learning, human development and human communication (see also section 2.3 below). Language is no longer only viewed as something that exists in a social vacuum and neither is language understood as mirroring reality in some neutral fashion (Linell 1998, Säljö 1997b). Meaning and interpretations occur in and through the use of language and in a sense we create our realities through the use of language itself. As cultural tools that have been created sociohistorically, the symbols and signs that have become codified into different human languages in themselves mediate the world to us. In this sense these symbols and signs are tools and mediational means through which we can understand and interpret the world (Wertsch 1998, 1985). Much of this kind of thinking has led to the theoretical orientation that is, both in the international and in the Scandinavian contexts, commonly known as the *sociocultural* or *sociobistorical perspective* (Bliss & Säljö 1999, Dysthe 2001, Rogoff 1990, Säljö 2000, Wertsch 1998, 1985).

The above theoretical discussion assists in understanding the two different ways through which one can study Deaf students Swedish, English, or more generally, a human beings literacy status. These two ways subscribe to different philosophical traditions, and have a direct bearing on “what” phenomena are studied. As will become evident in the discussions and analysis presented in Chapter 3, these two traditions overlap considerably with the two different perspectives (pathological and cultural-linguistics or medical-psychological and social-cultural) that researchers have employed and continue to fall back upon in understanding Deaf people and Deaf education and literacy.

Claes Nilholm (2003) – Swedish Communication Studies and special education researcher – describes three perspectives employed in the research conducted in the field of “special education” and the study of “disability” generally:

- (i) the medical-psychological perspective

- (ii) the critical perspective
- (iii) the dilemma perspective.

Nilhom (2003) acknowledges that while the first two perspectives dominate the field of “special education” and the study of “disability” generally, a pattern is emerging where the focus is not the study of the pathology of the individual that needs to be corrected (the medical-psychological perspective) nor specifically the study of social processes in order to deconstruct the reality of “handicaps” and “special education” (the critical perspective). Highlighting the dilemmas inherent in the institutionalized education of *all* children calls for the need to focus on the study of human beings’ social practices and cognitive processes (see also Bagga-Gupta & Nilholm 2002). This alternative “third position”, inspired from a sociocultural perspective allows for understanding human development, learning and communication in broader ways. It is this third sociocultural perspective that is understood as contributing to a changed conceptualization of areas such as development, learning and human cognition and is seen as being significant to present day understandings of the importance of a developmental approach in both ontogenesis and phylogenesis, the social origins of human higher functions and the role of cultural tools and signs in human activity (Bliss & Säljö 1999, Rogoff 1990, Wertsch 1985, Säljö 2000).

The concept – dilemma – points towards the underlying fallacy of viewing either educational methods or research as providing “total fixes” for student problems in school settings. Studies that adopt a sociocultural perspective attempt to understand how human beings live and communicate in everyday mundane activities and try to understand patterns of everyday behavior that are then seen as socializing sites. Thus, for instance achievement in school can be understood in this perspective by throwing light on the everyday contexts and routine patterns in which children are socialized (both in and outside schools) in order to understand how problems in school contexts get framed and can arise. Usually in depth studies, for instance, of the kind conducted by the literacy and numeracy researchers discussed above, are needed in order to understand these patterns (see also below).

In the more popular philosophical tradition or perspective that has been used to study the reading and writing status of an individual or a group in a given language, researchers have focused on the *psychological* and *developmental dimensions* of literacy. Within this tradition, and as has been discussed above, literacy is studied as an abstract practice, and “literacy development” is understood as occurring “inside” an individual’s head. Thus institutions such as schools, and cultures are understood as existing and influencing human beings in uniform and homogenous ways.

As implied above, a theoretically driven and increasingly more accepted way of studying a human beings literacy status, is to focus on the *interactive dimension* of literacy situated in social practices. Within this perspective or tradition the focus is on “literacy in practice”, ie., literacy is seen as being

meaningful in a particular context, on an everyday activity basis. Drawing upon a sociocultural and a sociohistorical perspective, rather than the traditional psychological perspective, a human beings “development”, or rather “socialization” is seen to occur in social interaction and not in isolation. Literacy out of context, and when viewed as an abstract practice or activity, becomes meaningless.

In summary: the psychological dimensions of literacy follow a *dichotomy view*, wherein philosophers and reserachers have attempted to trace an evolutionary process with the modern, literate human being at its pinnacle. According to this developmental trajectory the “primitive” mind or group is typified as “...small; homogenous; illiterate; highly personal; regulated by face-to-face encounters; having a strong sense of group solidarity; incapable of abstract thought; irrational, child-like and inferior to modern man” (Gee 1986, 720-1). In contrast the modern mind or group is typified as “...large diverse groupings of people; widespread literacy and technology; supposed sense of society and history; regulated by abstract rules; social relations tend to be impersonal and life is lived within ‘grids of impersonal forces and rules’” (Gee 1986, 721). The underlying assumption within the dichotomy view is that a strong linear link exists between literacy and higher order mental skills.

The younger interactive school of thought, views literacy as being essentially plural, ie. different types of literacies are understood as existing in different societies and sub-groups. In this – literacy as a set of *discourse-patterns view* – literacy is viewed as having different social and cultural contexts. Within this framework literacy is viewed as a complex, multi-faceted entity; as a set of discourse patterns ie. as ways of using language and meaning making, in writing *and* oral *or* signed communication. Accordingly, literacies and communication-practices are tied to world views, values and beliefs of particular social and cultural groups. These are integrally connected with the identity or sense of self of the people who practise them. Thus, a change of literacy practices entails a change of identity.

It is with these theoretical shifts as points of departure that the present analysis attempts to understand trends and research directions in the literature. This theoretically driven framework, and a central concern in the present study, are neatly captured in a recent exchange between a government official at a research agency³⁴ and Michael Karchmer, professor and Director GRI, Gallaudet University.³⁵ The query was related to a request for published or unpublished evidence reports and was stated in the following words:

³⁴ This research agency was situated outside the US.

³⁵ I am indebted to Mike for sharing this exchange with me. He did this as a response and comment to the synopsis of the present text in October 2001.

“We are doing a Systematic Review of the following question: ‘What is the evidence for the efficacy and effectiveness of each of the following intervention programs for children with hearing loss: auditory verbal therapy, oral approach, [national] Sign language and total communication?’”³⁶

Karchmer’s reply to the above query echo important concerns that underlie some of the pathways taken in the present analysis:

“I have to say that I am at a loss as to how to respond to your seemingly straightforward question. The general question of the efficacy of various communication approaches with deaf children in school settings is an exceptionally complicated one that has been argued for over 100 years. There is no general agreement. But I need to tell you that asking the question in the way you do will just lead you in circles. The deaf and hard of hearing student population is very heterogenous in terms of their characteristics and therefore their needs. At the very least, the question is not ‘what’s best,’ but what’s best for different kinds [of] students in different situations.

(...) the choices you lay out are not exhaustive and in fact are not mutually exclusive. But the way that the question is phrased suggests to me the kind of black-and-white thinking that has bedeviled the field for so-long. Also, these choices aren’t even parallel. Auditory therapy is just that, but [national] Sign Language is a language, not an intervention. Calling [a] SL an intervention is equivalent to calling the use of [a language] an intervention for students in [a bilingual] city.

(...) Asking the question in the way you do will produce no useful information and will only lead to further division. Please do not take this to be an unfriendly or ‘flip’ response. I care deeply about the underlying question that gives rise to your specific one. I am only trying to tell you that the way you are proceeding is not a productive one” (Autumn 2001).

It is contended here that a theoretically driven position – which is by no account a neutral position – may be one such *productive approach* that can be used to generate knowledge about the central concern posed in the above query. Karchmer suggests that the way in which the query is conceptualized is problematic and will just “lead us in circles” and “will produce no useful information”. This is so because there appears to be a *systematic selection bias* in each category or model of education available for Deaf children in many countries including the United States, thus,

“making it near impossible to reach a generalization about whether sign or oral programs can be compared. Sign programs tend to have more diverse children. Students from different settings or philosophies cannot be compared with one another because they are systematically different from each other in background” (Padden, 12 March 2002, private communication).

The explorative issues and questions raised in Chapter 1.1 have in a sense attempted to avoid issues such as these. The conceptual framework outlined here, can be said to be “selective” in the use of certain key concepts in the research field of Deaf education. The remainder of this chapter discusses these choices and the need to understand research methodologies as being enmeshed in and growing from theoretical frameworks.

³⁶ Colleagues in different parts of the United States have, in private communication, reported that they too regularly receive queries like this one.

2.3. A NOTE ON LANGUAGE SPHERES, COMMUNICATION AND RESEARCH METHODOLOGIES

The term “communication” is both a central concept but also a complex one in the *field* of Deaf education and *research* in Deaf education. It comes from the Latin “communicare” and means “to make something common”. Two implicit aspects of this concept can be highlighted for present purposes. Firstly the term implies an active participation in the development of the communicative process. Human beings in communication with one another participate actively in a communicative activity. In other words, in participating actively with one another human beings – do something actively – in the process. Secondly, an important implication, that is often sidelined, is that a message is actively constructed by the participating human beings – as they make something common. Meaning-making is thus the joint product of human communication.

Scholars working in fields such as Communication Studies, Literacy Studies and sociolinguistics have emphasized that the above epistemological sense of the term “communication” is often forgotten, not least in research which is focused on the measurement of communicative competencies, skills and processes. In the rather common conceptualisation of human communication – also known as the “transmission model” or the “radio model” – a communicating human being is understood as a “sender” who sends a “signal” to another human being, the “receiver”. The content of the message being communicated becomes thus reduced to the receiver’s capacity to “read” or “decipher” the sender’s signals. This “skill focused” and “signal focused” conceptualisation of human communication has more recently come under heavy critique and its assumptions have been challenged within the human sciences. Here it has been argued that despite the insights that the most detailed measurements of electronic activity or bloodflow in the human brain have to offer, we cannot reduce human communication to processes within the individual.³⁷ This view is in direct opposition to an understanding where communication is understood as *socialization* and in terms of *participation in social practices*. In this “participation model” the common meaning-making in the context of the *communication-practices* is central. Inspired from a sociocultural perspective one could say that individual psychological processes have their basis in the social and that these processes have (socio)historical roots (Linell 1998, Säljö 2000, Vygotsky 1986/1934, Wertsch 1998). It is for this reason that communication-practices are analytically interesting.

There is yet another reason to reflect on the scarce usage of the concept “communication” in this book. Researchers from the traditional *pathological* or *medical-psychological* perspective use the concept with equal ease to discuss the “oral speech” and “hearing” of deaf individuals, while researchers from a *cultural-linguistic perspective* use the term “communication” to mean “visual-manual language” usage. While these polarized differences are explored

³⁷ This is not to say that we have nothing to learn from these kinds of measurements.

further in the next chapter, it might be useful to introduce some of the complexities involved here. The following comparison between information regarding services and programs offered by different departments at Gallaudet University can be used here to illustrate this point.

The first piece of information is taken from a an information leaflet sent out by “The Gallaudet University Hearing and Speech Center” in January 2002 offering members of the GU community “Individual and Group Services to Improve your Communication (...) at work, at home, in school [and] in social situations”. Information presented in the leaflet under the following points implicitly gives an idea about what the concept “communication” can imply for Deaf human beings from the perspective of the “Hearing and Speech Center”:

- Lipreading/Speechreading
- Speech Production and Voice Quality
- Pronunciation and Dictionary Skills
- Voice Telephone Use
- English Idioms/Vocabulary Strategies to Improve Communication
- Communication Technology
- Writing for Communication

Information provided in a colorful leaflet produced and distributed by the “Center for American Sign Language Literacy”, at the same university during the later half of the 1990s calls for “Building Communication Partnerships”.³⁸ This center, which was established in the summer of 1995, is reported as

“not being a policy-making unit. Instead it is a resource to aid [the university] in becoming more involved with participants in our campus community by identifying communication barriers and enhancing signing proficiency (...) Research has an important ongoing role as the center develops and broadens programs and services. The center includes a skilled and knowledgeable language and testing researcher to collect and analyze data. This data will help us strengthen program offerings and direct our efforts into areas that have optimal potential in the development of core concepts for teaching and learning ASL and communication strategies”.

The co-existence of services and research into “hearing communication” and “signing communication” at the premier seat of higher education for the Deaf and hard-of-hearing in the world perhaps suggests that the polarization in the research literature is less dramatic than is the actual case. While there appears to be³⁹ considerable openness to communication strategies – both in the research conducted and the organization of teaching and learning – at

³⁸ This leaflet is the most recent one produced and was being distributed by the Department in January 2002.

³⁹ At least to a visiting scholar who has spent a year living and working on campus at GU.

GU,⁴⁰ the literature in the area of Deafness in general is clearly demarcated along the two perspectives that have been introduced in this chapter and that will be further explored in the next one.

Researchers in Deaf education who deploy a sociocultural perspective, often have a theoretical background in anthropology or related fields or in the field of Communication Studies or Deaf Studies, and are often themselves “visually oriented”⁴¹. In addition, they often use the term “communication” to mean participation in social practices in a wider sense. In the present context it is important to distinguish between the methodologically oriented discourse in Deaf education (the manual-oral-total-bilingual discussions) and more theoretical understandings of the concept “communication”. The term “language spheres” is occasionally used in this book as is the concept “communication-practices” in an attempt to steer clear of the complexities and often polarized associations that the term “communication” has acquired in the field of Deaf education.

These conceptual discussions have important theoretical-methodological implications. These are briefly touched upon here. Human communication, be it spoken language, written language or signed language, is *no longer* understood as occurring automatically or in some neutral fashion whereby information and meaning get transferred from one individual to another. By focusing upon interaction between co-present individuals through symbolic means, Linell (1996) and others have laid down an epistemology for *dialogism* “for both cognition and communication” where these are regarded as “simultaneously present aspects of both intrapersonal and interpersonal processes”⁴² (Linell 1996, 23; see also Markova 1990). Within such a “situated learning” (Lave & Wenger 1991) and a sociocultural perspective one can understand cognitive skills and processes as the *qualities of individuals-in-interaction* within contexts of *activities-in-process* (Bagga-Gupta 1995, Lave 1988, Linell 1996, Minick 1985, Rogoff 1990, Wertsch 1998). Instead of focusing upon the properties and qualities of individuals, sociocultural activity processes are focused upon, ie. activities where human beings participate in different socially constructed and meaningful practices.

Since it is in naturally occurring everyday activities that mediated artefacts and cultural tools, which are in themselves shaped sociohistorically, receive meaning(s), it is considered important to study the everyday lives of human

⁴⁰ The university developed a set of principles called “The Gallaudet Communication Statement” reflecting and outlining its ideas and feelings about communication in the mid-1990s and in President (Vice Chancellor) Dr. I. King Jordan’s words this statement “heralded a new era at Gallaudet and signaled that our communications climate has evolved, broadened, and become more inclusive” (Center for American Sign Language Literacy leaflet).

⁴¹ Visually oriented human beings interact in primarily (but not only) visual codes (see Bagga-Gupta in press-b).

⁴² Linell contrasts and discusses this against a monologicistic epistemology based on a Cartesian dichotomy and wherein cognition and communication are typically construed “as distinct processes, occurring within and between (from-to) individuals, respectively” (1996, 23).

beings and the everyday activities which they create and through which they in turn receive opportunities to develop (Wertsch 1998). Also since human development and learning is related to the “appropriation of the intellectual tools and skills of the surrounding cultural community” it is considered essential to study “the role of the formal institutions of society and the informal interactions of its members as central to the process of cognitive development” (Rogoff 1990, 11). A focus on everyday language use shifts the ground of enquiry from static identity categories to culturally grounded semiotic practices. From a sociocultural perspective then human identity is socially constituted through an individual's ability to participate and meaningfully interact or communicate with other human beings.

To summarize: dialogism as an analytical framework or epistemology has important implications in furthering our understandings of pedagogical issues concerned both with bi(multi)lingualism and literacy. Thus, instead of focusing upon competencies of individual human beings in one or more symbolic codes, be it oral, written or signed linguistic conventions, language use (including literacy) is seen as representing ways of relating to reality. However, as Linell (1996) reminds us, monologism continues to be the “dominant paradigm in the language sciences” at the end of the 20th century and this dominance is very much related to how we conceptualize issues of literacies and issues of bi(multi)lingualism (1996, 14). It is argued here that these theoretical conceptualizations are significant in how educational practices get shaped.

The remainder of this book presents a narrative that has grown from the analysis of a rather diverse body of literature that has and continues to have a bearing on Deaf education and language spheres. “The history of deaf education seems fraught with the quest for new paradigms and approaches but few attempts to discover how to improve our current models” (Schirmer 2001, 84). The next chapter throws light on some central issues in, what can at best be seen as, aspects of a history of Deaf education and issues related to this history.

CHAPTER 2

Perspectives and methodological discussions in Deaf education and literacy research.

Manual-Oral-Total-Communication-Bilingual

“We can best move ahead in the future by knowing what has been accomplished in the past, acknowledging the achievements and assessing the gaps with a broad brush without dwelling on them for too long” (Meadow-Orlans 2001, 143).

The analysis of a broad spectrum of texts that have been studied suggests that at the heart of the concerns in Deaf education lie explicit and implicit understandings of (i) what constitutes language and (ii) how best to socialize Deaf children into reading and writing in the hearing majority population’s primary language. These dual concerns have existed since the dawn of Deaf education itself and are perhaps far from being resolved at the present time.⁴³ An understanding of what language is and Deaf students reading levels have, from a historical perspective, led to the establishment of different systems, programs or models of education where oral or manual and an entire permutation and combination of models have been established and sustained. This chapter offers an outline of the historical shifts and the underlying concerns regarding language and achievement that are central in discussions related to Deaf education even at present times. Philosophical perspectives that have sociohistorical roots and that continue to shape understandings of Deaf education and literacies are presented before a brief cross-cultural discussion compares organizational principles of new discourses in Deaf education in the United States and Sweden.

3.1. ISSUES – PAST AND PRESENT

“A review of history reveals that debates over methodology have existed since Juan Pablo Bonet described the manual alphabet in the 1500s (...) [In the years since then] topics have shifted, to be sure, but dominance of the medical perspective and the ethnocentricity of those who point to the superiority of spoken language ability remain central to any discussion of the education of deaf learners” (Nover, Christensen & Lilly Cheng 1998, 62).

⁴³ See for instance the analytical history of the international congresses on the education of the Deaf in Brill (1984).

This section presents a brief historical outline of Deaf education as surmised from the study of a number of different commentaries.⁴⁴ Some aspects of this particular history will make familiar reading to researchers and professionals involved in Deaf education, other aspects may offer new insights. A large part of the narratives that constitute any “history of Deaf people” is to a large part either explicitly or implicitly related to some “history of deaf education”:

“Educational institutions have played a central role in the lives of Deaf people. While for most people school is primarily a place to secure an education, for Deaf people, school means much more. For many Deaf people, school is where they meet other Deaf people, often for the first time; at school they develop socialization patterns and friendships that frequently last throughout their lifetimes; there they may meet spouses, acquire a language that accommodates their visual orientation, and become a part of a culture that extends beyond the school years” (Jankowski 1997, 19; see also Lane, Hoffmeister & Bahan 1996, Ladd 2003).

While Bragg (1997) outlines and discusses sign lexicons and finger alphabets both before and after the Renaissance, he explicitly laments the paucity of primary evidence of, among other things, natural Deaf population groupings that could sustain any SL during this period in time:

“Without evidence of any genetic streak that would raise the deaf population to over its normal fraction of a percentage point, the assumption must be that the general population density never reached the critical threshold for the formation of deaf communities until the eighteenth century” (Bragg 1997, 4).

Thus it was not “until the invention of deaf education” (Bragg 1997, 24) that Deaf communities and different SLs can be understood to have systematically emerged. There are however, individual accounts of “SL communities” made up of Deaf and hearing members in different parts of the world (see for instance Jankowski 1997, R. E. Johnson 1991, Groce 1985). The most celebrated accounts describe the island of Marthas Vineyard where all inhabitants – Deaf and hearing – during 1600-1800 are said to have used ASL to carry out everyday communication in their lives and where deafness was considered to be a normal variation in the community (Groce 1985).⁴⁵

Swedish Deaf genealogy-hobbyist and former dentist Per Eriksson⁴⁶ distinguishes three periods in the history of Deaf education from the middle of the 16th century and until the early 1980s (Eriksson 1998). On the basis of

⁴⁴ While the interested reader would need to study more historically focused texts for a more in-depth presentation of any “History of Deaf Education”, the historical perspectives on the education of the Deaf by Donald Moores in the fifth edition of his classical volume “Educating the deaf. Psychology, Principles and practices” (2001), presents a good overview from an American perspective.

⁴⁵ For a Swedish source that describes this community see http://www.ur.se/dova/tecknade_fakta.html, November 2003.

⁴⁶ Per Eriksson is also founder, and for eight years served as president, of the *SDHS Sveriges Dövhistoriska Sällskap* (Swedish Deaf History Society). He currently serves as its secretary and is a member of the society’s board

current knowledge and status of different SLs and a noticeable shift in Deaf education discourse where Deaf bilingualism is dominant and is being implemented in a growing number of countries during the last 10-20 years, a “fourth phase” can be discerned and added to Eriksson’s three periods (Bagga-Gupta & C. Erting 2002).

According to Eriksson the period between the 1550s and 1760s constitutes the “first phase”. During this period the education of individual Deaf children was arranged by the child’s family with the aim of teaching the Deaf child to communicate with (hearing) people using *oral speech* and *writing*. Most teachers were priests or physicians and while instruction was made available in speech, writing, fingerspelling and sign, and started with everyday situations and pictures, Deaf children were rarely taught to “lip-read”. An interesting hallmark of this phase was that “because teachers jealously guarded the secrets of their trade, the art of deaf education was often veiled in mystery” and because they were “unaware of the work done by others, many teachers of the deaf thought their methods were of their own invention” (Eriksson 1998, 49). It is interesting to note that “most of what was written about deaf education at this time was either theoretical dissertations or reports of results: there was very little description of actual methods” (ibid).

Eriksson’s “second phase” was characterized by more institutionalized forms of schooling. According to Eriksson this phase was initiated by the founding, in the 1770s of three schools in France, Germany and Britain. The three men who founded these schools were not acquainted with one another. However this decade is also significant in that the First International Congress on the Education of the Deaf was held in Paris in 1878 (Brill 1984). The century that followed saw the establishment of schools for the Deaf in a number of countries in Europe. The first two decades of the 19th century saw the establishment of schools for the Deaf outside the European continent. For instance schools were established in Hartford, Connecticut in 1917 (see also below) and in Calcutta, Bengal in 1828 (Eriksson 1998, 61). The first Swedish school for the Deaf was established in Stockholm in 1808 (Pärsson 1997).

Four different “teaching systems” or “teaching ideologies” were in existence during this second phase and these four would shape discussions in Deaf education worldwide in the centuries ahead:

1. The Spanish or the *writing system/method*
2. The French or the *manual system/method*
3. The German or the *oral system/method*
4. The Deschamps or the *combined system/method*

According to Eriksson the French and the German systems or ideological orientations predominated until the Second International Congress on the Education of the Deaf in Milan, Italy in 1880. Brill (1984) reports that the first congress “adopted a resolution to the effect that preference should be

given to articulation and lipreading, which had for its purpose ‘the restoration of the deaf-mute to society’” (1984, 395). The second congress is referred to extensively in the literature and, depending on the authors ideological orientations, the second congress gets discussed in terms of a “success” (this orientation maps on to what is described as the pathological perspective, see further below) or a congress whose resolutions were “disastrous” (this orientation maps on to what is described as the cultural-linguistic perspective, see further below). Two significant resolutions that were adopted by this second congress were in favor of the so called German or the oral system:

“The convention, considering the incontestable superiority of speech over signs, (1) for restoring deaf-mutes to social life, (2) for giving them greater facility of language, declares that the method of articulation should have preference over that of signs in the instruction and education of the deaf and dumb”
 “Considering that the simultaneous use of signs and speech has the disadvantage of injuring speech and lipreading and precision of ideas, the Convention declares that the pure oral method ought to be preferred” (Gallaudet 1881, 5-6).

While only 164 people from eight countries (87 were from the host country, Italy) participated at the second congress (Brill 1984), the resolutions passed there have been identified as having shaped Deaf education demographics in the United States and “had a great effect on the education of the deaf throughout the world for the next hundred years” (1984, 395).⁴⁷ For instance, 7.5% of Deaf schools in the United States followed an oral ideology in 1882 as compared to 80% in 1919 and the number of teachers who were themselves Deaf in these schools dropped drastically from 42.5% in 1870 to 14.5% in 1917 and by 1961 this figure had dropped to 11.7% (Jankowski 1997).

Eriksson (1998) characterizes the “third phase” of Deaf education in terms of a period where national governments instituted laws that regulated education for Deaf children. In general Deaf education thereby became accessible to and mandatory for all Deaf children in Europe during this phase. While this was the case in Denmark already in the early 1800s, other countries saw this shift only at the end of the century. Deaf education became mandatory in Sweden in 1889. Domfors (2000) reports that while the oral “teaching methods” influenced the teacher preparation program that existed in Stockholm during the post-Milan period, teachers who were undergoing training were required to take signing classes and show proficiency in manual communication even during this period. This implies that the manual system never totally disappeared in Deaf education in Sweden at least. According to Eriksson’s (1998) historical account, the following four “philosophies” were predominant during a large part of the “third phase”:

⁴⁷ Brill (1984) reports that only six votes (one English vote and five American votes that included the vote of Edward Miner Gallaudet) were cast in opposition to the resolutions that the congress adopted.

“Speech should be used in the instruction of all deaf students
 All the more educable students should be taught using speech, the others with
 gestures.
 All educable deaf students should be instructed using writing.
 The most educable deaf students should be instructed using speech, and the
 least educable with gestures” (Eriksson 1998, 88).

The different co-existing philosophies of “teaching systems/methods” during “phase three” can be said to have culminated in the establishment of a formalized “total communication” system in Deaf education during the 1960s, 1970s and 1980s. Here oral, manual and written systems were all emphasized in educational institutions and this has been understood by some “as a philosophy that adopts any of the communication modes/strategies to communicate with deaf students” (Jankowski 26 February 2002, personal communication). The following are some of the different terms that were coined to capture the different systems that *later* went under the “total communication” umbrella in the United States (while so many terms were probably not used in European contexts similar terminology did appear even here).

Cued Speech:⁴⁸ A system of hand shapes used in four positions about the face to supplement speech reading by showing the exact pronunciation of words. The shapes are based on sounds that the letters make in spoken language and it is used in conjuncture with speaking.

Manually Coded English (MCE): Artificial systems – not distinct languages – that seek to present spoken English in a manual way. Signs for words are presented in the same order as in English, and invented signs are used in some systems to convey tenses, plurals, possessives and other syntactical aspects of English. Examples include Signed English, Seeing Essential English (SEE 1) and Seeing Exact English (SEE 11).

Oral Method: A method of instruction wherein children receive input through speech reading (lip reading) and the amplification of sound, and they express themselves through speech. The use of signs and fingerspelling is prohibited.

Seeing Essential English (SEE 1): A system wherein signs are created based on the root of the word and not on the meaning. (This system is not popular in educational institutions at present).

Signed English: A system designed to represent English as closely as possible using sign words based on ASL. Here a sign is used to represent each word and special sign markers are used to indicate past tense of verbs, plural nouns, pronouns, possessives, comparatives, superlatives and other grammatical elements. In Sweden this system was/is known as tecknad svenska (Signed Swedish).

Simultaneous Communication (SimCom): A system where signing and speaking is conducted at the same time.

Total Communication (TC): A philosophy of education which endorses the right of every child who is hearing impaired to communicate by whatever means are found to be beneficial including speech, signs, gestures, writing, etc. TC combines the Oral Method with the use of signs and fingerspelling. Here signs are coordinated with speech.

⁴⁸ This glossary has been compiled from literature that was created by Patricia DeCaro and Susan Foster, of NTID, National Institute of Technology, USA as the compulsory reading for the unit on “language” in an international masters course called “Project Inclusion” in 2000 (see Foster, Mudgett-Decaro, Bagga-Gupta, Domfors, Emerton, Lampropoulou, Ouellette, van Weert & Welch 2003). Örebro University, Sweden was one of the three participating universities in the project from Europe.

A study of the descriptions of these systems in the literature cannot be said to be very clarifying. There are very few studies that have actually *described* the communicative patterns in the different systems or methods that were focused in Deaf education during the third phase identified by Eriksson (compare also with research trends identified in Chapter 7). In Brill's (1984) sequential-historical analysis of developments in the education of the Deaf, a section presents an overview of "demonstrations of educational practices" (1984, 438-9) during the 1880, 1925, 1933, 1950, 1958 and 1980 International Congresses on the Education of the Deaf. While the 1933 and 1950 congresses are said to have included presentations of "classroom demonstrations and the moving pictures showing the activities of the different schools and the development in research work" (1984, 438), the 1880, 1925 and 1958 congresses included visits to the host country's Deaf schools. The 1958 and 1980 congresses are reported to have included demonstrations using TV-tapes and close circuit TV.

The brief presentations of the *different labels* that were historically and are currently used in the organization of Deaf education also suggests that a number of school systems have fundamental commonalities. However proponents of these different systems themselves suggest that there are clear-cut differences between their own positions and programmes and those of others. This issue of "labeling" of programs will be further discussed in the chapters that follow. What is significant for present purposes is that

"these are all sign systems, not Sign Languages: they are constructs which avoid the unique grammar, syntax, and structure of ASL and instead codify English on the hands and mouth. Deaf people consider them 'ugly', 'boring', 'slow', 'confusing' and almost impossible to master" (Roots 1999).

Recognition of ASL as a complex "natural" human language in the mid-1960s went on to shape new discourses in Deaf education. The ensuing studies of the linguistic structure of other SLs and the greater opportunities to travel, dialogue and disseminate knowledge during the last quarter of the 20th century probably further shaped new discourses of *bilingualism* (see further Chapters 6 and 7) and, it is contended here that, this period constitutes a "fourth phase" in Deaf education. While the recognition of different SLs as complex human languages undoubtedly played an instrumental role in this enterprise, a number of other sociocultural factors have contributed to shaping the field of Deaf education as it has emerged today in different countries. A brief account of research and issues that have shaped the establishment of the new discourses in Deaf education are presented in the next section. This forms a background against which achievement issues that have played a central role in the discussions related to Deaf education are situated (see section 3.3).

3.2. RESEARCH DISCUSSIONS ON WHAT CONSTITUTES LANGUAGE

One specific issue that has been a challenge for Deaf education is the issue of whether “manual communication through the air” constitutes a “real” language on par with “oral communication and language”. Advances in technology have revolutionized our ways of understanding life generally and human interactions and communication more specifically. The audio tape recorder has had a “dramatic influence” on the language sciences and discourse analysis (Adelswärd 1999, 23). In a similar fashion video technology has contributed to the expanding possibilities for detailed documentation and analysis of human interaction and the resources that we utilize on an everyday local level to “create conversations” (Sawyer 2001) and accomplish communication (Lindblad & Sahlström 2001). Communication between human beings, or face to face communication, in visually oriented environments could first be studied in similar detail after “the emergence of new consumer equipment that made recording of gestural data practical, affordable and accessible” during the 1970s and 1980s (Battison 2000, 7). This and the fact that it is more “cumbersome” to record and analyse visual language data (Bragg 1997, McIlvenny 1991) suggests that our understandings of everyday communication-practices in, for instance Deaf educational settings, “lags” behind our understandings of everyday interactions in hearing educational settings. The significant point to be noted is that these advances in technology enabled recognition being awarded to ASL, SSL, BSL, etc. as “languages”. Having said this, it is relevant to note that even today,

“Many people mistakenly believe that sign language is just a loose collection of pantomime-like gestures thrown together willy-nilly to allow rudimentary communication. But in truth, sign languages are highly structured linguistic systems with all the grammatical complexity of spoken languages. Just as English and Italian have elaborate rules for forming words and sentences, sign languages have rules for individual signs and signed sentences. Contrary to another common misconception, there is no universal sign language. Deaf people in different countries use very different sign languages. In fact, a deaf signer who acquires a second sign language as an adult will actually sign with a foreign accent! Moreover, sign languages are not simply manual versions of the spoken languages used in their surrounding communities. American Sign Language and British Sign Language, for example, are mutually incomprehensible” (Hickok, Bellugi & Klima 2001, 59).

As described briefly in Chapter 1, linguistic research in the 1960s by the late William Stokoe⁴⁹ (see Armstrong, Karchmer & Van Cleve 2002) and later in the 1970s by linguists and educators in other parts of the United States, Sweden, France, Denmark and England, gave the different SLs in these countries the status of “true” languages each of which had their own specific syntax and structures. This new knowledge contributed to the establishment of new models of bilingual education for Deaf children. The scientific and/or political acknowledgement and recognition of ASL, BSL, SSL, FSL

⁴⁹ His paper “Sign Language Structure” discussed the syntax and structure of ASL.

(Finnish Sign Language), DSL (Danish Sign Language), etc. as human languages shaped not only Deaf education in different countries but *also research* in the area of Deaf education. The literature does suggest that scientific recognition of SLs paved the way and made it easier for Deaf researchers to establish themselves in academia for instance. While Deaf researchers initially established themselves within SL (structural) linguistic research, they have since then, at least in North America, established themselves in fields as diverse as Communication Studies, history, computer technology, education, sociology, etc. As noted in the introductory chapter, in Sweden deaf doctoral students have so far being engaged in the study of SSL. The scientific status accorded SLs and the concomitant acceptance of Deaf people's as linguistic-cultural minorities is today understood in terms of the "new ethnicities" discourse (Lane, Hoffmeister & Bahan 1996).

It is relevant to briefly address popularized notions related to "ape language research" in the present context. Drawing conclusions from this research field and her own involvement – a couple of decades earlier at Columbia University, New York – in the raising of an infant West-African male chimpanzee called "Nim Chimpsky"⁵⁰, Laura Ann Petitto (2000a) states:

"Our research question [in the ape language research] concerned whether aspects of human language were species specific, or whether human language was entirely learnable (and teachable) from environmental input.

Although there is still much controversy surrounding the ape language research, what has remained surprisingly uncontroversial about all of the ape language studies to date is this: All chimpanzees fail to master key aspects of human language structure, even when you bypass their inability to produce speech by exposing them to other types of linguistic input, for example, natural signed languages. In other words, despite the chimpanzee's general communicative and cognitive abilities, *their linguistic abilities do not equal what we humans do with language, be it signed or spoken*" (Petitto 2000a, 42, emphasis added).

The recognition of different SLs as natural human languages has further led to research on linguistic milestones of children growing up in signing environments since birth (see for instance Caselli 1994, 1987, 1983, C. Erting 1994, C. Erting, Thuman-Prezioso & Benedict 2000, Morford & Mayberry 2000, Volterra 1981, Volterra & Caselli 1985, Volterra & C. Erting 1994). Such studies have demonstrated that children – hearing and Deaf – who grow up in signing environments from birth acquire language in much the same way that hearing children acquire spoken language when they grown up in oral environments. Reflecting on some of this literature Morford and Mayberry suggest:

"These studies focus on the phonological development of infants exposed to spoken and signed languages and underscore the parallels in the development of the perceptual and productive systems of signed and spoken languages, as well as the similarities in the language environments to which infants are exposed in sign and speech" (2000, 111).

⁵⁰ After Noam Chomsky!

While even the most recent literature sheds little light on *how* this learning takes place, these types of studies show that

“when deaf children first use signs, they do so to refer to objects, individuals, and events with which they become familiar within the social-interactive context, just as hearing children initially use [spoken] words. The learning of early sign combinations is also comparable to the learning of early [oral] word combinations as is the mastery of syntax” (Masataka 2000, 3).

More recent research on “sign motherese” and “manual babbling” also shows that the ontogeny of “manual activity” in children – Deaf and hearing – growing up in signing environments is similar to the linguistic milestones of hearing children growing up in oral environments (see for instance Holzrichter & Meier 2000, Masataka 2000, 1992, Petitto 2000a, 2000b, Petitto & Marentette 1991).⁵¹

There exists another body of research that has emerged primarily in the last decade or so and that sheds further light on the status of SLs as “true” human languages. Researchers in neuro-linguistics and other related fields have for many years been interested in understanding how Deaf individuals process SLs “in the brain” (Hickok, Bellugi & Klima 2001, Corina 1998). It has been argued that understanding the processing of visual-manual languages could assist in throwing light on whether the brain harbors specialized structures for decoding linguistic patterns in general – regardless of modality (Petitto, Zatorre, Gauna, Nikelski, Dostie & Evans 2000, Söderfeldt 1994). Using positron emission tomography Petitto et al (2000) recently reported that cerebral blood flow activity in profoundly Deaf signers processing specific aspects of SL resembled cerebral blood flow activity in hearing individuals processing oral/spoken language. This led to the conclusion that:

“neural tissue involved in language processing may not be prespecified exclusively by sensory modality (such as sound) but may entail polymodal neural tissue that has evolved unique sensitivity to aspects of the patterning of natural language. Such neural specialization for aspects of language patterning appears to be neurally unmodifiable in so far as languages with radically different sensory modalities such as speech and sign are processed at similar brain sites, while, at the same time, the neural pathways for expressing and perceiving natural language appear to be neurally highly modifiable” (Petitto et al 2000, 13961).

⁵¹ Such literature interestingly calls attention to the need for deconstructing both SLs as “Deaf peoples’ languages” and the need to critically examine why hearing children are denied access to education in almost all schools “for the Deaf”. While there are examples of both preschools and schools which follow a “visually oriented” philosophy and admit both Deaf and hearing students, the literature has not systematically discussed these settings (see Teruggi 2003 for a description of such a setting). These latter settings could be seen as some sort of “reverse/inverse integration” and as being focused on visually oriented education and not “deaf” education.

Hickok, Bellugi and Klima (2001) have presented similar findings. They report that the brain's left hemisphere is dominant for both SL and oral speech, though the brain's organization for language does not appear to be specifically affected by the modality in which language is perceived and produced (see also Petitto 2000a). SL perception has been studied by neuroimaging techniques in Sweden too (see for instance Söderfeldt 1994). In essence Petitto et al (2000) corroborate Söderfeldt's findings. These types of studies *seriously challenge* the idea that oral speech and sound are vital for human language or that only oral speech and sound can be equated with human language. Earlier studies have shown that Deaf people processing signed sentences used mostly their left hemispheres, just as hearing people parsing spoken language did. But the Petitto et al Canadian study found that in addition, both Deaf and hearing groups rely on identical brain structures for similar tasks (see also Corina 1998). These findings have led to the proposition that perhaps areas of the brain once viewed as devoted to sounds actually contain different types of cells capable of responding to the patterns of *natural language* in any form and modality. Such studies:

“demonstrate that the brain at birth cannot be working under rigid genetic instruction to produce and receive language via the auditory-speech modality, per se. If this were the case, then both the maturational time course and the nature of signed and spoken language acquisition should be different. [But] using a wide variety of techniques and participant populations, [demonstrates] that the acquisition of signed and spoken language is fundamentally similar.

What these findings do suggest is that the neural substrates that support the brain's capacity for language can be potentiated in multiple ways in the face of varying environmental pressures. The fact that the brain can tolerate variation in language transmission and reception, depending on different environmental inputs, and still achieve the target behavior provides support for there being a strong *amodal* genetic component underlying language acquisition, rather than the reverse. That is, the genetic foundations of language are not at the level of modality but at the level of abstract features of language structure such as its rhythmic and distributional patterning. Furthermore, there are multiple pathways by which language acquisition can occur. [This suggests] that a sensitivity to aspects of the specific distributional patterns found only in natural language is genetically determined and present at birth; this would constitute what is 'rigid' or 'fixed' about the brain in early language acquisition. At the same time, the language acquisition process is 'flexible' in that language can be perceived and expressed via hands or tongue” (Petitto 2000a, 48, emphasis in original).

These – rather different – tracks of research on what constitutes language can be said to have shaped a growing acceptance of SLs as “legitimate” languages generally and the role that these need to play in Deaf education specifically. At the same time one can note that some national governments require the documentation and availability of a specific national SL *dictionary* (for instance in The Netherlands, Austria and Brazil) before acknowledging their national SL at a political level (The International Conference on Dictionaries and the Standardization of Languages, 7–8 November 2001, Gallaudet University, USA). In some of these nation states, the national SL is accepted in the school system and shapes the organization of Deaf education *before* an acknowledgement takes place by the national government. In the Swedish context, as outlined earlier in Chapter 1.4, a

political acknowledgement of SSL as a language of instruction led to a shift in school level policies in the early 1980s and this has shaped the institutional field of Deaf education.⁵² However, as the analysis of literature presented in the next two sections suggests, issues related to school achievement and different philosophical perspectives have and continue to shape the roles that SLs have been accorded in educational systems in different national contexts. Having said this, it is important to recognize that

“we have passed the historical period in which it was necessary to demonstrate⁵³ that the natural languages of the Deaf are full human languages” (Hoiting & Slobin 2000, xv).

3.3. ACHIEVEMENT ISSUES. AN INTRODUCTION

In the area of hearing children’s literacy development researchers have been able to trace “the language continuum” (Kavanagh 1991) “from babbling to reading and writing” (Söderberg 1997b), but the area of alphabetic literacy has confounded researchers interested in Deaf education. The historical shifts and swings discussed above in section 3.1 and the plurality of education models or systems that currently co-exist in many parts of Europe and North America were established and continue to be sustained in the belief that one or the other model is the “correct” way to facilitate literacy learning for this group (Bagga-Gupta 2002b; see also Brill 1984). Literacy researchers and professionals

“have often pursued the ‘silver bullet’, that is, the perfect method, approach, or materials to literacy development. Persistence in this search has frequently led to adherence to a single good idea or method. As a result, reading professors promote their favorite methods and ignore or demean competing ones, school districts *adopt a single packaged program* that teachers are expected to employ faithfully, and teachers identify themselves by the method or program they use. (...) These stances reflect the belief that one method fits all students” (Schirmer 2001, 84, emphasis added).

And even though Deaf children exposed to visually oriented signing environments are sometimes understood as being at par with hearing children who have been exposed to aural environments as far as conceptual development is concerned, the literature suggests that no similar language continuum has been traced for Deaf children’s literacy development. The classical question of how to make alphabetic literacy accessible to Deaf children has and continues to engage Deaf professionals, Deaf NGOs⁵⁴ and researchers interested in Deaf education. As noted earlier, it would be interesting to learn about hearing (and Deaf) children’s involvement and progress in non-phonetically based language systems (for instance logographic or syllabic systems) in order to better understand the ways in which Deaf children access and negotiate alphabetic literacy and learning more generally. This focus on how to make alphabetic literacy accessible is

⁵⁴ SSL, has on the other hand, not received a “minority language” status in Sweden.

understandable when assessments of deaf children's literacy levels have continued to be dismal, *despite* the choice of "teaching system/methods" that are claimed to be employed in Deaf educational contexts where alphabetic languages are used. Average deaf upper secondary school graduates in the United States are said to have mastered reading and writing expected of hearing third or fourth grade levels (Allen 1986, Butler 1998; see further Chapter 5.3 & compare Heiling 1993). While evaluation systems and the effects of their outcomes differ from one national context to another,⁵⁵ it is generally recognized that, in comparisons to the general school going population, deaf children, exposed to what is considered to be different educational programs and teaching systems/methods, do not master the written form of the majority alphabetic language. There is also a paucity of literature that discusses the eventual role of exposition time to a specific language and the bearing that this would have on achievement issues.

Recent reports⁵⁶ from authorities in Sweden have suggested that at least more than half the deaf school leaving population leaves the compulsory comprehensive school level without obtaining pass grades in Swedish, Mathematics and/or English since this group is too weak in these key subjects.⁵⁷ Deaf children were not achieving as envisaged in the National Curriculum (Lgr 80 & Skolverket 1983; see for instance Heiling in preparation, 1994, 1993, Högsten 1989, Petersson, Liljestränd, Turesson-Morais, Eriksson & Hendar 2000, Rindler 1999, Skolverket 1997, SPM 2000). Swedish psychologist Kerstin Heiling's doctoral research (1993; see also 1995/1993), for instance, showed that as a group, Deaf 8th graders exposed to "sign communication" in the preschool years and during the school years at the end of the 1980s, fared better in academic achievement as compared to an earlier cohort which was understood as being educated in an oral setting during the 1960s. While Heiling does not compare the achievement results with hearing students results directly, she reports that in general when the tested students were allowed extra time on tests "their average results in reading-comprehension tests, and in a test of world knowledge, exceeded the fourth grade level" (1995/93, 221). Within the parameters of the normal test times

"14 subjects (35%) achieved as well as, or better than, the average hearing fourth-grader. Five [of 40] pupils had results comparable to, or better than, the average hearing eighth-grader. (...) Although deaf subjects in the eighties have made substantial gains in writing skills compared to their age-mates in the sixties, they are still far from the fluency and flexibility achieved by hearing subjects" (1995/93, 221).

⁵⁵ Formal evaluation for all Deaf compulsory school students have a bearing on accessibility to regular upper secondary studies as is the case in Sweden at present.

⁵⁶ Other more indirect indications vis-à-vis Deaf students competencies in Swedish were available already in the first half of the 1990s.

⁵⁷ Failure to obtain pass grades in these three subjects disqualifies students from entering regular upper secondary studies.

In her post-doctoral research, Heiling reports being surprised and concerned at the written Swedish performances of Deaf student cohorts during the 1990s since these students were, on average, “exposed to signs at about two years of age”, while the students she studied in the late 1980s (and which resulted in her doctoral thesis in 1993) “had been exposed to sign communication at an average age of 53.1 months i.e. almost 4 1/2 years” (1994, 9). While immigrant children are part of the cohorts causing concern, Heiling goes on to say that “only children who arrived in our country before school started have been included. There is no overrepresentation of immigrant children” in these groups (1994, 9).

A third reason for Heiling’s concern over levels of reading and writing performance in the early 1990s is related to her observation that most of these Deaf students

“started school with a general level of knowledge and social competence that were not common in earlier groups of deaf children.(...) General level of knowledge is certainly an important foundation for reading. How come then that the younger pupils have such difficulties learning to read? They are well oriented in lots of matters – information mainly acquired in SL” (1994, 10).

As mentioned above, more recent evaluation reports and school assessments during the second half of the 1990s are in line with Heiling’s concerns from the first half of the 1990s. Heiling’s (in preparation) continued testing of Deaf students shows that the trends she made public at a conference in Oslo in 1994 have continued during the 1990s.⁵⁸ At the same time, other changes in the Swedish Deaf schools which were a result of the implementation of the new goal oriented 1994 National Curricula (Lpo 94 & Lpf 94) makes more visible Deaf students achievement levels. Achievement issues have and continue to play a central role in how Deaf education gets organized in any part of the world. It is also a significant theme in this meta-research study. While the remaining empirical chapters explore how achievement issues are framed and themselves shape research discourses in Deaf education, the present introduction to achievement issues makes clear that “when literacy is seen to be synonymous with the results of standardized tests, then traditionally and internationally the level of literacy in the deaf/Deaf population is low” (Bagga-Gupta 2002b, 557-8).

3.4. PHILOSOPHICAL PERSPECTIVES IN RESEARCH AND THE SHAPING OF POLARIZED DISCOURSES IN DEAF EDUCATION

Assumptions about Deaf and hard-of-hearing children’s communicative development and achievement can in broad terms be said to be related to, and continue to follow, one of two schools of thought. The two schools of thought are grounded in two different philosophical traditions and overlap with the dualism that has existed in the study of literacy (elaborated earlier in

⁵⁸ I am indebted to Kerstin Heiling for sharing results of the testing-work that she has continued to do.

Chapter 2). The classical and dominating school of thought subscribes to what is sometimes referred to as the *pathological* or *medical-psychological* perspective. The second, more recent school of thought subscribes to a *cultural-linguistic* perspective (and is related to the “new ethnicities” discourse).

These two perspectives accord two very different ways of looking at, and studying human beings. The pathological perspective or the medical-psychological school of thought can be characterized by the following kinds of statements:

- the deaf⁵⁹ share a common pathology which needs to be treated or corrected
- the term 'deaf' designates people whose status as 'deaf' is determined solely by their inability to hear
- deafness (is seen as) one of the most desperate of human calamities

In sharp contrast, research that subscribes to the cultural-linguistic perspective is characterized by views such as:

- the term Deaf⁶⁰ designates people who use a SL as their primary language
- SSL, or ASL, or BSL, etc. is the language that is central to the independent culture of the Deaf in Sweden, or America, or Britain, etc. and each has its own history and traditions, its own art forms and poetry
- *to be deaf but not Deaf is indeed a calamity*, since an inability to communicate (sign) cuts one off from the Deaf community, just like an inability to hear (for a hearing person) cuts one off from the hearing world.

Padden (1996a) eloquently captures the larger shift to the cultural-linguistic perspective since the 1960s in the United States and describes the “new ethnicities rhetoric” of the early 1990s in the following:

“Almost as stunning as the changes in the deaf community in the last thirty years have been changes in the last five years [ie. the early 1990s]. Thirty years ago, Deaf people generically referred to their language as “the sign language”; it is now renamed “American Sign Language” [and ASL], standing in contrast to the also renamed British Sign Language, French Quebec Sign Language, Thai Sign Language, and the myriad national sign languages of the world. The activities of their everyday life were called “the deaf way”, or “the deaf world”; they are now called “Deaf culture’. The last five years have seen even newer vocabulary take hold, from calls for rights of Deaf people as a “linguistic minority” to schools that can educate the “bicultural” Deaf person” (Padden 1996a, 79).

Padden underlies two important aspects of Deaf people’s lives by emphasizing that Deaf individuals have always lived together with hearing relatives, teachers, co-workers, etc. and while the preferred everyday language of the Deaf in the United States and Canada has been ASL, they have always interacted, “often intimately, with individuals who use English”

⁵⁹ The lower case letter 'd' in deaf, refers to the pathological criteria, in as much as the emphasis is on the auditory non-perception status of the human being (see also footnote 1 in Chapter 1).

⁶⁰ The upper case letter 'D' in Deaf, refers to the cultural-linguistic criteria, where the emphasis is on group and cultural identity (see also footnote 1 in Chapter 1).

(Padden 1996b, 99). She argues that the increasing quantity of research and reporting into Deaf people's lives and cultures and the reporting on different SLs of the world in different academic fields "was to cast legitimacy on them" (Padden 1996a, 84). Further more, she argues, Deaf peoples entry into new occupations allowed for newer ways of self-understandings of different sub-groups within Deaf culture (for a related account of the situation in Sweden see Fredang 2003).

The emergence of Deaf voices, notably so within academia in the United States (see also Chapters 6 and 7), not-with-standing, it is the lower school achievement levels of deaf children generally that, as indicated earlier, in part continues to provide the rationale for a pathologically inspired discourse in Deaf education. Technological advancements – hearing aids in the 1950s and 1960s and Cochlear Implants (CI) at the end of the 20th century – continue to focus attention on the "inability to hear" dimension with regards to deaf people. In fact the educational system is often seen as "a battleground" (Jankowski 1997, Fjord personal communication, October 2001) where the pathological and cultural-linguistic perspectives take on rival positions. For instance, the classical disagreements between Thomas Hopkins Gallaudet and Alexander Graham Bell – two hearing American male compatriots who lived in the 19th century – shaped not only Deaf education at the institutionalized school level but also research related to Deaf education more generally. It would not be incorrect to say that European influences on global developments in Deaf education during the earlier centuries was replaced by North America taking on the lead in influencing global trends in at least the last century (see also Monaghan 2003).

Alexander Graham Bell – who is accredited among other things with the invention of the telephone – was in addition to being the son of a deaf woman, also the husband of a deaf woman. In the post-Milan mood Bell initiated and sustained a number of activities

"to make his case for Deaf people to use speech. (...) He wrote numerous articles, put on exhibitions demonstrating the speaking and speechreading abilities of Deaf people, testified on behalf of the oral approach, began publication of the Volta review (a staunchly oralist journal still in existence), and formed the American Association to Promote the Teaching of Speech to the Deaf (the present-day Alexander Graham Bell Association for the Deaf)" (Jankowski 1997, 24, emphasis in original).

In sharp contrast, Thomas Hopkins Gallaudet, an American missionary, together with Mason Fitch Cogswell, an American physician and father of a Deaf girl, and Lauret Clerk, a Deaf French man who was a teacher at the Royal Institute for the Deaf in Paris, were instrumental in establishing the first permanent school for the Deaf in Hartford, Connecticut, in the United States. These efforts paved the way for the establishment of the Deaf community as a demographic reality in the United States.

Different forms of manual communication and the use of natural SL's was, as was discussed earlier, instrumental in bringing together Deaf people in that they

“came to cherish the community that, became very much a part of their lives at residential schools. (...) One way to remain within this community was for Deaf people to secure jobs at residential schools upon graduation. Deaf people also began to take the initiative in their own education. Between 1817 and 1911, twenty-four schools for the Deaf were founded by people who were themselves Deaf” (Jankowski 1997, 22).

The hearing son of T. H. Gallaudet and Sophia Fowler, a Deaf woman, Edward Miner Gallaudet later founded and was the first president of the National Deaf-Mute College – (now known as Gallaudet University). This unique seat of higher education has gone on to becoming a world leader in research in Deaf issues and in addition to running its own university press has been home to two international research journals *American Annals of the Deaf* since 1847 and *Sign Language Studies* since 1972.

While the pathological and cultural-linguistics battle lines continue to be represented in the body of reporting and research that exists on Deaf issues, it was not until the 1980s that Deaf researchers themselves became significantly visible in this battleground arena.⁶¹ The voices of *Deaf scholars from within academia*, not only in research articles, but also in more lengthy analysis of Deaf culture (Padden & Humphries 1988), *Deaf-World* (Lane, Hoffmeister & Bahan⁶² 1996), *Deaf empowerment* (Jankowski 1997), *ASL* (Bahan 1996), *Language planning* (Nover 2000), *Deaf identity and education* (Bailes 1999, Gallimore 2000, Kannapell 1993), *Deaf culture and Deafhood* (Ladd 2003) has contributed to a growing body of emic voices and has shaped the relatively new field of Deaf Studies.⁶³

From a theoretical position, the social identity of a “disabled” or “handicapped” individual is heavily influenced by not only the criteria that are accorded a higher status by a particular society, but also the criteria to which researchers and philosophers subscribe to, in that society. Differences are created and established when researchers themselves label and categorize human beings and the perspectives they bring to an area of research (Bagga-Gupta 2004, Goffman 1963; see also Bagga-Gupta & Nilholm 2002).

This means that the concepts and categories that are used in research and other reporting in the area of Deaf education themselves highlight, create

⁶¹ Deaf individuals have always played an important, though sometimes unrecognized, role as professionals in the institutional field of Deaf education though.

⁶² While all three authors of this over 500 page long classical volume represent prominent voices in the North American literature, Bahan is Deaf, Hoffmeister is a CODA (hearing child of Deaf adults) and Lane is hearing. See further Chapter 8.1.

⁶³ Deaf Studies research groups and departments were established in different parts of the world in the 1980s and 1990s. In Sweden the first Deaf Studies research group emerged in the second half of the 1990s.

and establish differences. As has been outlined above, the pathological and cultural-linguistic perspectives imply two very different social constructions of Deaf and hard-of-hearing children's abilities and relationships to “communication” (see also Chapter 2.3). Special training programs and compensatory strategies are often tied to the traditional pathological criteria that is accorded to the functional disability related to hearing loss. In the case of Deaf children, speech training and speech reading have often therefore taken a high priority in order to increase and refine speech production. This medical-psychological influence is viewed in at least some of the literature as being essential and a first step in the child's reading – literacy – development. However, according to the cultural-linguistic perspective, the problem is conceptualized in terms of the relationship between a SL and a “second” or secondary language (often the majority language) literacy development.

The literature suggests that there is also growing awareness regarding the theoretical and pragmatic need to understand the literacy dimension of SLs (see also discussions in Chapter 2.3 and 6). In the editorial of the 1989 winter issue of the journal “The Writing Instructor” Lisa Bednar captures this in the following terms:

“Literacy and the Deaf” is a problematic topic. The source of the difficulty is in the word *literacy*, for we all, consciously or unconsciously, equate the term with mastery of the English [or other alphabetically based majority] language. In spite of the fact that literacy is not a synonym for the English language, our (hearing) American culture tends to view it as such, ignoring other critical kinds of literacy – in the case of the Deaf, for example, the gestural American Sign Language, which equals English in complexity and expressiveness” (Bednar 1989, 53, emphasis in original).

This view has more recently become visible in research in the field of Deaf education:

“Literacy (...) includes not only [English] reading skills but also skills required to become a literate user of American Sign Language (ASL). Literacy skills in ASL have only *recently* begun to be identified” (Hoffmeister 2000, 143, emphasis added).

Such a view of *SL literacy* – here ASL literacy – recognizes the theoretical and pragmatic need to take account not only of Deaf peoples literacies in a majority language but also Deaf and hearing peoples proficiencies in a particular SL. These developments and discussions can play an interesting and critical role within the framework of the Literacy Studies (and the New Literacy Studies) traditions discussed earlier in Chapter 2: What is literacy and biliteracy? In line with the earlier issues raised regarding literacies in logographic and syllabic languages, one can ask whether literacy also encompasses written forms of a given SL. And from the perspective of multiliteracies (see Martin-Jones & Jones 2000) what are the relationships, differences and similarities between the use of the written form of the majority spoken language and the written form of a minority SL?

“ASL literacy” is today an established concept in both the school level and higher educational level discourses in North America.⁶⁴ In the context of the present study it must be acknowledged that this dimension of literacies needs to be seen as new knowledge and while some effort has been made to attend to this dimension in the literature, no systematic analysis has been done to address it in this book.

The two polarized philosophical perspectives discussed here continue to exist in the literature and these perspectives appear to be mutually exclusive and excluding of one another. There is perhaps need to highlight the absence of literature that attends to or even recognizes the need for fruitful balanced dialogue between these two historically fuelled and mutually excluding perspectives. Here it is maintained that this issue is important since both these perspectives play an important role in how Deaf education gets shaped today (for a further discussion on this see Bagga-Gupta 2004). Neither does the available literature seem to address issues related to the democratic and moral dimensions vis-à-vis space, resources and status accorded to these two perspectives in research and what bearing this has on how Deaf education and literacy issues are framed today. An attempt is made to attend to this issue in a modest manner in the concluding chapter of this book.

The last section of this chapter presents a brief comparative cross-cultural discussion of the new discourses pertaining to the fourth period of bilingualism in Deaf education. This has a two-fold goal. Firstly, the next section will form the backdrop against which the more specific discussions on the thematic and emerging research trends in Deaf education can be understood (in Chapters 5, 6 & 7). Secondly, the analysis presented below also allows for a more critical understanding of the Deaf bilingual Swedish system, which is often called the “Swedish model”.

3.5. SOME CURRENT CROSS-CULTURAL ISSUES IN DEAF EDUCATION WITH A FOCUS ON UNDERSTANDING THE LATEST PHASE IN DEAF EDUCATION

As outlined in the earlier sections in this chapter, the recognition of SLs as “linguistic systems” in the 1960s and 1970s and as “true languages” more recently has been an important factor that has contributed to the emergence of a new discourse on “ethnicities” and Deaf bilingualism. This discourse draws upon representations of Deaf human beings as members of unique minority groups with their own languages and ways of life (Bagga-Gupta & C. Erting 2002, Lane, Hoffmeister & Bahan 1996, Padden 1996a, 1996b). A visual orientation to the world is central to this conceptualization of Deaf life and to notions of “visually oriented bilingualism” (Bagga-Gupta in press-b, 2000a). This has also been described in terms of “Language Acquisition by

⁶⁴ At present there appears to be no discussion on SSL literacy either in the institutional field of Deaf education or in the Swedish research literature.

Eye” (Chamberlain, Morford & Mayberry 2000). While this paradigmatic shift has become more apparent in the last decade in the United States, it coexists there with a number of different educational approaches and methods that have been in place for nearly 200 years (Bagga-Gupta & C. Erting 2002). In contrast, in the Swedish educational context this discourse has replaced others in the last two decades, continuing a historical pattern of one discourse clearly dominating at any given time (Domfors 2000).

The domination of a “national-one-track-model” at any given historical time in Sweden, as against the co-existence of a number of different models and discourses side by side even at present times in the United States can be said to derive, in addition to the demographic structures of the two countries, from local linguistic, cultural, sociohistorical and socioeconomical influences (compare also Y. Andersson 1981). For instance, the national curricula (Lgr 80, Lpo 94, etc.) in Sweden lays a common foundation for the implementation of a specific interpretation of Deaf bilingualism at all the state governed regional special schools for the Deaf and hard-of-hearing. While the five regional special schools are required to draw up their own local plans, they do so within the national framework (see also Chapter 1.4).

In contrast, the absence of a national curriculum or even a common state wide curriculum can perhaps explain the different conceptualizations of Deaf bilingualism in the literature and institutional settings in the United States.⁶⁵ For instance Prinx and Strong (1998) have, on the basis of current theory and literature conceptualized and described the proliferation of five different approaches for “bridging the gap between ASL and written English within a bilingual framework” in North America (1998, 55). They outline that proponents of *signed languages/systems as a bridge* – the first approach – suggest that some form of English like signing is a “critical element to build a bridge between a natural sign language and a written language” (1998, 56). Proponents of this bilingual system in Deaf education “recommend beginning with a strong ASL foundation and then gradually introducing MCE [Manually Coded English] separately” (ibid). *The fingerspelling, initialized signs and chaining as a bridge approach* proponents have, through the analysis of naturally occurring discourse and practices, advocated – according to Prinx and Strong – the need to focus on equivalent representations in a natural SL and the written language as aspects of more desirable “habits of language use that teachers bring into play in classroom instruction” (Humphries & MacDougall 2000, 92). Prinx and Strong call the third Deaf education approach within a bilingual framework the *sign glossing as a bridge*

⁶⁵ In addition, the large majority of researchers working in the field of Deaf education, in at least North America, conduct their doctoral and post-doctoral research in “mainstream” university departments. While this does not automatically guarantee critical thinking and authorship, researchers-in-training and established researchers at these departments become not only exposed to non-categorical research literature but they often must liaison with researchers working in mainstream academia as well. It is suggested that probably this too has a bearing on why a number of different conceptualizations of Deaf bilingualism can be currently traced in North America.

system. The rationale here is that “teaching deaf students a glossary⁶⁶ would provide them with rudimentary literacy skills in ASL that could then be transferred to written English skills” (1998, 56).

Discussions in academic internet forums and lists suggests that different SL writing systems currently either exist or are being developed in different places in the world. Developments in web based and other technologies have also been used to make available resources of different SLs more accessible (see for instance <http://www.eudeaf2003.org>, February 2003). In addition, Carmel already in 1992 presents bibliographical information regarding dictionaries of SLs from 46 countries. Recent technological advancements and insights in the Social Sciences and Humanities were presented at the International Conference of Dictionaries and the Standardization of Languages at Gallaudet University, USA.⁶⁷ This conference witnessed a marked proliferation of dictionary-making from various perspectives, including field linguistics, dialect variation, semantics, and advances in technology as they relate to SLs. Efforts in Scandinavian countries during the last two decades, for instance the work being carried out by Brita Bergman, professor at the Department of Linguistics, Stockholm University, and her colleagues, are also geared towards codifying SSL into textually accessible forms.⁶⁸ These endeavors are time-consuming and tedious, but at the same time they are significant, both from a theoretical and from a political point of departure.⁶⁹ Prinx and Strong have characterized these kinds of *sign writing systems as a bridge* as yet another way for filling the gap between a natural SL and a written language code. They however call for further research that demonstrates the efficacy of the use of these systems in institutionalized school practices.

The fifth approach that Prinx and Strong (1998) discuss is the *phonological and phonemic cueing system* where proponents

“stress the importance of incorporating the phonological code of spoken language when reading [They argue] that English phonology is available to deaf people in the form of mouth movements needed to produce specific sounds [and] that this is not strictly speechreading or lipreading English words – rather (...) the English – like mouthings that accompany some ASL signs and

⁶⁶ Written in all capital letters to distinguish them from English words. This is also an established practice of reporting SL-talk in written texts in the literature.

⁶⁷ Researchers and dictionary makers who presented at the conference included Charles Fillmore, University of California, Trude Schermer, University of Amsterdam, Sherman Wilcox, University of New Mexico, Trevor Johnston, University of New Castle, Ceil Lucas, Gallaudet University, Fernando Capovilla, University of Sao Paulo, etc. and discussions focused upon, among other things, issues of lexicography, technology, standardization and the political decisions involved in the production of written artifacts like dictionaries and encyclopedias. The SLs presented and discussed at this conference included ASL, Thai Sign Language, Indian Sign Language, Brazilian Sign Language, Australian Sign Language and the Sign Language of the Netherlands.

⁶⁸ Similar work is being done vis-à-vis NSL, DSL and FSL in the other Scandinavian countries.

⁶⁹ It should however also be recognized that lexicons as tools that codify different SLs represent meager steps in discussions of SL literacies.

fingerspellings [are] evidence that deaf people have the ability to access phonological representations of English words” (1998, 57).

It is suggested here that the specific conceptualization of Deaf bilingualism in Sweden, as has been briefly outlined in Chapter 1.4, can be understood as a different and sixth approach: *a comparative contrasting grammar structure approach with a delayed introduction of the written language*. It is also significant to note that oral language is seen as playing no role in this conceptualization of Deaf bilingual education. Proponents of this approach emphasize the centrality of keeping the two languages of the deaf separate (Lundström undated) and emphasize grammatical structures. They suggest the centrality of the “comparison between SSL and Swedish which can lead to increased insight and increased linguistic security of students” (Svartholm 1990, 7, my translation). In a presentation at a Deaf bilingual education conference in Moscow during the latter half of the 1990s, linguist Kristina Svartholm, professor at Stockholm University, describes and evaluates:

“a model for teaching written Swedish to [deaf children] as their second language (...) In this model, common texts written for children are focused on as the basis for language learning. Through translations into sign language and elucidations of parts of texts conducted by the teacher in a way that highlights similarities and differences between written language and sign language, the child gradually develops knowledge about written language form and thus also develops reading ability. Later, knowledge about written language gained from this kind of work with texts is also used for writing. Grammar is primarily looked upon and taught as a means to understand content in texts and to write texts. (...) The model regards the importance of keeping the two languages – written Swedish and Swedish Sign Language – apart from each other in teaching. Their linguistic structures and means for expressing content differ fundamentally from each other. (...) This must be clear to the children from the very beginning” (Svartholm 1998, 139-40).

In the Swedish context this (sixth) approach has been identified as the primary method of making written Swedish accessible to deaf children. Bagga-Gupta and C. Erting (2002) have suggested that the “comparative contrasting approach, with an *early* introduction of written English”, co-exists with the five approaches identified by Prinx and Strong in North America. In the Swedish context, the comparative contrasting grammar structure “model” of Deaf bilingualism appears to have taken its point of departure from different areas (see Bagga-Gupta 2002a, 2000a). Firstly, perhaps this strategy was felt to be appropriate in the re-education of the hearing staff working at the regional special schools at the beginning of the 1980s. Since the previous ideology of total communication in the 1970s required that teachers used oral Swedish *and* Signed Swedish or Sign Supported Swedish, proponents of the new model perhaps deemed it crucial that teachers stressed the *differences* between the two languages, in part so that they would themselves understand what the new ideology implied. Secondly, theoretical understandings related to SSL research showed that it was a “true” language and this may have also reinforced the idea that the languages should be kept separate in the context of teaching. However, more significantly, it was more traditional understandings of bilingualism and

language acquisition that probably also contributed to the strong emphasis on the comparative grammar discourse in Swedish Deaf bilingualism.

The research and understandings with regards to bilingualism generally, at least in the Scandinavian countries, have been clearly shaped by changing demographics as a result of immigration during the second half of the 20th century (see for instance Arnberg 1988, Bergman, Sjöqvist, Bulow & Ljung 1992, Hansegård 1968, Sjögren, Runfors & Ramberg 1996). This body of literature, at least in Sweden – which has also been the Scandinavian country that has witnessed the largest immigration – is often geared towards understanding the language situation of children and adults “who have a first language *other than Swedish*” (Runfors 1996, 5, my translation, emphasis added). This “immigrant issue” perspective on bilingualism has shaped both research generally and Deaf bilingualism particularly (compare also with Bagga-Gupta 2003a, Cromdal 2000, Cromdal & Evaldsson 2003). A recent monograph (Börestam & Huss 2001), by two Swedish professors – one at the Department of Scandinavian Languages and the other at The Center for Multiethnic Research at Uppsala University – discusses this perspective on bilingualism. In addition the authors suggest that the comparative grammar perspective is considered outdated⁷⁰ in general understandings of bilingualism:

“The term bilingualism implies a division against monolingualism and such a boundary was more important earlier on in order for the earlier applications of bilingualism. The point of departure earlier on was that the languages should at all costs be kept apart, and only those who exhibited incompetent knowledge of the languages, mixed the languages” (Börestam & Huss 2001, 11, my translation).

Newer ways of understanding bi- and multilingualism in Sweden (see also Cromdal 2000, Cromdal & Evaldsson 2003) – which appear to reflect conceptual shifts in the Social Sciences and Humanities – do not seem to have shaped the general conceptualization of bilingualism in Swedish Deaf education.

The second of the five bilingual approaches identified by Prinx and Strong (1998) – the *chaining as a bridge approach* – has emerged from descriptive research findings from interactional studies in classroom and home environments. Deaf and hearing researchers, with backgrounds in education and anthropology, Carol Erting, Tom Humphries, Carol Padden and others, whose recent findings have been used by Prinx and Strong in identifying this approach, do not themselves label their findings as a “teaching approach”. Humphries, who is himself Deaf and is senior lecturer at the Teacher Education Program at UCSD, California, USA, has however discussed

⁷⁰ These discussions are however not new in the Swedish literature. Swedish scholars like Aronsson (1984), Hansegård (1968), Sjögren, Runfors and Ramberg (1996) and others have been working within the framework of newer understandings of bilingualism. See also Cromdal and Evaldsson (2003).

“chaining” in terms of “teaching habits” of “good teachers” (Humphries & MacDougall 2000).

None of the six bilingual approaches identified in the literature have been empirically tested (Prinx & Strong 1998, Knoors 1997). Reviewing the proceedings of the 1993 international “Bilingualism in deaf education” conference in Stockholm, and especially the contributions in the proceedings that describe the success of the Swedish model, Harry Knoors (1997) observes that:

“The topic that the book addresses is very important, as results in deaf education have been rather disappointing for a considerable proportion of deaf children. Bilingual education appears to be a very promising option for these children, at least on theoretical grounds. (...) Alas, there were virtually no data, and far too much of the text was rhetoric. (...) Bilingual education for deaf children (...) is simply taken for granted, being seen as an almost miraculous concept in which teaching theorists, teachers, parents, psychologists and linguists simply believe, a concept that will solve all problems in education of the deaf, a concept that does not need to be made fully operational through good research into effects and good practices. It would not be the first time that ideology and emotion have confounded the issues that are really at stake in deaf education” (1997, 54).

In addition to the critique that Knoors levels against the lack of empirically grounded evaluations, data-based research and the taken for granted view of Deaf bilingualism by a number of groups – teaching theorists, teachers, parents, psychologists and linguistics – there is need to acknowledge the *absence of research in Deaf education* generally and in the area of literacy especially, at least in the Swedish context. A recent parliamentary commission report on the situation of education for students with functional disabilities described research in Sweden in this area in the following terms:

“A need for developing, documentation of experiences and knowledge and collaboration between developmental work and research work exists. (...) A systematic research based knowledge concerned with the *teaching and instruction* of students in need of special support is *missing*. The existent research in the *area is dominated* by an analysis of handicaps, its origins, remedial programs and outcomes. There is however an explicit lack of research when it comes to the education of students in need of special support. Among other things, *what is lacking is theoretical perspectives, participant perspectives* and knowledge about the context of special education. ... There is a *lack of research based knowledge* for specific groups. A concrete example is regarding *deaf children's learning*, and specifically deaf children's learning of [reading and writing] Swedish.” (Proposition 1998/99 Nr. 105, 21, my translation, emphasis added).

This suggests that educationally informed research grounded on theoretical principles in the field of science that is known as “pedagogy” or “education” at colleges of teacher education or departments of education (in Sweden) cannot be said to have been influential in guiding educational practices in the Swedish special schools for the Deaf and hard-of-hearing in the years following the national decision that led to the acceptance of SSL as a

language of instruction in the national curriculum (Lgr 80, SÖ 1983; see also Bagga-Gupta 2002a, 1999a).

In addition, recent evaluations of Swedish research by The Swedish Council for Research in the Humanities and Social Sciences (HSFR) in the field of education (including special education) indicate the following:

“Given the large number of doctoral works represented, we found the *low interest in theory-building*, or theory work (...) surprising. (...) It seems clear that the traditional special education approach to research – by way of the disability *categories* – is still pronounced among Swedish researchers (...). Typical for the ‘category’ studies is to focus a range of issues of relevance for understanding the specific disabling conditions from a broadly defined ‘pedagogical perspective’. *Common themes across categories are seldom identified*, neither are the links to the educational research agenda or to theory-building in general. Under favourable conditions each researcher may work cumulatively with his/her projects (...), but the basis for exchange and cumulation across projects and different researchers seems to be generally weak” (Vislie 1997, 139, emphasis added; see also Emanuelsson, Persson & Rosenqvist 2001).

Taken together the above suggests that research in “Deaf issues” in Sweden has developed within a “category” basis and may have been less influenced by theoretical developments in the Social Sciences and Humanities. The Swedish evaluation of research in special education also calls for “more informed knowledge of how” the Swedish “one school for all” approach gets played out in the everyday life of institutional settings, especially since “internationally there are strong arguments for” this integrated approach (Vislie 1997, 140).

Prinx and Strong (1998) emphasize that “future research is necessary to establish the extent to which any one of these approaches (alone or in combination) may effectively bridge the gap between ASL and English literacy” (1998, 58). This suggests that despite the newer discourses of Deaf bilingualism and the “new ethnicities rhetoric”, academic achievement issues within Deaf education remain unresolved (see also discussion on the literature on Deaf bilingualism in Chapter 6). At the same time advances in medical technology have reinforced a discourse of the pathological perspective (see further Chapter 5.4; see also Lane 1999). Medical literature outlines explicitly that cochlear implants (CI), “a complex major surgical procedure (...) provides useful audition for [deaf] children and enables them to develop intelligible spoken language” (Nottingham Paediatric CI program 1997, 3) but professionals who work with recipients of CI suggest a more confounded picture:

“Of all the controversies surrounding education of the deaf – oral-manual, ASL/English, integration/separation, and so on – none seem to touch the raw nerves that the issue of cochlear implants does” (Moore 2001, 117).

While “success” estimates in children who have received CI are contested (see summary of research presented by Enerstvedt 1999 and research

reviewed in Moores 2001 and Simonson & Kristoffersen 2001), the numbers of children with CI being admitted to the regional special schools for the Deaf and hard-of-hearing in Sweden and the numbers with CI who are being admitted to hearing school settings have seen a dramatic increase at the end of the 1990s. Recent estimates suggest that while 30 percent of young deaf children in the United States were receiving CI at the turn of the millennium, a considerably larger percentage⁷¹ of newly identified deaf children in Sweden were receiving CI. This development at the turn of the millennium is interesting; not least because of the prominence accorded to the Swedish bilingual model internationally during the 1980s and 1990s.

In her anthropologically driven comparative analysis of CI in Scandinavia and the United States, Fjord (see for instance 2001, 2000) suggests that the discourse surrounding CI in the two contexts could perhaps explain the dramatic demographic differences that can be observed currently. The fact that CI is viewed in Scandinavia as a “powerful hearing aid” allows parents to opt for it more readily. “If nothing is lost by getting the CI, that is, if the politics of culture do not have to be engaged in order to pick the CI for [one’s] child or to offer it in a clinic, then it can be consumed as a *supplement*” (Fjord personal communication 06 December 2001, emphasis added). The strong discourse of “hearing identity” associated with CI implants in the United States and the “strong interests in pathology and profit” in the United States (Moores 2001, 116), on the other hand, perhaps requires parents to deal with more fundamental choice issues in that context.

While children who previously received CI in Sweden continued to receive their education in SSL, and sometimes their entire education in signing environments (Fjord 2001, Skolverket 1997), the picture remains unclear regarding *where* CI children are currently receiving their education in Sweden. Children with CI were more likely to receive their education in mainstream settings or oral school programs in the United States at the end of the 1990s (Fjord 2001, Terstriep 2001).⁷² A couple of points can be made here. Deaf schools in at least both these countries are currently witnessing a shift in student demographics and some speculate that in the future they will only have “implanted” children in Deaf schools.

It is worth noting that the discourse and perspectives, enabled and represented by CI technology appear to be situated and developing, like all the ideological shifts that have been traced and briefly outlined earlier in this chapter, in the *absence* of theoretical considerations of “what constitutes a

⁷¹ Estimates during the same period are put to between 80-90 percent.

⁷² Recent efforts at the Laurent Clerc National Deaf Education Center in Washington DC, while positioning itself neutrally to parents decision regarding CI, nevertheless provide services and education for children and families within the framework of a bilingual ASL-English school program in the United States.

language”.⁷³ The implementation of this technology cannot be understood as being only negative either.⁷⁴ The point that needs to be recognized is that recent policy shifts which, for instance, allow very young children to become recipients of CI seem to have been made in the *absence of or despite* the more recent research discussions regarding what constitutes language.

In addition, Moores (2001) succinctly describes the main concerns in the discussions in the literature on the subject in the following four points:

- “1. Are implants successful? If so, for what kinds of subjects – in terms of age, nature of hearing loss, extent of loss, and so on – are they appropriate?
2. Do the potential benefits outweigh the risks?
3. Do the advocates of the procedure ‘oversell’ the benefits or fail to provide realistic counseling to recipients or, in the case of children, to parents? For example, professionals may consider the procedure a success if it increases awareness of sound in cases where parents expect their child to process speech in a normal manner.
4. What are the moral and legal issues involving informed consent for invasive surgery on children as young as two years for deafness which is a non-life threatening condition?” (2001, 114).

Also, like all prescriptive shifts in the field, CI technology shapes Deaf education and Deaf literacy issues nonetheless. In line with Prinx and Strong’s (1998) closing remarks, future research is necessary to establish the extent to which CI shapes access issues and school achievement and literacy (see also Chapter 5.5).

In summary: the oral-manual-total-bilingual debates appear to stand out in the history of Deaf education and also seem to shape current understandings of deaf/Deaf literacies and bilingualism. The recognition of natural SLs, in 1960s and in the 1970s, as “true” languages shaped newer ways of understanding Deaf education. However, while a shift in educational policy has been noted – in for instance the establishment of the fourth phase in Deaf education – non-prescriptive research on the more recent trends in Deaf education have been reported primarily during the 1990s. This body of work is focused upon later in Chapter 7.

The literature also suggests that the pathological and cultural-linguistic philosophical traditions co-exist as mutually exclusive positions and while it is easy to understand their historical developments, possibilities for dialoguing and *bridging the academic* – and more significantly the resource

⁷³ While the treatment and profit orientation of medical practitioners and companies that manufacture CI is understandable and needs to be recognized, the cultural-linguistic discourse that can be seen in the work of the few anthropologists and education-researchers working in the field suggests that the promises that CI can offer in educational settings is reminiscent of the pathological discourse of oralism.

⁷⁴ The technology clearly provides benefits, not least for late deafened adults who lose their hearing. The literature also suggests that CI “have generally been more successful with people with late onset deafness than with people who have been deaf from birth or early childhood” (Moores 2001, 114).

allocation⁷⁵ – *gulf* between them and between these two perspectives and newer perspectives appear to be wanting. The literature analyzed does however suggest important ways in which the technological-medical perspective shapes the present day organization of Deaf education. There is a paucity of literature that discusses these two perspectives from ethical and democratic perspectives.

The nature of the literature that has been studied and its relationship to Deaf school settings can be gauged in a number of ways. One such would be to understand the nature of the texts that are available in the area of Deaf education and literacy. Another would be to throw light on the methodological and theoretical orientations/perspectives that authors/researchers employ in their studies. While this discussion has already been initiated, textual parameters related to the same are explicitly explored in the next chapter.

⁷⁵ In informal discussions it is not uncommon to hear medical-psychologically oriented research groups and colleagues working in “deafness” referred to as the “richer” of these two camps.

CHAPTER 4

Textual, theoretical and methodological trends in the literature

“[A]cademic disciplines represent the primary units of internal differentiation of the modern scientific system. They constitute of largely self-regulating and self-reproducing networks of communication. The specific mode of communication in science is publications. They represent the basic communicative acts that generate, continue and reproduce the self-regulating flow of the disciplinary communication process. By combining proposition and quotation, a scientific publication displays an array of references, which may then be analyzed with regard to cognitive filiations, theoretical affinities, or disciplinary preferences they give expression to” (Keiner 1994)

“[A] journal article is more highly valued than other forms of publication for the role it plays in the dissemination of information. Journals provide a central location for authors to present their contributions to the development of a field. The notion of an archival contribution involves some degree of assurance (...) that what is presented has been carefully evaluated and meets the highest standards of peer review (...) Timeliness is essential to the maintenance of dialogue among scholars, which in turn enhances scientific progress” (Wilbur 1998, 1).

4.1. INTRODUCTION

The patterned ways in which different conceptualizations of what constitutes language and the philosophical perspectives that inform these conceptualizations were discussed and presented in the previous chapter. The analysis of these historical and present day perspectives are important in that they provide a backdrop against which one can understand research trends in the area of Deaf education. These manual-oral-total-bilingual discussions represent not just historical shifts in Deaf education and in research on Deaf education, but they co-exist in the discussions in the literature today and shape how Deaf education is currently organized. In effect, they represent different organizational strategies that are used to construct different school programs for deaf students and these have co-existed and currently co-exist even though a particular ‘model/system/method’ is more popular than others at any given time period. In addition, these shifts in the organization of Deaf education – and especially the specific models that represent the shifts and that have been implemented under the umbrellas that denote these shifts – appear to have taken place without being *pushed* by empirical research from theoretical positions.

The present chapter exploratively presents trends in the available literature in the area of literacies and reading/writing development of deaf/Deaf children.⁷⁶ The very *nature* of the texts available are analytically focused (in section 4.2 of this chapter). Thus, the kind of questions asked in this section include: What *kinds of texts* are available in the area of literacies and language spheres of the Deaf? In what *form* are these texts available? Can any *thematic trends* be discerned in the literature and can any patterns or shifts be discerned over time? What are the similarities and differences between the available literature in Sweden (both in Swedish and in English) and the United States?

Section 4.3 empirically attempts to throw light on another central aspect of the nature of this body of literature: the kinds of theoretical frameworks and methodological frameworks and tools that researchers have fallen back on as they have studied issues of Deaf literacy and language spheres. The following kinds of questions have been central in this enterprise: Can one see patterns in how researchers in the field of Deaf education have, in the past and in the present, conceptualized “what language is”? How does this relate to the theoretical and methodological frameworks that they employ in their research studies or education-related-developmental-work? Do these patterns differ in any way between Sweden and other countries, particularly the United States? Is there information available on the backgrounds of the researchers working in the area of deaf/Deaf education and literacy? In other words, can one discern any patterns regarding researcher-background (field affiliation, hearing status, language competency status, etc.) and their theoretical methodological orientations? What are the overriding *assumptions* of researchers who are conducting research or are involved in education-related-developmental-work in deaf/Deaf education? The final section of this chapter attempts to throw light on this last question.

4.2. NATURE OF TEXTS

The internet resources made available through ERIC have been organized, since 1979, by assigning a three-digit document type code to each record it has accessioned (see <http://www.edrs.com/webstore/help/glossary/pubtype.cfm>, September 2001).⁷⁷ A maximum of three codes are assigned to any one record. For instance, the code 010 identifies “books”, 020 “general – collected works”, 021 “conference proceedings – collected works”, 060 “historical materials”, 140 “general – reports”, 080 “journal articles”, 110 “statistical data”, 150 “speeches, conference papers”, etc. In addition, publications have been further categorized in that different codes have been assigned to different *kinds* of texts. Thus for instance, the system allows for a differentiation between “undetermined – dissertations/theses” (040),

⁷⁶ The specific searches conducted in the preparation of this chapter were carried out in September-October 2001.

⁷⁷ Some of the services available via the US Department of Education were discontinued on 18 December 2003.

“doctoral – dissertations/theses” (041), “masters – dissertations/theses” (042) and “practicum – dissertations/theses” (043). Likewise, the system allows for a differentiation between “general reports” (140), “descriptive reports” (141), “evaluative/feasibility reports” (142) and “research/technical reports” (143).

This coding system can itself be used as a research tool in order to search for a single kind of publication category and multiple codes can be used in order to search multiple publication categories. Thus all thesis and dissertations can be searched simultaneously and also together with key words. This function is available on subject related databases like ERIC and have, for the purposes of the present analysis, allowed for the available literature to be categorized from the “type of publication” perspective. A similar search could be conducted in order to discern the types of texts that were available in Swedish (for instance through Libris and Libris-artiklesök). Since the number of Swedish texts was comparatively smaller in the area of interest in this meta-research study, a manual study was also resorted to for this body of literature.

The ERIC coding system that has been used suggests that there is no dearth of texts available when one uses key words like “deaf” (7459 hits), “deaf AND education” (5561 hits), “deaf AND communication” (573 hits), “deaf AND literacy” (96 hits), “deaf AND reading” (903 hits), “deaf AND writing” (419 hits), “deaf AND oral*”⁷⁸ (123), “deaf AND total” (143), “deaf AND bilingual” (69), etc. However, extremely few publications thus identified are empirical texts.⁷⁹ These figures suggest interesting patterns when contrasted with the number of publication hits received when the key word “data” is added to the above categories: “deaf AND data” – 695;⁸⁰ “deaf AND education AND data” – 531; “deaf AND communication AND data” – 257; “deaf AND literacy AND data” – 20; “deaf AND reading AND data” – 66; “deaf AND writing AND data” – 27; “deaf AND oral* AND data” – 28; “deaf AND total AND data” – 60; and, “deaf AND bilingual AND data” – 26.

The following hits were recorded when the keywords were modified to *empirically-conceptually suggestive categories*: “deaf AND communication activit*” (3), “deaf AND classroom practice*” (3), “deaf AND school practice*” (2), “deaf AND everyday life” (1), etc. While individual searches like the above do not identify all published texts even in peer-reviewed journals (see also discussion in Chapter 1 and Appendix 1), they do *suggest patterns* that have significance in the present context.

⁷⁸ The symbol “*” denotes that the search was an “open category search”. Thus for instance, using the term “oral*” allowed for the inclusion of terms such as “oralism”, “oralist” etc.

⁷⁹ The symbol “*” denotes that the search was an “open category search”. Thus for instance, using the term “oral*” allowed for the inclusion of terms such as “oralism”, “oralist” etc.

⁸⁰ While numbers within parenthesis here are from the search conducted in the ERIC database, similar trends were noted in the searches conducted in the other internet resources that were used (see also Chapter 1 and Appendix 1).

The following figures, also from the ERIC data base, throw further light on the nature of the literature:

Books (010)	
“deaf AND 010”	– 747
“deaf AND literacy AND 010”	– 37
“deaf AND school AND 010”	– 292
“deaf AND reading AND 010”	– 114
“deaf AND writing AND 010”	– 65
Collected Works – General (020)	
“deaf AND 020”	– 449
“deaf AND literacy AND 020”	– 28
“deaf AND school AND 020”	– 152
“deaf AND reading AND 020”	– 74
“deaf AND writing AND 020”	– 40
Dissertations/Theses – Undetermined (040)	
“deaf AND 040”	– 168
“deaf AND literacy AND 040”	– 2
“deaf AND school AND 040”	– 54
“deaf AND reading AND 040”	– 31
“deaf AND writing AND 040”	– 17
Guides – General (050)	
“deaf AND 050”	– 289
“deaf AND literacy AND 050”	– 6
“deaf AND school AND 050”	– 89
“deaf AND reading AND 050”	– 44
“deaf AND writing AND 050”	– 18
Journal Articles (080)	
“deaf AND 080”	– 3404
“deaf AND literacy AND 080”	– 143
“deaf AND school AND 080”	– 928
“deaf AND reading AND 080”	– 375
“deaf AND writing AND 080”	– 206
Reference Materials – General (130)	
“deaf AND 130”	– 31
“deaf AND literacy AND 130”	– 0
“deaf AND school AND 130”	– 16
“deaf AND reading AND 130”	– 4
“deaf AND writing AND 130”	– 0
Reports – General (140)	
“deaf AND 140”	– 67
“deaf AND literacy AND 140”	– 2
“deaf AND school AND 140”	– 19
“deaf AND reading AND 140”	– 6
“deaf AND writing AND 140”	– 4
Speeches, Conference Papers (150)	
“deaf AND 150”	– 625
“deaf AND literacy AND 150”	– 26
“deaf AND school AND 150”	– 207
“deaf AND reading AND 150”	– 96
“deaf AND writing AND 150”	– 46

These figures reconfirm the interest and devotion of professionals and researchers in publishing in the area of Deaf education. The literature that is recorded in databases in the area of Deaf education is abundant. In fact, most of the literature that can be assessed through such data bases relates to the area of education (5561 texts of 7459 are related to education in the ERIC data base). Another clear cut trend in the literature is that the majority of reporting focuses on reading, lesser on writing and there is considerably lesser interest on literacy. While this level of analysis can hardly draw upon the theoretical distinction between literacy and reading/writing that was put forth in Chapter 2, the bias towards reporting on reading and writing can be seen as framing the focus of what is deemed essential for school success.

The reporting on aspects of “oral” or “total communication” or methods is twice or more than twice the reporting on aspects of “bilingual” education or methods. Such trends are not surprising, given that reporting possibilities have become increasingly available in the last two to three decades of the 20th century. What is surprising is the relatively few empirical texts in the literature that focus on “communication methods” or “literacy, reading and/or writing”. A further analysis of the methodological sections of texts and abstracts of the publication hits reviewed above also supports the finding that the overwhelming majority of literature in Deaf education and literacy is non-data driven (see further Chapter 5). It is not easy to understand this bias. Is it so that data-driven research or evidence based literature are not themselves sufficiently recorded in the data bases that have been searched? Or can other factors throw light on this situation?

Using ERIC’s three-digit document type codes suggests that *journal articles* account for a large amount of the reporting in the Deaf area (3404 hits). This suggests that, at least in the English language literature, there is a strong academic international tradition of publishing in peer-reviewed and non-peer-reviewed journals. 27.3% of these are focused on the area of “schooling”. Books (747 hits) account for another large group of texts in the Deaf area. Speeches and conference papers (625 hits) make up another substantial avenue for dissemination of knowledge and views in this area. However, speeches and conference papers represent less than one-fifth of the reporting when compared to journal articles. Collected works (449 hits) also represent a fairly large grouping of texts in the Deaf area. Doctoral, masters and practicum dissertations and theses make up 168 hits, of which 54 are focused on schooling, 31 on reading, 17 on writing and two in the area of literacy. Reports account for a mere 67 hits, and this is 2% when compared to the volume of journal articles published in the area. There are no reference materials that cover the Deaf literacy area available in these data bases, though 31 reference materials are available in the Deaf area more generally.

There is another significant issue that can be raised when one focuses upon the kinds of texts that are available through such searchers. In her Council on Anthropology and Education (CAE) 2000 presidential address, Evelyn

Jacob (2001), professor of education, takes issue with “theory-oriented and practice-oriented research” by suggesting that the “CAE stands at the intersection of anthropology (data, theories, methods, and insights) and education (problems, practice, and institutions)” (2001, 267). In similar manner, as has been suggested in Chapter 1, there is need to differentiate between literature about Deaf education and literacy *as activity and institutional fields* and Deaf education and literacy *as research enterprises*. While Jacob (2001) argues for both making visible and accessible a range of high quality research practice-oriented literature, for instance through peer-reviewed publications, she also emphasizes the need for, and the relevance of, integrating theoretical work with practice-oriented developmental work.

Given the relatively few dissertations/thesis hits (doctoral, masters and practicum) that were recorded, one can raise questions regarding the theoretical traditions in this area. This is a significant concern *both* at the institutional school level and in the research area. The nature of the texts that are available through on-line searches, *suggests a crisis of legitimacy* in the area of Deaf literacy not only as far as theoretical and empirical work is concerned but also as far as practice-oriented research is concerned. In the international English language literature the major thrust of the texts published in the area of “literacy” or “reading and writing” is either in the form of monographs, collected works, reports, journal articles and speeches and conference papers devoted to the *categorically specific human condition* of deafness. A further analysis suggests that extremely few book chapters appear in anthologies where the focus has a more *conceptual or thematic* point of departure. Thus for instance, chapters titled (i) “Bilingual vs. Oral Education” (Heiling 1998), (ii) “Total Communication” (Evans 1991) or “The Mainstreaming of Primary Age Deaf Children” (Gregory & Bishop 1991), (iii) “Emerging Literacy in Bilingual/Multicultural Education of Children Who Are Deaf: A Communication-Based Perspective” (Christensen 2000a), (iv) “Second Language Learning in the Deaf” (Svartholm 1994), (v) “Socialization of Deaf Children and Youths in School” (Stinson & Foster 2000), (vi) “Bilingual Deaf Education in Venezuela: Linguistic Comments on the Current Situation” (Oviedo 1996) appear in anthologies titled (i) “Issues unresolved. New perspectives on language and deaf education” (Weisel ed 1998), (ii) “Constructing Deafness” (Gregory & Hartley eds 1991), (iii) “Deaf Plus. A Multicultural Perspective” (Christensen ed 2000b), (iv) “Bilingualism in Deaf Education” (Ahlgren & Hyltenstam eds 1994), (v) “The Deaf Child in the Family and at School” (Spencer, C. Erting & Marschark eds 2000), (vi) “Multicultural Aspects of Sociolinguistics in Deaf Communities” (Lucas ed 1996). Exceptions where chapters focus on Deaf education published in conceptually or thematically organized books can be illustrated by the following “Deaf children’s language situation” (Heiling 1997, my translation) and “Time, space and visual bilingualism” (Bagga-Gupta 2001b, my translation) which were published in “From babbling to reading and writing” (Söderberg ed 1997b, my translation) and “Interaction in educational contexts” (Lindblad & Sahlström eds 2001, my translation).

While *category focused* conferences and collections make valuable contributions to a body of knowledge in a field, the analysis at this level appears to suggest that a need exists for the field of Deaf education and literacies to expand its horizons by connecting to larger changes and related issues in the Social Sciences, Humanities, and perhaps even in the Technological Sciences. One way of doing this is to participate in *conceptually or thematically oriented* academic dialogues and not only category oriented academic dialogues. An example from a related area in Deaf education research perhaps makes the point more succulently.

The previously discussed international conference⁸¹ “Dictionaries and the Standardization of Languages” is interesting in a number of ways. The conference not only made available a global body of knowledge building possible and perhaps sowed the seeds of cross-cultural analysis since scholars from all the continents contributed to the agenda, but more significantly it brought together scholars who were working with dictionary making enterprises in *spoken* and *signed* minority languages. Further, the keynote address by Simon Winchester, author of the best selling book “The Professor and the Madman: A tale of Murder, Insanity, and the Making of the Oxford English Dictionary” – contributed yet other perspectives to dictionary enterprises of *minority languages*. The point being made is that academic discussions on issues related to Deaf education perhaps need to also occur in arenas other than in the category area of “Deaf” dialoguing. There is perhaps need for “Deaf research” to become more “integrated” in mainstream research in areas such as educational research, literacy research, teacher-education research, historical research etc.

In comparison with the literature that is available in the international data bases, a rather limited number of texts are unearthed in the searches conducted through the Swedish Libris⁸² and Libris-artikel (article) data bases. Thus for instance, a simple search makes available 26 hits for “döva OCH utbildning” (deaf AND education) though 488 hits get recorded for “döva” (deaf) and 17102 for “utbildning” (education) separately. Similarly 7 hits are received for “döva OCH läsning” (deaf AND reading), 3 for “döva OCH skola” (deaf AND school), 27 for “döva OCH kommunikation” (deaf AND communication). Other key word combinations offer the following results: 11 hits for “döva OCH bok” (deaf AND book), 2 hits for “döva OCH böcker” (deaf AND books), 46 hits for “döva OCH språk” (deaf AND language), 1 hit for ”döva OCH tvåspråkig” (deaf AND bilingual), 9 hits for ”döva OCH tvåspråkighet” (deaf AND bilingualism) and 69 hits for “döva OCH teckenspråk” (deaf AND sign language). It is significant to point out that many of the hits thus recorded are not Swedish texts at all but are texts in English. Results of using English key words to search the Libris data base

⁸¹ The conference was sponsored by Gallaudet University Press Institute, the educational division of Gallaudet University Press (see Chapter 3).

⁸² Libris allows searches to be made among over four million publications in different languages – English, Swedish and others – in Swedish libraries via the internet.

are presented before discussing these trends. “Deaf AND education” resulted in 106 hits, “Deaf AND reading” (3 hits), “Deaf AND writing” (1 hit), “Deaf AND literacy” (1 hit), “Deaf AND language” (83 hits), “Deaf AND communication” (54 hits), “Deaf AND sign language” (39 hits) and “Deaf AND bilingualism” (4 hits).

While it is important to recognize that all the Swedish (and English) texts authored by Swedish researchers that have been produced⁸³ and/or are currently used in Sweden, in for instance teacher education programs, may not show up in these kinds of searches, the *paucity* of Swedish texts that show up in the literature in a country that has long been a forerunner in international discussions in the most recent shift in Deaf education ideology warrants further scrutiny (see below).

The *nature* of the Swedish language texts that became available through online internet searches and the subsequent personal requests for researchers literature lists suggests that, the far majority of these can be understood, using the ERIC three-digit document type code, as “viewpoints (opinion papers, position papers, essays, etc.)” (170), “guides” (051), “historical material” (060), reports – descriptive (141), etc. Some of the identified publications have a biographical character: “En erfarenhet rikare: en bok om att bli döv” (One experience richer: A book about becoming deaf) (B. Andersson 1978, my translation), “Döv – javisst” (Deaf – of course) (Josberg 1993, my translation). Others have an evaluative focus. Very few publications thus accessed are authored by established researchers currently working in different Swedish universities; some have been authored by university lecturers: “Ung och döv i mångfaldens Sverige” (Young and deaf in Sweden’s diversity) (Danielsson 1994, my translation), “Vad går det hela ut på egentligen?” (What is the point of this actually?) (Gustavsson 1987, my translation). Some of the publication hits are newspaper articles and the national Deaf NGO⁸⁴ periodicals feature among the Swedish texts that are documented and can be accessed via the Swedish internet resource and databases “Libris” and “Libris-artikel”. Further analysis of the limited number of texts that were accessed through the use of key words like “språk” (language), “läsning” (reading), “bok” (book), “teckenspråk” (sign language), “tvåspråkighet” (bilingualism), etc. suggests that these either have an element of personal experience or are national Deaf NGO periodicals. The accessibility of this body of Swedish literature in different university libraries⁸⁵ in Sweden and the fact that more theoretically driven texts authored by established researchers do not show up in this national data base is puzzling. Is it so that researchers are not publishing in established

⁸³ For instance one of my own Swedish articles which was published in the Swedish education journal “Utbildning och Demokrati – Tidskrift för didaktik och utbildningspolitik” [Education and Democracy – The journal of didactics and educational politics], did not show up in these searches at the end of 2001.

⁸⁴ Non-governmental organizations, eg. SDR and DHB.

⁸⁵ The Libris data base makes available information on exactly where each publication can be accessed in the country.

scientific arenas, for instance peer-reviewed journals or are they publishing in other contexts in Swedish that are not recorded in the Libris data base?

Personal knowledge of the research landscape in Sweden allowed for further investigation on this front. Firstly, the Libris search was further refined and names of established researchers were used to search for individual researchers specific productions. Secondly, as outlined in Chapter 1 (see also Appendix 1), some of the researchers who occupy a more central position in Deaf education and Deaf literacy more specifically were personally contacted at the end of 2001 and requests were made for literature lists of texts that they had authored and/or that they had been or were currently using as course literature at their home universities.⁸⁶

In addition, a targeted search of doctoral and master level thesis with the search words “dövhet or döva” (deafness or deaf) was conducted and this resulted in 31 hits. Of these 10 were not Swedish thesis and one was an English translation of a thesis published previously in Swedish. The remaining 20 thesis were produced⁸⁷ during the period 1928 to 2001. These are listed below together with information (where this is available) regarding the departments where they were defended (“*” next to the title indicates that the original Swedish title was translated by me):

- 1) “Cognitive Deafness: the deterioration of phonological representations in adults with an acquired severe hearing loss and its implications for speech understanding” U. Andersson (2001) Studies from the Swedish Institute of Disability Research, Linköping University.
- 2) “Rhetorical conflicts: competing truths in the deaf world”* Jacobsson (2000) Department of Sociology, Lund University.
- 3) “Deaf mute teacher – special pedagogue – teacher for deaf and hard-of-hearing: a teacher educations contents and rationality shifts”* Domfors (2000) Department of Education, Örebro University
- 4) “About mutual understanding and conflict: conversations between parents and school leaders at a school for the deaf”* Säwe (1999) Department of Sociology, Lund University.
- 5) “Hard-of-hearing in higher education: possibilities and constraints”* Antonson (1998) Department of Education and Psychology, Linköping University.
- 6) “Simultaneous sign and speech: a multimodal perspective on the communication of hearing-impaired children” Nelfelt (1998) Department of Linguistics, Gothenburgh University.

⁸⁶ Literature lists that had been used both prior to the recent sweeping changes in teacher education and the new courses in teacher education were solicited.

⁸⁷ Ph.D research, and in some instances even Masters research, is published in Sweden by the department/faculty where the research is conducted and defended.

- 7) "The education of the deaf in Sweden 1889–1971: a school for a language and a practical occupation"* Pärsson (1997) Department of History, Gothenburgh University.
- 8) "Signing in the Brain. Sign Language Perception Studied by Neuroimaging Techniques" Söderfeldt (1994) Department of Psychology, Uppsala University.
- 9) "Integration in institutionalized activities/systems: A study of group integration of hard-of-hearing and deaf children in pre-school"* Ellström (1993) Department of Education and Psychology, Linköping University.
- 10) "Monaurally deaf persons: audiological, social psychological and existential aspects" Hansson (1993) Department of Education, Stockholm University.
- 11) "Touching voices: components of direct tactually supported speechreading" Öhngren (1992) Faculty of Social Sciences, Uppsala University.
- 12) "Deaf children's development in a time perspective: knowledge levels and social processes"* Heiling (1993) Malmö College of teacher education⁸⁸
- 13) "Hard-of-hearing in working life: A stress/control perspective"* Gullacksen (1993) School of Social Work and Public Administration, Lund University.
- 14) "To 'hear' with the skin" Spens (1984) The Royal Institute of Technology, Stockholm.
- 15) "On speech perception of seriously hard-of-hearing and deaf"* Martony (1974) The Royal Institute of Technology, Stockholm.
- 16) "Personality development with deafness. Parts 1 & 2"* Crafoord & Axelsson (1975) Department of Psychology, Stockholm.
- 17) "Pure tone audiometry for pre-school children: A clinical study with particular reference to children with severely impaired hearing" Barr (1955) Karolinska Institutet, a medical university, Stockholm.
- 18) "Auditory training of deaf and hard of hearing children: Results from a Swedish series" Wedenberg (1951) Karolinska Institutet, a medical university, Uppsala.
- 19) "Hearing tests and hearing aids: A clinical and experimental study" Holmgren (1939) Karolinska Institutet, a medical university, Stockholm.
- 20) "Ear-specialist investigations of pupils in Swedish deaf-mute schools along with remarks on the question of teaching the hard-of-hearing"* Henning (1928) Uppsala University.⁸⁹

As can be surmised from the titles, very few of these doctoral or master level thesis have a direct bearing on the area of Deaf literacy or even Deaf

⁸⁸ This thesis was translated into English and published by Signum in 1995.

⁸⁹ The original title was in German "Ohrenärztliche Untersuchungen von Schülern der Taubstummschulen Schwedens nebst Bemerkungen zur Frage des Unterrichts der Schwerhörigen". In Swedish the title would read: "Öronläkarundersökningar av elever i svenska dövstumsskolor främst gällande undervisning av gravt hörselskadade".

education. A focus on medical-technical-psychological research at the thesis level seems to *dominate the entire period*. Thesis written and defended at Departments of Education (and in some instances Departments of Education and Psychology) on Deaf related issues become available only during the last decade of the 20th century. None of these thesis are authored by research students who are themselves Deaf. The titles of these texts and the university or college departments where they are authored and defended suggests a clear cut diversification and proliferation of the research agenda during the 1990s. Thesis at the masters and doctoral levels focused on the Deaf area were defended in the areas of Sociology, Handicap/Disability, Psychology, Linguistics, History and Education during the last decade of the 20th century.

Only one doctoral thesis (written and defended in 1993) can be said to have been focused on Deaf bilingualism and reading and writing issues. This text merits some scrutiny and will be discussed further in Chapters 5 and 6 (see also Chapter 3.3). Its *context* is briefly introduced here. The thesis (Heiling 1993) reported the achievement levels of two groups of school level students – one from the end of the 1960s and the other from the end of the 1980s. In addition to the Swedish text being translated and made available in English in 1995, the findings presented in this piece of doctoral research have been presented subsequently at conferences and anthologies. The relatively positive reading and writing levels of the 1980 cohort are seen as supporting the success of the bilingual model. The continuing post-doctoral analysis of reading and writing levels of Deaf students by this individual researcher were presented at an international conference in Oslo in 1994.⁹⁰ While the somewhat different and problematic findings presented at this conference are available in the form of conference proceedings in English (see Vonen, Arnesen, Enerstvedt & Natstad 1996), these more updated data and the concerns that these post-doctoral analyses raise have been disseminated to a more limited extent both inside and outside Sweden (see further Chapters 5 and 6).

The evaluation of Swedish research in education (Rosengren & Öhngren 1997), discussed in Chapter 3.5, devotes a separate section to evaluating “Special Educational Research”. Norwegian professor of special education Lise Vislie, here reports that research contributions “that seem to have rather modest ambitions in relation to research, i.e. being mainly reports on developmental/evaluation projects” are not being included in the evaluation (Vislie 1997, 128). This, in the view of the evaluation study, suggests an inherent discrepancy between the established status of the areas of Special Education at university departments and in the institutional fields in Sweden on the one hand and the Swedish research agenda in this area on the other:

⁹⁰ I had the opportunity to participate in this conference in preparation for the meta-research study that was being discussed at my home institution, the Department of Communication Studies, Linköping University, Sweden, in the mid-1990s.

“Compared to the rather strong profile towards special education research found in the [university] institutional presentations [of university departments and research groups], the examples of such research in the materials we have received, seem moderate” (ibid).

The findings of the present meta-research study are in line with the above analysis and are particularly relevant in understanding the area of research in Deaf education in Sweden.

The analysis of the Libris searches conducted by using the names of individual researchers and the “publication etc” lists obtained directly from a few established researchers whose work has shaped the field of “Deaf education”, “Deaf bilingualism” and “Deaf literacy” in Sweden also gave rise to a few trends. The efforts of a handful of researchers working in this/these areas are geared towards authoring conference contributions solely in the “category area of Deafness”. This trend also corroborates the trends noted in the national evaluation of special education research discussed above:

“It appears clear that the traditional special educational approach to research – by way of the disability categories – is still pronounced among Swedish researchers” (Vislie 1997, 139).

In other words, the majority of texts included in “publication etc” lists of established researchers are titles of conference presentations and almost all the conferences where such presentations are made are “Deafness related” or “handicap” related conferences. Studying the literature that was previously included in teacher education programs at the university level suggests that *non-published materials* in Swedish often accounted for a large proportion of the literature. Reports published by different departments form the bulk of the publications in the Deaf area (in the Social Sciences and Humanities) though conference presentations make up a larger section of some researchers works. The Swedish Council for Research in the Social Sciences and Humanities, HSFR’s, critique towards the weak links that the available literature had towards theory-building or the educational research agenda in the Swedish “special education” research is also mirrored in the Swedish “Deaf education” research agenda.

Another pattern that can be discerned is the relative non-existence of Swedish or English texts published by researchers in *peer-reviewed contexts*. Publications of presentations made at conferences or symposia, sometimes translated to other languages, in conference proceedings, account for some of the entries in the “publication etc” lists and the Nordic Journal for Deaf Education – a journal administered by teachers of the special schools from the Nordic countries, account for other entries of some of the researchers. There is no academic level Swedish or Nordic journal – peer reviewed or otherwise – that is focused on “Deaf education” or “Deaf bilingualism” or “Deaf literacy” issues. Presentation of projects, reflected both in the title of texts and also in the content of texts, figure in the “publication etc” lists. Yet another genre of texts produced by researchers, and which also appear frequently in the reading lists at college or university level courses [used in

in-service training or basic level teacher education and in “Swedish as second language of the Deaf” courses]⁹¹ are reports produced and distributed from departments where researchers are working.

Many texts thus authored and produced by the small number of individual researchers would qualify as “cumulative research” project reporting of either single individuals or sometimes a small group of individuals working on a Deaf related project over a period of time. This trend is similar to that noted in the national evaluation of Swedish research in education (Rosengren & Öhngren 1997):

“Common themes across categories are seldom identified, neither are the links to the educational research agenda or to theory building in general. Under favorable conditions each researcher may work cumulatively with his/her projects (...) but the basis for exchange and cumulation across projects and different researchers seems to be generally weak” (Vislie 1997, 139).

The few book chapters that have been written, and with a direct bearing on the area of Deaf literacy, exist in both category and thematic anthologies. These few Swedish chapters vary qualitatively from being extensions of earlier Ph.D. research, to focusing on analysis of classroom interaction or being ideologically motivated success accounts of the Swedish model of Deaf bilingualism (see also discussion presented in Chapter 3.5). While very few texts are chapter contributions anthologies (which are not conference proceedings), only a couple have been recently published in academic anthologies that have a more conceptual point of departure. The first of these two Swedish anthologies focus on individual studies of early development of language in children and the second on individual studies of interaction in educational settings. Two different researchers who have focused on issues of Deaf education, bilingualism and literacy have contributed one chapter in each of these anthologies. Another avenue in which at least one researcher working in this/these areas has published is in magazines of the Swedish Deaf NGO’s and “Språkbitar” (Language issues, my translation).

The important point to be noted here is the paucity of literature, both international and Swedish, that attempts to break away from the category area of “deaf/Deaf” and connect to conceptually or thematic concerns that are relevant to Deaf literacy or education more generally. This brief analysis of the nature of existent texts and their contexts suggests that rather limited data-driven studies have been reported in Sweden and especially in Swedish. Exceptionally few texts authored by Swedish researchers are available in the English literature. In addition, texts – Swedish or English – published in peer-reviewed contexts are conspicuously absent. Together, these findings corroborate both the recent national level evaluation of research in education and special education (Rosengren & Öhngren 1997) and the

⁹¹ The most recent changes in the overhaul of teacher-education in Sweden (in 2001) have not allowed for critical reviewing of the most current reading lists used in these departments.

national commission findings on research in the area of functional disabilities (Proposition 1998/99 Nr. 105). These, as has been discussed above (and in Chapter 3), point to the paucity of research currently available in the area of Deaf education (especially in Deaf literacy) and that research in the area of Deafness (and other special educational “categories”) continues to be carried out in category terms with weak links to theory.

While the international English language literature appears to be available as published peer-reviewed journal articles, monographs, anthologies, reports, book chapters in thematic Deaf focused books and non-Deaf focused conference presentations, the Swedish literature is scarce in almost all these categories. Ph. D thesis in Sweden, even though few in this area, are available due to the tradition of departmental and university publication of the theses before the Ph.D viva examination.⁹²

4.3. THEORETICAL AND METHODOLOGICAL ORIENTATION IN THE LITERATURE. SOME COMMENTS

It would be presumptuous to describe the theoretical and methodological frameworks that researchers have employed in the large body of literature currently available since a systematic categorization study of the available international literature was not carried out. However, since the Swedish literature is limited, and both conventional and unconventional attempts have been made to identify it, the trends in this body of literature can be studied in a more focused manner. Despite the above mentioned limitations vis-à-vis the international literature, an attempt is made to offer comments regarding theoretical and methodological trends that can be seen in the field as a whole.

The international English language literature in the area of literacies and Deaf education continues to be divided along the manual, oral, total and bilingual parameters that have historically shaped the discussions in and the organization of the field of Deaf education. Thus for instance, literature in the last few decades continues to describe the efficacy of different models and programs in as far as academic success in schools is concerned. How language is conceptualized appears to influence in many ways the theoretical and methodological frameworks that researchers have employed to study issues related to achievement and Deaf literacy.

Articles that appear in the *Volta Review*, which was established by Alexandra Graham Bell over a century and a half ago (see also Chapter 3) often describe the advantages of the academic benefits that deaf children can accrue from the oral approach. Some articles, both here and in other journals devoted entirely to Deaf issues, point to the negative effects of other models and programs before outlining the advantages of whole language instruction. It is interesting to note that little if any of this literature

⁹² Swedish: Disputation.

describes the theoretical foundations of the programs or models that they support and outline. In addition, these articles often *describe* the success of their program/model without presenting data on the *actual practices* that make up the program or model. This is a significant point, not least because of the theoretical orientation of the present study, and there is perhaps need to discuss this issue further.

A description, however in-depth, based on information regarding a model can lay out the *guiding principles of the model*, what proponents envisage vis-à-vis the practices in that model should/would look like, what people working in the particular model say regarding to practices, outcomes, etc. These kinds of *descriptive viewpoints and information are important*. However, and this is an important difference, such texts tell us little about how human beings co-construct and together constitute life inside and outside schools. They do not give much information regarding what goes on in the everyday lives of individuals who participate in the activities of that program. In other words, the *prescriptive agendas* of models and programs need to be understood as guiding frameworks and the current literature does suggest that we know little, if anything, about the “actual” everyday practices that constitute oral, total, bilingual etc. programs or models.

Here it is interesting to reflect on the origins of Deaf education as discussed earlier in Chapter 3. According to Eriksson (1998) the period between the 1550s and 1760s constitutes the “first phase” in Deaf education. He suggests that during this phase when “teachers jealously guarded the secrets of their trade, the art of deaf education was often veiled in mystery” and teachers were “unaware of the work done by others” (Eriksson 1998, 49). While the sheer quantity of literature that has been authored in the area of Deaf education and Deaf literacy since that time has been phenomenal, it is paradoxical that the everyday activities that constitute deaf education continue to be “veiled in mystery”. It also remains unclear whether critical reflection is encouraged vis-à-vis the model or program that professionals and researchers are schooled or initiated into at the start of their careers and which they seem to remain imbedded in during the course of their entire professional lives. To this end it might be interesting to learn about what (if any) exposure members of the different camps have to literature from “other models and programs”. What Eriksson says regarding the literature during the first phase of Deaf education is interesting and holds true with regards to the literature available centuries later:

“most of what was written about deaf education at this time [i.e. 1550–1760] was either theoretical dissertations or reports of results: there was very little description of actual methods” (ibid).

The findings of this meta-research study suggests that, until the 1990s, very little literature focuses the “actual” everyday practices in Deaf education. In other words, we know very little about how communication occurs and how meaning gets negotiated in the everyday lives of Deaf children and hearing and Deaf adults in educational settings. Chapter 7 attempts to describe the

emerging trends in the literature that has started focusing the everyday practices of primarily one kind of program – the bilingual educational model – and while this model itself has been described earlier in Chapter 3 as being part of the fourth and latest phase in Deaf education, at least six different approaches have been conceptualized as falling under this model. It is perhaps not a coincidence that some researchers have more recently (independently of one another) started studying the everyday practices in Deaf arenas in the 1990s. This focus reflects shifts in the human sciences that have shaped both theoretical conceptualizations of human language and “communication” and the methodological implications involved in studying the same.

Having said this, it should be recognized that a cognitive paradigm that focuses a skills perspective on reading and writing appears to clearly dominate the literature as a whole. A clear interest in *testing* children (and even adults) can also be discerned. The use of tests, interview guides and questionnaire procedures are popular methodological approaches used by researchers in their studies and projects.

A couple of brief points can also be made on the disciplinary and theoretical-methodological trends in the Swedish literature, even though these need to be viewed carefully, not least because of the paucity of literature available and also the nature of this body of literature. While a medical-technological perspective has been and continues to dominate the area of handicap research and deaf research in the country, one can perhaps see research activities becoming visible in other disciplines from the 1970s onwards. The following is an attempt at conceptualizing this expanding research interest using time as a point of departure:

- | | |
|----------------------------|---|
| • Linguistics (structural) | 1970s and continuing to the present |
| • Psychology | 1980s and continuing to the present |
| • Sociology | early 1980s and continuing to the present |
| • Education and history | second half of 1990s |

While a structural linguistics profile, primarily from two departments at Stockholm University, dominates the theoretical-methodological trends in Sweden ever since the 1970s, a limited number projects and texts with a sociolinguistic perspective have appeared from Gothenburg University (Department of Linguistics) and Örebro University (Department of Education) during the 1990s.

Work initiated by language researcher Ragnhild Söderberg at Lunds University in southern Sweden in the 1970s can perhaps be seen as an attempt to focus both category and thematic issues in Deaf education with a bearing on literacy issues. There appears to be an important difference in what can, for present purposes, be seen as the *Stockholm and the Lund models vis-à-vis* understandings of Deaf bilingualism.⁹³ Publications in the area

⁹³ This is discussed further after the presentation of the bulk of Swedish literature in Chapter 6.4.8.

focused in the present book from Stockholm University, and to some extent even the College of teacher education in Stockholm, appear to have favored a strong contrastive comparative grammar model with an introduction of written Swedish at the age of seven years for optimal language learning. An analysis of publications available from Lund University and the College of teacher education, Malmö, suggest an orientation towards theoretical frameworks where learning of SSL and Swedish is seen as being concomitant to participation in both the languages already in pre-school settings. The national curricula and syllabi for schools for the Deaf that have existed during the post-1981 period⁹⁴ in Sweden can be seen as based on the Stockholm model.

While the international and Swedish searches conducted in the mid-1990s unearthed little literature that focused everyday practices vis-à-vis literacies and language spheres in Deaf education, two interesting trends emerged in the searches conducted in 2001. Firstly a descriptive research agenda on communication-practices in Deaf educational settings were identified in the latter set of searches. Secondly, Deaf academic voices appear more significantly in the literature in the studies that have emerged during the latter half of the 1990s. In other words, researchers who are themselves Deaf become visible in the discourse that is shaping issues related to literacies and language spheres in Deaf education.

While the emerging emphasis on the study of everyday practices that constitute bilingual education models both in the international and Swedish literature thrown light on this one particular model, we continue to know little about the everyday practices that constitute other models. The final section of this chapter briefly outlines the underlying assumptions that characterize research which focuses on the study of communication-practices in the most recent shift in Deaf education (this latter research is discussed in Chapter 7).

4.4. CENTRAL ASSUMPTIONS IN THE (EMERGING) LITERATURE THAT FOCUSES COMMUNICATION-PRACTICES

Many of the overriding assumptions that researchers and professionals who work in the fields of Deaf literacy and Deaf schools have been both explicitly and implicitly outlined earlier, most notably in Chapters 2 and 3. As has been described there, these assumptions have and continue to shape both research and the organization of Deaf education more generally. In other words, assumptions regarding “deaf/Deaf”, “what constitutes a real language”, etc. have been clearly instrumental in shaping “The Great Debates” and “Where, How, and What to Teach Deaf Children” (Moore 1991).

As outlined in section 4.3 above, a disability and handicapping discourse is an overriding feature of most of the empirically driven literature available on

⁹⁴ See discussion in Chapter 1.4.

literacy and how schools for the deaf/Deaf are currently organized. For instance, literacy continues to be conceptualized in the literature as being synonymous with outcomes of standardized reading and writing tests. “Fixing” the dismal literacy levels and outcomes also appears to be a major theme in the literature. The majority of the non-empirically driven literature – and as outlined above in section 4.2 – is devoted to describing and/or evaluating the *situation* of Deaf children in different settings (see also Webster 1987). While the two previously discussed and central philosophical perspectives of cultural-linguistic and pathological criteria continue to dominate discussions that are seen as shaping Deaf children’s acquisition of reading and writing, a smaller and more recent body of research focuses what goes on in the everyday interactions of Deaf children and the hearing and Deaf people they interact with. This specific literature is discussed later in Chapter 7 and the underlying assumptions that have and is shaping this emerging body of literature is briefly focused here.

This body of literature appears to be generated by researchers with backgrounds in anthropology or human communication and by researchers who are situated within departments of education, teacher-training, Communication Studies, etc. In many instances hearing and Deaf researchers and students are reported as collaborating in projects whose texts are here understood as shaping the emergence of this new research trend in the literature. What is significant and different from the rest of the literature is that many of these researchers – hearing and Deaf – are (implicitly) identified in the literature as being competent users of different SL’s themselves.

The assumptions in this body of literature regarding literacies map onto the more recent theoretical perspectives discussed in Chapter 2. In other words, literacy is understood in terms of communicative and situated practices rather than isolated neutral skills. This emerging body of literature also has the following common threads: the studies are often based upon a clear-cut focus on interaction and practices rather than on specific traits or characteristics – personal or otherwise – of individual people. Learning and development are seen to be collective and distributed functions. Another theoretically driven assumption that underlies this body of literature is that institutional practices are seen as being related to sociohistorical processes. In addition, in keeping with more recent linguistic and neurological findings, different SL’s are understood as “normal” human languages that are as complex as different spoken languages. Another assumption, either explicit or implicit in this body of literature is that Deaf children and adults are conceptualized as bi- or multi-lingual “minority” human beings who live in close contact within a hearing majority culture and of which they are regarded as members. In this emerging research literature, Deaf bilingualism is understood generally in terms of a particular SL which is central in a given Deaf-World and a majority language.

In summary: This chapter has, in an explorative spirit, attempted to throw

light on ideological motivations that have *pulled* the different shifts in Deaf education. While the trends that are presented here are closely related to the themes that have been identified in the literature (and presented in the next three chapters), the discussions in this chapter have been kept separate from the chapters that focus on the themes in the literature for a specific reason. This comparative analysis of the nature of literature in Deaf education and literacies from Sweden and elsewhere suggests that there are *striking dissimilarities* between for instance Swedish research literature and research literature from the United States. Chapter 4, in other words, attempts to function as a brief backdrop against which some specific themes in the larger literature can be presented and the differences between the Swedish and international traditions of conducting and dissemination of research findings can be understood.

CHAPTER 5

Specific research themes in the literature

“Clearly we should or should not expect to find any single predictor of reading success that works for all children, deaf or hearing, and the combination of factors that positively or negatively influence reading development are not yet fully understood” (Marschark 2001, 33)

5.1. INTRODUCTION

The central question that can be asked as one goes through the body of literature and its analytical presentation is *firstly* to what extent the literature is reproducing the dichotomies, tensions and fractions that have existed since the first phase of Deaf education, ie. the mid 16th century, and *secondly* to what extent the literature is creating a new knowledge base. Despite the scholastic and professional interest in issues regarding reading and writing in Deaf education, the great debates that they have fuelled and continue to fuel, and the historical shifts in the organization of education for Deaf children, there are comparatively few empirical and data-driven studies that have systematically addressed literacy itself and the nature of the concerns continue to be elusive as Marschark’s opening quote above and the following quote suggest:

“Although literacy development has attracted substantial amounts of research and of school resources, instructional efforts have not been totally unified because there is still *considerable uncertainty about the nature of the problem*. Much is still unknown about (1) how deaf students process text during reading and writing, and (2) how they acquire effective literacy skills. It is uncertain both what knowledge about text is most useful to successful deaf readers/writers and what experiences allow them routinely to acquire that knowledge. This uncertainty is further magnified by differences in learning and processing that may exist among groups within the deaf population” (Kelly 1990, 203, emphasis added).

A young Deaf child’s English or Swedish – or any of the world’s 100-odd written languages’ – literacy status, has been traditionally studied following the cognitive and developmental dimensions of reading and writing. In addition, many studies investigate “cognitive development in the absence of language” (Marschark 2001, 31). Comparisons and conflicts between oralism and manual models and “methods”, or comparisons between Deaf and hearing students/individuals continue to dominate the literature. The overwhelming bulk of the literature continues to conceptualize textual competencies in terms of individually owned, neutral reading and writing skills. This appears to cut across the literature, irrespective of the

philosophical (medical-psychological or cultural-linguistic) or communicative-ideological (oral/manual/total communication) orientations of the author/s of the texts.

The literature *consistently suggests* that irrespective of the educational programs in which they are enrolled, the majority of students who are Deaf read at levels considerably below those of their hearing peer groups. Even at the end of the 20th century, a majority of students who leave upper secondary school are reported as having reading and writing skills equivalent to those expected at the 4th or 5th grade levels (Traxler 2000). And “yet, there are clearly many deaf adults and children who are excellent readers and excellent writers. What accounts for these differences?” (Marschark 2001, 33).⁹⁵ The theoretically driven analysis of this body of literature gives some indication that answering this kind of question requires that one turns to newer conceptualizations of the research agenda and of the methodologically oriented discussions in both the institutional field and in the academic literature.

The remainder of this introductory section in Chapter 5 will in part function as a guideline in order to assist the understanding of how the vast body of literature that was identified was further analysed and how choices regarding the presentation of the literature in this and the next two “theme” chapters were handled.⁹⁶ The issues related to why some Deaf children and adults become expert readers/writers, and the majority currently do not, can perhaps be better understood through the findings presented in the next two chapters. There however currently exists a rather large body of literature which focuses on Deaf children’s reading and writing and which is conceptualised within four themes that are presented in this chapter. This body of literature has an important bearing on both the field of Deaf education and also on how Deaf literacy is commonly conceptualized. This literature is presented and discussed in this, the first of the three, thematically oriented chapter(s). Taking a broader, rather than a skills approach towards literacy, and a pragmatic approach to the literature resulted in not discussing available writings that have focused on the sub-skills that are currently understood as being part of reading and writing.⁹⁷

A few areas or themes were identified when the literature was being analysed. The themes represent areas where both, Swedish and international literature exists, and areas where only international literature exists. Some of these areas overlap and are identified here as a heuristic device. Each identified theme is *illustrated* through a few chosen examples from the literature. An attempt is made to cover more recent literature and where

⁹⁵ Per Selander, a Swedish Deaf psychologist, asks a similar question regarding the Swedish context in an undated manuscript from the late 1990s.

⁹⁶ See also Chapter 1.2 and Appendix 1.

⁹⁷ The theoretically driven arguments for this choice are presented in Chapters 1 and 2.

possible the affiliations of the authors are presented. An attempt is made to cover the core literature that is available in and on Sweden in the next chapter. In other words, Chapter 6.4 compliments the earlier discussions on the Swedish model and literature presented in Chapters 1.4, 3.5 and 4.

“*Better model*” studies or reporting forms a sizable portion of the literature available in the area of Deaf literacy and education generally. The major historical shifts in the communication-ideological foci (oral/manual/total communication/bilingual) in the area of Deaf education have clearly shaped the area of research in Deaf literacy and education. One can ask whether the shifts have shaped the research agenda or whether the research literature has shaped the field. This body of literature is briefly discussed under the heading of “better model” reporting (section 5.2 below). As will be noted, much of this reporting, while discussing issues of schooling, does not directly discuss literacy itself. *Demographic studies* of deaf/Deaf populations, another theme in the literature (presented in section 5.3), can be understood as being important for two primary reasons. The human population that is the focus of the literature that is being covered in this review is small. In addition, the major shifts in educational ideology suggests that demographic studies could throw interesting light in this area. In the international literature findings from demographic studies are often used to structure research knowledge and even as a basis to develop hypothesis. Demographic studies are conspicuously missing in the research literature from Sweden.

Given the early influence that different countries had on one another’s models/systems of education, studies that have a *cross-cultural* component could potentially throw interesting light in the area that is focused in this meta-research study. Culture is, in the present context, understood more broadly than is normally the case. Studies comparing different country models, different educational models and different cultures – primarily deaf and hearing cultures are scrutinized under this theme. Another theme that is focused upon is how different *technologies* are understood as shaping deaf/Deaf literacy and education (section 5.5). Here aspects of sound amplifying technology (hearing aids, cochlear implants, etc.) and material technologies related to literacy practices inside and outside classrooms (everything from print, paper, pencils to computers and internet) are considered in the analysis of the literature.

A fifth theme that has emerged in the analysis of the literature reports on issues related to the current period in Deaf education: *Deaf bilingualism*. This theme is presented and discussed separately in Chapter 6. Research on or from Sweden is focused in a subsection (Chapter 6.4) under the presentation and discussion of this fifth theme. As noted above, studies presented and discussed under the different themes often overlap. To re-iterate a point made earlier, while these themes suggest directions that can be identified in the research, no attempt is made in this or in the next chapter to present all the literature that were identified in the different searches and that potentially could come under one or more themes. The sixth and final

theme that has been identified is related to the emerging trends vis-à-vis research on communication-practices. Literature that can be subsumed under this theme is discussed in Chapter 7.

5.2. “BETTER MODEL” STUDIES OR REPORTING

Many studies that have been reported either in journals or as unpublished reports, and have in the present context been conceptualized as studies reporting or informing “better models”, invariably describe the rest of the overwhelming body of literature in the area of literacy and Deaf education as being “only” evaluative or “only” descriptive⁹⁹. Interestingly enough many of these studies also “negatively” evaluate the efficacy of other studies focused on other models while at the same time suggesting the methodological superiority of their own project or study and their own findings as being the more rational and correct. The following quote will here serve to illustrate this tendency:¹⁰⁰

“Existing research into literacy skills of severely, pre-linguistically hearing-impaired children is largely descriptive or evaluative and has contributed little to our understanding of the processes involved” (Webster 1987, 227, emphasis in original).

While such a position is not an uncommon one in academic writings generally, attention is drawn to three issues here. Firstly, the weaker links to theoretical frameworks and arguments proposed in the body of the literature that constitutes and covers Deaf literacies and education needs to be recognized (see also Chapter 4). For instance, Kelly (1990) suggests:

“There is still an evident need for research in this field [of Literacy and Deafness], particularly programs of inquiry that are soundly based in theory, methodically conducted, and responsive to questions that are critical to promoting the literacy of deaf children” (1990, 202–3).

Secondly, the ideologically motivated shifts and the polarized philosophical perspectives that have historically divided the field call for paying closer attention to *how* the research community has framed issues in the literature. And thirdly, there appears to be a tendency in the literature to *advocate a*

⁹⁹ In the context of the present project a distinction is drawn between “prescriptive” and “descriptive” studies. While the former is seen as being ideologically pushed understandings of the best model of education, the latter term – descriptive – is seen as describing actual practices and activities and not just describing the framework of different labels (see also discussion in Chapters 2 & 4.2). The use of the term “descriptive” is however often used in the literature as involving the *description of the labels* used for different models – ie. the prescriptive understanding of what comprises a particular model. From a theoretical position, it is significant to keep these understandings distinct, even when the terminology used is similar.

¹⁰⁰ It should be noted that here attention is being drawn to what may be a specific argumentation style in the literature. Webster’s study on reading and writing reported in the International Journal of Rehabilitation research can be understood as a sound piece of academic writing.

specific model for implementation in the (re)organizing of Deaf schools either on the basis of the researchers' own studies/projects or on the basis of reflection on cumulative knowledge that is available at any given particular time.

As Swedish researcher and professor of Education, Ingrid Carlgren, recently suggested:

“Instead of being in and reflecting on where we are and what we are doing, there has been an obsession with Utopia, i.e. ‘the land of nowhere’. Instead of analysing trends and aspects of what is actually going on in relation to what is thought of as good or bad, the aim has been to abolish all that is old and replace it with something new” (Carlgren 1999, 233).

While reflecting on (shifts in) discourses in the field of general education, the above quote reflects a fundamental theme and pattern in the Deaf education and Deaf literacy literature during all four phases that have been identified previously in Chapter 3. Webster (1987) is once again used here as an illustration of a single piece of research being used as the basis for proposing “better models” (see also Neuroth-Gimbrone & Logiodice 1992):

“In the present study an attempt was made to analyse the deaf child’s strategies in reading and writing, to construct a model of literacy development in relation to linguistic and cognitive factors, and to suggest ways of remediation” (Webster 1987, 227).

The seminal publication “Unlocking the Curriculum: Principles for Achieving Access in Deaf Education” by Gallaudet University researchers Robert E Johnson, Scott K Liddell and Carol J Erting (1989), which is further discussed in Chapters 6 and 7 is understood as marking the general shift towards the current bilingual period in the organization of Deaf education in North America. This text can be seen as an example that illustrates how reflection on cumulative knowledge at a given point of time has been used to propose a “better model”.

The third issue that is being discussed here suggests that there is often a rather narrow differentiation or demarcation between what one could call “research” *and* “applied research”. As will be suggested through the presentation and discussion of the Swedish literature under section 6.4 in the next chapter, this demarcation is largely non-existent in the Swedish literature that has shaped the field of Deaf education in and after the shift towards the current bilingual phase in Deaf education.

A final point needs to be made before some more examples that represent this theme are presented. Not all authors of texts/studies that can be understood as falling under this theme themselves prescribe to a better model of education themselves. However, findings from these studies build on specific attributes or factors that the researchers are hypothesizing or controlling as aspects conducive to reading and/or writing development.

Research by Geers and Moog during the last three decades (for instance Geers & Moog 1992, 1978; Geers, Moog & Schick 1984; Geers & Schick 1988) from the Central Institute for the Deaf, Washington University in St. Louis, USA report in (for instance) the *Journal of Speech and Hearing Research* (Geers & Moog 1992) that the average reading scores of 100 deaf students – 16-17 years of age – who were taught exclusively by the “oral method” was about five grade levels higher than the national average for deaf students. Thus suggesting that the “oral method” was superior to other “methods”. Geers and Moog also compare the reading scores of a group of Deaf children of Deaf parents – DCDP – with a group of Deaf children of hearing parents – DCHP – both of which were taught by the “Total Communication method”. In addition the Deaf children enrolled in the “oral method” program are reported as displaying high levels of functioning in oral language situations, for instance in the oral classrooms and in their hearing families. The other two groups are reported as displaying superior competencies in functioning in situations where ASL and Signed English are used.

This study by Geers and Moog (1992) has been quoted by Swedish audiology and medical researchers in support of their critique of the current “communication methods” and orientation in the Swedish Deaf school system. In the present context it can be noted that Geers and Moogs’ findings have been challenged in the United States on the grounds that the oral students in their studies came from selective affluent backgrounds.¹⁰¹ For instance, the editor of the *American Annals of the Deaf*, Professor Donald S. Moores has gone on record suggesting that “a lot of the affluent kids educated by the oral method would do a lot better in a Total Communication program” (cited in Eron 1988, 76). Geers and Moogs acknowledge the fact that deaf students “with a higher intelligence and increased family support tend to do best” (Eron 1988, 76).

Research of the kind conducted and reported by Geers and Moog is representative of studies in the literature whose findings are used by the authors themselves (or by other researchers who share the authors primary philosophical orientations – here the medical-psychological perspective) to support a particular set of “best practices” in the organization of education for Deaf students. The present discussion should not be interpreted as suggesting that oral language has no position in Deaf education.¹⁰²

In addition, in a recent research synthesis on the language development of children who are deaf in the context of North America, Mark Marschark (2001), professor and researcher at the National Technical Institute for the Deaf, Rochester, USA, cites a number of resources and suggests that:

¹⁰¹ See also Padden’s reflections concerning the best placement of different groups discussed earlier in Chapter 2.2.

¹⁰² While this issue is discussed further in Chapter 6, the need for a more nuanced view of the position of oral language use in Deaf education in Sweden can be noted here.

“Despite the long history of emphasizing spoken language in the US, empirical research concerning the development and teaching of speech skills to young children who are deaf has lacked theoretical coherence and generalizability with regard to language use in everyday conversation” (2001, 21).

The “total communication methodology” was the dominant model and organizational principle in the field of Deaf education until the 1970s and even the 1980s (see Chapter 3). It has more recently been described as a variation of monolingulism since educators who subscribed to it (and who continue to subscribe to it) “widely believed that an English-based sign system was English” (Singleton, Supalla, Litchfield & Schley 1998, 17, emphasis in original). While proponents of the more recent “bilingual model” have argued that using both signing and oral speech at the same time is a “hearing perspective”, arguments have also been raised which suggest that it is not possible to sign and talk coherently and at the same speed in both modalities. Studies presented in Gustason (1988) and Gustason (1990) however “question the concept that SimCom¹⁰³ is either not possible or somehow unable to accomplish” (1990, 23). Professor Gerilee Gustason, who is herself Deaf, previously worked at Gallaudet University and is currently Executive Director of SEE¹⁰⁴ Center for the Advancement of Deaf Children, USA. She suggests:

“I don’t believe that the failure of many people to sign well in SimCom means that it can’t be done. I reject that notion for precisely the same reason that I reject the idea that the failure of deaf kids in education means that deaf kids can’t learn. That assumption is simply wrong (...) Early exposure to the language, yes, I fully agree with that also. Obviously I disagree with regard to *which language*. Because those of us who developed SEE never said that if the child has deaf parents who use ASL that ‘s bad. It’s not. That’s fantastic. But we did say that hearing parents have a tough time. It’s hard to accept sometimes that your child is not what you thought it would be” (1990, 23 & 24, emphasis added).

The above quote illustrates, among other issues, the confusion in the literature between human languages and “communication methods and ideologies”. It is theoretically significant to differentiate between these two, as was highlighted in Chapter 2. Dr. David M. Denton, the hearing Superintendent (now retired) at the Maryland School for the Deaf in Maryland, USA, who is credited with coining the term “Total Communication” defends the total communication movement, while accepting the importance of ASL. He suggests the following at the same national seminar from which the previous quote by Gustason is taken:

“Total Communication was seen as a multisensory approach recognizing the fundamental legitimacy of both manual and oral modes of communication, but recognizing first of all the absolute right of every deaf child to communication

¹⁰³ Simultaneous Communication – one of the many “communication methods” that have played a role in Deaf education (see also Chapter 3).

¹⁰⁴ Signing Exact English – another of the many “communication methods” that have played a role in Deaf education (see Chapter 3).

access, in whatever form. The humanitarian characteristics of the Total Communication movement have helped revolutionize deaf education all over the world. Its wide acceptance and popularity has resulted in the dramatic burst of growth in the usage of sign language. With the public acceptance of sign language has also come public recognition of the viability of the deaf culture and the elevation of deaf persons into positions of responsibility and prominence in a variety of fields” (Denton 1990, 17; see also Denton 1987).

While the “best model” studies or reporting can be said to be perpetuating historical divisions and tensions, they also represent a section of the literature that has and that continues to ignore knowledge generated in fields as diverse as structural linguistics and neurolinguistics¹⁰⁵ and on theoretical discussions related to human learning and communication in the Social Sciences and Humanities (see discussions Chapter 2).

The remainder of this section therefore focuses on some of the research that has paid attention to these more recent understandings and has attempted to relate this knowledge to “better practices”. However, as could be gauged from the historical analysis of the shifts and tensions inherent in the organization of Deaf education and reporting of research in Deaf education, it appears that this issue remains quite complex.

Carolyn Ewoldt’s,¹⁰⁶ Ph.D dissertation (from 1977) made available some interesting findings. Ewoldt concluded at the end of the 1970s that the literature exaggerated Deaf children’s literacy problems and she then suggested that better practices that included the whole language perspective were needed to improve Deaf literacy levels (see also Ewoldt 1994).

“Given young deaf children’s interest in and easy access to print, and their need for a primary language, a marriage of whole language and ASL/written English bilingualism would provide an ideal learning situation for deaf children” (1994, 5).

Ewoldt’s post-doctoral research (for instance 1983 and Ewoldt, Israelite & Dodds 1993) provides interesting insight into what might be seen as better practices in the institutional field of Deaf Education. Ewoldt (1983) took issue with what is reported as being a common practice in Deaf education – the practice of creating and using simplified texts for Deaf students (see also LaSasso 1987). Her analysis suggests that such simplified texts are more complex products since these texts often lack the predictability, cohesion and other cues that “non-simplified” texts possess. Based on an interview study of 16 upper secondary school students and their teachers, Ewoldt, Israelite and Dodds (1993) report that teachers tended to underestimate students independent reading-comprehension abilities and also misjudged what texts students were likely to enjoy reading. In support of Ewoldt’s 1983 findings, they report that students themselves judged the most difficult texts as being the most interesting. These kinds of studies challenge the common practice

¹⁰⁵ This body of knowledge has thrown light on the complex nature of SLs during the last 30 years (see earlier discussions in Chapter 3).

¹⁰⁶ Currently professor of Education at York University, Toronto, Canada.

of using simplified texts in classrooms for Deaf students and raise interesting questions in the field of education more generally (especially since this is a common approach for other student categories that are experienced as being scholastically weak).

Jean Andrews, professor of Special Education, at Lamar University, Texas, USA, reports (1988) from a year-long implementation of a pre-reading program in a school which used the “reciprocal training procedure” and which according to Andrews was grounded in Vygotsky’s theory of language and learning. The training procedure incorporated

“an interactive dialogue through which the teacher explicitly models four prereading skills: fingerspelling, book reading, story retelling, and word recognition during story-time session with experimental story books” (1988, 349).

The intervention which lasted for half an hour every week for 25 weeks during a school year at the beginning of the 1980s is reported as being successful on the basis of pre and post text analyses. Andrews, on the basis of these analyses, presents a set of guidelines for the successful implementation of the program in other settings.

Some of the literature reports on what is perhaps seen as a “truism” in studies reporting good practices in reading and writing. For instance, Rogers (1989) discusses a year long study that focused on primary school age Deaf students who were read bed time stories four times a week. He reports that post-tests indicated improved reading abilities. Even students expressive “signing” abilities are reported to have improved over the course of the year.

Another study which reports on the effects of parents reading for their Deaf children at home by Lartz and Lestina (1995, 1993) suggests similar trends and describes specific strategies that three Deaf mothers used while reading to their 3-5 year old pre-school children. In their paper Lartz and Lestina (1993) suggest that such strategies may constitute better practices for improving reading abilities of Deaf students in school. Some of the strategies, described in this study parallel the findings reported by members of the Signs of Literacy research group at Gallaudet University.¹⁰⁷ For instance, the research on communication-practices reported in Chapter 7 suggests that “chaining” or “local chaining” of ASL and English or SSL and Swedish wherein ASL or SSL words or sentences are placed in the vicinity of English or Swedish words/sentences *or* are directly paired with the presentation of English or Swedish words/sentences are a common structuring device or cultural tool in the behaviour repertoires of parents or teachers engaged in “rich literacy practices”. Lartz and Lestina report that two of the following strategies were employed by all the three Deaf mothers: “sign placement” and “text paired with sign demonstration” and suggest these as being important in supporting reading abilities of Deaf children.

¹⁰⁷ The work of this research group is presented in Chapter 7.

Kluwin and Kelly (1992) describe the implementation of “a successful writing program in public schools for students who are deaf” on the basis of a two-year project which included 325 students and 52 teachers in grades 4-10 from 10 public school programs. The project focused on teachers and is reported to have made available to them better practice strategies for teaching writing. The teachers are reported as being involved in the project and an assessment of short-term effects on students writing abilities is understood as being beneficial, especially as far as grammar skills are concerned.

LeNard and Delk (1992) also describe and report on a project that focused on teachers of the Deaf working in public school settings. Their two-year project involved giving teachers on-going, hands-on training in “whole language” teaching practices. LeNard and Delk report that the project was a success in that classroom teaching strategies improved, as did teachers attitudes. Even students writing – as gauged from writing samples – is reported to have improved as a result of the project.

In another study that focused on the teaching strategies of teachers, Schleper (1993a) describes the use of historical novels as a better practice model for Social Studies teachers of the Deaf. The one-year project included monthly strategy training sessions to make available to five teachers “meaning-centered guided reading strategies”. Schleper (1993a) reports that teachers were comfortable in using these strategies and that a post-study survey of students indicated that the project had positively shaped students motivation and interest in history.

In further reports Schleper and his colleagues (Schleper 1994, 1993b, 1993c, 1992, Schleper & Farmer 1991) describe different studies and classrooms where the focus is on the use of the “Whole Language Philosophy”. They report that the use of authentic texts in school practices is more suitable for improving Deaf students reading and writing. Schleper (1993b) analyzed if Deaf adolescents could remember and use “literacy devices” such as symbolism and foreshadowing more easily in independent reading and writing if they were introduced to these previously through the use of picture books. Schleper (1993b) reports that students’ abilities increased both in test situations as well as in their writing work and reading of different text genres.

Schleper and Farmer (1991) further describe a year long case study wherein they report on an intervention strategy in a traditional group of Deaf upper secondary school students who were understood as doing poorly in standard reading tests. The intervention was offered in the form of an “interdisciplinary approach” which is reported to being informed by research in literacy in the education of deaf “learning disabled students” (1991). The interdisciplinary approach included offering a composite English and Social Studies class. The students are reported as having gained in reading and writing skills as seen through tests and in analytical discussions. They are

also reported as displaying more positive attitudes towards reading and writing generally.

Leonard Kelly (1995), research associate and literacy researcher at the Gallaudet Research Institute, USA, reports empirical findings which have implications for “Whole Language Instruction”. The study compared top-down and bottom-up reading strategies of nine secondary school Deaf students who had third grade reading abilities with a matched group of nine students who were skilled readers in order to throw light on what component processes the groups were exploiting. Kelly situates himself within a cognitive-theoretical perspective, and reports that while both groups were similar in how they used top-down reading processes, the skilled group of readers fared better on the bottom-up processes. Kelly concludes that “the excessive use of attention for bottom-up processing” by the students with lower reading skills “circumscribes the amount of working memory capacity available to engage in higher level processes related to comprehension of the entire text” (1995, 331).

While highlighting the need for bottom-up components in the whole language approach programs, Kelly cautions that this

“does not automatically justify a resurgence of the drill-and-practice approaches that have been so prevalent in reading programs for deaf children and youth. Recall that explicitly skill-focused programs have been largely unsuccessful in routinely developing reading competence of deaf students” (1995, 331).

This illustration of a self-reflective stance is noticeably uncommon in the literature that can be placed under the “better models” theme. David Dolman (1992), professor of education at Barton College, North Carolina, USA, also takes issue with “Whole Language Approaches” used in Deaf education. By drawing an analogy between findings of studies which looked at the impact of whole language approaches on children from minority¹⁰⁸ backgrounds and families with low-incomes, and the case of Deaf children, Dolman suggests that “the deficiencies in exposure to print, interaction with books, and experience with standard English are serious enough to warrant a more direct approach to literacy than is offered through the whole language philosophy” (1992, 281). However, like Kelly, he concludes his paper by suggesting that the strengths of the approach are “a much-needed antidote to relying solely on skill-based books and work sheets” (1992, 281).

Ellen Schneiderman (1990), professor of Deaf education at California State University, Northridge, USA, distinguishes between “non-communicative teaching methods as arbitrary demands for use of language” and “communicative teaching methods (...) based on situations in which there is a genuine need for the use of language” (1990, 18). Schneiderman presents

¹⁰⁸ Read “Black” or Afro-American.

ways to use communication games like Bingo or Picture-Object Matching in *written form* with Deaf students in an effort to improve their English skills.

In what appears to be a large project called “The Access-to-Learning Project”, Singleton, Supalla and their colleagues at the Universities of Illinois and Arizona, USA, try and investigate whether Deaf children with greater fluency in ASL exhibit better skills in English literacy¹⁰⁹ (see Singleton, Supalla, Litchfield & Schley 1998). The study, conducted between 1993 and 1997, assessed the linguistic – ASL and English – skills, cognitive and social skills of 80 profoundly deaf children from different school settings. In what appears to be the first published¹¹⁰ article from the project, Singleton, Supalla, Litchfield and Schley report on 53 profoundly Deaf DCHP’s who were aged between 6 and 12 years and were attending one of the three following school settings: ASL/English bilingual residential school, traditional residential school and self-contained classrooms in public (hearing) schools.

The ASL skills of the students were assessed by means of a special proficiency tool that the research group had devised and which required the collection of data in three contexts: everyday conversation through peer interaction, conversation in an interview setting with an adult and retelling of a videocartoon story. While the public school setting students are reported as exhibiting primarily low skills in ASL, students in the traditional residential school setting “demonstrated considerable variability in their ASL skill” (1998, 24). On the basis of this it was concluded that “informal exposure to ASL outside of the classroom *does not guarantee* that a deaf child will attain a high level of ASL fluency” (1998, 24, emphasis added). This type of conclusion is supported by findings for hearing students in the area of ethnicity and language studies where mere exposure to a majority language outside classrooms is not seen as guaranteeing scholastic success inside classroom settings. Given this, it is interesting that the bilingual model subscribed to in Sweden currently builds unquestioningly on the tenant that mere exposure to SSL is seen as providing the impetus for “first language” level fluency for Deaf students (see further Chapter 6.4). Half the students in the bilingual residential school setting in the Singleton, Supalla, Litchfield and Schley study are reported as demonstrating high ASL skill level, 31 percent medium and 19 percent students are reported with low ASL skills.

Singleton, Supalla, Litchfield and Schley (1998) report that their “preliminary results indicate that after age 9, high ASL-fluent deaf children of hearings parents were outperforming their less ASL-fluent peers on several English writing tasks” (1998, 25). No such correlation was found for the younger students in the project. However the research group cautions

¹⁰⁹ The larger project is reported as having other aims as well.

¹¹⁰ A number of unpublished reports and student thesis are referenced in the article, but these could not be accessed for the present analysis.

against “over” interpretations from this finding since the younger students produced “very little English text in their classroom activities” and it was on the basis of these text samples that conclusions were drawn. They indicate that their overall findings regarding ASL proficiency being positively related to proficiency in English can also be seen in other literature from the 1990s.¹¹¹ They present their primary conclusions in the following words before presenting a good practice model of teaching English:

“We contend that a specific intervention must take place in order to facilitate the transition from ASL to printed English, with the expected result of raising deaf children’s English proficiency to a level that surpasses the well-known fourth grade reading level plateau” (1998, 25).

Basing their good practice model on their own findings and the work on ASL-based techniques and “glossing” by Andrews, Winograd and DeVille (1996), Mozzer-Mather (1990), Neuroth-Gimbrone and Logiodice (1992) and the teaching work in a pilot intervention program by two members of their research group, Singleton, Supalla, Litchfield and Schley (1998) suggest that an ASL-based technique where an ASL-narrative is first presented and the narrative then “glossed” into English would be a viable “method” of learning/teaching English:

“Eventually, deaf children would deal directly with English print via reading and writing activities and no longer need to have an ASL video representation as their primary narrative source and sign gloss as an intermediary code” (1998, 26).¹¹²

While Singleton, Supalla, Litchfield and Schley (1998) recognize that other educators working in schools that employ “Bi/Bi¹¹³ programs” also employ other creative ASL-based techniques for making English learning possible, they remain concerned that these creative “methods” are applied inconsistently “across instructional settings” and question whether “common pedagogical practices are shared among teachers within the very same program” (1998, 27).

This concern for the possible *range of everyday communication-practices* that can go into the very same program is a concern that is central to the findings

¹¹¹ Many of the references to this “other literature” from the 1990s are either unpublished reports or student theses. One of the unpublished reports (Padden & Ramsey 1996) and the published reference that Singleton et al cite (Strong & Prinz 1997) have been included in the present analysis. One conclusion that can be drawn on the basis of the references that they cite is that a number of researchers and students collaborated in the project and that research with relevance to Deaf literacies and education were initiated and were being conducted during the 1990s. This was also corroborated with direct contact with some of these researchers. See further Chapter 7.

¹¹² Compare also with the different approaches to bilingual education summarised by Prinz and Strong (1998) discussed earlier in Chapter 3.5; compare also with empirical accounts of classrooms practices in Swedish Deaf school settings presented in Bagga-Gupta (in press-b, 2000).

¹¹³ Bilingual Bicultural model (see further Chapter 6).

of the present meta-research study. In other words, the label of a particular program – “oral”, “total communication”, “bilingual”, etc. – only gives information regarding the prescriptive framework regarding the communication modalities that is assumed to be favourable for the reading and writing development of Deaf children; this label, as has been argued earlier, gives us little information regarding the everyday communication-practices of that program. There is also perhaps need to reflect on the diversity of interpretations and the co-construction of everyday life in and outside classrooms in any given program, in order to understand the complexities related to educational ideologies that such labels represent. This is a theoretically significant issue. Common practice-principles that teachers are overtly taught or programs are supposed to nurture *cannot* be taken as being equivalent to the everyday practices that teachers co-construct with other members of their classrooms. This is, however, not an assumption that underlies much of the literature that can be understood as falling into the “better models” theme.

Two other conclusions that Singleton, Supalla, Litchfield and Schley (1998) offer in their paper are significant for present purposes. Firstly they endorse the view that greater consideration needs to be given “to the theories underpinning [different] Bi/Bi programs” and secondly their work shifts focus “from first and second language learning issues to modality-based issues” (1998, 27). This latter point is also theoretically important and merits attention because the concepts “first” and “second” emerge in the literature as the field shifts into the “bilingual” period in Deaf education. These concepts are borrowed from the research field of hearing bi(multi)lingualism¹¹⁴ and are not empirically grounded in the complex linguistic experiences in different Deaf communities. It is problematic, if not confusing and misleading, to use these concepts especially given that 95% of Deaf children are born into hearing families¹¹⁵ who at best first come into contact with, and start learning, a given SL through short courses when their Deaf child is a year old. While theoretical arguments suggest that a visually accessible language – a SL – might be the most easily accessible linguistic code for a large majority of Deaf children, (in institutionalized activities), this at best needs to be understood in terms of a *primary* code for these 95 percent of DCHP’s (in institutionalized activities).

Swedish linguist and professor at the Department of Scandinavian languages, Stockholm University, Kristina Svartholm has been the holder of the chair “Swedish as the *second* language of the deaf” after its inception at the end of the 1990’s. Svartholm has presented and discussed the Swedish bilingual

¹¹⁴ Even in hearing bi(multi)lingualism the terms may apply to “sequential” language acquisition and not “concurrent” (also known as “simultaneous”) bi(multi)lingual socialization. It may be that the proliferation of the terms “first” and “second” in the literature is more revealing of a monolingual bias that monolingual researchers and professionals bring to the field than empirical evidence as such (see also Bagga-Gupta 2003a, 2002a, Cromdal 2002).

¹¹⁵ For latest figures and discussions on this estimate see Mitchell and Karchmer (2004).

model at both national and international contexts during the last two decades (this work is presented in Chapter 6.4). Her work can be seen as shaping the organization of and interpretation accorded to the teaching of reading and writing in the Swedish Deaf bilingual model. For present purposes it can be noted that Svartholm's work characterizes "better model" reporting.

While most of the literature that can be conceptualized as falling under the "better models" category has focused on children, some of the literature is also focused on Deaf adults. This focus stems from the "effect on the employment of the deaf worker" and concerns related to functional literacy skills (Lieberth 1992, 4; for a parallel discussion in the Swedish context see Högsten 1989). However, this literature also reports that "few if any studies of the efficacy of such programs or of the educational methods used in them have been reported" (Lieberth 1994, 22). No study of the everyday literacy practices of Deaf adults have been found in the literature searches. An interesting exception was a study of the microlevel communicative-practices of adults in signing environments – Deaf clubs (see McIlvenny 1995, 1991).¹¹⁶ However, it should be added that some monographs – often authored by researchers or other individuals who are themselves Deaf – throw implicit light on these everyday practices at a more general level (see for instance Padden & Humphries 1988, Lane, Hoffmeister & Bahan 1996; for an interesting Swedish autobiography see Josberg 1993).

Lieberth (1994) has herself designed, chosen, modified and developed literacy materials for the training and assessment of Deaf adults (see also Lieberth 1992). Lieberth (1994) describes this literacy training program and the assessment procedure which entailed working on computer programs. The analysis that was possible in these programs "were used to chart progress on specified writing goals" (1994, 24). While the results of this study are reported by the author as not being statistically significant, other measures and "subjective data (...) indicated that the materials and methods used with the subjects were effective" and "that the literacy training had positive benefits" (1994, 26). The author also presents future directions for work in this area.

The literature that has been reported on "better models" directly or strategies and "good practices" that contribute towards a "better model" have a bearing on literacy issues in Deaf education. It is perhaps difficult (though perhaps not impossible) to reflect on the *institutional field* of Deaf education and at the same time also analytically contribute towards the *research field* of Deaf education. As was noted previously in Chapter 1, there is a fundamental analytical distinction between the research field and the institutional or activity field of Deaf education and literacy. Contributing to both the research and the institutional field simultaneously is a challenging task and from the literature that has been studied, it appears that both researchers and professionals often

¹¹⁶ These studies did not focus literacy as an aspect of these communicative-practices explicitly.

tend to become prescriptive and ideological in their reporting when they are involved in both fields. The need for non-prescriptive research and critical reflection on the different models is worth noting, given the great debates that this area has witnessed over the last few centuries.

5.3. DEMOGRAPHIC RESEARCH

A non-prescriptive theme that can be identified in the literature is concerned with the creation of a larger macro-level picture of the shifting trends in, for instance, school placement and achievement levels of different sub-categories of students. This literature can be placed under the theme of “demographic research”.¹¹⁷ The nature of this literature is presented first in this section, before discussing how findings from some studies in this theme shape Deaf education and literacies. In the United States, the Gallaudet Research Institute (previously Center for Assessment and Demographic Studies) has, since 1968, in addition to other activities been responsible for conducting and analysing the Annual Survey of Deaf and Hard of Hearing Children and Youth (Annual Survey, see <http://gri.gallaudet.edu/Demographics/annsrvy.html>, October 2001)¹¹⁸. Data regarding deaf and hard-of-hearing individuals is also collected periodically through the United States National Health Survey and this is independent of the GRI Annual Survey (Ries 1994). Unlike the annual survey, the national health survey does not focus on children and neither does it focus on educational institutions.

“The Annual Survey grew out of an expressed need for accurate and continuing demographic data on deaf and hard-of-hearing children in the U.S., in order to *facilitate educational program* planning at the local, state, and national levels” (Holden-Pitt & Diaz 1998, 72, emphasis added).

The demographic, audiological, educational and other information that is seen as being relevant to education is “reported only in summary, cumulative reports; no individual student or individual school data from the survey are ever released by the GRI”. In addition, this survey periodically adds new criteria to its agenda. For instance, Mitchell and Karchmer (2004) analyze and report on the parental hearing status distinction that was added to the survey in 1995–96.¹¹⁹ Mitchell and Karchmer’s analysis calls into question the figures that have traditionally described the linguistic group of Deaf children who have Deaf parents (DCDP’s). Instead of the often quoted 10%, the 1999–2000 survey indicates that less than 5% of deaf and hard-of-hearing students in educational settings have at least one parent who is deaf. As will become evident in the sections that follow (for instance 5.4 and 5.5) such a finding has important implications for the research literature on Deaf education and Deaf literacies.

¹¹⁷ Unreferenced quotations in this section are from this internet resource (October 2001).

¹¹⁸ Information regarding parental hearing status was first elicited in the surveys 1984-85 through 1986-87. This question was then dropped and added to the survey again in 1995-96.

¹¹⁹ Information regarding parental hearing status was first elicited in the surveys 1984-85 through 1986-87. This question was then dropped and added to the survey again in 1995-96.

The Annual Survey is cited often in the international literature and is used as an important source in a wide variety of ways and by a wide number of governmental and non-governmental agencies in the United States. It is also used by researchers and, as mentioned earlier, shapes interpretations of smaller, more in-depth empirical studies. “The Annual Survey has also provided a sampling framework for four national achievement testing projects using the Stanford Achievement Test in 1974, 1983, 1990, and 1996”. Deaf schools and programs in the United States can be said to be shaped by this body of work. Some of the different kinds of information that have been used for research purposes from the Annual Survey include:

- statistical summaries of “communication method by audiological status” (<http://gri.gallaudet.edu/AnnualSurvey/combyaud.html>, October 2001),
- “characteristics of elementary aged severely-profound deaf kids” (Allen – <http://gri.gallaudet.edu/AnnualSurvey/elem.html>, October 2001),
- “ethnic backgrounds” (Schildroth & Hotto 1995),
- information regarding educational outcomes by mapping which deaf and hard-of-hearing students leave high schools and enter college or university level education (Allen 1994 – <http://gri.gallaudet.edu/AnnualSurvey/whodeaf.html>, October 2001).

While post-secondary information is not collected in the Annual Survey, the demographic research conducted at the GRI enables the publication of regularly updated editions of “College and Career Programs for Deaf Students” (King, DeCaro, Karchmer & Cole 2001). This is done in collaboration between GRI, Gallaudet University and the National Technological Institute for the Deaf, Rochester Institute of Technology. The 2001 edition of this guidebook indicates that over 150 seats of higher learning in the United States *alone* offer services for Deaf students. Many of these are at the college level, some of which are supported by Gallaudet University.

Collaboration with other agencies also allows for national population estimates to be made through the Annual Survey’s longitudinal demographic research. For instance, information is available on genetic epidemiology of early-onset deafness (Marazita, Ploughman, Rawlings, Remington, Arnos & Nance 1993), the question “How many people use ASL?” is analyzed interestingly (Allen 1994 - <http://gri.gallaudet.edu/Demographics/qxreasl.html>, October 2001, Holt, Hotto & Cole 1994, <http://gri.gallaudet.edu/Demographics/factsheet.html>, October 2001) and demographic fact sheets regarding this population are available (Holt, Hotto & Cole 1994, <http://gri.gallaudet.edu/Demographics/factsheet.html>, October 2001). These kinds of data and analysis have allowed for statistically based understandings of, for instance, shifts in student and programme characteristics (Allen & Schoem 1997, Holt 1994, Schildroth & Hotto 1996, 1994, 1993), age of diagnosis of deafness, etiology, additional disabilities, ethnicity and socio-economic backgrounds (Allen & Schoem 1997), effects of different

curricula on reading and mathematics achievement (Allen & Schoem 1997, Holt & Allen 1989), etc. Some of the major findings that can be drawn from the demographic research available in this body of literature and how they shape Deaf education are presented below.

Holt and Allen's (1989) study of national achievement patterns in the United States have shown that in self-reports teachers indicate that they devote relatively more time to reading instruction with *younger* children and relatively more time to mathematics instruction with *older* children. In addition, deaf children from minority ethnic groups "are likely to receive less content exposure" and Holt and Allen conclude that "since the level of exposure is dependent in part on the amount of time spent in instruction, it appears that more instruction time needs to be made available for these students" (1989, 560). Further more, on the basis of their study of over 2000 students in special and mainstream programs, they conclude that "the students who derive the most benefit from integration for reading instruction are those who have the poorest communication skills. Yet, the data also show that these are the students who are least likely to be placed in an integrated setting" (1989, 560).

Schildroth and Hotto (1995) describe changes in students' ethnic backgrounds and relate these to a number of variables over a period of 20 years. Ethnic background – an important factor that is seen as influencing school results – is however not studied in relation to achievement levels during this period. Allen and Schoem's (1997) and Holt's (1994) analysis reports on, among other issues, type of educational programs and English and mathematics achievement levels of deaf and hard-of-hearing students in these programs during the early 1980s and early 1990s. In a conference presentation at the American Academy of Otolaryngology, Allen and Schoem (1997) suggest that while more deaf students were earlier educated in state-supported residential programs, an increasing number of students were being educated in local mainstream schools together with hearing students during the early 1990s. Going beyond information regarding this important shift, they demonstrate and conclude that many of the mainstream students (from the early 1990s):

"receive almost no integration into curricula and classrooms of hearing peers. Achievement studies show that students in segregated classrooms in local schools have very low levels of attainment when compared to their peers in other settings, even when we control for degree of hearing loss and minority status. Clearly, schools, policy makers, and (most importantly) parents need to monitor the services and quality of education received by students in these special education classrooms" (Allen & Schoem 1997).

In other words, mainstreaming can at best be understood as geographical-integration and the organizational benefits of geographical integration of groups of deaf and hard-of-hearing students seem to effect achievement negatively. Holt (1994) has also studied how academic achievement was related to school program and classroom communication. Deaf "white" integrated students who had no additional disabilities generally had the

highest scores in reading comprehension and mathematics computation. However a significant relationship was noted between classroom communication mode and achievement in mathematics. “Students using a sign interpreter and those in exclusively oral programs scored higher than those whose teachers communicated by sign (...) Students in special schools had higher reading comprehension and mathematics computation scores than students in local schools who were in separate classes” (1994, 436). However Holt remarks that these findings remain *partially inconclusive* because evidence is lacking regarding whether students with higher achievement levels are streamed into integrated settings or whether it is factors in integrated settings that lead to better achievement scores.¹²⁰

Allen (1992) also discusses subgroup differences in educational placement, instead of global population statistics, in relationship to achievement levels. He shows that only 10% of profoundly deaf students attend local mainstream schools, and less than 5% of these attend schools where there are three or less deaf/hard-of-hearing students; two-thirds of this group attend school programs with 30 or more deaf and hard-of-hearing students; placement in residential all-deaf settings increases steadily from the age of 8 years (13%) to 18 years (35%); as compared to white students, minority deaf and hard-of-hearing students are less likely to be in mainstream classes; and interestingly, the top 10% of profoundly deaf students who have achievement levels comparable to their hearing peers are more likely to be in mainstream integrated settings (see also Allen 1986).

From a Swedish perspective, school placement has, until the beginning of the 21st century, not been an overriding issue for deaf children since all deaf children have been placed in special schools. However the non-availability of other school forms can at the same time be perceived as an issue for Swedish deaf students. In addition, the dramatic rise in the percentage of newly identified deaf children receiving CI also brings school placement issues in Sweden to centre stage. Demographic data concerning placement is not available for hard-of-hearing children in the Swedish school system (see also SPM 2000). Also, while different hypotheses have been put forth in Sweden to explain issues related to achievement levels and academic performance of Deaf students in the recent past, what is significant in the present context is that these discussions take place in the *absence of demographic data* related this school population (see further below).

In line with the recent shifts in both conceptualisations and assessments of disabilities, Karchmer and Allen (1999) emphasize the importance of focusing upon “functional hearing abilities” (and not just “hearing loss” per se) “for the provision of appropriate educational services to deaf and hard of hearing children” (1999, 68). Their study reports

¹²⁰ At the cost of being repetitive, see also discussion of the same issue that Karchmer and Padden raise in the last section of Chapter 2.2.

“on a new set of questions added to the 1997-98 Annual Survey of Deaf and Hard of Hearing Children and Youth that attempt to recast the notion of ‘additional disabilities’ to take into consideration the functioning of children in their classrooms along certain functional domains” (1999, 75).

Karchmers and Allen’s findings indicate that “the prevalence of limitations in classroom functioning is much greater for children who are deaf and hard of hearing than that predicted by the traditional categories” and this “reveals areas where additional accommodations and services are needed” (1999, 76). Based on information on 30,198 students, and where teachers’ ratings were the primary source for the functional data, Karchmer and Allen reflect on teachers’ perceptions of students’ difficulties and the key role that communication is reported in playing in the classroom environment:

“if disability is seen as an interaction of an individual with a condition and the environment rather than as a deficit of the individual, the results may say as much about the suitability of the educational setting and services as they do about the student being assessed” (1999, 77).

In addition, this study indicates that students of every functional hearing ability were reported at each audiological level and a substantial number of students who had been diagnosed as profoundly deaf were reported as having functional hearing. This is a central finding and there is no indication in the literature regarding if, and how, such complexity is managed in the organisation of education for students who are d/Deaf and hard-of-hearing. Large scale demographic studies throw critical light on the very organisation of Deaf education. At the same time they also throw light on the assumptions regarding “communication models” that shape schooling for this population.

In addition to the Annual Survey, the Gallaudet Research Institute has also periodically conducted large educational test standardization studies to obtain norms for deaf and hard-of-hearing students in order to describe their achievement levels. Thus for instance, the *median* Reading Comprehension subtest score for 17-18 year old students is reported as corresponding to

“a 4.0 grade level for hearing students. That means that half of the deaf and hard of hearing students at that age scored above the typical hearing student at the beginning of fourth grade, and half scored below”
(<http://gri.gallaudet.edu/Literacy/#reading>, October 2001; see also Gallaudet Research Institute 1996,¹²¹ Holt, Traxler & Allen 1997).

¹²¹ Here test score information for deaf and hard-of-hearing 8-18 year old students on the subtests Word Study Skills, Word Reading, Reading Vocabulary, Reading Comprehension, Mathematics (Problem Solving), Mathematics (Procedures), Spelling, Language, Environment, Study Skills, Science, Social Science, and Listening are available. In addition age-based percentile norms are available for Word Reading/Reading Vocabulary, Reading Comprehension, Mathematics (Problem Solving), Mathematics (Procedures), Spelling, and Language.

Reporting on a mathematics survey that was administered along with the norming of the Standard Achievement Test, 9th edition, in 1996, Allen (1998) indicates that there “is considerably less curricular focus on mathematics problem solving than on procedures” and that while “more traditional strategies, such as strategies that emphasize memorization and paper-pencil computation” were reported as receiving greater emphasis, “emphasis on students reading about mathematics and on probability and statistics received particularly low ratings” (1998, 13). Despite the fact that achievement level studies have shown that on average deaf students have higher mathematical skills as compared to reading skills, Allen argues that the traditional emphasis in mathematics teaching, would not adequately prepare deaf students for developing critical thinking skills or for adult work life.

The literature reviewed also contains some medically oriented studies that have *surveyed* large groups of deaf children. These studies have focused on the prevalence, school achievement¹²² and functional status of this group (see for instance Bess, Dodd-Murphy & Parker 1998, Niskar, Kieszak, Holmes, Esteban, Rubin & Brody 1998, Yoshinaga-Itano, Sedey, Coulter & Mehl 1998). These studies by medical researchers are independent of the Annual Survey.

Another study that merits attention under the theme “demographic research in the literature” was an independent survey study reported in the journal “The Volta Review”. Here LaSasso (1987) presents findings from a large scale survey of 478 different programs where Deaf students were enrolled. The survey results indicate that most programs used re-written texts to teach Deaf children reading and writing. “Reading Milestones” – a basal reader program developed for deaf and mentally retarded (sic) students is reported as being the most widely used program. Teachers were reported as preferring this program because of its *simplified* vocabulary and syntax,¹²³ infrequent use of figurative expressions and also its emphasis on phonics.

The use of specially created texts is also a common practice in Deaf education in Sweden. This occurs at two levels: teachers report that they create their own, often simplified texts, for use with their Deaf students because appropriate materials are wanting (see for instance Bagga-Gupta 2002b) and special texts for use by Deaf students are created at the national level. For instance materials were created in the early 1990s by teachers and the older Swedish Institute for Special Needs Education, SIH. This task is currently handled by the new Swedish Institute for Special Needs Education, SIT. One such material that continues to be quite popular was “Adam’s Book” that was developed nationally for Deaf and hard-of-hearing students

¹²² It is interesting to note that perhaps no other group of students are studied as closely in school related areas as is this group by medically and technologically oriented professionals (compare also with Chapters 2.2 and 3.4).

¹²³ See also Ewoldts post-doctoral research discussed in section 5.2 above.

in the age group of 6 to 13 years. “Adam’s Book is a bilingual material for deaf pupils who have just begun school (...) It consists of 23 relatively free-standing chapters about everything from text telephone [TTY] calls and eaten up hearing aids to mobbing and love” (<http://www.sih.se/laromit/tspdator/linkit.htm>, April 2002).¹²⁴ It consists of a 139 pages Swedish text book and two videotapes (Part 1 and 2) where the Swedish text is presented in SSL. More recently this material has become available digitally in a CD-version.¹²⁵

However, as was noted earlier, demographic data are almost non-existent in the Swedish literature. A few points need to be noted regarding this situation. Firstly, the need for well-defined information regarding students in educational settings with hearing impairments was highlighted in the first annual report (SMP 2000) of the new Swedish authority responsible for all special schools for this group of students, SPM. Secondly, one school-leader at the special schools has been collecting achievement level statistics of all school leaving students from the special schools during the 1990s. These figures recently became available in a report published by the Swedish National Agency for Education, Skolverket (see Bagga-Gupta 2002a; <http://www2.skolverket.se/BASIS/skolbok/webext/trycksak/DDW?W=KEY=1030>). Thirdly, three projects focused on Deaf literacy issues were initiated during the second half of the 1990s in order to “understand and explain [why] so many pupils in the compulsory comprehensive school for the deaf do not reach the [required] goals and therefore cannot come into the national programs at the upper secondary school level” (Skolverket 2000, my translation; studies from these projects are presented in Chapter 7). Fourthly, admission level statistics (unpublished) at the three upper secondary schools for the Deaf and hard-of-hearing suggest that the majority of Deaf students currently leave compulsory comprehensive schools with inadequate grades in Mathematics, Swedish and English and as a result cannot receive admission in the national programs at this level of education (Rindler 1999). Fifthly, the Swedish National Association of Psychologists for Deaf and hard-of-hearing conducted an independent *total population* study where different reading tests were administered to all 524 Deaf (not hard-of-hearing) students in the special schools in 2000 (Petersson, Liljestränd, Turesson-Morais, Eriksson & Hendar 2000). This total population study in Sweden also included Deaf students enrolled at a local school in Gothenburg. Salient findings of the Swedish report can be summarized in the following points:

- Deaf children *can read* using a strategy other than phonetic decoding
- Deaf children take longer to “come into reading”

¹²⁴ See also <http://www.sit.se/net/Startsida+SIT/In+English/Educational+materials/Deaf+and+Hard+of+Hearing/Products/Adam%27s+Book>, March 2004.

¹²⁵ More recently, the Swedish Institute for Special Needs Education (SIT) has produced and commercially made available other books and videos (see <http://www.sit.se/net/Startsida+SIT>, July 2002).

- “a large group” require special attention (specific percentages are not made available in the report)
- distribution between “weak” and “strong” students is very large
- Four groups of Deaf readers are identified. These include:
 - Group 1: “confident & fast” readers
 - Group 2: “confident & slow” readers
 - Group 3: “unsure & fast” readers
 - Group 4: “unsure & slow” readers or “students who cannot read”

Given the different factors that are speculatively discussed in Sweden, to explain or understand the recently available achievement statistics following the new goal oriented national curricula (Lpo 94, Skolverket 1996), there is need to recognise that policy decisions at both the national and the local school levels are often being shaped in the *absence of reliable and longitudinal demographic data*.

In conclusion: The studies presented and discussed in this section have an important bearing on the organization of education for the Deaf. Such studies also have a bearing on how non-demographic and non-prescriptive research can be planned and findings of which stand a more realistic chance of being richly interpreted (against the backdrop of large scale demographic findings). The kinds of conclusions that researchers have drawn in the studies presented under this theme are important and can be made with demographic data collected over time. The patterns and shifts that emerge from this body of research are significant in a number of ways and they allow for more nuanced understandings of some of the factors – minority status, functional assessment, parents hearing status, etc. – that this body of research has offered to explain Deaf students’ achievement levels in the United States. As noted above, the near absence of this kind of information, and more importantly research dialoguing, in Sweden raises important issues. Shifts and changes appear to be occurring and are being implemented without a basic understanding of the demographics of the student population. For instance, given the significant impact that CI-technology is having in the Scandinavian countries, the impact of immigration in Swedish schools, issues related to parents hearing status, etc. schools in this part of the world are perhaps being left on their own to deal as best as they can with significant changes in their student populations. In this regards it is interesting to note that a recent demographic study in Puerto Rico – conducted in collaboration with the U.S. Annual Survey of Deaf and Hard of Hearing Children and Youth – during the second half of the 1990s was seen as having “the potential to make an important contribution to the development of research and program planning (...) and to address the educational and health-related needs” of this population (Albertorio, Holden-Pitt & Rawlings 1999).

5.4. CROSS-CULTURAL COMPARATIVE RESEARCH

A third theme that has been identified in the literature can be termed “cross-cultural comparative research”. While the concept cross-cultural usually

implies a comparison of different national or country models, here culture is understood in a broader way. In addition to studies that have compared the Swedish situation to other country models, studies that have focused on a comparison between different educational systems or models are also considered. In addition, studies that have compared outcomes between different linguistic groups – deaf populations and hearing populations; populations that accessed languages at different ages – are also considered. Since these groupings and studies overlap they are presented together under the more open category of cross-cultural comparative research.

The fourth grade threshold of deaf children’s reading levels reported frequently in the literature – both Swedish and international – seems to be a concern that has spurred comparative studies of different models that have existed historically or that currently co-exist (see also section 5.2 and Chapter 3.3). Many of the studies presented here exemplify efforts in this direction. It should be mentioned at the onset that implications have been drawn, regarding the communication modality a Deaf child is exposed to from birth, by using parents hearing status as a factor in many of the studies that fall under this theme. In addition, and as has been argued earlier in this meta-research study, comparing outcomes of different programs by using the label of the program is contentious.

Studies in North America have reported that when Deaf children are exposed to ASL at an early age their linguistic developmental milestones are understood as being comparable to those of hearing children (Caselli 1987, 1983, Meier 1991, Newport & Meier 1985, Volterra 1981, Volterra & Caselli 1985; see also Klima & Bellugi 1979). Different studies carried out in North America since the 1960s, for instance by Meadow (1968), Stuckless and Birch (1966) and Vernon and Koh (1970), have also indicated that deaf children whose parents are deaf – also known as DCDP¹²⁶ or DCDA¹²⁷ in the literature – performed better in school as compared to deaf children who had hearing parents – the latter are also discussed in the literature as DCHP¹²⁸ or DCHA^{129, 130}.

“The *justification* for studying deaf children of deaf parents separate from deaf children of hearing parents is that children in the two categories typically are born into and develop within quite different linguistic, social, and cognitive environments, even though they might attend the same school programs. The deaf child born into a deaf family is immediately exposed to a fully developed manual communication system and matures in a familial environment with direct experience of the impact of deafness” (Moore & Sweet 1990, 154, emphasis added; in the Scandinavian context a similar argument is offered by Vestberg 1989).

¹²⁶ Deaf Children of Deaf Parents.

¹²⁷ Deaf Children of Deaf Adults.

¹²⁸ Deaf Children of Hearing Parents.

¹²⁹ Deaf Children of Hearing Adults.

¹³⁰ See also Hoffmeister, de Villiers, Engen and Topol (1997) and Padden and Ramsey (1996).

Many studies report that DCDP outperform DCHP on most measures of language and academic achievement (Moore 2001), suggesting either that children enter school with a foundation in a SL or that they are members of bilingual home environments and *thus have a bilingual foundation from birth*. Even recent discussions in the literature continue to interpret discrepancies between DCDP and DCHP in terms of early exposure to an SL. For instance, Hoffmeister (2000) suggests that DCDP “function well in school because they arrive with an intact language – ASL – with which they can learn English” (2000, 147). This *assumption* is also the driving force behind the present conceptualization of the Swedish Deaf bilingual *school model* where all Deaf children in the pre-school age (0-6/7 years) receive services in “signing pre-schools” (see Chapters 1.4 and 3.5). However, DCDP and DCHP are essentially viewed as indistinguishable in the academic literature in Sweden. In the Swedish literature, it is unclear why parents hearing status is not highlighted, though one study (Ahlgren 1984) uses the criteria to understand “correct sign language” norm by comparing the language development of two DCHP against one DCDP (see Chapter 6 for a description of this study).

Padden and Ramsey present results of a study in a 1996 text which reports on 135 Deaf and hard-of-hearing students in two different school forms: residential school (83) and local program (52) (see also Padden & Ramsey 2000).¹³¹ Padden and Ramsey note that “the proportion of students with deaf parents in the residential setting participating (...) was nearly five times higher than that in the public setting” (2000, 169). Among other issues, they report on the relation between ASL skills and students SAT-HI¹³² reading scores. Two of the three tests used to measure ASL ability – an imitation task and a verb-agreement production test – are reported as correlating significantly with the reading scores of students from both school programs. Padden and Ramsey’s (2000, 1996) study suggests that comparisons between DCDP and DCDH need to be further refined. While acknowledging a stronger correlation between DCDP and comparatively higher reading achievement scores, they suggest that DCHP who share a combination of some characteristics – early “first” language exposure, mainstreamed “white” background, early introduction and longer exposure to school, and no “handicap” – “are more likely to have higher reading scores when compared to other deaf children less advantaged in these ways” (2000, 186). Their analysis of different school settings also provides interesting insights. They underscore the important role that families and school settings play in “cultivating certain skills as means of acquiring competence in reading” and the fact that “different school settings organize reading instruction differently” (2000, 187). At the same time they caution against over-interpretation of their qualitative and quantitative findings:

¹³¹ The descriptive parts of this study are presented later in Chapter 7.

¹³² Stanford Achievement Test – Hearing Impaired.

“we expect that deaf children in general have multiple routes to reading ability and that we have identified only a subset of these possible routes. A complete study of reading development in the entire populations of deaf and hard-of-hearing students will likely identify several subgroups, each with a different array of language skills” (2000, 187, emphasis added).

Moors and Sweet (1990) report a study where they attempt to identify (instead of compare) separate “factors predictive of and related to reading and writing skills” in two groups (1990, 156). Both groups had 16-17 year old Deaf students in residential schools, all of whom were enrolled in the program since the age of four years. The first group had Deaf parents (65) and the second group had hearing parents (65). Results from a battery of tests

“suggests that literacy achievement in [the two groups of] subjects is closely tied to specific knowledge of English grammar and English vocabulary (...) The failure of measures of speech, oral communication fluency or sign communication fluency to contribute to the prediction equation for reading or for writing suggests that, for this population, literacy achievement is closely tied to English language skills” (1990, 199).

Moors and Sweet conclude the reporting of their complex battery of tests by suggesting that DCDP and DCHP in mainstream settings with a total communication ideology need to be studied since the DCDP and DCHP in their residential settings study “have been taught by total communication and have attended residential schools, which probably has increased their commonality” (1990, 200).

In addition, while residential schools for the Deaf – regardless of the language philosophies that the schools adhere to – have long been seen as the sites where SLs flourished (see also Chapter 3), a study reported in the early 1980s (Livingston 1983) showed that regardless of what modality or language deaf children were exposed to in their homes, deaf children seemed to acquire natural ASL-type of language in school settings (see also Hoffmeister 2000 discussed below). The Livingston study analysed transcribed natural conversations¹³³ of Deaf students with one another and with the researcher in a school where instruction provided by hearing teachers included the use of spoken English and Manual English (not ASL). Livingston reports that while no adults used ASL in this school, the students did not only exhibit use of ASL-like signing themselves, they clearly did not exhibit Manual English type of signing in their natural conversations. Such findings have led researchers to suggest that Deaf children’s academic achievement levels need to be re-assessed in terms of language *deprivation* rather than in terms of language *delay* or language *inability* (Gerner de Garcia 1995, Kuntze 1998): this new “body of research (...) challenges viewing differences as deficits, a view that continues to dominate educational practice” (Gerner de Garcia 1995, 223).

¹³³ The study was conducted in the mid-1970s.

Hoffmeister (2000) reports from a project with multiple agendas and where one component attempted to study whether knowledge of ASL was related to Deaf children's reading comprehension (see also Hoffmeister, de Villers, Engen & Topol 1997). Hoffmeister compared the reading skills of two groups of Deaf students who attended a variety of school settings: one group had, apart from interaction with other DCDP, no formal exposure to ASL. However, the school program they attended self-reported to be using Manually Coded English (MCE). The second group was made up of DCDP. While students with "intensive ASL exposure" are reported as scoring higher on different ASL tasks that they were presented, it is interesting to note that they not only scored at higher levels on MCE comprehension measures but also the SAT reading task that the two groups were tested on. Hoffmeister reports that unlike previous research, ASL tasks in the study measured

"sophisticated knowledge of ASL lexical and morphological rules, thereby tapping language skills that are more related to the language of schooling and reading. Thus when the level of the ASL skill measured is sophisticated, it relates to reading skills" (2000, 160).

However, it has only recently been suggested that while SL or manual communication has previously been viewed as an important variable in research designs, it has itself *not* been tested explicitly (Chamberlin & Mayberry 2000). The correlation between ASL skills and MCE comprehension that is reported in Hoffmeister's study is however intriguing. Hoffmeister suggests that this co-relation can be understood by the fact that "the MCE systems borrow heavily from ASL" and the author calls for further descriptive studies to "better understand how knowledge of ASL might relate to comprehension and production of sentences in MCE systems" (2000, 158).

It is also significant to note that while these comparative studies in North America have implied the presence and relationship of manual communication on Deaf students' achievement levels, they have done so *without explicitly discussing the precise nature and role that ASL could have played in the development of reading and writing in Deaf children's lives.* Hoffmeister (2000) argues that

"it is primarily in Deaf children of Deaf parents (DCDP) that we have a parallel with hearing, bilingual children. Even with more limited access to the second language, DCDP are able to tap into (...) *a model of bilingual language learning*" (2000, 147, emphasis added).

A more recent study which compared English literacy performance of DCDP's and DCHP's in the United States by Strong and Prinz (1997; see also 2000, Prinz & Strong 1998)¹³⁴ suggests that when children's high level of fluency of ASL is considered (for instance kept constant) then there is no

¹³⁴ Strong and Prinz took into account mother's hearing status not hearing status of both parents.

difference in literacy achievement between the two groups. Strong and Prinz's work (2000 and Prinz & Strong 1998 discussed earlier) attempted to address

“the relationship between ASL and English literacy skills among children aged 8 to 15 years attending a residential school for the deaf in California. The objective was to provide a basis for which to evaluate a rationale for developing a bilingual ASL/English instructional approach” (Prinz & Strong 1998, 51).

Their sample included 155 students – 40 DCDP and 115 DCHP. Prinz and Strong report:

“that ASL skill is significantly correlated with English literacy. Furthermore, children of deaf mothers outperformed children with hearing mothers in both ASL and English reading and writing (...) Within the medium and high level of ASL skill students with hearing mothers performed similar to those with deaf mothers” (1998, 53).

They conclude that: “Deaf children's learning of English appears to benefit from the acquisition of even a moderate fluency in ASL” (Strong & Prinz 1997, 45) and that “differences in academic performance between students with Deaf and hearing parents discovered in previous research may indeed be largely attributable to a fluency in ASL, a notion that is consistent with the Cummins (...) theory of cognitive and linguistic interdependence”¹³⁵ (Strong & Prinz 2000, 137). This is reported as suggesting that the positive correlation between a SL and written language competencies is not limited to DCDP. However Strong and Prinz themselves suggest that their study does not throw light on

“the effect of the *quality of parent-infant communication* (as distinct from the language of communication) on language acquisition of any kind, either English or ASL” (1997, 44, emphasis added).

They also acknowledge that despite the headway made by their own and some other studies “in describing a common underlying proficiency between ASL and English and the efficacy of a bilingual educational approach for deaf children” there is need to emphasize that “additional research is needed to further elucidate the *precise nature* of the relationship between ASL and English literacy” (Prinz & Strong 1998, 55, emphasis added).

Despite research findings about Deaf children's emergent literacy (see for instance research presented in Chapter 7) and communication-practices during their first few years of life, the literature that compares DCDP and DCHP continues to focus on an *assumed monolingual* ie. SL “input model” and interprets this as being a prerequisite for school achievement. In this regards it is surprising that the literature does not focus the *bilingual foundation* that DCDP receive from birth and the significance of this in explaining their superior academic achievements (however compare

¹³⁵ See for instance Cummins (1981).

Hoffmeister 2000 discussed above). Could the bilingual, including the use of written language exposure that DCDP receive, give them an edge in school related tasks similar to what (hearing) children from middle class backgrounds are reported to have in school (see for instance the classical studies in language socialization patterns by Heath 1983 and others discussed earlier in Chapter 2)? This is an important issue that remains to be raised in the empirical literature. Thus, while the international literature appears to highlight the SL exposure that DCDP receive birth onwards, there is scant, if any discussion on how written language use occurs in families where both parents and children are Deaf and how this in any way differs from written language use in hearing families with one or more Deaf children (compare with literature discussed in Chapter 7).

While the studies discussed under the cross-cultural theme have generally compared the academic performance of DCDP and DCDH and have implied interesting pathways to literacy acquisition, Deaf academician and literacy researcher, Marlon Kuntze¹³⁶, highlights the fact that “the role that ASL may have played in literacy development has never been extensively discussed in the literature” (Kuntze 1998, 2). Some recent literature does however throw light on this issue and emerging trends from this literature is discussed under the theme of Deaf bilingualism in Chapter 6 and in studies covered in Chapter 7.

Some studies which have compared pragmatic aspects of language development in DCDP and DCHP (see for instance Ciocci & Baran 1998, Jamieson 1995) suggest that both groups of young pre-school children show equivalent competencies in certain measures of social conversation. These studies also suggest that DCDP display greater language abilities when compared to DCHP and the former group of young Deaf children also had a more developed “private sign language” or use of language when reading, writing or playing alone. Cook and Harrison (1995) have also reported that Deaf preschool children who show superior reading and writing levels make use of “private language” at both home and in school.

Some studies in the literature have compared “first” and “second” language learners – in the Deaf context and when learning of the language begins after *early* childhood – and report that “early exposure to a language facilitates, and perhaps is necessary for, later language learning at older ages” (Morford & Mayberry 2000, 115; see also Neville, 2002, Newman, Bavelier, Corina, Jezzard & Neville 2002). For instance Mayberry (1993) reports a study where 36 deaf adults with contrasting histories of spoken English and ASL acquisition were administered tests intended to measure “ASL sentence processing”. The subjects, who had on average been using ASL for almost 50 years, were reported as displaying no differences for fine-motor production and pattern segmentation skills. However “subjects who acquired

¹³⁶ Kuntze received his Ph.D in educational linguistics at Stanford University, USA, and is currently senior lecturer at the San Jose State University in California.

ASL as a second language after childhood outperformed those who acquired it as a first language at exactly the same age” (1993, 1258). And since “first” languages are rarely acquired after childhood in the hearing population, Mayberry concludes that the results of this “study suggest that the phenomena may be a common one that has long-lasting repercussions on the language comprehension skills of individuals who are born profoundly deaf” (1993, 1269).

In a subsequently unpublished study by Mayberry and Lock (1998, reported also in Morford & Mayberry 2000) Deaf individuals who are late “first” language learners¹³⁷ are compared to hearing second language learners and to native ASL learners who had acquired ASL from birth. The late “first” language learners are reported as performing poorly when compared to the other two groups. Morford and Mayberry (2000) conclude that

“although the importance of early exposure to language is widely accepted among researchers and practitioners involved in the area of deafness and language, development of these areas of research is necessary to lead us to a more adequate understanding of why early exposure is particularly critical to language acquisition by eye” (2000, 125).

Surprisingly few non-demographically inspired studies that are empirically driven and that explicitly set out to compare different co-existing educational models have been found in the literature on Deaf literacy. Notable exceptions include the large scale work of Pintner and his colleagues at the beginning of the last century (Pintner 1927, Pintner & Paterson 1918, 1917). These studies attempted to compare the reading skills of students from “oral” and “manual” school settings. The results reported in these studies are today considered to be unclear, given that among other things, only crude measures of hearing could be done at that period of time, and no explicit measures of skills in “manual” communication were available to be used (see also Chamberlain & Mayberry 2000).

Another study from the middle of the 20th century (Pugh 1946) compared the reading skills of Deaf students who attended two different school forms: residential schools (where large numbers of DCDP were enrolled) and day schools (where the majority of DCHP attended). Older students in the former school form are reported as faring better. In the literature this study is seen as providing evidence of a positive relationship between signing and reading skills.

At the cost of being repetitive, two issues can once again be highlighted. Firstly, some studies have empirically analyzed or described academic outcomes of a particular educational model or communication system where the researcher/s or educational practioner/s have drawn conclusions about outcomes of *other* models/systems which they have themselves not studied.

¹³⁷ They are reported as having acquired scant language – signed or spoken – in early childhood.

Secondly, and as has been argued repeatedly, there is need to differentiate between the models/systems that have been studied and the communication-practices that constitute these models/systems. This second point is particularly significant in light of the historical shifts in organizational trends in the schooling system. Thus, for instance, if a text reports on a project that studied achievement related outcomes of exposure to ASL or an oral approach, there is no way to verify what actual practices were used in the school/program, let alone the communication that was used outside the classrooms, and that in fact could *also* have had a bearing on the outcomes reported. As discussed earlier, especially in Chapter 2, this conceptual thrust on communication-practices and not the labels that have been and continue to be used to describe different programs needs to be highlighted.

For present purposes, the following example from an unpublished doctoral study is used to further illustrate this important point.¹³⁸ Svaib in 1994 describes a deaf child – Melissa – who is reported to have been:

“exposed only to Manual English and yet achieve solid literacy development. Svaib’s analysis of Melissa’s narrative development showed that she was ‘developing literate abilities comparable to those of her hearing peers’. In the span of 18 months of data collection [Svaib was able to demonstrate this]. The case of children like Melissa is remarkable. Manual English is probably not, as Svaib suggested, entirely detrimental. However, *something else is probably going on*” (Kuntze 1998, 9, emphasis added).

While it is naturally important to carry out empirical studies to better understand how children like Melissa fare both inside and outside school settings, theoretically it is even more interesting to understand what kind of communication-practices children like Melissa are exposed to inside and outside school settings and which are seen as shaping their literacy development. This is what Kuntze means by “something else is probably going on”. While explicit statements are made in the literature regarding what modality or code/s Deaf children are exposed to, on a non-prescriptive level the literature offers little insight regarding the complexities of everyday communication that these children are exposed to and that they participate in.

In the unpublished Svaib study mentioned above, Melissa’s home is further described as being an unusually “literacy rich” environment. On the basis of this Svaibe’s colleague – Kuntze (1998) – goes on to conclude that:

”Melissa’s acquisition of English skills may have come mainly from her literacy activities rather than Manual English per se. It was through books that Melissa was exposed to written English in its entirety and complexity. Her ability to use good English in her signing as evidenced in Svaib’s analysis probably came from her exposure to print” (1998, 10).

As the analysis and arguments presented here and the empirically driven and descriptively – not prescriptively – focused studies presented in Chapter 7

¹³⁸ Reported in a 1998 article by Svaib’s colleague – Marlon Kuntze – from the same university.

suggest, there is an important need to understand communication-practices that make up different educational models/programs before the labels that are used to describe these models/programs can be compared to achievement outcomes. There is little that suggests that a “mere” shift at the policy level (and label level) results in implementing and giving rise to the prescribed outcomes at the local institutional level. The present day concerns facing Deaf education in Sweden perhaps need to be understood within this framework.

All Deaf people in North America do not use ASL as their primary language¹³⁹ and this too is not acknowledged in the literature that focuses literacy. This also supports the argument that it is significant to understand local level literacies and communication-practices both inside as well as outside classroom settings, before drawing direct conclusions about the impact of parents hearing status and children’s achievement levels in schools. It is more likely that literacy development is supported by adults who mediate and help children make meaning of situations and texts. These adults – hearing and Deaf – perhaps then do not focus primarily on the *form of the communication*. They rather focus on the content of the communication. And this is what is discussed sparingly in the literature (how adults structure environments) both inside and outside classrooms – to support participation in literacy and meaning-making activities.

Another important recent discussion in the body of literature that is here understood under the theme “cross-cultural comparative research” surmises that Deaf children’s dismal reading scores have been attributed to their lack of “inner speech”. In a theoretical/review article in the *Journal of Deaf Studies and Deaf Education*, Mayer and Wells (1996) contrast the educational context of Deaf students with that of hearing bilingual students whose “first” language did not have a written form. While acknowledging that Cummins empirical work which resulted in the linguistic interdependence model has been a driving force for Deaf bilingual education more generally, Mayer and Wells add that this appropriation is “based on a false analogy [since] the situation in deaf education does not match the conditions assumed by the linguistic interdependence model” (1996, 93). Mayer and Wells report that they draw on Vygotsky’s theoretical position and they argue that “inner speech stands in an intermediate position between oral speech and writing” and “for meanings constructed in inner speech to be expressed in writing, they have to be rendered maximally explicit and coherent so that they are intelligible to a nonpresent reader” (1996, 95). In effect they argue that the central issue in Deaf children’s reading and writing relate to the incompatibility between the nature and codes of inner speech and that of text speech.

Partly in response to Mayer and Wells discussions, researchers have more recently argued that in the case of Deaf children’s appropriation of the

¹³⁹ And similarly, neither do all Deaf people in Sweden use SSL as their primary language.

written code, it is more “appropriate to describe the resultant nature of their inner ‘speech’ as an ‘inner eye’ rather than an ‘inner ear’” (Prinz & Strong 1998, 50). Regardless of the terminology or modality, three issues can be noted: Firstly, while they make an eloquent argument, Mayer and Wells may have interpreted Vygotsky’s work and applied it to the Deaf situation *too literally* (see also Singleton, Supalla, Litchfield & Schley 1998). Secondly, the issues they, and many other researchers, discuss regarding “first” and “second” language learning probably needs to be understood from a *multilingual perspective* – and not a monolingual-learning or a monolingual-literacy view of the world (see also above & Chapter 2). Thirdly, while Mayer and Wells theoretically analyze the premises of the bilingual model regarding “growing up in a literate culture” and the “three conditions [which] need to be met for the relevant [literacy] development to occur” (1996, 101), there is – as discussed earlier – a marked *absence* of the examination of the actual practices that make up the bilingual model that they discuss. In this respect it is important to note that Mayer and Wells recognize the need for studies regarding “the nature and quality of (...) exposure” that Deaf children have as far as texts are concerned (1996, 104). While the discussion that followed Mayer and Wells article (for instance Mason 1997 and Mayer & Wells 1997) can be said to have focused on a discussion related to terminology, it is interesting to note that, the empirical observations that Mason¹⁴⁰ offers in his response are *anecdotal* and from general life situations, *not* from empirical research.

Studies that compare Deaf and hearing children more directly could also further our understandings vis-à-vis the nature of their inner eyes or inner speech. There is unclear evidence in the literature regarding the role that phonological or phonemic awareness skills – something seen as vital in hearing children learning to read an alphabetically based language – play in the reading development of Deaf children (Prinz & Strong 1998). Thus for instance, while there is growing evidence regarding Deaf children’s need to access text meaningfully in visual spatial terms, there is evidence that Deaf individuals proficient in literacy tasks – particularly reading – rely on phonological cues (see for instance Hanson & Fowler 1987, Leybaert 1993, Marschark & Harris 1996, Musselman 2000).¹⁴¹ Some researchers also suggest that the ability to use phonological information during reading and the degree of hearing loss and children’s preference in using oral language or

¹⁴⁰ Mason (1997) himself downplays the relevance of Mayer and Wells (1996) article by saying that their “determination is theoretical, not empirically based” (1997, 277).

¹⁴¹ Here it is interesting to note that there is disagreement in the role that phonological processing plays in developmental reading disabilities even in the case of hearing children. Compare for instance research reported by Bradley and Bryant (1985) and Bishop (1991). Findings from longitudinal studies that were interested in the relationship between early language measures and literacy achievement levels in hearing children suggest that: “preschool phonological competence showed only weak links with subsequent reading and spelling ability. The child’s ability to describe what was happening in a picture, to convey the gist when retelling a story, to produce complex sentences and to understand and use grammatical inflections were all better predictors of literacy attainment” (Bishop 1991, 98).

SL are *not* directly related (see Marschark 2001, Musselman 2000, Wilbur 2000):

“Phonological skills also are enhanced in children with better speech relative to those with poorer speech, but we know that they are separate from speech skills and cannot be explained on the basis of articulation alone. Rather the basis for phonological abilities in readers who are deaf involve a combination of information drawn from articulation, speechreading, fingerspelling, residual hearing and exposure to writing, no one of which is sufficient in itself” (Marschark 2001, 34-5, emphasis added; see also Padden & Ramsey 1998).

Understanding how competent readers – hearing and Deaf – process texts can, it has been suggested, throw light on how and why many Deaf children experience problems in reading. It has been suggested that young Deaf children, as compared to both age-matched and reading matched hearing children, “tend to focus more on individual words rather than relations among words (...) This orientation disrupts both grammatical processing and top-down semantic processing, thereby reducing comprehension and retention” (Marschark 2001, 35; see also Kelly 1995 discussed earlier in section 5.2). While these recent findings from cross-cultural comparative research are significant, the socialization patterns through which Deaf (and hearing) children are introduced to texts in order to become readers (and writers) are also very significant. The implicit and explicit ways of using texts and socialization patterns are crucial in the meaning making processes involved in literacy practices.

An important Swedish study that could be placed under the current theme compared different educational models historically. Heilings 1993 doctoral study (introduced earlier in Chapter 4.2) compared outcomes between what is understood as an oral (1960s) and signing (1980s) school system. This study is discussed in Chapter 6.4.

In what can be described as a classical piece of cross-cultural research, Yerker Andersson, an American-Swede who grew up in Sweden and graduated from the special school for the Deaf in Stockholm, and retired in 1996 as professor of Sociology at Gallaudet University, USA,¹⁴² studied “the role of cultural variation in the emergence and development, and also the disappearance, of social groups” in the United States and Sweden (Y. Andersson 1981, 16).¹⁴³ The social groups Y. Andersson focused upon in his Ph.D dissertation that was completed in 1981 were the Deaf “since deafness is a clear-cut social handicap” (1981, 115). Discussing the two country contexts in terms of heterogeneous (USA) and homogeneous (Sweden) settings and different issues of boundary maintaining that Deaf people have to adhere to, Y. Andersson, argues that “the relevant question here is not whether handicapped persons should remain segregated [a normative issue], but why the degree of segregation among handicapped persons varies from

¹⁴² He is professor emeritus at the same university since his retirement.

¹⁴³ Y. Andersson has, in addition to his academic career, held the position of president (1983-1995) and vice president (1975-1983) of the World Deaf Federation for two decades.

one society to another” (1981, 29). The findings of this sociological study can provide a broader cross-cultural context against which issues of Deaf education can be better understood. The findings of this study have relevance today and indicate among other things the following five points:

1. The understanding of Deafness in a unitary manner is a common characteristic of homogenous societies and this increases the segregation of Deaf people in such societies.
2. Cultural uniformity, which is seen as another hallmark of homogenous societies, reinforces the group maintenance strategies of the Deaf group in such societies.
3. In homogeneous societies Deaf groups are more prone to establish separate activities for their own group.
4. Common activities and interests in the Deaf group further strengthen group solidarity.
5. In homogeneous societies, different strategies are employed by the majority society and by the minority groups to maintain separate and well defined boundaries between the different groups.

The above results, describing the Swedish (homogenous) situation, can contribute in interesting ways in making sense of present day Deaf education and the Swedish Deaf community (compare also Fredang 2003). For instance, Y. Andersson’s analysis explains the continuing existence of a uniform one-track school model available to all Deaf students in Sweden, regardless of the language situations in their home settings.

In conclusion, there appears to be evidence in the literature that DCDP show greater adaptability to school tasks as compared to DCHP. Reporting from studies that have attempted to compare the outcomes from different methodologically oriented models is far from conclusive – even though the most recent literature does support more convincing arguments for a visual orientation in the educational setting. Given the diversity of experiences that Deaf children bring into educational settings, it is in fact not surprising that using *one* communication-methodology or approach does not lead to better scholastic achievement for all children. This is perhaps one of the more salient results of this meta-research study. This result is supported by other more recent analysis. For instance, Marschark, on the basis of an analysis of literature suggests:

“that sign language and spoken language should not be considered as mutually exclusive alternatives, but as potentially additive strategies for encouraging language development in children with hearing loss. Hearing children use either gestures or words for particular concepts, and deaf children use gestures, signs, or spoken words. This suggests a general developmental resistance to simultaneous communication per se, an inclination for young children to use only one mode of communication at a time (...). In both later childhood and adulthood, some deaf individuals are more comfortable with spoken language than others, and some are more comfortable and competently bilingual than others. Deaf children’s relative fluencies in the two modalities will depend in part on the age of onset and the degree of their hearing losses. Other factors, such as parental language abilities (signing by hearing parents, speech and signing by deaf parents), and the quality of early education and exposure to spoken and signed language also may make a difference. Speech and sign skills

often become increasingly intertwined in children who have experience with both modalities, improving speech production and comprehension as well as overall language ability. In summary, neither spoken nor sign language has been shown to be a panacea for the observed lags in the language development of children who are deaf. At the same time, *it is well established that children raised in bilingual or multilingual spoken language environments have greater language competence relative to children from single language environments (...). There are also some indications that early acquisition of sign language can foster English language skills, both spoken and written*” (Marschark 2001, 26, emphasis added).

The *complexities* regarding the range of communication-modalities that can at times be available in the lives of Deaf children and adults and their bearing on literacy in institutional settings is neatly captured in the above quote by an American researcher describing the ASL-English situation in the United States. That these complexities are representative of the Deaf experience outside of the United States can be surmised in the words of a Deaf Australian librarian describing the Auslan (Australian Sign Language)-English situation in Australia:

“deafness alone does not tell us anything about a person’s literacy skills. Some Deaf people are fluent in English and some are not; some are fluent in sign language and some are not; some are bilingual and some are not; and many of us are sensitive about the area in which we feel our skills are lacking” (Lloyd 1994, 292).

5.5. RESEARCH ON IMPACT OF TECHNOLOGIES

“A considerable array of specialized devices is sold, mostly by hearing people, to or for members of the DEAF-WORLD. They include: TTYs¹⁴⁴; closed-caption television decoders; hearing aids; cochlear implants; visual doorbell signaling devices; sound and motion detectors; baby cry-signaling devices; vibrating alarm clocks; smoke and fire detectors with visual alarms; personal pagers; siren detectors; computer modems; answering machines, fax machines; electronic mail and bulletin boards; loud-ring signals; loud buzzers; strobe lights; and devices that convey information through vibration. Some of these devices are modern versions of traditional artifacts of DEAF-WORLD culture. Mechanical clocks rigged so that a weight falls at the appointed hour and awakens the Deaf sleeper have been replaced by electronic bed vibrators. A stack of books placed next to a bedridden Deaf child, who can knock it over to summon a parent with the vibration, has been replaced by the baby cry signaler (a sound activated flasher). The most widely used device, the TTY, was invented in the 1960s by Robert Weitbrecht, a Deaf astronomer, physicist and electrical engineer.

If you sorted the various kinds of technology that are sold for use by Deaf people into those *devices that present visual information*, like the TTY, and those that *present auditory information*, like the hearing aid, you would discover (it should be no surprise) that the former receive, in general, a warm welcome in the DEAF-WORLD, while the latter do not. Telecommunications technology, including the TTY and captioning, are important parts of the technology agenda that the DEAF-WORLD has established for itself” (Lane, Hoffmeister & Bahan 1996, 360, emphasis added).

¹⁴⁴ Text-telephones or mini-coms.

Technologies that have and that continue to shape the institutional field of Deaf education can for present purposes be understood as falling under two main categories.

Sound and speech amplifying technology which are either

- (a) *individualized* – traditional (outer ear) hearing aids and Cochlear (inner ear) Implants – and
- (b) *environmental* technologies – microphones and loops.

Literacy-technologies – computers, OH's, IT, black or whiteboards and also paint, paper, pencils, etc. – would constitute the second main category of technology that have a bearing on the institutional field of Deaf education.

While (human) interpreters can be considered a kind of mediating tool, as do other technologies that are discussed in this section, for present purposes literature on interpreters is not discussed here. This regardless of the fact that they translate oral speech, SL-talk or other forms of communication into a SL, oral language, written language or tactile communication (for a recent and exhaustive annotated bibliography on interpretation literature in Deaf arenas see Patrie & Mertz 1997). Given the rather polarized historical discussions that have shaped the research and the institutional field, it is also important to point out that not all the literature on the role and impact of technologies is motivated from the classical “medical-psychological” perspective on deafness. As the opening quote of this section and the one that follows below illustrates, it is widely recognized that technology plays an important role in Deaf peoples lives:

“Once a hearing loss is identified, a variety of technological and educational tools are available to children and to their parents and teachers. When people think of the ways in which technology might affect the lives of children and adults who are deaf, they naturally think first of hearing aids and, more recently, of cochlear implants (...). In addition to aids that assist with hearing, there are also a variety of devices that deaf people use to replace hearing or reduce the reliance on it (...) most technological aids used by people who are deaf rely on visual information or signals (...) Perhaps the two most important devices for most deaf people are the TTY [text telephone or minicall] and the *caption decoder*” (Marschark 1997, 32-3, emphasis in original).

While it can be noted that such inferences are made in the literature from the cumulative experiences of researchers or professionals working in the field of deafness, evaluative and descriptive research reporting on the uses of technology is scant.¹⁴⁵ At the same time, and in the context of the present study, it is interesting that both the TTY/text-telephone/mini-com and the caption decoder, that Lane, Hoffmeister, Bahan and Marschark identify as being the most important technologies in the lives of Deaf people, *require the use of written language. In other words, technologies play a significant role in the*

¹⁴⁵ A recent exception is the discussion of computer mediated language practices in visually oriented arenas by Keating (2001, 2000) and Keating and Mirus (2002).

literacies that shape lives both inside and outside Deaf educational contexts.¹⁴⁶

While a discourse of hearing and normalacy does indeed seem to underlie the larger body of literature on technologies – especially the sound and speech amplifying technologies – there are a handful of studies that have attempted to understand the *social practices* involved in the use of sound and speech amplifying technologies. While these do not directly address issues of literacy, they do throw light on conceptualizations of deafness generally. Some of these were discussed earlier in Chapter 3 (sections 3.4 & 3.5) and exemplify the importance of critical research in the area. For instance, recent reports suggest that over 90 percent of newborn deaf children in Sweden are being implanted with CI technology and that the rise of CI in the USA is on the increase.¹⁴⁷

As outlined in the concluding section of Chapter 3, sound and speech amplifying technologies have in the past, and continue in the present, to play an important role in Deaf education. CI for instance, in addition to reviving an oral agenda in Deaf education, is considered to be one of the few bio-technological innovations whose outcomes explicitly shape communication agendas in school settings (see for instance Fjord 2001, 2000, 1997, Moores 2001). Despite the fact that CI operations have been conducted on the deaf during the last three decades and on deaf infants since at least the early 1990s, current research on CI-implanted children *in school settings* is meagre. In the Swedish setting an exception is the on-going work of Gunilla Priesler, professor of psychology, Stockholm University and her colleagues.¹⁴⁸ While extensive research has been and continues to be conducted on the medical agenda that underlies CI, research on educational perspectives and outcomes are wanting. The cultural and pathological perspectives related to CI are however widely discussed in the literature, as the following words of an American researcher¹⁴⁹ in an article from the mid-1980s re-published more recently in a historical reader suggest:

“Community maintenance often takes the form of policing the boundaries: who is in and who is out; who is central and who is peripheral. Cochlear implants may be a genuine threat to Deaf culture (by reducing our numbers and by turning public opinion against those of us who want to keep our skulls intact), or they may prove to be just another kind of overhyped snake oil, like lipreading. Whatever the future reveals about the true significance of cochlear

¹⁴⁶ For examples of the uses of discursive technological uses in Swedish Deaf educational settings see Bagga-Gupta (in press-b, 2001a).

¹⁴⁷ The increase in the USA has been much less dramatic as compared to the Swedish context.

¹⁴⁸ Reports on the Norwegian situation regarding CI and educational settings are available in the literature from the Skådalen Resource Center, Oslo (see for instance Christophersen 2001, Landsvik 2001, Simonsen, Breilid, Jochumsen & Kristoffersen 2001, Simonsen & Kristoffersen 2001).

¹⁴⁹ Padden, as has been noted earlier, is a Deaf child of Deaf parents and currently holds the title of professor of Communication at the University of California, San Diego, USA; see http://communication.ucsd.edu/people/f_padden.html, March 2002)

implants, their appearance on the borderland of the Deaf World has inspired a minirenaissance of Deaf activism” (Padden 1985/2001, 309).

In the present context it is interesting to note the establishment of the Cochlear Implant Education Center (CIEC) in 2000 at the Laurent Clerc National Deaf Education Center at Washington DC, USA. The CIEC is reported to have been established with the explicit agenda of addressing address the *educational needs* of the expanding generation of American children who receive CI.

“The goal of the center is to investigate, evaluate, and share best educational practices for children with implants (...) nationally. The CIEC is special in that its focus is to develop and evaluate programming for children with implants within an educational framework that integrates American Sign Language. Through its work, the center will evaluate and eventually model school programming that capitalizes on the technology of cochlear implants, yet continues to recognize that children with implants are still members of the deaf community” (<http://clerccenter.gallaudet.edu/CIEC/index.html>, March 2002).

One of the four foci of the CIEC is to “initiate research related to language, communication, academic and social-emotional outcomes for signing students with CI” (Nausbaum, Waddy-Smith & Laporta 2001). The CIEC reports the following as its five basic beliefs:

- Cochlear Implant technology clearly provides deaf individuals with increased access to sound
- Language and communication outcomes vary among cochlear implant users depending on a variety of factors
- The diversity among cochlear implant users should be reflected in the diversity of educational program and service options
- Given proper supports, spoken language and sign language can be nurtured and developed simultaneously
- Individuals with cochlear implants can benefit from interaction with other Deaf peers and the Deaf Community

In the context of the present discussion such beliefs can be understood as *bridging* the traditional polarizations of the cultural and pathological philosophical perspectives.

Much of the literature that has focused on literacy-technologies in the Deaf area has a *developmental streak* to it. In other words program and project descriptions and evaluations make up the bulk of the literature in this area. Few texts in this body of literature describe the social and communication-practices that Deaf and hearing students and teachers are involved in activities where literacy-technologies are used (a handful that shed light on this perspective are presented later in Chapter 7). Video or computer programs are more often than not understood and described as making up for the missed “linguistic input” through the oral modality. More recently, the Swedish Institute for Special Needs Education, SIT, has developed and made available programs that

“simplify working with [Swedish] text and Sign Language in the computer. With Link-it¹⁵⁰ you are able to make bilingual materials for comparing languages for deaf people who are learning the written language as well as for hearing people who want to learn Sign Language. You can produce ‘dictionaries’ in Sign Language, write descriptive texts with explanations in Sign Language, subtitle video films or whatever you need” (<http://www.sit.se/net/Startsida+SIT/In+English/Educational+materials/Deaf+and+Hard+of+Hearing/Products/Link-it>, April 2002; see also discussion on materials produced by this institute in section 5.3).

Some texts in the literature stress the interactive dimension that computers enable for creating opportunities available for “authentic” reading and writing. A few studies from this body of literature are presented below in an attempt to profile the focus in the literature that is currently available.

Pollard and Shaw (1982) describe a “Reading and Microcomputers Project” at the Texas school for the Deaf. While the primary focus of the project is reported as providing teachers with in-service training, these aims are directed at improving the reading comprehension of Deaf students and include the development of software for this purpose. The project is also reported as being aimed at teaching a secondary class “computer literacy” during one semester since the authors are convinced that “computer programming represents an exciting frontier in careers for deaf youngsters” (1982, 485). Based on their experiences the authors “offer some suggestions for those who are considering starting instructional microcomputer projects” (1982, 486).

The Coordinator of Computer-Assisted Instruction at the American School for the Deaf, in Connecticut, USA, Polansky (1985) describes a “computer literacy” course to increase the knowledge, skills and attitudes of upper secondary school students. The project aims to introduce students to the world of computers, and also encourages “outside reading and learning about computers” (Polansky 1985, 392).

In an article titled “Helping Students with Disabilities Become Writers”, Zorfass, Corley and Remz (1994) describe “success stories” of “how technology, combined with effective practice, can help students with disabilities overcome barriers to their success” (1994, 62). In their article they mention two projects with relevance for “students with hearing impairments”. The first is a collaborative project involving The WGBH Educational Foundation and the National Technical Institute for the Deaf where “researchers are currently exploring ways in which technology can help students who use ASL to become writers of English” (1994, 64). In the pilot-project the Deaf students watched a video story in ASL and were then required to subsequently create English captions on a computer program with the intent of creating captions to superimpose on the video. The authors report that

¹⁵⁰ A program.

“having control over the story helps [students] capture the sequence of events and recall specific details. While students write, teachers review their work and encourage self-corrections” (1994, 64).

In the second project taken up in their article, the Center for Children and Technology and the Lexington School for the Deaf in New York are reported as having developed a “model program” in order to carry out science activities by writing messages over the network since,

“by using e-mail, deaf students have the opportunity to practice reading and writing as part of meaningful and purposeful learning activities” (1994, 65).

In an article titled “The Need for Interactive Video in the Education of the Deaf”, Jones (1986) describes different interactive video programs – the Interactive Video Dictionary, the Tenses and the Passive Voice program, the Reading and Comprehension program – to provide a “dynamic link between language and action” and support Deaf children’s acquisition of skills (1986, 156).

An interesting study reported in the mid-1990s attempted to analyse the role that computers and IT play in the development of written communication of Deaf children (Bottino & Chiappini 1995). Through a set of three different experiments involving Deaf students in different school systems, in different cities and a Deaf adult and a Deaf child, the researchers analysed the Deaf students behaviour “by analyzing the observation protocols and the record of the communication sessions” (1995, 694). Among other things the authors note that

“in such a communication context, the cognitive processes involved in learning written language may benefit from an *interaction mechanism* which is not present when written language is used in monologues” (1995, 697, emphasis added).

They also note that the computer mediated communication between the adult and child especially “favour[s] the acquisition of linguistic structures which are new to the children and strengthen their lexical capabilities” (1995, 699). A couple of other recent studies have also suggested the significant role that interaction in an IT supported setting can play in enabling written language development of Deaf children in educational settings.

The Swedish literature in the area of technology also reflects trends similar to those in the international literature. Harnessing technology like personal computers, text-telephones/TTYs/mini-coms and video-telephones, for everyday communication purposes are described in articles and reports (see for instance Dandels 1990, Linden 1994, Monten 1984, Persson 1978, Udd 1993, Wilhelmsson 1986). Swedish technology and disability researcher Lotta Holme highlights the unequal distribution of resources between different nations and suggests that an inadequate availability of resources is not a real issue for different groups of students in need of special support in

the Swedish educational context (Holme 1996). Recent reports that throw light on the situation in the Swedish schools for the Deaf suggest that literacy tools such as white boards, TV-videos, overheads and computers are common artifacts in these settings (see for instance Bagga-Gupta in press-b, 2003a, 2002a, 2002b, 2001a, 2000a, SPM 2000). However there is insufficient knowledge regarding how these artifacts and tools are used in the classrooms.

The Star Schools Project (see also Chapter 6), a research and developmental national initiative that received federal funding from the US Department of Education, has since 1997 explicitly attempted to develop appropriate instructional design which integrates innovative technology in Deaf bilingual school settings (see <http://www.starschools.org/nmsd/misc/mvstate.html>, February 2002, Nover, Andrews & Everhart 2001, Nover & Andrews 2000, 1999).¹⁵¹

“Technology such as digital cameras, digital camcorders, Power Point presentations with LCD projectors, CD-ROM software, Internet, and SMARTBoards can play an important role in assisting the teacher, not only in providing visuals and graphics, but also in demonstrating the two languages – ASL and English” (Nover, Andrew & Everhart 2001, 72).

In its mission statement the project is reported as being explicitly focused on an educational agenda. The project aims to:

“provide a bilingual staff development model that promotes effective instruction of language and literacy for deaf and hard-of-hearing students (...) through a national collaborative effort among educators and researchers” (<http://www.starschools.org/nmsd/misc/mvstate.html>, February 2002).

In the projects fourth year report (Nover, Andrews & Everhart 2001), two sections are devoted to teacher’s use of technology and how technology enhances ASL/English bilingual classrooms. The project reports that bilingual schools that have participated in its programme have fundamentally changed both qualitative and quantitative uses of technology in their classrooms.

Teachers in the participating schools are reported to be using TTY’s, computers, internet, e-mail and word processing programs everyday and scanners and educational software frequently during the week. In addition, the frequency count and breakup of usage of technological tools such as digital cameras, camcorders, SMARTBoards, Power Point/LCD, TV/VCR etc. during class time presented together with how these tools were used during lessons supports the rationale that technological tools have an important role in Deaf educational settings.

¹⁵¹ The steering group of this large-scale educationally focused project is made up of Deaf and hearing researchers and university teachers who are all competent users of ASL and (at least written) English.

To recapitulate: A conceptual analysis of the literature that has a bearing on Deaf education is discussed under six themes in this book. While four of these: (i) *better model* studies, (ii) *demographic* studies, (iii) studies with a *cross-cultural* component, and (iv) studies focused on TECHNOLOGIES have been presented and discussed in this chapter, the fifth theme related to the current period in Deaf education is focused explicitly in the next chapter. An attempt was made in section 5.1 in this chapter to provide a rationale for the way the themes have been structured and a guideline was outlined to support the reading. The literature has been discussed keeping in mind the need to present larger conceptual themes through the use of exemplifying examples and also keeping in mind the need to throw light on the Swedish context. The analysis presented in the next chapter suggests that the theme of “Deaf bilingualism” is, from a historical perspective, a relatively new area in the literature. This fifth theme is however already an established area in the literature. In addition the analysis and discussion of the Swedish literature again raises important issues regarding what constitutes research.

CHAPTER 6

Deaf bilingualism. An established research theme in the literature

“Often called ‘Bi-Bi’ programs, these academic programs emphasize both ASL and English (reading and writing) while encouraging children to learn about both deaf and hearing cultures; however, *there is no single model or definition*” (Marschark 2001, 43, emphasis added).

6.1. INTRODUCTION AND BACKGROUND

An established research theme in the literature is made up of studies and discussions in the area of Deaf bilingualism. This chapter supplements the bilingual studies presented under the four themes that have been dealt with earlier in Chapter 5. Emerging trends on the more recent research focus on communication-practices primarily conducted in institutional settings which have adopted bilingual ideologies are however presented later in Chapter 7. The bulk of the Swedish literature is presented and discussed in section 6.4 in this chapter, primarily because a large body of this literature grows from or is otherwise related to the bilingual educational model.

As outlined earlier in Chapter 3, the last one and a half decades of the 20th century have seen the emergence and establishment of educational programs with a focus on Deaf bilingualism. This focus had been proposed as a viable option in Deaf education already in the first half of the 1970s in the United States: “Bilingual Education: A New Direction in the Education of the Deaf” (Kannapell 1974; see also Caccamise & Hicks 1978, Cokely 1978, Coye, Martin & Humphries 1978, Curry & Curry 1978, Kannapell 1978, Woodward 1978). The Second National US Symposium on Sign Language Research and Teaching in 1978 was focused upon “American Sign Language in a *Bilingual*, Bicultural Context” (Caccamise & Hicks 1978, emphasis added). This National Symposium, together with the National Association of the Deaf, Gallaudet University,¹⁵² the Salk Institute of the University of California, San Diego, Center of Deafness and the Department of Special Education, California State University, Northridge formally:

“resolved that the Symposium appeal to the United States Office of Education to reconsider¹⁵³ and to approve inclusion of American Sign Language on the Bilingual Education Act list of official languages” (Caccamise & Hicks 1978, Frontispiece).

¹⁵² At that time Gallaudet College.

¹⁵³ A petition to recognize ASL had been turned down earlier.

The point that can be noted is that critical discussions regarding “bilingual education” were already taking place in the 1970s. In addition, it may be relevant to note, as Y. Andersson points out, that “as the US has no official language at all and only mentions English as the dominating language, ASL cannot be *official* in any way. However, ADA [American with Disabilities Act] protects ASL in effect by demanding that ASL interpreting be used for accessibility reasons” (personal communication, January 2003). The following quote by James Woodward, an American pioneer researcher in the field,¹⁵⁴ in 1978 highlights issues that are of concern in the field of Deaf bilingualism even today and especially so in the Swedish context:

“Bilingual education for any social group is not merely a linguistic problem. It is primarily a sociolinguistic problem. That is, the comparative grammatical structures of the languages in the school situation are of minor importance. What is important is the interaction of language and sociological issues; for example, a knowledge of language attitudes is more important than a knowledge of the linguistic structures of the two languages in determining the probable success or failure of bilingual education for a certain group. (...) In addition to sociolinguistic attitudes, a knowledge of the ethnography of communication (...) of a given situation or the sociolinguistic influences of participants, topic setting, channel, message form and their interrelationships on language preference, and use, is required. Even if we know a lot about the grammar of both languages, this knowledge in itself is not sufficient for establishing a bilingual education program. Applying this general information about bilingualism to the sign language situation in the U.S., we can see that the chief problems to establishing bilingual education programs for deaf students lie not in our comparative lack of knowledge of the structure of ASL, but in the language attitudes of hearing and deaf individuals and in the sociolinguistic parameters that influence the use of ASL” (Woodward 1978, 183, emphasis, added).¹⁵⁵

In addition, to presenting a critique of the fundamental principles on which the Swedish Deaf bilingual model was *going to be built upon* in the years that were to follow, it is significant to note that the understandings that Woodward, already in the 1970s, and Ceil Lucas, professor of linguistics, GU and chief editor of the Sociolinguistics of the Deaf communities series (see footnote 152), bring to Deaf bilingualism in general are gleaned from theoretical foundations in the Social Sciences and Humanities and not primarily from the category area of research in deafness.

6.2. REVISITING DEAF BILINGUAL APPROACHES. A CONCEPTUAL ANALYSIS

As described previously in Chapter 3, research since the 1960s and 1970s on the linguistic structures of different SLs was to significantly shape a shift in the organization of Deaf education in many countries. This trend for instance gradually shaped the organisation of education for the Deaf in

¹⁵⁴ Woodward has also contributed to research and developmental work regarding SLs in South-East Asian countries over the last few decades.

¹⁵⁵ See also the nine volumes in the Sociolinguistics of the Deaf communities series published by Gallaudet University Press since 1995 (see <http://gupress.gallaudet.edu/socio-series.html>, May 2002).

Scandinavian countries (see also Davies 1991, Mashie 1995, Ahlgren 1984), the Netherlands, and different parts of the United States. As was described in Chapter 1, Sweden is recognized as the first country in the world where *political acknowledgement* was accorded to its SL – ie. SSL – and it was this acknowledgement in a parliamentary budget decision in 1981 that changed school level policies already in 1983. This has been, as the discussion of literature presented under section 6.4 below further illustrates, a largely top-down administrative implementation of a bilingual model. In other words the shift can be seen as having occurred in the absence of research findings supporting such a shift (see especially Ahlgren 1988).

More recent analysis suggests that the post-1981 period in Sweden needs to be understood as a “transition-towards-a-minority-period” rather than as a “minority-period” (see for instance Bagga-Gupta 1999a, Bagga-Gupta & Domfors 2003, 1997). In contrast it appears that the shift towards Deaf bilingualism in the United States since the 1970s, can be understood as being shaped from grass-root level movements (see Y. Andersson 1981; see also Bagga-Gupta & C. Erting 2002). Some cross-cultural issues in Deaf education were introduced in Chapter 3.5 with the aim of understanding the latest phase in Deaf education. This section revisits issues related to that discussion.

Michael Strong, Director of research at the Center on Deafness, University of California, San Francisco, reviewed a number of bilingual-bicultural programs for Deaf children in North America in the mid-1990s (Strong 1995). He discusses the major on-going shift since the mid-1980s in the following:

“Over the past 10 years, some significant changes have occurred in regard to the rights of – and society’s awareness of – persons with disabilities in general and persons with deafness in particular. An understanding of the importance of the role of American Sign Language (ASL) in the lives of many deaf persons is a component of this new awareness. Partly as a result of these kinds of changes, an increasing number of educational institutions serving deaf children have considered the option of developing school programs that adopt a bilingual/bicultural perspective, in which ASL is used in addition to English in the classroom” (Strong 1995, 84).

In other words, different school programs in North America gradually made *local level decisions* to change their programs to bilingual programs (see also Martin 2001). While school programs in the United States (and perhaps North America more generally) can be described as falling under a “bilingual period” today, this situation needs to be understood against a historical trend of pluralistic programs/models that have and that continue to co-exist at any time period in the United States (Bagga-Gupta & C. Erting 2002). In contrast, in the Swedish educational context, a bilingual school ideology has replaced others in the last two decades, continuing a historical pattern of one discourse clearly dominating at any given time (Domfors 2000; see also Bagga-Gupta & C. Erting 2002). Thus, the domination of a “national-one-track-model” at any given historical time in Sweden, as against the co-

existence of a number of different models side by side even at present times in the United States can be said to derive, in addition to the demographic structures of the two countries, from local linguistic, cultural, sociohistorical and socioeconomical influences.¹⁵⁶ As has been explicated earlier, the national curricula in Sweden lay a common foundation for the implementation of a specific interpretation of Deaf bilingualism at all the regional special schools for the Deaf and hard-of-hearing. While these five regional and one national special schools are required to draw up their own local plans, they do so within the national framework.

While no clear cut single definition of “Deaf bilingualism” exists, what researchers and educators generally imply when they use the term is making the content of education or the curricula available through the use of a particular SL – in the Scandinavian countries Swedish Sign Language, Danish Sign Language, Norwegian Sign Language or Finnish Sign Language, in the Netherlands Sign Language of the Netherlands and in the United States and parts of Canada American Sign Language – and the majority language – in the Scandinavian countries Swedish, Danish, Norwegian or Finnish, in the Netherlands Dutch and in the United States American English. Thus generally, Deaf bilingualism is today understood in the following terms:

“deaf children can best learn ASL (or any natural SL) because for the deaf child, it is as learnable as a spoken language is for a hearing child. The acquisition process would be effortless for the child and ASL would serve as their primary language in childhood and adulthood, thus permitting the full range of discourse possibilities for language acquisition and use. (...) Deaf children’s acquisition of English, however, cannot be considered equivalent to ASL in terms of learnability” (Singleton, Supalla, Litchfield & Schley 1998, 20-1, emphasis in original).

Models of bilingualism that have been established especially in institutionalized educational settings in different parts of the world have, however, *subscribed to different kinds of prescriptive perspectives*.¹⁵⁷ Thus for instance, the focus of Deaf bilingualism appears to be different between at least Sweden, the Netherlands, Norway and United States: SSL and *written* Swedish as compared to SLN-Dutch, NSL-Norwegian and ASL-English. It appears from the literature available in English, Norwegian and Dutch on Deaf bilingualism in the Netherlands, Norway and the United States that while *spoken* Dutch, *spoken* Norwegian or *spoken* English is *not the focus* of Deaf bilingual education programs in these three countries¹⁵⁸, neither do these programs de-emphasize spoken skills as appears to be the case in the

¹⁵⁶ For an in-depth sociological comparative analysis of Deaf identity issues etc. in the two countries see Y. Andersson (1981). See also Fredang (2003) for a sociological analysis of Deaf identity during two different periods during the 20th century in the Swedish context.

¹⁵⁷ The different Deaf bilingual models that have been recently identified in the literature and discussed in Chapter 3.5 are briefly revisited here.

¹⁵⁸ As well as in other countries where Bilingual education models have been implemented within Deaf education.

Swedish setting. While the visual-gestural modality of Deaf bilingualism is focused in the Netherlands, Norway and the United States at the group level, attention appears to be paid to auditory-oral modality of Deaf bilingualism in order to cater to individual differences within the Deaf school going population (see for instance the discussion with regards to Deaf bilingualism in the USA context in <http://www.starschools.org/nmsd/misc/mvstate.html>, February 2002).

Increasing attention in the literature to bilingual education approaches in North America has perhaps assisted in tweezing out different interpretations in the programs that have adopted these approaches. In addition, and as was outlined in Chapters 1.4 and 3.5, while one specific interpretation of Deaf bilingualism and how this should be implemented in school education exists in Sweden, researchers have recently described at least five other rationales underlying Deaf bilingual school education that exist in North America (see Prinz & Strong 1998 and discussion presented in Chapter 3.5). An absence of a national curriculum or even a common state wide curriculum has probably given rise to, as was argued in Chapter 3.5, different conceptualizations of visually oriented Deaf bilingualism in North American and parts of Europe. It was also suggested that differences between the ways in which research is conducted – within a category research agenda and within “regular” research departments – in different national contexts could have had a bearing on how Deaf bilingualism (and other models) have been conceptualised. This possibly explains why different conceptualisations of Deaf bilingualism can be currently traced in North America. As discussed previously in Chapter 4 (see also below), most research in Sweden on Deaf issues gets conducted within a category research agenda (see also Vislie 1997, Proposition 1998/99 Nr. 105) and this possibly contributes to the unitary interpretation of Deaf bilingualism in the Swedish context.

On the basis of current theory and literature, Prinz and Strong (1998) have, as outlined previously in Chapter 3.5, conceptualised and described the proliferation of five different approaches for “bridging the gap between ASL and written English within a bilingual framework” in North America (1998, 55). These are:

- (1) signed languages/systems as a bridge
- (2) fingerspelling, initialized signs and chaining as a bridge
- (3) sign glossing as a bridge
- (4) sign writing systems as a bridge
- (5) phonological and phonemic cueing system as a bridge

The first approach, while stressing the primacy of a solid foundation in ASL, suggests that some amount of English like signing is critical to literacy development. Prinz and Strong’s second approach is based on the findings of researchers interested in everyday uses of the two languages. These researchers findings are reported as suggesting that “competent teachers/adults” focus on equivalent representations in a given SL and the written language. The third approach advocates the use of SL-written glossaries as a

means of providing basic literacy skills that could transfer to written English skills. The fourth approach is suggested following various efforts in different parts of the world to create visual systems for “writing down” SLs. While this is contentious according to Prinz and Strong, some hope that the writing systems currently being developed will enable Deaf students to become literate in the writing system of a SL and also the written majority language. The fifth approach that they present focuses on aspects of phonology other than the audiological input. Thus, speechreading, fingerspelling, mouthings, etc. are seen as ways of bridging the gap between the two languages. In the context of this meta-research study it is suggested that the specific conceptualization of Deaf bilingualism in Sweden (see further section 6.4 below) can be understood as a different and sixth approach:

- (6) comparative contrasting grammar structure model, with a delayed introduction of the written majority language¹⁵⁹ and a non-focus on oral language.

In addition, researchers like Singleton, Supalla, Litchfield and Schley (1998) suggest that:

”in contemporary Bi/Bi programs, ASL/English bilingualism is interpreted primarily in linguistic and cultural terms. That is, the goal of ASL/English bilingual education is dual language mastery and access to Deaf and Hearing cultures. For some Bi/Bi advocates, there is an assumption that English-based signing will result in the successful acquisition of English and that an English-based sign system can be used along with ASL in a bilingual educational setting” (1998, 19).

Singleton, Supalla, Litchfield and Schley (1998) report that in some programs the use of English-based signing occurs in bilingual *transitional* programs (where ASL would eventually be phased out after Deaf children become successful English learners), in others English-based signing is seen as having a place in bilingual *maintenance* programs (where ASL is never phased out). And in yet others access to English is viewed as occurring through the use of *visually accessible print materials* – and not through systematic immersion in English-based signing. While Singleton, Supalla, Litchfield and Schley (1998) and others seem to favour the emphasis laid on ASL acquisition in this third bilingual approach or program, they stress that

“the details of how first language acquisition of ASL for deaf children from hearing families takes place remains unspecified” (1998, 19).¹⁶⁰

This highlights once again the problematic issue of viewing ASL or other SLs as *all* deaf children’s “first” language. Nevertheless, the third form of Deaf bilingualism identified by Singleton et al. ie. “use of visually accessible print materials”, emphasizes a given SL and “only” the written form of a

¹⁵⁹ Also known as a “consecutive” or “sequential” bilingual model.

¹⁶⁰ Similar concerns are raised by also Bagga-Gupta (2002a, 2002b, 1999b) in the Swedish context.

majority language. How and which of these two languages can be made “naturally” available to Deaf children from different family backgrounds – ie. DCDP and DCHP – in their everyday lives remains, however, an unexplored issue in the literature. This is not an insignificant observation since the overwhelming majority of deaf children are born into hearing families.¹⁶¹ While traditional estimates have put this figure to 90 percent,¹⁶² more recent analysis suggests that even this is a myth. Research on demographic trends by Mitchell and Karchmer (2004) suggests that only five percent of Deaf children in the United States have one or both parents who are deaf and this suggests that not more than five percent of Deaf children can have access to a linguistic environment at home that is comparable to the linguistic environments that the larger majority of hearing children have in their hearing home environments.

A second reason why Mitchell and Karchmers’ observations merit further scrutiny is with regards to the paucity of empirically driven discussions on everyday language use in the Deaf bilingual literature. The vast majority of proponents of the bilingual approaches or models, be it either ASL-English or SSL-Swedish, (or other SL-majority language pair) have in recent years made either theoretically inspired or ideologically motivated arguments in favour of this most recent shift in Deaf education. For instance, as discussed in Chapters 3 and 5.2, the seminal paper “Unlocking the Curriculum: Principles for Achieving Access in Deaf Education” by Robert E. Johnson, Scott K. Liddell and Carol J. Erting in 1989 describes the reasons for the failure of Deaf education and then presents a “model program for the education of deaf children”.¹⁶³ This and Lidell and R.E. Johnson’s subsequent work (1992; see also Lidell 1990, R. E. Johnson 1990) presents convincing arguments in favour of a bilingual approach. While Padden (1990) subsequently supports the fundamental arguments that R.E. Johnson, Lidell and C. Erting (1989) make in their historically significant paper, she draws critical attention to the fact that there is lack of research on the “learning practices’ or ‘activities’ and how people exchange information” in Deaf settings that adopt a bilingual model (Padden 1990, 26). More recently, Singleton et al (1998), Mayer and Akamatsu (1999) and Wilbur (2000) have presented theoretical arguments that suggest that ASL is essential for success in institutional settings (see also literature discussed previously in Chapter 5.2). However, while Singleton et al and Mayer and Akamatsu suggest that both ASL and some form of English based signing are necessary, Wilbur’s theoretical analysis suggests that English based signing is not required in school settings.

¹⁶¹ See discussion of literature on DCDP versus DCHP in Chapter 5.4.

¹⁶² I.e. 90 percent of Deaf children come from hearing family backgrounds.

¹⁶³ This paper is understood as having triggered the shift at the institutional level towards a bilingual model of education in the United States (see also Preface in R. C. Johnson 1990). See further discussion on the impact of this text in Appendix 3.

6.3. BILINGUALISM AND LITERACY

The continuing discussion during the 1990s, both in and outside the United States, appears to have focused upon and contributed towards the building of *a critical mass* in the literature body that re-affirms the reasons for the inadequacies of the “total-communication” or the *transitional* bilingual model programs described in the previous section. Literature from the 1990s advocates bilingual models of the maintenance types and models where similarities and differences between Deaf and hearing bilingualism are highlighted and where both the SL and the majority languages are seen as being vital components of Deaf education (Martin 2001, Nover, Andrew & Everhart 2001).

As described in Chapter 5.4 earlier, researchers have more recently proposed arguments that support the idea that ASL proficiency leads to better literacy standards. Such discussions are important not least because of the ideologically shaded shifts in the organization of the field of Deaf education. In addition, a framework that was recently put forth for “bilingual multicultural education of learners who are deaf” suggests that while a,

“signed language is primary for achieving linguistic development, cultivating cognitive skills, and enhancing comprehension (...) Deaf children need varied, yet consistent, opportunities to develop a full array of language abilities” (Nover, Christensen & Lilly Cheng 1998, 61 & 66).

Such a framework stresses the need for variance in linguistic codes and modalities for language acquisition. This type of model stresses the importance of both literacy and oracy, while at the same time giving “signancy” (Nover, Christensen & Lilly Cheng 1998) or a Signed Language a primary role. This, as has been suggested, differs from the Swedish model of Deaf bilingualism where currently oracy is not emphasized for Deaf students:

”Teaching of Swedish in the Special schools should support the students development to bilingual individuals, which for the majority of students in the Special schools imply sign language as a first language and written Swedish as a second language” (http://www.skolverket.se/kursplaner/specialskolan/svenska.html, my translation, November 2001; updated web page http://www3.skolverket.se/kio3/front.aspx?sprak=SV&ar=0405&infotyp=24&skolform=12&id=4058&extraId=1571, March 2004).¹⁶⁴

Nover, Christensen and Lilly Cheng (1998) stress the significance of adopting a more encompassing bilingual model of communication especially for the development of literacy. They recommend the use of two very different approaches for this purpose:

¹⁶⁴ Note however that more recent explorations of classroom practices have reported that Swedish Deaf bilingualism is much more complex than the ideological understanding of Deaf bilingualism (see literature discussed in Chapter 7).

- (i) A *bilingual approach* where a Signed Language would dominate: in classrooms the teacher usually does this in moving from print, to the SL “by using a sequence of pointing to the world in print, using ASL to define it, finger spelling it, and/or writing it” (1998, 69); this “code switching” preserves the lexicon of both languages.
- (ii) A second language approach with only English or Swedish, etc. where the focus of literacy development would be through communicating messages directly in the target language; this they argue “is to provide increased use of expressive English forms” (1998, 69).

Nover, Christensen and Lilly Cheng (1998) emphasize the need for acknowledging the different sub-categories (ethnic background, degree of hearing loss, parent background, etc) and degrees of Deaf bilingualism that co-exist within Deaf communities and suggest the incorporation of both the above approaches in a *language teaching model* for Deaf children. They¹⁶⁵ rely on an implicit understanding that

“code switching¹⁶⁶ between ASL and English is extremely common in classrooms where the teacher is fluent in both languages, although there is no research that documents the frequency of this kind of code switching” (Nover, Christensen & Lilly Cheng 1998, 69).

There is very little research that has focused on the *patterns in which the two languages* are connected in everyday language use or how users shift between the languages in everyday communication-practices.¹⁶⁷ Like a growing number of researchers, they therefore

“call for more ethnographic studies that address the ways in which attitudes and assumptions shape classroom interactions” (1998, 69).

At the cost of being repetitive, the international literature – and this is also quite evident in everyday interactions in the Deaf communities¹⁶⁸ – suggests that Deaf human beings do not constitute one homogenous communicative group (Grosjean 1996, 1992, Kannapell 1974, Lane, Hoffmeister & Bahan 1996, Padden 1996a, Padden & Humphries 1988, Strong 1995). In other words, from a non-prescriptive position a small body of literature supports

¹⁶⁵ Steve Nover is a Deaf American academician who obtained his Ph.D (2000) in the area of “Language, Reading and Culture” from the University of Arizona, USA and specialized in “language planning, bilingual education, linguistic anthropology, second language acquisition”. His thesis is scheduled to be published as volume 12 in the Sociolinguistics in Deaf communities series in 2005. All three authors work closely with teachers of the Deaf.

¹⁶⁶ “Code switching” is a term that they borrow from the research literature in oral bilingualism. In this context it may be interesting to note that concerns regarding the use of concepts from oral bilingualism to describe language use in Deaf communities have been recently raised (see for instance Lucas 2001). Research discussed in Chapter 7, in comparison, uses concepts like “linking” and different types of “chaining” to refer to the “switching” between ASL-English and SSL-Swedish that occurs in everyday practices inside and outside Deaf classrooms.

¹⁶⁷ What Nover, Christensen and Lilly Cheng call “code switching” and researchers whose work is discussed later in Chapter 7 call “linking”, “chaining” and “sandwiching”.

¹⁶⁸ As can be evidenced by texts authored by Deaf people.

the view that there are *different ways* in which Deaf bilingualism exists in *everyday* Deaf arenas.

However, as has been highlighted earlier, despite the theoretically driven and ideologically motivated arguments in the more recent literature, there exist very few empirical studies regarding what Deaf bilingual practices look like in institutional settings. These kinds of studies are currently seen as being important in throwing light on how different Deaf bilingual models shape school achievement (see also Knoors 1997, Marschark 2001, Nover, Christensen & Lilly Cheng 1998, Prinz & Strong 1998). In addition, while the number of countries and school programs that have embraced the bilingual school ideology seems to be increasing,

“few have developed a comprehensive theoretical framework explaining how they organize the ASL [or SSL or other SL] and English [or Swedish or other majority language] learning experiences of their deaf students” (Singleton, Supalla, Litchfield & Schley 1998, 18).

This suggests that a historical trend continues whereby an educational ideology of communication is in place or is currently being implemented in educational settings and researchers and educators are presently attempting to understand what the practices of this ideology look like and what their implications would be for Deaf learners.

“We can interpret the bilingual-bicultural movement in deaf education as a leap toward new directions without considering what we already know about bilingual education and the language development of deaf children. National recognition certainly has been afforded to individuals who advocated widely for bilingual-bicultural education. However, we still have sparse data regarding the effectiveness of the paradigm or the instructional strategies within the paradigm that improve achievement. Indeed the history of deaf education seems fraught with the quest for new paradigms and approaches but few attempts to discover how to improve out current models” (Schirmer 2001, 84).

The above quote reflects the situation in both the United States and Sweden. The large scale “research and development project” – the Star Schools Projects (described previously in Chapter 5.5) has relevance in this context. The focus of the Star Schools Projects on in-service training and pre-service training can be understood in terms of applied work where certain understandings of Deaf bilingualism and good practices in the institutional field of Deaf education are identified by a project team¹⁶⁹ and are implemented in teacher training and mentor training programs in participating universities and colleges from around the United States.

The different sub-projects of the Star Schools Project are relevant to the discussion here for a number of reasons. *Firstly*, this project was instituted during the second half of the 1990s and received federal government funding in order to:

¹⁶⁹ The project team consists of researchers and teacher-educators. The hearing and Deaf team members are all competent users of ASL and English.

“improve language teaching practices of teachers who work with deaf learners by providing training in current bilingual theories and pedagogical techniques, including ‘Engaged Learning’ practices, through a convergence of Internet, Web, and distance learning technologies” (Nover, Andrew & Everhart 2001, 1).

The activities of the larger five year project (1997-2002) are reported as being guided by two principles:

1. Deaf bilingual students are given equal opportunity to learn the *same challenging content* and acquire skill levels that are recommended for all students.
2. Proficiency in American Sign Language (ASL) and English is promoted for all deaf students because bilingualism enhances cognitive, social, and linguistic growth, as well as our understanding of diverse multicultural groups in the Deaf and Hearing cultures” (Nover, Andres & Everhart 2001, 1, emphasis added)

Secondly, the leadership and the core project group comprises of researchers and teacher-educators who are competent members of Deaf and hearing cultures and are fluent in ASL and (at least written) English. *Thirdly*, this national level project is reported as systematically incorporating best practice principles of Deaf bilingualism in a number of different teacher education departments in the United States. It would not be incorrect to suggest that this project is unique and perhaps represents the first instance where teacher educators and researchers make visible and explicit the principles of a Deaf bilingual model and what this model should be like. In Sweden, a national development project,¹⁷⁰ funded by the National Agency for Education, brought together teachers from all the five regional special schools for the Deaf and hard-of-hearing, three local government schools for hard-of-hearing and one local government school for the Deaf and hard-of-hearing and members of the Deaf Studies research group at the Department of Education, Örebro University during 1997-99. This developmental project focused explicitly on issues of reading and writing (see Bagga-Gupta 2003c, 1999a, 1999b, 1999c, Bagga-Gupta & Domfors 2003, SOL-projekt 2000).¹⁷¹ In the present context it is relevant to differentiate between the work done in teacher education programs or developmental projects like the Swedish SOL-project involving teachers and the communicative-practices that themselves comprise Deaf bilingual programs. In addition:

“While there are no [empirically] published accounts of these bilingual programs, there has been some *recent research conducted on the relationship between ASL and English literacy acquisition*, an important aspect of evaluating the potential efficacy of bilingual educational approaches for deaf children” (Prinz & Strong 1998, 47, emphasis added).

¹⁷⁰ The Swedish SOL (Skriv och läs, Writing and Reading) Project (1997-99).

¹⁷¹ The project brought together teacher-representatives from all the compulsory level schools for the Deaf and hard-of-hearing in the country and initiated some documentation activities at all the schools in an attempt to understand bilingual practices in Deaf and/or hard-of-hearing institutional settings. The project, however, did not at any stage, attempt to incorporate systematic guidelines in teacher education programs.

As was described earlier in Chapter 5.4 some studies have shown that “ASL skill is significantly correlated with English literacy” (Prinz & Strong 1998, 53; see also Singleton, Supalla, Litchfield & Schley 1998). While a few studies discussed earlier (eg. Moores & Sweet 1990, Padden & Ramsey 1998, Prinz & Strong 1998) have suggested that Deaf children of Deaf adults (DCDA) show greater command in literacy as compared to Deaf children of hearing adults (DCHA), it has also been shown that DCHA with a high level of competency in a given SL outperform their less fluent classmates on literacy related measures (Singleton, Supalla, Litchfield & Schley 1998).

Padden and Ramsey (1998, 1996) have reported from a number of studies conducted during the period 1993-1996 from the project “Deaf Students as Readers and Writers: A mixed mode research approach”. The quantitative and qualitatively focused studies “examined the acquisition of reading and writing skills in deaf and hard of hearing children” (1996, 1). Padden and Ramsey discuss two non-linguistic arguments to suggest why knowledge of a natural signed language might support reading ability. *Firstly*, Deaf parents are very often members of Deaf culture and provide an accepting environment and provide resources for their child’s language development more generally. *Secondly*, when contrasted with a group of DCHA children, DCDA children do well in reading because the former group is *very variable*. Padden and Ramsey however express caution by saying that,

“Because there are few studies comparing DCDP’s with age-matched hearing readers of similar social backgrounds, it is hard to tell whether it is ASL specifically that contributes to reading development, or *early language experience in general*” (1998, 31, emphasis added).

The linguistic argument that has been proposed to account for why a relationship between a natural Signed Language and reading ability might exist proposes that possessing skills in a SL in itself provides a foundation for the acquisition of another language. Padden and Ramsey’s six different studies demonstrate that a relationship does exist between competency in ASL (or other SL) and reading in a majority language. However, their cumulative work suggests

“that the relationship does not develop ‘naturally’ but must be cultivated. There are conditions that enable associations to be made between ASL and reading including exposure to certain types of discourse settings that serve to highlight, signify, and direct attention to correspondences between different language systems” (1998, 30).

They reason that this *relationship* is not an obvious one “as it cannot be the case that simply knowing English leads to reading development” in hearing children (1998, 33). More interestingly, they demonstrate and argue that critical conditions are required for forming these associations:

“these conditions, (...) derive from resources external to the individual, that is they are found in social practices among deaf readers and in instructional techniques used by signing teachers” (1998, 32).

These set of studies surmise that Deaf parents make available a natural language environment for Deaf children and that this probably leads to better literacy skills. Further more, a positive relationship is reported between use of fingerspelling and initialized signs and reading skills even though Padden and Ramsey do not claim that the first two by themselves afford reading ability. C. Erting, Thumann-Prezioso and Benedict (2000), Kelly (1995) and Padden's (1991) work in Deaf families shows that very young Deaf children can recognize fingerspelled words *before* they can read print. Thus suggesting that Deaf children,

“first learn to recognize fingerspelled words as global, whole units, not in terms of the composition of individual handshapes that make up the letter sequence in the word. Only later do they recognize handshapes and their correspondence with letters” (Padden & Ramsey 1998, 38; see also Petitto 2002).

Recent literature in this area therefore suggests that fingerspelling and initialized signs function at a *mediating level* between ASL and print, in a manner similar to the associative functions that sounding out or reading aloud performs between speech and print in the case of hearing children (see also studies presented in Chapter 7). At an applied level these studies suggest that such language behaviours need to be harnessed as mediating tools and inform practice in instructional settings.

Singleton, Supalla, Litchfield and Schley (1998) follow a somewhat similar line of reasoning and propose that the meaning of bilingualism for Deaf children needs to move away from issues of “first” and “second” language learning and instead be understood in terms of a “modality-constrained-bilingualism” where “specific ASL-based methods must serve as a bridge to print English” (1998, 21). They report from a large five-year long research project “Access-to-Learning” (1993-97) where, among other things, the relationship between ASL fluency and English skills among 80 Deaf children were accessed. Based on their data they report that,

“when deaf elementary school-aged children are exposed to ASL in the classroom (as opposed to only outside of the classroom) their potential for enhanced ASL fluency is considerably increased” (1998, 24).

Based on some of their own work and instructional work by others, they suggest that the use of a “notational system (glosses) to approximate the meaning of signs” (1998, 25) could function

“as an intermediary code and as an instructional tool. Eventually, deaf children could deal directly with English print via reading and writing activities and no longer need to have an ASL video representation as their primary narrative source and sign gloss as an intermediary code” (1998, 26).¹⁷²

¹⁷² Compare with Prinz and Strong's (1998) approaches discussed in section 6.2 above.

However, they too underscore the need for further investigations both theoretically and in the development of instructional methods and related to the evaluation of student outcomes. The research reported here and the studies presented in Chapter 7 suggests that instead of general knowledge of a particular SL, it is “associations between specific elements of ASL and alphabetic writing system” that furthermore need to be cultivated and can account for a link between knowledge of a SL and literacy development. Discussing the area of Deaf bilingualism and literacy specifically Marschark (2001) adds that there is further

“need to examine the relationship of motivation, exposure to reading, and quality of teaching to literacy. The effects of early exposure to reading, via parents and early school environments, seems a particularly important area of study, given findings that children who read more become better readers, and better readers read more” (2001, 37).

The need for such a focus in the literature is also echoed in Padden and Ramsey’s (1998) work where they suggest that more general early bilingual language experiences of DCDP’s, and not merely *early* exposure to ASL could account for their higher achievement in school related literacy tasks.

6.4. SWEDISH LITERATURE ON THE DEAF BILINGUAL EDUCATIONAL MODEL

6.4.1. *Introduction*

This section presents an overview of the relevant published and unpublished literature on the bilingual model in Sweden. It has been argued earlier that the Swedish Deaf educational system was shaped by a specific interpretation of Deaf bilingualism that was handed down (simultaneously) to all the Deaf schools through the National Curricula during the post-1981 period.¹⁷³

“In the national curriculum now in place, when SÖ [Swedish Board of Education] subscribes that Swedish education should be implemented independent of oral education, it does so *not because of a result of research* but more as a consequence of the poor educational results of using oral training as a tool in the learning of Swedish. In other words no reports about the success of Swedish learning via the written word were available before the [present] national curriculum work [was instituted]. Neither did SÖ take any responsibility to educate or re-educate teachers for the new working methodologies that the national curriculum implied” (Ahlgren 1988, 201, my translation, emphasis added).

This top-down implementation can perhaps in one way account for the lack of empirically driven Swedish studies that have either evaluated the model during the 1980s and 1990s or until very recently even described the communicative-practices that make up or characterise this model. The above quote by a senior Swedish researcher at the Department of Linguistics,

¹⁷³ This period has been described as a “transition to a minority period” (Bagga-Gupta & Domfors 2003, 1997).

Stockholm University on the most recent shift in policy regarding Deaf education in Sweden and the dramatic national curriculum shift towards bilingualism in the early 1980s exemplifies the paucity of research evidence that pushes changes in this school form. This is, as the present meta-research study suggests, symptomatic of the shifts both internationally and also in Sweden (see also Schirmer 2001).

It was first in the second half of the 1990s that a non-ideologically motivated evaluation of the Deaf schools occurred (see Skolveket 1997). This National Agency for Education initiated evaluation presented a disturbing picture of the achievement levels of deaf children (see section 6.4.4 below). Given that knowledge is wanting regarding what communicative-practices made up this model of bilingualism, and for reasons argued here, it would be incorrect to understand bilingualism per se as being the cause of the present day concerns in the Swedish special schools.

6.4.2. *Different issues in earlier studies*

An aspect of earlier studies is captured in a review of the Swedish literature in an undergraduate thesis,¹⁷⁴ published and distributed by RPH-HÖR,¹⁷⁵ titled “Swedish language skills of special school students” (my translation) from 1984:

“What is characteristic for many studies is that they are solely descriptive¹⁷⁶ in nature. It is often stated that large differences are present at similar levels of hearing loss, but seldom are attempts made to isolate factors that could have lead to these differences. In other studies some statements are made about the reasons [that could explain these differences], without making available relevant background data. What is often ignored are factors such as presence of additional handicaps, impairments that are present from birth or acquired later, time of diagnoses or *real teaching methods used*” (Gustafsson 1984, summary text, my translation, emphasis added).

A handful of interesting studies that focus on the reading and writing competencies of students who are Deaf and hard-of-hearing are reported

¹⁷⁴ There is a tendency for teacher-student’s unpublished essays or bachelor level thesis (at colleges and universities) to be viewed as “research” in the institutional field of Deaf education in Sweden. Stepping aside from conventions used in the present study momentarily, I will here suggest that this is the case from my own experiences in supervising teacher-students at various levels in both the Deaf area and the hearing area since the mid-1990s. I have noted very different receptions of essays/thesis at the Deaf and hearing institutional school levels. I have also noted this tendency in the role of scientific leader projects that focused on Deaf literacies and learning at the upper secondary school and the compulsory comprehensive school level during the second half of the 1990s in Sweden. Since I am more informed about the on-going and unpublished thesis studies of students at my department at Örebro University, Sweden, and less informed about similar work at other departments in the country, unpublished student-teacher essays/thesis are not discussed here.

¹⁷⁵ RPH, Rikscentralen för Pedagogiska Hjälpmedel (The national center for educational aid); HÖR, Hörsel (hard-of-hearing).

¹⁷⁶ See footnote 96 in Chapter 5 for the analytical distinction that is drawn upon in the use of the terms “descriptive” and “prescriptive” in the meta-research study presented in this book.

during the 1960s and 1970s (see for instance Ahlström 1972, Ahlström & Amcoff 1966, Amcoff 1977, 1968, Amcoff & Ahlström 1967, Hanson 1962, Norden 1974, 1969, etc).¹⁷⁷ Amcoff and Ahlström's research is reported in the international literature and at times in the Swedish literature as suggesting that accomplishment in sign language is positively related to accomplishment in written language. While there are other indicators presently available in the international literature that suggest that this might indeed be the case (see discussions in Chapter 5 and in previous sections in this chapter), it is worth noting that the methodological design, assumptions regarding demographics of the population in the special schools and the communication “methods” used in these schools, and as reported in Amcoff's work, have been critically reviewed by researchers in Sweden (see for instance Gustafsson 1984, Lundström 1973). Some of these studies used tests in order to understand Deaf students reading and writing levels. Test results reported from this period suggest that grade 8 level students in the special schools for the Deaf did not read or write at levels equivalent to grade 4 (hearing students). In addition, there is some indication in this body of literature that hard-of-hearing students with residual hearing and oral language skills who are nevertheless placed in Deaf classrooms/schools have “other kinds of” special needs. More recent literature from Sweden (see for instance Bagga-Gupta 2002a) has also highlighted this situation and there is concern that hard-of-hearing children with additional challenges are placed in “Deaf” classrooms because of the slower tempo in these settings. Indirectly, such discussions are relevant and throw implicit light on the institutional field of Deaf education.

Nelfelt and Strömquist (1990), researchers at the Department of Linguistics, Gothenburgh University, briefly outline three types of “explanations that are used to explain deviance in deaf [individual's] written Swedish from the Swedish norm” (1990, 11, my translation). The first, *phenomenon of interference*, is reported in terms of influence from “the original language” ie. SSL and this can explain the deviance in the morphology and syntax of written Swedish. *General learning strategies* constitute the second type of explanation, which according to Nelfelt and Strömquist are based on “universal principles” for language learning. The assumption here is that Deaf individual's who exhibit less than required proficiency in written Swedish, have received inadequate “input” and have participated in a “limited number of communication practices” (1990, 11, my translations). *Input influence*¹⁷⁸ is suggested as the third type of explanation and the authors note that

¹⁷⁷ During the same period other studies focused on speech perception and oral skills of deaf students and some of these attempted to relate such skills to reading and writing competencies (see for instance Liljedahl 1975, Martony 1974, Risberg 1979).

¹⁷⁸ See also discussion of the use of simplified written language in Deaf educational settings in Chapter 5.2.

“a limited or deviant input, for instance, that which is given in written language teaching in the school, would be mirrored in the language that is produced. *Simplified or conservative written language forms* will to a large extent be exhibited in deaf [individual’s] written language as compared to hearing [individual’s]” (1990, 11, my translation, emphasis added).

While there is an implicit understanding in the Swedish institutional field (and perhaps also in the work of some researchers) that the phenomenon of interference accounts for the “different” or “weaker” Swedish of Deaf students, there is no empirically driven published literature in Swedish that throws light on these explanations.

6.4.3. *Historically focused studies and studies on achievement issues*

Researchers studying the Swedish model are in a position to ask whether Swedish Deaf students’ “reading levels” have changed historically as a result of the new curriculum in the post-1981 period and we can ask how Swedish Deaf students’ “reading and writing levels” compare with those of Swedish hearing students test scores as a result of the new bilingual national curricula. In other words, the unique national shifts in the Deaf educational system in Sweden allow for the possibility to understand dimensions of different programs at different historical periods. Three historically focused Ph.D dissertations have attempted to do this: Domfors (2000), Heiling (1993), Pärsson (1997).¹⁷⁹ While Swedish educational researcher and teacher educator Lars-Åke Domfors’s¹⁸⁰ doctoral research covers the period 1873 to 1999, historian Anita Pärsson’s¹⁸¹ thesis work covers the period 1889 to 1971, and psychologist Kerstin Heiling’s¹⁸² testing compares achievement levels of two cohorts: students from the end of the 1960s and end of the 1980s.

Given the fact that one program/model is understood as existing at any given time period – including the present – implies that if data are available from previous periods when different methodological foci existed (eg. “total communication”, “oral”, etc.) then they can be compared to data from the present “bilingual” period. In this respect it is interesting to note that Domfors’s (2000) doctoral research suggests that while one model is clearly dominant during any given historical period – and this shapes the organization of Deaf schools – strands of other models or philosophies can be seen in (at least the teacher education discourse during) that particular period.

Some efforts have been made in Sweden to study the “reading and writing levels” of Deaf students both in historical terms (ie. reading and writing

¹⁷⁹ See also Chapter 4.

¹⁸⁰ He is a faculty member at the Department of Education, Örebro University.

¹⁸¹ She is working at the Department of History, Gothenburg University.

¹⁸² While she defended her Ph.D at the College of Teacher education, Malmö, Heiling currently works as a psychologist at a county council in southern Sweden.

levels before 1981 have been compared to levels after 1981) and in cross-cultural terms (ie. writing levels between hearing and deaf students have been compared). While the statistical comparative analysis of different cohorts from the end of the 1960s and end of 1980s presented in Heiling (1993)¹⁸³ appear to suggest that Deaf students at the end of the 1980s fared better in reading and writing tasks as compared to a cohort from the end of the 1960s, Heiling subsequently reported (for instance in preparation, 1997, 1994, personal communication) that the improvements seen in reading levels at the end of the 1980s *did not continue* during the 1990s.

“The results of this investigation show that deaf pupils in the eighties were definitely superior to their age-mates in the sixties in tests primarily assessing theoretical knowledge. The greatest changes concern comprehension and production of written Swedish but numerical and mathematical proficiency was also better than in deaf pupils two decades earlier. On the other hand, the results in the general intelligence test and spatial and perceptual test achievements had hardly improved at all over the decades. (...)

In this study we could not establish any clear difference in achievement between pupils with different degrees of hearing-loss. This is in contrast to previous investigations of orally trained pupils, where an increasing degree of deafness was associated with decreasing reading proficiency. The tendency contained in the data presented here shows that pupils with severe hearing-loss achieve better on language tests. The tendency is opposite in mathematical tests.

(...) the test results were related to the level of general ability in the groups of pupils in the two decades. Although the general level of achievement had risen between the sixties and the eighties the range between high- and low-achievers remained unchanged. Pupils with favourable intellectual abilities achieved just as well in relation to the pupils with poor results in the 1980s as they had in the 1960s. On all tests there was a small group of pupils, often with additional handicaps, who achieved very poorly” (Heiling 1995/93, 228, italics in original, underlined emphasis added)¹⁸⁴.

However Heiling notes in the English summary of her Swedish thesis from 1993 that

“although deaf subjects in the eighties have made substantial gains in written skills compared to their age-mates in the sixties, they are still far from the fluency and flexibility achieved by hearing subjects” (1993, 221).

The English translated thesis from 1995 also reports:

“in language tests, many of the deaf pupils in the eighties still needed more time than their hearing age-mates in order to prove how much they actually knew. With extended time two-thirds of the group passed the so-called grade-four criterion, i.e. they [grade 8 pupils] were able to read at least as well as an average fourth-grader. In other words, the majority had acquired

¹⁸³ As was mentioned previously in Chapter 4.2, Heiling’s doctoral thesis from 1993 has been an important part of literacy related literature in Swedish. Heiling’s Ph.D and post-doctoral research has relevance to the issues being discussed in the present context, and while this research was introduced in the previous chapters, it is discussed further here. Her Swedish thesis from 1993 was translated into English in 1995 and the latter is sometimes used in international settings as proving the efficacy of the bilingual model.

¹⁸⁴ This quote is taken from the English translation of Heiling’s Ph.D thesis from 1993.

functional reading ability although many of them read slowly. Ten per cent of the subjects read as fast and correctly as an average hearing pupil in grade eight. With extended testing time the average reading ability of the deaf subjects was almost equivalent to that of hearing age-mates. A small group of pupils, most of them with additional handicaps, achieved very poorly in language tests.

Regarding the ability to express oneself in writing, no adequate material of hearing subjects exists for comparison. In the 1980s the deaf pupils wrote more freely and had a richer vocabulary than their age-mates twenty years earlier, but presumably there still is a considerable gap between hearing and deaf subjects” (Heiling 1995/93, 289-30).

In addition, Heiling’s subsequent findings and reflections presented at an international conference on Deaf bilingualism and literacy in Oslo¹⁸⁵ in 1994 and her current work in progress (Heiling in preparation) indicate that most of the students Heiling was studying in the 1990’s had

“started school with a general level of knowledge and social competence that were not common in earlier groups of deaf children (...) General level of knowledge is certainly an important foundation for reading. How come then that the younger pupils have such difficulties learning to read [in the 1990s]? They are well oriented in lots of matters – information mainly acquired in SL” (Heiling 1994, 10; see also Heiling 1996).

While statistical data from her work in the early 1990s (and the rest of the 1990s) is unavailable, Heiling clearly indicates already in 1994 that the newer cohorts in the 1990s were experiencing problems as far as Swedish was concerned. On the basis of her current work in progress,¹⁸⁶ Heiling suggests that the following kind of questions are critical to understanding the present concerns in the Swedish Deaf bilingual model:

“In connection with the larger acceptance of sign language and usage, parents were recommended, already at the stage when [a child’s] hearing loss was discovered, to sign with their child and the children were quickly channelled into signing preschools. The children who were born later than the original project group [the group from the 1980s] could therefore be expected to come into exposure with signs earlier.

1. The first question is therefore:
How does Swedish reading competence develop in those deaf students who received exposure to sign language early and who had a well functioning sign language communication in school compared to those pupils who left the deaf school in the 1980’s?
2. Another question emerges from the above description of keeping sign language and Swedish separate:
Do the reading skills of younger deaf students who have been taught according to a *consecutive* bilingual model, which requires good competencies in sign language before Swedish as a second language is introduced in the school, differ from reading abilities of the older students who received a more *simultaneous*¹⁸⁷ language stimulation?

¹⁸⁵ See also Chapter 4.2.

¹⁸⁶ I am grateful to Kerstin Heiling for sharing her present insights and work in progress.

¹⁸⁷ In that the children received exposure to both SSL and (written) Swedish.

3. The following question arises on the basis of the results that have been accumulated during the period 1985 to 1997:
 What are the reasons for the variations in the development of the [longitudinal] results which can be observed and especially the sudden changes [in results] for the younger [recent] groups?" (Heiling in preparation, my translation, emphasis added).

From the perspective of the theoretical framework argued for in this meta-research study (see Chapter 2), the questions that Heiling raises are important. The significant issue that can be surmised from Heiling's most recent unpublished work is whether the specific Deaf bilingual model in place in Sweden in itself becomes an issue in Deaf children's socialization into written Swedish.

6.4.4. *Other studies on achievement issues*

The parameters of the Swedish system also allow for the possibility to systematically study the *nature of literacy practices* in different Deaf school settings – all of which follow the same model at any given period – and this can allow for gauging Deaf students "*reading and writing levels*" in general. While very few studies have focused on the nature of communicative-practices in Swedish Deaf arenas,¹⁸⁸ some other texts have recently and more explicitly discussed or made statements regarding the reading and writing levels of Deaf students. For instance, a project directive by the National Agency for Education recently states that:

"Considerably fewer pupils in the special schools reach the national goals as compared to pupils in the [hearing] compulsory schools" (Skolverket Dnr 1999:2810, p 2, my translation).

In addition, statistics available from the newly established National Agency for Special Schools for the Deaf and hard-of-hearing, SPM (see SPM 2000) and the annual tabulations done by Sven-Owe Englund (1999), head of one of the regional special schools for the Deaf and hard-of-hearing were recently presented and discussed in a National Agency for Education report (see Bagga-Gupta 2002a, <http://www2.skolverket.se/BASIS/skolbok/webext/trycksak/DDW?W=KEY=1030/>).¹⁸⁹

Less than 40 percent of the students who graduated from the comprehensive levels of the regional special schools for the Deaf and hard-of-hearing had requisite grades in the key subjects of Swedish, Mathematics and English that qualified them to get admission in a national program at the upper secondary schools for the Deaf and hard-of-hearing. There is clearly, as

¹⁸⁸ Some of these were recently initiated to understand the complexities of academic achievement in Sweden. These are discussed in Chapter 7.

¹⁸⁹ Tables 1 and 2 were tabulated with the help of this body of statistics and are taken from this report.

Bagga-Gupta (2002a) and SPM (2000) have suggested, a need to study these trends over a longer period of time (compare also with Chapter 5.3):

“The number of students at the special schools is so small that large variations in results can exist between different batches of students, and this is important to bear in mind when one comments results from separate [graduating] years. Logically results from at least 4-5 different [graduating] years would be needed in order for a more reliable analysis of the exam results from the special schools” (SPM 2000, 15, my translation).

Table 1: Exam results for grade 10 in 1999/2000 & 1998/1999 at the regional special schools in terms of students qualifying to the national programs at the upper secondary school level

	1998/99	1999/2000
Students qualifying to the national programs at the upper secondary school level	24 (39,34%)	24 (38.7%)
Students not qualifying to the national programs at the upper secondary school level	37 (60.65%)	38 (61.29%)
Total nr of students leaving school	61	62

(Bagga-Gupta 2002a, 33, my translation)

The uniqueness of Heilings on-going data collection and analysis needs to be understood in the background of the above. There are other indications that point to the current trends in Deaf students’ achievement levels in Sweden. In addition to the statistics presented in Table 2, Englund has also collected annual statistics from all the five regional special schools including results from the spring and autumn terms in grades 9 and 10 and Eva Rindler, at the national upper secondary schools for the Deaf and hard-of-hearing has collected entry point statistics at the upper secondary schools (see Rindler 1999, private communication). These two unpublished sources suggest that the statistics presented in SPM (2000) for a two year period at the end of 1999 are not unique. Tabulating Englund’s statistics makes available the following picture for the school year 1997/98:

Table 2: Percentage of grade 10 students with and without passing grades in the key subjects Swedish, Mathematics and English at the regional special schools 1997/1998

Swedish	Mathematics	English	
Students with passing grades	62%	57.2%	63.4%
Students without passing grades	38%	42.8%	36.6%

(Bagga-Gupta 2002a, 34, my translation)

About 60% of the students in grade 10 at all the regional special schools in Sweden completed their school year in 1998 with passing grades in at least *one of the three* compulsory key subjects.¹⁹⁰ It is not possible to draw conclusions regarding what percentage of the students had received passing grades in *all three* compulsory subjects from the available statistics.

SPM (2000) has also recently extrapolated that in line with the large increases that have been noted vis-à-vis "students with extra ordinary study situations"¹⁹¹ since 1998¹⁹², the percentage of these students in the regional special schools are expected to continue to increase in the coming years:

"This level has increased further during 2000 and there is a lot to suggest that it will increase further keeping with the fact that the [special] schools become better at identifying all the students individual needs and conditions (...) The majority of special study plans in the special schools contain a change which is geared towards supporting the students in the subject of Swedish" (SPM, 2000, 17, my translation).

While this development is explained primarily from the intensified focus on students in need of special support at the regional special schools, it is also important to acknowledge the role that the newly mandated indicators of school achievement have played in this process (see further below).

The evaluation study by the National Agency for Education conducted in 1997, mentioned earlier, also indicate that the writing competencies of Deaf students at all the five bilingual regional special schools for the Deaf and hard-of-hearing lag behind hearing students' competencies. Special evaluations are reported to have been conducted specifically regarding students' results in Swedish and Mathematics. Teachers from all the five regional special schools were required to send in samples of their students' everyday writings in Swedish and calculations in Mathematics. They were also required to submit their own reflections on these samples. Two experts (researchers) were then invited to submit their analysis of this data. The following reflections were presented by Annika Persson, senior lecturer at the Department of Scandinavian Languages, Uppsala University, regarding her analysis of the data on Swedish:

"Teachers evaluation of different students, at many of the schools, presents a picture that the larger part of the written exercises are focused on grammar. The teachers' evaluations have also in the majority of cases been either only or to a large degree been concerned with just grammatical problems and advancements.

¹⁹⁰ Passing grades in all three compulsory subjects are required in order to obtain admission into a national program at the upper secondary school level (see also Chapter 1.4).

¹⁹¹ Students who are not achieving as expected in schools – both hearing and Deaf schools – are currently required to have special study plans established and periodically accessed.

¹⁹² From 5% in 1998 to 13% in 1999 and 14% in 2000 in the special schools student population.

Therefore it is quite surprising that the analysis [of students' texts] shows that the students have difficulties to keep their texts coherent. Connections and stylistic tools and also the dispositions are often very faulty (...)

It appears that in those cases where the students have a more developed narrative technical ability, there is a connection with a greater interest for reading.

The need for the students to learn grammatical structure is obvious. These structures can however be learnt in different ways, among other things through reading, where different levels of writing are integrated in an obvious manner. It is possible that grammar tends to be emphasized too much, in a way that the students training in text analysis suffers (...)

There is (...) need to look over the teaching materials that the students have access to, and see how well (if at all) adapted pedagogy in these are for this group of students" (Persson in Skolverket 1997, my translation, emphasis in original).

In the analysis of the Mathematics data, Astrid Pettersson, associate professor at the Institute for Education, College for teacher training in Stockholm, notes that the teaching materials that were being used were, according to the teachers themselves, for a lower grade level for hearing students. The students are reported as also faring at a lower level in tasks that require understanding of Swedish.

"The picture which emerges in the data that has been sent in is that the variation in the students knowledge is very large. There are a few students in the material with very good knowledge [levels]. But the dominating picture is that a very large percentage of students have very large difficulties in Mathematics and [these] will probably not reach the stipulated goals for the 5th and 9th grades in school" (Pettersson in Skolverket 1997, my translation, the entire paragraph is italicized in the original report).

The 1997 National Agency for Education evaluation was the first ever evaluation conducted of all the regional special schools in the country. It's interest in achievement issues is understandable in the context of the new goal oriented curriculum of the 1990s. Thus the new national curriculum of the 1990s, which requires passing grades in the three key subjects of Swedish, Mathematics and English in order to obtain admission into a national upper secondary school program, thus makes visible issues that are of concern both in the research field of Deaf education and also in the institutional field of Deaf education.

A more recent independent study of reading competencies of the entire population in the five regional special schools, one state school and one local government school for Deaf and hard-of-hearing by the Swedish Professional Association of Psychologists for Deaf and Hard-of-hearing, discussed earlier in Chapter 5.3, indicates a similar picture. It is interesting to note that while these studies have been conducted during the 1990s, there is no concerted effort to collect or make available demographic achievement level data in Sweden. Perhaps this explains why some researchers were themselves less than informed about these present concerns even at the end of the 1990s. In this respect it is also important to note that the recent large scale total population study conducted by the Swedish Professional Association of Psychologists for Deaf and Hard-of-hearing continues the

trend of not making available precise figures regarding students who are reading at grade level as opposed to below grade level.

6.4.5. *Further discussions on achievement and language issues*

These recent concerns from the 1990s take on a more significant light given the international attention that the Swedish Deaf bilingual model has received since the early 1980s and the "lack of evidence" that has previously existed regarding the efficacy of this particular model (and interpretation) of Deaf bilingualism. However, and this needs to be stressed *once again*, it would be a fallacy to equate the recent concerns regarding the achievement level of Deaf students in the Swedish model with the failure of Deaf bilingualism per se. There are two strong arguments *against* making such a claim. Firstly, as has been argued previously, the Swedish Deaf bilingual model appears to have developed in isolation from other Deaf bilingual models in other parts of the world (it is interesting that implicitly, Heiling's on going work and the questions she poses [see sub-section 6.4.3 above] also suggests this). Secondly, and in line with what has been argued theoretically a number of times so far, the ideology or the label of a model tells us little about the everyday communication-practices in the schools that subscribe to that model. There is, it is argued here, need to be aware of these ideological motivations if we are to make any headway in this historically infected "model and methods" discussion.

These issues in the Swedish Deaf educational landscape then emerged in the mid and latter half of the 1990s and have been discussed recently by some Swedish researchers. For instance, Bagga-Gupta and Domfors (2003, 1997) suggest that "an understanding of these issues goes far beyond tests, performance and achievement as well as beyond commonly accepted notions of "first" and "second" language acquisition" (2003, 78; see also Bagga-Gupta in press-b, 2002a). Aligning themselves with the Literacy Studies research traditions, they argue that the "acquisition of literacy (including literacy in the writing system) exists in different domains and that these domain-specific skills are closely related to specific social practices" (Bagga-Gupta & Domfors 2003, 78). These and other Swedish researchers also point to some indicators that suggest that the position of written Swedish was downgraded in many *signing preschools and day care centers*¹⁹³ for the Deaf in the post-1981 period. For instance, Heiling already in 1994 describes the compulsory school and more significantly the preschool period in the following terms:

"[in the] stricter bilingual setting (...) Swedish and Sign Language have been kept apart. In most of the pre-schools this meant that *written Swedish was almost excluded* as well. Fingerspelling of names was replaced by personal signs and written names on hangers and drawers were replaced by pictures. These very strict conditions have been dissolved but the situation is different from the late seventies and early eighties when reading and writing was more common and also used in a playful way in pre-school activities" (1994, 9, emphasis added).

¹⁹³ In contrast, schools for the Deaf are labeled *bilingual* schools and not *signing* schools.

In addition, from her experience as a clinical psychologist over a long period of time at a large regional special school for the Deaf, Heiling reflects:

“demands for a ‘real sign language’ were growing fast. Tied to these demands were warnings about the negative effects of not supplying the children with a ‘pure language’. As the possibilities to acquire this genuine sign language through education was lacking at least in [some] parts of the country, many teachers and parents began to feel uncomfortable and incompetent. I noticed that much of the joyfulness disappeared and that communication was seen as a permanent test of language achievement for the hearing adults” (Heiling 1994, 10; see also Heiling in preparation, Bagga-Gupta & Domfors 2003).

Arne Risberg, professor in hearing technology at the Royal College of Technology, Stockholm argues (in an article that profiles him in an NGO magazine) against the increasing “SSL only” focus. He makes the case for a more balanced view of Deaf children’s language situation and for Deaf adults’ needs for good competencies in Swedish:

“I would like to hear factual arguments for different positions. To be deaf is more than merely being [a member of] a linguistic minority. I assume for instance that [the deaf] after all have a need for a daily newspaper. Then one must learn Swedish to be able to understand it.

The same concerns oral language. Deaf and severely hearing impaired [individuals] who do not work and live in a signing environment, must be able to communicate with hearing [individuals], they must at least have, what Arne Risberg calls, survival speech” (Bloomberg 1992, 10, my translation).

While Risberg argues that it is the Deaf themselves, for instance Deaf NGO’s like the National Deaf Federation, SDR, who are against “oral training and speech”, a closer scrutiny suggests that this is not necessarily the case. For instance, some Swedish Deaf leaders in Deaf NGO’s are not only open to the need for such training but also for the need for *simultaneous*¹⁹⁴ bilingualism and the *early introduction* of Swedish:

“With regards to oral knowledge which is also a part of Swedish, deaf education in the deaf schools should give deaf pupils skills in speech which are realistic. That is, skills for practical use for instance being able to buy newspapers, order train tickets or ask for directions” (Ulfsparre 1991, 30, my translation).

Lars-Åke Wikström, the current president of the Swedish National Deaf Federation, SDR, is reported in an article featuring him as saying:

“Lars has nothing against deaf [individuals] learning to speak. He fights [however] only for their right to sign language” (Bergman 1991, 10, my translation).

Hugo Edenås, another prominent member of the Swedish Deaf community, author and recent recipient of a coveted cultural award, notes recently in

¹⁹⁴ In that children need exposure to *both* SSL and Swedish.

another profile interview article in *DÖV-tidningen* – the magazine of the Swedish National Deaf Federation:

“In the first instance, I want my books to encourage deaf children to try and become bilingual. To be able to write, read and in the way best possible and also speak Swedish is much more important than just be able to [use] sign language!

(...)

I mean that if sign language develops alone when the children are young, they will have a language that then functions very well emotionally and in a limited world. But it would be difficult to later on understand how Swedish is built up through the special rules of sign language. Something called language threshold exists. The deaf child who succeeds early to take itself over this threshold has an easy task to develop a correct understanding of language. [Such children] often succeed in both writing and reading” (Tjärnström 2000, 16, my translation).

The SSL rights of Deaf people are often focused by profiling leaders from the Swedish Deaf community. This is interesting given that the Swedish literature searches, especially the one’s conducted in 1996–97, identified articles primarily published in either the general mass media (for instance national, regional or local newspapers) or specialized mass media magazines (for instance NGO magazines). As noted previously, the academically oriented published literature was limited (see especially Chapter 4). As illustrated by the examples above, the profiled individuals in the Media articles are often leaders in Deaf NGO’s, TV producers, etc. The contents of such texts suggests that there is some discrepancy between the discourse that focuses on SSL and what is understood as “Deaf people’s Swedish”, on the one hand, and the life narratives of some prominent members of the Deaf community (some of whom live in hearing families), on the other hand. The latter suggests that some of them live with hearing partners or children and self report to often reading lengthy Swedish texts and not using SSL – at least not with all their immediate family members. Some leaders are also reported to have become deaf post-lingually and a few report that they experienced their hearing levels fall during adulthood. These narratives are not insignificant in the present context, not least, since there is little overt recognition of the complex heterogeneity and diversity within the school population of Deaf children.

It is significant in the present context that the life narratives, as can be surmised through these texts, differ dramatically from some of the key assumptions in the present ideology of the Swedish Deaf bilingual model. And more importantly such narratives represent the lived experiences of members of the Swedish Deaf community. Thus for instance, contrary to the emphasis that Hugo Edenås lays on the introduction of both SSL and Swedish early in the lives of Deaf children, more recent analysis by researchers like Heiling (in preparation, 1994) and Bagga-Gupta and Domfors (2003, 1997) suggest that at least during the latter half of the 1980s and beginning of 1990s, not only was bilingualism emphasized only at the comprehensive and upper secondary school levels, and not valued in the

pre-school arenas, but a view of language purity became established and this perhaps paradoxically had negative consequences for communication-practices in different Deaf arenas during the post-1981 years.

6.4.6. *Some individual studies on the Swedish Deaf education system during the 1980s and 1990s*

Högsten (1989) reports from a large multiple-study project that followed up students who had graduated from the national upper secondary schools for the Deaf and hard-of-hearing during the years 1979 and 1983. While it is important to take into account the period when the project students graduated, it is also significant to understand the *magnitude of the concerns* and also how the ex-students of the system are reported to have reflected on their schooling after graduating. 90 percent of the upper secondary school graduates self-reported to feeling that they should have received more teaching in Swedish when they were in upper secondary school:

“The interviews highlight that these young people are *painfully conscious* about their inadequate knowledge of Swedish. Their leaders and bosses at their work places complain about their inadequacies in Swedish (...) Only 20 percent of these young people can read what they want to in a newspaper without problems. A large percentage of those who did not participate in the most recent elections, self-report to not voting because they could not understand the available information prior to the elections. A third of the individuals who did not possess a text telephone, report that the reason for not owning a text telephone was that they had difficulties understanding what was written on the screen and that they had difficulties putting together sentences in a response” (Högsten 1989, ix, my translation, emphasis added).

A large number of students are also reported as hopping off entirely or switching their area of study in upper secondary school (Högsten 1989). Individuals who report to not being happy with their upper secondary school studies furnish the following self-reported reasons for their dissatisfaction:

- The studies were at a very low level and were slow: “the upper secondary school should set *higher demands* on deaf/hard-of-hearing pupils” (1995, vii, my translation, emphasis added).
- Their competencies in Swedish are experienced by them as being at a very low level and thus not allowing them the possibility to study at the upper secondary school level and especially so in “theoretical” areas.
- As compared to their hearing counterparts they were not happy with their study materials and books.
- The teaching groups at the upper secondary schools were very heterogeneous with regards to their knowledge levels and individual abilities.

20 years later, a prominent Swedish Deaf leader in his mid-30’s and a teacher at the upper secondary school for the Deaf, reflects on the lack of assessments and smooth transitions between preschool, comprehensive school and upper secondary school levels: “What is missing in Sweden is just

the “links” [between the different school levels] and assessment of knowledge” (cited in Bagga-Gupta 2002a, 47, my translation).

In a student essay study published by RPH-HÖR in 1984, and discussed earlier in sub-section 6.4.1, an attempt is made to analyze what relationship, if any, exists between different language variables and background variables in a group of 35 “grade 7 students with severe hearing impairments” (Gustafsson 1984, summary, my translation). The study also attempted to look at effects of “changed teaching methods on the pupils Swedish language skills” (Gustafsson 1984, summary, my translation). The statistical analysis reported suggests that different linguistic and communicative variables were highly co-related. A salient result concerns the “*heterogeneity of the student group*” (1984, 69, my translation, emphasis in original) and “*the difficulty in finding one teaching method which is beneficial for all students in all desirable skills*” (1984, 70, my translation, emphasis in original).

In a large questionnaire study¹⁹⁵ titled “bilingualism in deaf teaching” (Lundström 1985, my translation), presented in a report from the College of teacher education in Stockholm, Kjell Lundström, retired lecturer,¹⁹⁶ also emphasises the heterogeneous character of classrooms in Deaf schools not least the distribution of students hearing abilities. The aim of the study was to understand teachers conceptualisation of their own “teaching from a bilingual perspective” (1985, 9, my translation). Lundström reports that copying or imitation exercises dominated the teaching strategies in Swedish. He also reports that

“teachers in the first instance think that both languages have the same content system even though they have different expressive forms, and this is congruent with the language system, which they use themselves, namely signed Swedish” (1985, 221, my translation).

Lundström argues for the importance of working “comparatively and contrastively between the two [language] systems, [so that the] students can build up their bilingualism” (1985, 221, my translation). The study reports that,

“nearly half of the teachers did not systematically work with such exercises and that there were significantly more teachers who had worked [in the special schools] for 0-9 years who used such exercises” (1985, 221, my translation).

Another university student’s interview study published by the previous Swedish Handicap Institute (SIH) in 1995 looked at “some dimensions of literacy among deaf children in a bilingual program” (McLarey 1995). Nine interviews were conducted with 9–10 year old students and the results are reported as indicating that all the students had received opportunities to

¹⁹⁵ The study included all teachers, study directors and heads at the regional special schools in Sweden.

¹⁹⁶ Lundström is presently working on his Ph.D thesis.

develop SSL before starting school at the age of 7 years. These students were reported as participating in daily literacy activities for communication, obtaining information and entertainment. All the nine children report to enjoying reading and eight report that they read in their free time. McLarey (1995) concludes that while the interviews give “no reason to believe that a bilingual method of educating deaf children is in any way a hinder to literacy development” (1995, 39) she adds that “the *real problem* in analyzing these responses is not knowing how well the children’s answers represent how *they actually interact with a text*” (1995, 38, emphasis added). The study also calls for observations of the children interacting with texts and a study of their textual productions in order to give a “more complete understanding of how far they have come in their literacy development” (1995, 39).

American author, Shawn Neal Mahshie’s¹⁹⁷ (earlier Shawn Davis) book (1995) “Educating deaf Children Bilingually – with insights and applications from Sweden and Denmark” is sometimes cited in Sweden as being evidence of the success of the Swedish model and is not uncommonly used in Deaf bilingual training courses in the United States. Mahshie, a consultant and previously employed at Gallaudet University, describes the lack of available literature on the Swedish model as being the impetus that led to the book:

“Word of the 1981 Swedish law¹⁹⁸ and changes in the educational practices of both Sweden and Denmark had begun to circulate in the Deaf community and among some educators in the United States; however, there was little information published in English about the extent and nature of the activity” (1995, xxi).

Mahshie also describes her well-referenced and eloquently written 262 pages book as “resembling investigative reporting rather than ethnography” and the quotes from the 99 interviews and 27 classroom and home observations that the book is based on as “primarily personal observations and anecdotes” (1995, xxiii). She goes on to add that the “information from this overview will be a catalyst for scientific studies to follow” (1995, xxiii).

6.4.7. Projects related to the Swedish Deaf bilingual model and underlying assumptions

The majority of the remaining literature regarding the Swedish model – in Swedish and English – can be understood in terms of (i) advocacy of the model and (ii) information about Swedish projects on Deaf bilingualism.

¹⁹⁷ Shawn Mahshie currently works as an independent consultant and runs her own publishing company.

¹⁹⁸ The 1981 decision has incorrectly been understood as a law in the literature. The 1981 acknowledgement that has received prominence both nationally and internationally is made in appendix number 12 in the governments annual budget proposal (see Proposition 1980/81 Nr. 100, Appendix 12, page 297).

Two established researchers, Kristina Svartholm¹⁹⁹ and Inger Ahlgren²⁰⁰, working in the area of linguistics and active in the Deaf area since the 1970s can, on the basis of the analysis of the literature, be understood as having played an important role in shaping the specific understandings of Deaf bilingualism in Sweden. Ahlgrens (1984) text “Deaf children and written Swedish” (my translation) was the final report from the project “Sign language and Swedish learning of Deaf children” (my translation). The project – 1979–81 – was initiated as *a trial* with early Swedish teaching in preschool with six deaf children who were judged as having age-adequate competencies in SSL. A subsequent phase of the project during 1981–83 – is reported as focusing on Swedish teaching and Swedish learning at all levels in Deaf schools.

Ahlgren reports that four of the six children in the first phase of the project were part of an “*earlier project*”:

“Two of the children, a boy and a girl, had deaf parents and thereby had sign language as their ‘real’ mother tongue. The language development of the boy [who had deaf parents] was taken as the norm against whom the two children with hearing parents were compared” (Ahlgren 1984, 2, my translation).

While this earlier project “had a focus on parents education” where the researchers wished “to teach both general self confidence and sign language to hearing parents to an extent which would make it possible for them to be normal parents for their deaf children” (Ahlgren 1984, 2, my translation).

In the written Swedish project (Ahlgren 1984), the six children are reported to have been “taught” Swedish one hour per week during the first year and two hours per week during the second year of the project. The language of instruction is reported as being “sign language” and the teaching was

“completely done on the written form of Swedish since this is easily available to the deaf” (1984, 3, my translation).

“The most important activity was reading which in this case meant that one of the deaf research assistants translated to sign language from a book. The children had their own copies of the book. The children were encouraged in different ways to follow the text so that they knew the whole time that the contents originated from the abstract marks²⁰¹ on the pages of the book. On every occasion three to four pages were read. When the reading was over we returned to the written text and took up words or expressions and explained them. The children underlined these words in their own books and then copied these on small cards. The cards were collected in a card box in alphabetic order” (1984, 3, my translation).

¹⁹⁹ As has been mentioned earlier, Svartholm is, since 1999, professor of “Swedish as a second language of the Deaf”, at the Department of Scandinavian Languages, Stockholm University.

²⁰⁰ Ahlgren is associate professor at the Department of Linguistics, Stockholm University.

²⁰¹ Swedish: *krumelurerna*

The conclusions drawn from this project and a subsequent project had, it is contended here, an important bearing in shaping the view of Deaf bilingualism in the Swedish model. This subsequent pilot project was headed by the linguists Ahlgren and Svartholm and is described in a short article titled: “Bilingual teaching in the deaf school – a pilot project” (Ahlgren 1988, my translation). This project (1983–1985) was interested in generating knowledge regarding “how teachers could enhance the learning of written Swedish in the deaf school” (1988, 202, my translation). The project included collaboration with Manillaskolan (the regional special school for the Deaf in Stockholm) and the special education section of the college for teacher education in Stockholm. The project’s aim is described as enabling,

“a level of reading skills in Swedish formulated as ‘the ability to with a large degree of certainty to draw conclusions regarding the contents of a text after a reading [of the text]’. Such a level of skills would be comparable to a threshold level from which the student should be able to continue and learn more by continuing reading on one’s own” (Ahlgren 1988, 202, my translation).

In this particular article, Ahlgren motivates the importance of only focusing on reading and *not* writing for Deaf children. In the pilot study six students in grade 2 are reported to have received special teaching five hours a week during three school years. The students received “normal” teaching during the rest of the week in their classrooms. The five project hours were used for “reading and text analysis with a comparison between sign language and Swedish” (1988, 202, my translation). The teaching in the project group is described as follows:

“In the beginning reading implied mostly that the deaf teacher translated to sign language from her/his book and the students followed the text in their own books. Words and phrases were explained in sign language and the students attention was drawn to how Swedish and sign language could, in different ways, express the same content. Gradually the teacher could translate a bit and allow the students to continue a bit in cooperation. During a phase the students received [a little] homework and before the second year came to an end, the students could read enough to be able to read on their own with the teacher functioning as a encyclopedia for new words (...) An hour a week was devoted to grammar and written exercises. From explicit position grammar rules, the students got to train on formulating correct sentences and short texts on a given theme” (Ahlgren 1988, 202-3, my translation).

The project evaluation is reported as focusing on reading skills. Each student was required to individually read a short text that is reported to have been written by “a linguistic colleague with stylistic talents” (1988, 203, my translation) and present the contents in SSL. This latter narration was video filmed. The students were allowed to ask a Deaf teacher-student the meaning of words and phrases in case they did not understand the meaning. A control-group of six students from grade 4 (the same grade where the six project students were at that point of time) was chosen by the class teacher. These students were judged by the class teacher as being the “cleverest in Swedish”. This group was also given the same reading-narration test. Ahlgren reports that

“all the students in the test group understood the content of the [written] text and could re-narrate it in their own language. Some glosses (...) were new words for all six while each one asked about the meaning of 3-4 words (...) With this the test shows that the aim of the [project] has been achieved. In the control group one of the six students could re-narrate the content, the other five said that [the text] was too difficult and that they did not understand [the text] at all. Even the student who understood the content did not have any questions about words that he did not understand. [We can deduce that] he came across new glosses because he then fingerspelled (...) The fact that students in the experiment group actually understood the contents in the text can be seen as a strong indicator that it was precisely the conscious contrasting language teaching which produced the results in that the test group could read an unknown text and understand its content” (1988, 204, my translation).

The reports written by Ahlgren and Svartholm separately (see also below) suggest that these six students were the focus of Ahlgren’s preschool projects (described above) and one of Svartholm’s empirical projects (described below). There is reason to reflect on the methodological design of these studies, especially given that no other studies were conducted. In addition, these results have not been discussed more widely and especially not in peer-reviewed academic contexts. Another reason for dwelling on the methodological design is because the results from these studies were influential in shaping the model of Deaf bilingualism during the 1980s and 1990s. For instance, it was on the basis of these sets of studies that led to the conclusion that the *teaching* of Swedish was unnecessary and perhaps even detrimental during the pre-school years (see also Svartholm 1997). In addition, these studies (see especially the quotes above) implicitly suggest a less than positive role of fingerspelling in the learning context. As the international and Swedish research discussed in Chapters 3, 5 and 7 suggests, the opposite may be the case in the bilingual literacy development of Deaf students. In this respect it is also interesting to note that some Deaf leaders in the Swedish Deaf community go as far as suggesting that teachers *should fingerspell* more in school settings, suggesting that this would be a “good method”:

“It is great to fingerspell Swedish words and one would then get an understanding of how Swedish words are spelled and sentences are built” (Hugo Edenås in Tjärnström 2000, 16, my translation).

There is also need to reflect on what, if any, cumulative effects the experiences of the six project students played in the *different projects* that Ahlgren and Svartholm initiated and led and in what ways the assumptions in these different projects led to the conclusions that were arrived at. Svartholm’s work, for instance the “The two languages of the deaf. Grammar²⁰² – Swedish for the deaf” (my translation) commissioned by the SÖ (National Board of Education) and published in 1990 (see Svartholm 1990) and other texts have played a pivotal role in how the Swedish bilingual model has been conceptualized and implemented in the schools in Sweden.

²⁰² Swedish: *Språklära*.

One of Svartholm's Swedish report's (1984) presents a review of literature and merits attention in the present context. The 59 pages report titled "Deaf and society's written language. A research review and a look back" is made up of three parts "which can in effect be read independently of one another" (1984, Foreword, my translation). In part 1 (pages 1-13), Svartholm describes the ideology behind "oralism" which is described as the dominant ideology in Deaf education in Sweden and other parts of the world and part three (pages 41-56) looks back on "the conditions which have existed for Deaf written language learning in Sweden" (1984, Foreword, my translation).

The middle section (pages 14-40) of the report is focused on studies that have analyzed the written language compositional aspects or the *form and structure* of the written language produced by Deaf children. There is also an implicit agenda devoted to the understanding of the grammar structures of Deaf children's written texts that underlie Svartholm's own analysis of the literature in the middle section of the report. Thus, for instance, Svartholm says the following when discussing a 1940 study by Heider and Heider:

"The Heider and Heider study differs from most of the other later studies on an important point: they devote no special attention to the grammatical incongruencies in the materials. In the introduction they mention that the deaf normally have much more incorrect production in their written language as compared to hearing [people], but they never return to this point more than in very general terms" (1984, 16, my translation).

In discussing another study, Svartholm says:

"It was not before 1980 that Quigley and one of his co-workers published an article where they among other things compared the constructions which earlier on were viewed as typical for deaf with constructions found with second-language learners (Quigley & King 1980). They present a list of different constructions with a short comment on whether these were mentioned in the bilingual literature or not. With a few exceptions this was the case. Quigley and King therefore mean that the problem of the deaf with the learning of English appears to be of the same type as that of hearing [people] – but the problem is much bigger. Quigley and King's comparison between the deaf and hearing language learners stops with that statement. The aim with their essay was not to discuss how the results could be used in deaf education, rather it was to present a language test which was constructed from the earlier results" (1984, 22-3, my translation).

Svartholm further argues that the reason why the previously dominant "psychological paradigm"²⁰³ began to be questioned in the 1970s was

"a result of the *generative transformation grammar*: An interest awakened to see whether the differences in deaf children's written language could be described as regular/consistent or not. In that case it could be understood/explained in

²⁰³ She exemplifies the paradigm by referring to the 1964 work of Mykelbust and says "as a psychologist Mykelbust will explain the differences in deaf children's written language as a result of a lack of cognitive abilities" (1984, 19, my translation).

that the deaf child built up its own grammatical system which could be described in terms of base-structures and transformations” (1984, 20, my translation, emphasis added).

While this explanation, from a structural linguistic perspective, is suggested by Svartholm as having challenged the previously dominant psychological model, the historical analysis of the discourses and philosophies that have existed within Deaf education since the 1600s (outlined in Chapter 3), suggests that research on different SLs in the 1960s and 1970s – also primarily structural linguistic findings – indeed need to be highlighted as shaping understandings of “what constitutes language”, which in turn shaped the most recent prescriptive shift in Deaf education.

In the present context, it is perhaps important to understand the line of argumentation presented in Svartholm’s 1984 report. As has been discussed previously, unlike the other interpretations of Deaf bilingualism that have been identified and discussed recently in the international literature, the Swedish Deaf bilingual model is based explicitly on the “contrastive comparative grammar structures” model with “a delayed introduction of Swedish”. Svartholm’s argumentation where she highlights that other researchers only identified the similarities and differences between Deaf and hearing children’s written language competencies *but* “did not discuss how the results could be used in deaf education” together with her own role in how Deaf bilingualism was conceptualized in Sweden in the post-1981 years is crucial to understanding why the Swedish model took on a different course as compared to the other bilingual models that have been established in other parts of the world.

Thus for instance, the importance of keeping the two languages of the Deaf separate is seen as critical in the Swedish literature (see also Lundström 1985, undated) and emphasis is laid on the grammatical structures and “comparison between sign language and Swedish which can lead to increased insight and increased linguistic security of students” (Svartholm 1990, 7, my translation). In a presentation at a recent Deaf bilingual education conference in Moscow, Svartholm describes and evaluates:

“a model for teaching written Swedish to [deaf children] as their second language (...) In this model, common texts written for children are focused on as the basis for language learning. Through translations into sign language and elucidations of parts of texts conducted by the teacher in a way that highlights similarities and differences between written language and sign language, the child gradually develops knowledge about written language form and thus also develops reading ability. Later, knowledge about written language gained from this kind of work with texts is also used for writing. *Grammar is primarily looked upon and taught as a means to understand content in texts and to write texts.* (...) The model regards the importance of keeping the two languages – written Swedish and Swedish Sign Language – apart from each other in teaching. Their linguistic structures and means for expressing content differ fundamentally from each other. (...) This must be clear to the children from the very beginning” (Svartholm 1998, 139-40, emphasis added).

What seems interesting in this respect is also the relatively greater focus on the form of language in language instruction in the Scandinavian countries as compared to other settings more generally. The quote above seems to suggest that form is viewed as the channel through which *content* can and should be taught. At least three significant issues will be raised with regards to this in sub-section 6.4.8 below after the remaining projects and literature that have had a bearing on shaping the current Deaf bilingual model in Sweden are presented.

Svartholm has reported at international and Swedish conferences and primarily in unpublished manuscripts and reports on the Swedish Deaf bilingual model and the different projects that she has been responsible for. She presents an overview of these projects in a four page article titled “Swedish as a second language for deaf” in “ASLA²⁰⁴ – Information” in 1996 (my translation). She reports that “an important part of [her] work has been to look for answers to questions regarding similarities and differences between deaf and hearing second language learners” (1996, 129, my translation). In this article, Svartholm lists the following six projects and work experiences as contributing to her perspective/model:²⁰⁵

1. “Swedish as a mother tongue for the deaf” project
2. “Teaching deaf students in Swedish at the Department of Scandinavian languages, Stockholm University” since early 1980s
3. Participated actively in the intense work after the 1983 national curriculum came into force in the special schools
4. Identifying problems and needs for Deaf people within the adult education arena
5. “Swedish for the deaf at the upper secondary school level” project
6. “Perspectives in written Swedish as compared to sign language” project

As mentioned earlier, information and results from these projects are rarely, if ever, discussed in regular academic channels such as national and international journals and anthologies that either are non-peer reviewed or peer reviewed. For instance, of all the references to her own reporting mentioned in the article from 1996, which reviews the projects she has been involved in, the majority are reports from institutions, a few are proceedings from symposia or conferences, one is a service material for teachers of the Deaf, and two are journal articles – one of which is a peer reviewed journal (see also discussion regarding the nature of Swedish texts in this area in Chapter 4; see further below).

Svartholm has been involved in authoring a report titled “Similar-languages²⁰⁶ in deaf education. Studies of classroom communication in two different school forms²⁰⁷ for the deaf” (Svartholm, R. Andersson & Lindahl

²⁰⁴ Association suédoise de linguistique appliquée (Swedish association for applied language sciences).

²⁰⁵ Appendix 2 briefly presents information regarding these projects and experiences.

²⁰⁶ Swedish: *samspråk*.

²⁰⁷ The two different school “forms” here indicate the (i) final year of comprehensive school and (ii) upper secondary school.

1993, my translation) from the “Swedish for the deaf in the upper secondary school” project (see Appendix 2). This 46 page long Swedish text is one of three texts that report on the empirical material that can be identified from this project. All three texts are reports from the Department of Scandinavian Languages, Stockholm University. Two of the three texts have relevance to this meta-research study and are briefly discussed here.²⁰⁸ The 1993 text reports that the

“projects main goal is to develop the subject Swedish for the deaf at the upper secondary school level and to find ways to support students development towards competence of both the languages, sign language and Swedish language in its written form. It shall also give knowledge of deaf [students] Swedish learning strategies, as well as knowledge about how the two languages are connected to one another” (1993, 3, my translation).

“we needed to get a picture of how communication worked in different classrooms with teachers who had different levels of sign language. From such a general picture of present day teaching, we could then proceed in the work of developing the Swedish subject” (1993, 4, my translation).

A wide variety of methods are reported to being tried and used in this project. These include:

- Observations of 39 different teaching situations in different groups and with different teachers in grade 10 at the regional special school for the Deaf in Stockholm, Manillaskolan, and at the national upper secondary school for the Deaf in Örebro. However, the authors note that the

“observations will not be aimed at studying the languages in the classroom in detail. Instead we want to get a more general picture of the linguistic interaction/ work between teachers and students as a base for our continuing work” (1993, 17, my translation, emphasis added).

- R. Andersson and Lindahl, the two Deaf research assistants in the project and co-authors of the 1993 report, participated in the teaching in the project classrooms and “a few such lessons were video recorded” (1993, 4) even though “what could be seen in the tapes [are presented] only as if this was ordinary class room observations” (1993, 17, my translation).
- Almost 50 students from Manillaskolan and the upper secondary school for the Deaf were interviewed with

“the aim of getting a picture of their understanding of how the two languages are related to one another. They were also required to narrate a selected set of Swedish texts in sign language and in connection with this they were required to answer questions on the texts, in sign language. The interviews and text narratives, as well as the discussions around the texts were video filmed” (1993, 4, my translation).

Grade 10 is reported to have been included in the project because of two specific reasons: *firstly* the class had 23 students and the large group size was

²⁰⁸ An analysis of other texts that reference this project suggests that they are non-empirically based.

considered to be interesting. *Secondly*, six of these students had, during 1983-1985, participated in the pilot project “with bilingulism, contrasting Swedish teaching” (compare with the projects that have been reviewed and discussed earlier in this section). This 1983-85 pilot project is reported in Svartholm, R. Andersson and Lindhal (1993) as building upon an earlier research and development project where this same group of six children had “been introduced to sign language already at an earlier age and had, in contrast to what was then normal, a well functioning sign language at the beginning of school [at age seven]. They also received bilingual teaching in Swedish already from the beginning”²⁰⁹ (1993, 5, my translation). This research and development project presented earlier and led by Inger Ahlgren at the Department of Linguistics, Stockholm University is cross-referenced in this report and Svartholms other texts.

Section 4 (“Large class teaching in Class 10”) and section 5 (“Teaching at RGD”) in Svartholm et al (1993) constitute the empirical sections of the report (see also R. Andersson 1995). Discussions in these sections are interesting and particularly relevant to issues of Deaf literacies and bilingualism. In a paper presented to the World Federation for the Deaf in 1995 in Vienna, Austria, Ronny Andersson, who graduated from the regional special school for the Deaf in Lund and is currently pursuing his doctoral studies, reports on the empirical section of this project. Observations of three teachers teaching during 24 lessons at the upper secondary school for the Deaf are grouped under three categories on the basis of the teachers’ “communication skills”. These three teachers are also compared to one teacher working in grade 10 at Manillaskolan. The latter is reported as being “fluent in Sign Language” and as enabling multiple kinds of interaction in the classroom. The aim of this exercise is reported “to illustrate the correlation between teachers’ fluency in Sign Language and patterns of communication in their classes” (R. Andersson 1995).

The first teacher is reported as having a positive attitude towards the Deaf even though the teacher had never met any Deaf students earlier on and had only rudimentary signing skills; the second teacher is reported as having previous experience working with Deaf students and there was “a strong Swedish language influence in the way she signs”; the signing of the third teacher is reported as being “fully intelligible” even though this teacher is reported as not always understanding the communication of the students signing to one another. While it would have been significant to see more empirical evidence of an interactive character in order to validate these impressions, the findings R. Andersson (1995) reports are significant in the present context:

²⁰⁹ However as Ahlgren (1988, see discussion earlier) notes these six children participated in regular teaching except for one hour/week during the first year and two hours/week during the second year of the project. In Ahlgrens subsequent project (also reviewed and discussed above), these six children were reported to have received special Swedish instruction for five hours every week during the school terms over a period of 3 years (compare with how this “teaching” is discussed in Svartholm, R. Andersson & Lindhal 1993).

“A very large part of their communication consisted of a dialogue between the teacher and a single student, usually in the form of questions and answers with either the teacher or the student as questioner. The student talking to the teacher seems to ignore the rest of the class completely.

While this is going on, the other students sit facing the teacher without turning to see their classmate’s part in the conversation. This may be explained by the fact that the teacher in this case is unfamiliar with the correct signs for turn-taking in group discussions; or by the fact that the students are using ‘foreigner talk’, a meager sign language and therefore hardly conducive to lively discussion. A third explanation seems to be that many of the students are unaccustomed to group discussions, probably because their teachers, reluctant to put their own skills in Sign Language to the test, had always avoided that particular activity, thereby depriving their class of practice at this fruitful and highly educational kind of student work” (1995).

R. Andersson’s analysis and argumentation supports the need for teachers to have good signing skills in institutional settings. The Svartholm et al (1993) report however presents a polarized description regarding the situation in grade 10 as compared to the upper secondary school data. The report is critical of latter setting while presenting a clearly positive picture of the former. The two page long discussion of the results presented in the concluding section 6 of the Svartholm et al report describes a picture that the authors develop in the project and that are similar to the corner stones of the Swedish Deaf bilingual school model.

Some of the key assumptions that underlie this model and that have particular relevance to reading and writing issues can also be arrived at through the analysis of a one and a half page article (Svartholm 1997) titled “Swedish as a second language for the deaf – what is that?” in a 1994 theme magazine issue of the parents NGO, National Parents Association of the Deaf, hard-of-hearing and language impaired, and another one and a half page article profiling Svartholm’s work (Ringaby 1994) titled “Written language is a dead language” in the magazine “Interpretation Perspectives”.

Svartholm (1997) attempts to answer the following three questions, which also function as three of the four subheadings of her article:

1. How do Deaf children learn to read?
2. When can one start teaching in Swedish?
3. How should the teaching of Swedish look like?

The article emphasizes the issues Deaf children face (as compared to hearing children) when breaking the alphabetic-phonetic code and Svartholm suggests that

“reading learning in the deaf must be viewed as a language learning process, where different children take up different amounts of written language in different tempos” (1997, 9, my translation).

In answering the second question, Svartholm presents three arguments *against* the introduction of Swedish during the first seven pre-school years:

- children are viewed as not being cognitively mature to be introduced to a second language
- such training, it is suggested, can interfere with the “child’s possibilities to develop its sign language and in the process also on its possibilities to develop normally”,
- and finally it is suggested that there is a “risk that early language training would focus too much on separate words. This could lead the child to believe that Swedish and sign language are in principle the same thing, that there is a one-to-one relationship between words and signs. This is a misconception that can be a direct obstacle for children to develop in their Swedish learning. This can be difficult, very difficult to overcome” (1997, 9, my translation).

Svartholm, however says, that use of written language with a young Deaf child is permissible and can be started as early as one wants though,

“not in the first instance so that the child can learn Swedish, but simply because it is fun, to together with the child participate in what the script communicates” (1997, 9, my translation).

Svartholm answers the third question “how should the teaching of Swedish look like” by stating that the teacher should be able to

“translate texts to sign language, explain them in sign language, and emphasize and point to the similarities and differences between the languages (...) The teacher must also be able to show how one proceeds in order to extract the meaning of unknown words or phrases out of context and how one can use different signals in the text which describe/tell us how they should be interpreted and understood. All this demands that the teacher has deep knowledge about the structure of sign language and written Swedish and how they are related to one another” (1997, 9, my translation).

In the 1994 article by Ringaby, Svartholm is quoted as saying

“Swedish written language is a *dead language* for the deaf child. The alphabets mean nothing because the language is devoid of here and now communication” (1994, 4, my translation, emphasis added).

Some of the *underlying assumptions* in the above two articles can be summarised in the following points – and these assumptions can be traced in almost all the available texts by Svartholm, some texts by other Swedish linguistics, and *more significantly* at the educational-political discourse level:

1. Swedish Deaf bilingualism means the sum of SSL and written Swedish
2. Deaf children/adults have no speech/hearing resources. The element of spoken language in the model is very limited. In other words, the “Deaf” are viewed as being “deaf”²¹⁰
3. Deaf bilingualism is considered to be mono-cultural
4. There is a clear cut emphasis on the delayed introduction of Swedish

²¹⁰ Compare with the use of the terms ”Deaf” and ”deaf” in Chapter 3.4.

5. The teaching of Swedish is advocated through an explicit comparative grammar instructional method
6. Deaf children of Deaf parents are seen as being linguistically the same as Deaf children of hearing parents

These assumptions, it is contended, are problematic for a number of reasons. They do not hold ground today as a result of theoretical shifts in the Humanities and Social Sciences more generally. More specifically they are contentious because – as outlined in Chapter 2 – research during the past three decades in the areas of literacy, learning and communication offer different ways of conceptualising language and human development. In addition, and also significantly, results in the area of Deaf bilingualism and literacies arrived in independent academic settings both in and outside Sweden clearly question these types of reductionistic assumptions. While trends from this emerging body of research is presented in Chapter 7 that follows, some further discussion pertaining to some of these problematic assumptions are in order here. A further discussion regarding these reductionistic assumptions are presented in the final sub-section of Chapter 6.4.8, before concluding remarks vis-à-vis the fifth theme of “Deaf bilingualism” identified in this meta-research project are presented in section 6.5.

6.4.8. Reflections on the bilingual model projects and underlying assumptions

To reiterate a point raised earlier, it can be noted that methodological descriptions and project findings are often presented inadequately and in anecdotal fashion in much of the available Swedish literature (see also Knoors 1997). This is especially the case with the literature that deals with the Deaf bilingual model. This is a critical issue and the need for evidence based reporting and publishing in an adequate manner such that other researchers and professionals in the field have an opportunity to draw independent conclusions and interpretations can be noted (see also findings regarding the “nature” of the literature presented in Chapter 4). The absence or paucity of empirically driven texts in academic journals from important projects as the one’s that have been discussed above can also be noted. It is also not clear why no concerted efforts have been made to collaborate and disseminate findings on the *six children* who have been the foci of at least three separate projects – spanning over a decade – during pre-school, elementary school and secondary school by Swedish researchers.

This meta-research study identifies an urgent need for more rigorous documentation (which ideally also employs different perspectives; see further Chapter 8) and the dissemination of results in areas of relevance to Deaf education, as was also recently emphasized by a Swedish commission report (see Proposition 1998/99 Nr. 105; see also Knoors 1997, Rosengren & Öhngren 1997).

The following three important issues can be noted here with regard to the key assumptions in the Swedish Deaf bilingual model. These are related to

- (i) the language didactic situation in Scandinavia
- (ii) different conceptualizations of Deaf bilingualism in Sweden and
- (iii) critical voices of teachers working in the regional special schools.

Firstly, the view of language learning/teaching evoked in this model is a contentious one generally in both the international and Swedish (language learning) literature. Swedish language and education researcher and teacher educator Ulrika Törnberg poses the following observations about the *historicity of language issues* in Swedish educational settings:

“The answers to the question why we should have language teaching in Sweden and what it should lead to, what language teaching should be about and how it should be conducted are not given once and for all but rather depend on when in history these questions are answered and by whom they are answered.

These questions have been given different weightage, even if the questions really are connected and influence one another. In the language pedagogical professional literature, within teacher education and in-service education and in the teaching practicals it is *primarily the ‘how?’-question*, the question about learning, method and way of working, *that has received the largest focus*, while the answer to the question about language teaching and the *‘why’* of the aim and goal of the language subject has primarily been formulated and discussed at the societal and political level. What is discussed least at all levels is the *‘what?’-question*, the question about the *content* of language teaching (Törnberg 2000a, 93, my translation, emphasis added)²¹¹.

As discussed previously in Chapter 3.5, the research and understandings with regards to bilingualism generally, at least in the Scandinavian countries, have been clearly shaped by changing demographics as a result of immigration during the second half of the 20th century. Such literature has attempted to understand the language situation of human beings who are immigrants. The “immigrant perspective” on bilingualism and also a general “*monolingual perspective*” on bilingualism²¹² has shaped both research generally and Deaf bilingualism particularly.

In distancing themselves from *older ways* of theorizing *bilingualism*, Börestam and Huss (2001) suggest that the comparative grammar perspective is today considered outdated²¹³ in general understandings of bilingualism (see also Chapter 3.5). Törnberg’s important observations together with these newer ways of understanding bi(multi)lingualism in Sweden and Scandinavia appear

²¹¹ See also Arnberg (1988), Aronsson (1984), Bergman, Sjöqvist, Bulow and Ljung (1992), Carlsson and Bagga-Gupta (submitted, 2001), Hansegård (1968), Sjögren, Runfors and Ramberg (1996), Törnberg (2000b).

²¹² See for instance Bagga-Gupta (2003a), Cromdal (2000), Cromdal and Evaldsson (2003).

²¹³ These discussions are however not new in the Swedish literature. Swedish scholars like Aronsson (1984), Hansegård (1968), Sjögren, Runfors and Ramberg (1996) and others have been working for sometime within the framework of newer understandings of bilingualism.

to reflect general shifts in the human sciences. They however have not as yet had a bearing on the conceptualizations of language issues and bilingualism in the institutional field of Swedish Deaf education and at least not in the macro level discourses in this field.

The *second* issue that is significant and that needs to be noted regarding the key assumptions of the Swedish Deaf bilingual model is related to a different but less prominent (and politically unrecognised) conceptualisation of Deaf bilingualism in the Swedish context. Swedish researchers like Ragnhild Söderberg, retired and previously professor of Scandinavian languages at Stockholm University and Lund University, and Heiling's work and writings can be understood as presenting a different ideology of bilingual learning where stress is laid on the *early systematic and playful* introduction of reading and writing in Deaf and hearing children's lives (see for instance Söderberg <http://www.ncbe.gwu.edu/ncbepubs/symposia/reading/reading3.html> February 2002, 2000, 1999).²¹⁴ Söderberg reports to having been involved in reading experiments with Swedish Deaf children, seven of whom are reported as having learnt to read between the ages of two and five years in their home settings (see Söderberg 1976a, 1976b). In addition, 40 Deaf children between five and six years of age are reported to have started reading in Deaf preschool settings (see Soderberg 1981, 1985; see also discussion of Heiling's post-doctoral work and on going work in sub-section 6.4.3 above). These researchers lay emphasis on supporting the introduction of *both SSL and Swedish* in Deaf institutional settings and this is more reflective of the assumptions of all the five approaches towards Deaf bilingualism that have been identified in the international literature (described earlier in Chapters 3.5 & 6.2). In these latter approaches, early exposure to both languages – ASL and English – is recommended. While it is important to note that the perspectives of researchers like Söderberg and Heiling did not gain currency in shaping Deaf educational settings in Sweden during the 1980s and 1990s, it is beyond the scope of the present analysis to suggest why this was the case.

The *third* issue that can be raised vis-à-vis the key assumptions in the Swedish Deaf bilingual model relates to critical voices of teachers during the 1990s. Some teachers working in the regional special schools have themselves voiced concern in texts regarding the underlying assumptions of the Swedish bilingual model.²¹⁵ For instance some teachers critically question the *deliberate non-introduction* of Swedish in preschool settings:

“The experiences and knowledge that newcomers [ie. Young Deaf students] bring with them from home and preschools is critical to how schools can start the organisation of reading and writing.

²¹⁴ The establishment of the RGD-projekt (Upper secondary schools for the Deaf project) and the Swedish SOL-projekt (Writing and Reading project) were themselves set up during the latter half of the 1990s because of the direct concerns expressed by teachers and school leaders at the upper secondary and compulsory comprehensive school levels. Findings from these projects are presented in Chapter 7.

Preschools' views on the early introduction of Swedish has not been uniform during a number of years. Many preschools have focused only sign language (...)

As a result, most of the 7 year old students who have arrived at special schools have no experiences of the Swedish language" (Ek & Möne 1995, 72, my translation).

The teachers also sum up, what in their views count as important early reading and writing efforts for Deaf children under five points:

1. One can and should present Swedish language early for the young deaf child, if it can be done in a playful manner at the level of the child (...) we have noted that children who became used to using fingerspelling at an early stage demonstrate ease and confidence when they meet new words and in remembering these words
 2. Stories and narratives are just as important for stimulating an interest in reading for deaf children as they are for hearing children
 3. (...) one has to highlight and use channels other than vision for supporting memory (...)
 4. We are of the opinion that children's early writing trials should be encouraged and supported.
 5. (...) reading groups where one can also focus individual differences are a good solution"
- (Ek & Möne 1995, 81, my translation)

En and Möne also explicitly question the ideologically steered view where "mouthings", oral language and fingerspellings are viewed suspiciously in the Swedish bilingual model. Based upon their own teaching experiences, they suggest that,

"We work with reading from a number of different approaches in school. Even when our point of departure is the whole-word method, it is natural to support this with speech, mouth movements and fingerspelling. Deaf children must also, with time, be made aware of the sound/alphabet relationship since this knowledge has important uses. For instance memory gets supported when one knows that *m* has a particular mouth pattern and a specific kinaesthetic feeling.

It is stated in SÖ's service material "The two languages of the deaf, Language methods²¹⁶" that deaf children do not receive any support when this relationship is highlighted. However based upon our experiences we suggest that it is both possible and necessary to teach this relationship to deaf children. Children also have use of this knowledge since mouth movements are also a part of sign language" (1995, 77, my translation).

Implicit in the perspective of these teachers is recognition of the heterogeneity of the student population in their special schools, and an acceptance of the hearing/oral resources of some members of this school population.

The Deaf bilingual "comparative contrasting grammar structure model with the delayed introduction of Swedish" appears to have its roots in different areas. Firstly, perhaps this strategy was felt to be appropriate for re-educating hearing staff working in the regional special schools in Sweden at the beginning of the 1980s when the bilingual ideology was implemented.

²¹⁶ Swedish: *Språklära*

Since the earlier ideology of total communication in the 1970s required that teachers use oral Swedish and Signed Swedish or Sign Supported Swedish, proponents of the new model perhaps deemed it crucial to stress the differences between the two languages so that the teachers would understand what the new ideology implied (see also Bagga-Gupta 2000a). Secondly, theoretical understandings related to SSL research showed that it was a “true” language and this may have also reinforced the idea that the languages should be kept separate in the school system. However it is argued here that, more significantly, it was older and traditional understandings of bilingualism and language acquisition that probably also contributed to the strong emphasis on the comparative grammar discourse in the Swedish Deaf bilingual model.

The primary concern of Svartholm and some other Swedish researchers during the 1980s and 1990s can perhaps be recognized in their important contributions in the political arena where their work contributed towards the recognition of SSL and the shift towards the bilingual education model. These researchers can be seen as constituting the “first generation of researchers” whose work shaped the Deaf educational system in Sweden during the last two decades of the 20th century. While Svartholm’s concerns in applying research knowledge in the institutional level needs to be recognized, her work (and the work of some other scholars from the “first generation”) cannot be said to have been engaged in critical dialoguing in the Swedish or international academic level. This then can also explain why developments of the Swedish Deaf bilingual model have occurred in isolation from developments in Deaf bilingual models in other parts of the world. There is also need to further address some of the underlying assumptions of the Swedish bilingual Deaf educational model.

While professor of SSL at Stockholm University, Britta Bergman’s Ph.D dissertation from 1982 clearly differentiates between native and non-native Deaf signers, there is a clear tendency in almost all the Swedish literature to treat Deaf children as one homogenous category. Bergman (1982) makes this significant distinction while describing the informants in her study:

“Just as within the deaf community, a minority of the informants are native deaf signers, ie. children of signing deaf parents. The majority of the informants are non-native deaf signers with sign language as their first and primary language, acquired when beginning at the age of seven at a school for the deaf” (1982, 1).

Swedish Deaf psychologist Sven-Erik Malmström also recently, at a 2001 Scandinavian teacher-educators and teachers of the Deaf conference, questions whether the focus on creating “monocultural deaf” identities in Sweden²¹⁷ is a reasonable stance and how this in fact may contribute to

²¹⁷ In macro-level discourses in Sweden, Deaf individuals are viewed as “bilingual” and “monocultural” beings.

adjustment problems that Deaf youngsters have in transiting to the wider society:

“No one [in Sweden] discusses that all deaf children, youth and adults, live in both worlds more or less on a daily basis. We live with hearing families, we live with hearing teachers, we have our own children and we work with hearing [individuals] everyday. Practically ALL deaf [individuals] are, from such a definition, in need of bi-cultural knowledge.

It is evident that something is not correct. Deaf personal at deaf schools say worried ‘deaf children today get everything, that we did not get, and yet they cannot manage to function in society’” (Malmström 2001, my translation).

The assumption that “Swedish is a dead language for the deaf”, is also problematic, and it is also a gross oversimplification to assume that Swedish – especially written Swedish – cannot and is not used by Deaf children and adults to communicate with others – hearing and Deaf – in their daily lives (compare also with the literature discussed under the theme “Research on impact of technologies” in Chapter 5.5). As has been emphasized earlier, not only are Deaf communities (in and outside Sweden) very heterogeneous groups, but Deaf children and adults often – in the course of their everyday lives – meet hearing people who have little or no SL competencies. Members of Deaf communities use written language and, sometimes, oral language to communicate with the latter (see also Padden 1996a, Lane, Hoieffmaster & Bahan 1996). Deaf people also use written language to communicate in all Deaf or in Deaf-hearing situations in a multitude of ways by using literacy-technologies like TTY’s/text-telephones, faxes, chat-programs, and paper and pencils.

It is, in the present context, also important to recognize that the assumption regarding “breaking of phonetic codes” as the natural pathway to reading does not hold for *all* hearing children either. It holds true *only* for a majority of hearing children and *primarily* for those in societies where the written languages are based on alphabetic systems – not in societies where written languages are based on logographic or syllabic scripts.²¹⁸

It can be surmised then that the emphasis on delaying systematic introduction to Swedish until six or seven years, the focus on keeping the two languages apart, etc. can be said to derive from a particular *view of language* and from a specific view of *language learning*. As the analysis of the literature here suggests, there is conspicuously little evidence to support such assumptions. The Swedish *pre-1981 years* are often discussed in terms of the “first seven white years” in a Deaf child’s life, implying that Deaf children during the “oral phase” often came to the Swedish Deaf residential schools at seven years of age without any language skills. More recently it has been suggested that in the *post-1981 years* the insignificant or lack of emphasis on Swedish in the first seven pre-school years justify the 1980s and even the larger part of the 1990s as being understood in terms of the “first seven

²¹⁸ There is limited or no phonetic relationship between the spoken and written codes in the languages used in these latter contexts.

text-less years” in a Deaf child’s life (Bagga-Gupta 2002a; compare Ek & Möne 1995).

This view (and model) of bilingualism that has grown from the work of researchers with a background in linguistics has shaped how education for teachers was developed during the post-1981 period, how education for interpreters was developed, and most significantly how the post-1981 national curricula have been envisaged and developmental work related to school materials has been initiated. The assumptions in the Swedish model also suggest that the work at the research level has been isolated from developments in Deaf literacy and Deaf bilingualism in other countries. And as more recent theoretical shifts in the Social Sciences and Humanities have informed us, it is problematic to view reading and writing skills as being individually owned, neutral skills that one learns in school. These shifts also suggest that it is equally problematic to see human potential as being restricted to a cognitive capacity where a human being can learn only one language during the first six to seven years of life. As has been discussed earlier in Chapters 2 and 3, there is a vast body of evidence from a number of research areas, not least neurolinguistics research during the last decade, that suggests the contrary.

However the most convincing arguments *against* this framework or model for the introduction of a written language systematically only at the age of six or seven years in school, comes from recent empirically driven research in the area of Deaf Studies itself. As the research presented in the next chapter highlights, competent members of Deaf arenas – in schools and home environments – use *both* ASL and English or Swedish and SSL – in complex patterned ways in their everyday lives. Studies discussed there suggest that this complex usage of language begins from as early as a few months of age. Contrary to being kept strictly apart, adults and children in *visually oriented signing environments* “chain” or “sandwich” or “link” both the codes and the researchers working in this area who are either themselves Deaf or hearing, and all of whom use ASL/English or SSL/Swedish themselves, call attention to the empirical and theoretical significance of the *connectedness* of the two languages.

It is contended here that the argumentation extended by some of the “first generation researchers” in Sweden and the consequences that that had for shaping a specific interpretation of Deaf bilingualism in Sweden was directed towards problematizing the assumptions of the “oral” and the “total communication” Deaf education ideologies. While proponents of a bilingual ideology in other countries and contexts can support the need for such argumentation, it is contended here that the kind of argumentation used indicates that one ideological position has only replaced another.²¹⁹ Highlighting the reasons regarding the limitations of oral language use or “total communication” usage and their place in Deaf education can be seen as a legitimate enterprise. However, (i)

²¹⁹ See Ahlgrens first quote presented in the beginning of sub-section 6.4.1.

equating societal/majority language with oral language; (ii) prescriptively according invisibility and non-acceptance of Deaf people's use of oral communication – however limited – in their everyday lives; (iii) arguing for the delayed introduction of Swedish in institutional preschool settings etc are highly contentious and problematic propositions.

It perhaps can be said that despite the legitimacy that Deaf people had received through the legislative and national curriculum changes of the early 1980s, the line of reasoning and assumptions that underlie most of the Swedish literature was equivalent to reducing Deaf people to their audiological status of “non-hearingness”. Swedish psychologist Christina Eriksson²²⁰, graduate of the regional special school for the Deaf in Vänersborg, captures this in the following words: “the hearing aids of the 1960s and 1970s were replaced by sign language in the 1980s. Fundamentally nothing had changed – one technical view of language replaced another” (personal communication 1999). By this she implies that the linguistic changes were occurring within a technical perspective. Such an understanding can also be seen in the recent minority language ratification process that occurred in the different member states in Europe whereby SSL was *denied the status of a minority language* by the Swedish parliament, since SSL was at the end of the 1990s viewed as a “territorial free language” and only “a communications method” (SOU 1997 Nr. 192, Minority Languages Committee, my translation).²²¹

6.5. CONCLUDING REMARKS

The following quote by Professor emeritus David S. Martin, previously head of the Department of Education, Gallaudet University brings together some thoughts related to the literature that has been discussed under the themes that have been covered so far in Chapters 5 and 6:

“When you read educational research results [in the area of Deaf Education], you sometimes come away feeling, ‘What do we really know?’ and ‘How much we don't know yet.’ Results are confusing and conflicting and contradictory” (Martin 1990, 32).

Considering that these words were authored at the “Access: Language in Deaf Education” seminar which followed the publication of the seminal bilingual education paper on “Unlocking the Curriculum” at the end of the 1980s, it is striking that they capture the essence of the issues that face researchers working in the area of literacies and Deaf education at the beginning of the 21st century.

²²⁰ Christina Eriksson has been a member of the KKOM-DS research group at the Department of Education, Örebro University and collaborated in the Swedish Special Schools Project (SS projekt) that is discussed in Chapter 7.

²²¹ Finnish SL received the status of a national minority language in Finland during the same ratification process there.

Some specific themes identified in the literature have been used as a structuring resource in this and the previous chapter. The two perspectives identified in the literature – the medical-psychological and the cultural-linguistic – and that can be traced historically to the beginning of Deaf education, can be conceptualized as shaping our understanding of important issues in Deaf education even today. Even a glance at project and report titles or articles obtained in the literature searches spanning a number of different data bases, shows that researchers have been primarily concerned with either comparisons and conflicts between oralism and manual signing, or comparisons between deaf and the “normal hearing” populations. In other words, specific understandings of language learning generally, and literacy specifically, continue to shape the different ways in which issues related to schooling for the Deaf gets studied and is organized.

Researchers and educators focused on reading and writing (for Deaf and hard-of-hearing human beings)

“have often pursued the ‘silver bullet’, that is, the perfect method, approach, or materials to literacy development. Persistence in this search has frequently led to *adherence to a single good idea or method*. As a result, reading professors promote their favorite methods and ignore or demean competing ones, school districts [or national curricula] adopt a single packaged program that teachers are expected to employ faithfully, and teachers identify themselves by the method or program they use (...) These stances reflect the belief that one method fits all students” (Schirmer 2001, 84-5, emphasis added).

The research that has been discussed in the present and the previous chapter suggest that “good intentions” on part of researchers or professionals do not necessarily deliver the goods, but more significantly, these often turn out to be *short-sighted endeavours*. As Tore Äng, study director at a special school in Sweden notes, in 1992:

“It is relatively easy to see that everyone always wants the best for [deaf and hard-of-hearing] students, but a lack of knowledge about the conditions, educational goals and the processes that occur in a classroom, resulted in the situation where many students had a difficult time in school” (Äng 1992, 8, my translation).

As the analysis of textual trends in the literature presented in Chapter 4 and the discussion above suggests, relevant literature in Swedish in the area of Deaf education has occurred primarily at the level of unpublished departmental reports (which are often cross-referenced in other departmental reports), discussions in publications of the Deaf and parental NGO’s and papers presented at national and international conferences and seminars. While there are some exceptions, the need for dialoguing within the research community in more established ways – for instance published monographs in Swedish and English and peer-reviewed articles in scientific journals – can be noted.

These reflections lead up to interesting questions: how does the “one school for all” organizing democratic ideology match up to the new goal oriented

principles that are currently focused upon in Swedish education for Deaf and hearing students? Given that over two decades have passed since the acceptance of SSL as the “language of instruction for the deaf”, how can we understand the recent concerns about Deaf children’s school leaving results that teachers and administrators feel are often related to poor levels in Swedish? What can local level communication-practices inform us about everyday practices in schools? How is/are language/s conceptualized in everyday activities in classrooms – and reading and writing in particular – in different bilingual Deaf school settings, in different subjects, and in different school levels in Sweden? Some limited emerging evidence related to these questions is presented in the next chapter.

Bringing together issues in the literature discussed in the earlier chapters here, it can be said that recent literature in the field of Deaf education and literacy can be seen as highlighting a conceptual shift from “deaf children as being language delayed” to “deaf children as being language deprived”. The majority of the “deaf children as being language delayed” literature can be said to emerge from a *category research* agenda which has in large part not kept pace with general theoretical shifts and explicitly, implicitly and even unwittingly viewed deaf children through the lens of pathology (even when the researchers or professionals are situated within a cultural or linguistic perspective paradigm). In addition,

“although there is increasing recognition that linguistic theory must encompass signed languages, the inclusion of signed language data in theoretical explanations of reading development is nearly nonexistent” (Mayberry, Morford & Chamberlain 2000, xii, emphasis added).

There is need to see a bilingual approach in the very study of bilingualism. It is contended here that the bulk of reporting and research on different models and systems – oral, invented sign systems, bilingualism, etc. – draw on the traditional model where Deaf children are considered language delayed. In contrast, literature that often takes the perspective “deaf children as being language deprived” as a point of departure – either explicitly or implicitly – appears to draw on recent theoretical shifts which often views intersubjectivity as arising from a human beings ability to attend to communication and to engage in dialogue with other human beings. This is understood as a precursor and of critical importance to literacy development. Literature that takes its point of departure in this later perspective has been presented together under the sixth and final theme that has been identified in this meta-research study. This literature is discussed in the next chapter.

CHAPTER 7

Research on *communication-practices*. Emerging trends from a new theme in the literature

“A critical test for the soundness of any research findings is the extent to which they are replicated in other studies. Probably because of the lack of suitable measures of ASL and the disinterest in or an active opposition to the use of ASL in schools, no studies have attempted to access the relation between ASL skill and English literacy in deaf children *until recently* (...) The emergence of this research focus reflects an increased interest in *bilingual educational approaches* together with some federal funding from the Department [Ministry] of Education” (Strong & Prinz 2000, 138, emphasis added).

7.1. INTRODUCTION AND BACKGROUND

This last empirically conceptualized chapter opens with a quote that captures an important emerging research agenda in the area of literacies and Deaf education. The implication of using the term “bilingual educational *approaches*” in plural form above needs to be re-iterated. The research discussed in this chapter supports this understanding and the fact that, as the previous chapter and Chapter 3.5 described, *different kinds of bilingual approaches/programs* have been *prescriptively* implemented in different parts of North America and in other countries.

Another issue that the opening quote in this chapter highlights is the *paucity* of currently available research that has attempted to understand bilingual models *descriptively* and non-ideologically. “The quantity of this work has yet to reach a critical mass” (Padden 1996b, 103). The situation that Padden described in 1996 appears to have changed little at the beginning of this century. Studies of communication-practices in bilingual settings are few, and in comparison to most sections of the last three chapters, some recently produced unpublished texts that are nevertheless empirically driven – conference papers, reports to funding agencies or unpublished Ph.D thesis – have been included here. This has been resorted, in an attempt, to highlight aspects of the “emerging trends” in this body of literature. While some of this literature was accessed through the American SOL-database at Gallaudet University, personally contacting some of the researchers working with issues relevant to Deaf literacies, gave access to other unpublished or in preparation writings.²²²

²²² It should be added that some of the writings of the researchers whose work is discussed here is available in regular academic publications in the very recent years.

And finally, as discussed earlier in Chapters 4 and 6.4, other explanations than the reasons that Strong and Prinz give regarding the situation in North America in the opening quote above, need to be taken into account in order to understand why, until recently, very little Swedish studies focused upon communication-practices in Deaf educational settings. The Swedish model was essentially a “top-down” model of bilingualism, where the regional special schools in the 1980s were (to put it simply), required to replace the “Total Communication” ideologies of the 1970s with a new ideology. It was not, therefore, probably deemed necessary to pursue a critical empirically driven research agenda on the model itself. It was not until the second half of the 1990s that legitimate educational-political reasons arose and which pushed for the critical examination of different aspects of the Swedish bilingual school model. While evaluation studies by the National Agency for Education (Skolverket 1997) and other indicators (see for instance the work reported in Chapter 6.4) constitute one kind of critical examination, a limited number of studies and projects that have focused on communication-practices at the Swedish upper secondary schools and compulsory schools for the Deaf represent a different and newer kind of research agenda.

While individual studies by a few researchers – primarily from North America – have been identified from the late 1970s and in the 1980s, a new research field which focuses communication-practices in Deaf educational settings and that explicitly addresses literacy issues appears to have emerged in the very recent past. The few empirically driven studies that have been identified and that can be placed under the communication-practices theme in the literature are covered in this chapter. Many of the studies reported here share certain “underlying assumptions” regarding Deaf individuals, the nature of language, learning, etc. The explorative presentation of some of the main underlying assumptions in this body of literature, presented earlier in Chapter 4.3, reconnects to important paradigmatic shifts in the Social Sciences and Humanities in the last few decades.

Section 7.2 below briefly recapitulates why focusing *communication-practices* explicitly is deemed significant against the historical backdrop of the “methodological” swings and the polarized and parallel discussions from the medical-technical and the cultural-linguistic perspectives.²²³ A brief note on the common research-methodological features of the studies discussed in this chapter are presented in section 7.3. Section 7.4 presents and discusses some of the international studies available on communication-practices in Deaf settings. Emerging research findings from a limited number of Swedish research projects that can be covered under this theme are discussed in section 7.5.

²²³ This has been theoretically motivated in the earlier chapters, most prominently in Chapter 2.

7.2. REVISITING THE SIGNIFICANCE OF STUDIES THAT FOCUS COMMUNICATION-PRACTICES

The analysis of the literature presented in Chapters 3 to 6 have shown that there currently exists a large volume of international research that in one way or another touches upon issues related to Deaf education, reading and writing. An important aim that has emerged through the analysis in the present meta-research study is to throw light on, and understand, (i) the historical pendulum shifts that have characterized Deaf education, (ii) the polarization that *continues to exist* in Deaf education in different parts of the world and finally (iii) the technical perspective that implicitly, explicitly or unwittingly (continues to) shape some educational models that have accepted the “new ethnicities” rhetoric of the cultural-linguistic perspective. Of special significance is the need to understand that “Deaf communication” has been and continues to be informed by shifts between two very different traditions. The first of these takes as its point of departure a belief that oral speech lays the foundation for learning reading (and perhaps even for “communication” in general). An alternative understanding views a given Signed Language as a natural and independent (minority) language and considers this to be the normal and primary (or “first”) language for/of the Deaf. It has been assumed that this latter understanding, grounded on international research reporting, can be meaningful in understanding conceptualizations of Deaf bilingualism which in its turn can have a bearing in the future application of more theoretically informed pedagogy in Deaf education. Thus, the present study of the literature has focused on research that has tried to look at the relationship between different forms of communication (oral speech, signed speech, signed-oral speech) that individuals meet in different *everyday arenas* and their textual competencies.

This specific interest emerges from the fact that studies have repeatedly shown that, on average, Deaf and hard-of-hearing individuals reading and writing development, in both the international and in the Swedish context, is substantially delayed. The previous empirical chapters suggest that a considerable amount of research is focused towards understanding, and improving this situation. Thus for instance, there is a growing interest to systematize knowledge from both research and developmental programs in order to “isolate” different factors that could be central to the issues that have and that continue to confront Deaf education. However, despite this large knowledge base, there is considerable confusion regarding literacy and learning in the education of Deaf individuals. *It is contended here that (i) the ideological nature of the discourses in the field, (ii) the polarized positions (vis-a-vis deaf/Deaf and communication) that have and that continue to exist in different parts of the world, and (iii) the fact that the labels of different models and programs are confused with the everyday practices in those programs/models, in themselves contribute to further confounding issues related to literacies.*

This means that it is significant to look closely at research that focuses on Deaf communication-practices, has a descriptive agenda and that goes beyond the labels used to describe different educational programs or

“methods”. *It is contended here that such a non-political and non-ideological agenda is important in order to understand the ‘tensions’ between the medical-technical and cultural-linguistic perspectives with the goal of going beyond the strong pendulum shifts and foci that these two perspectives have given rise to in institutionalized educational settings.*

The more recent literature discussed in the previous chapters suggests that while there is emerging evidence concerning the potential relationship between ASL and English literacy skills,²²⁴ there is a growing awareness regarding the need for scrutinizing this relationship in greater depth. These recent discussions regarding Deaf bilingualism in North America appear to suggest that while:

“a significant correlation between ASL proficiency and English literacy achievement [appears to exist] (...) additional research is needed to further elucidate the precise nature of the relationship between ASL and English literacy” (Prinz & Strong 1998, 55).

In addition, it has been suggested that while,

“many research projects, nowadays, seem data-driven to the extreme (...) final results may consist of little more than descriptions of a range of assessment tools and strings of incomprehensible data points, along with recommendations for ‘more research’. In fact, it has become fashionable among some deafness researchers to point out that the number of variables affecting events in any classroom containing deaf students is too vast to allow for general pedagogical recommendations. Every situation is unique, they would say; hence, deaf education needs to be reinvented for every classroom, depending on the teacher’s assessment of the maddeningly unpredictable variables affecting the particular children assigned to the teacher each fall” (R. C. Johnson 1994, vi).

The above quote, taken from the foreword of a monograph that explores communication and social identity in a preschool for Deaf children, goes on and shifts focus towards the ethnographic study that the monograph makes available. R. C. Johnson recommends:

“The study that unfolds in the following pages might be regarded as a kind of map of the sensory, linguistic, and cultural landscape of deaf education, a terrain troubled by mixed feelings experienced by a range of people whose attitudes are often at odds. It seems to me that any traveller venturing into this terrain would be well-advised to take a long look at this particularly useful roadmap” (1994, vi).

These words capture the essence of the literature that is presented in this chapter and, particularly highlights, the significance of studies that have a descriptive foci in their explorations of everyday life and communication-practices. Chapter 2 explicitly discussed the ways in which the concept “communication” is understood in the field of deafness generally and Deaf education more specifically. The use of the concept “communication-

²²⁴ And by extrapolating this, a potential relationship exists between other SLs and alphabetically based majority language literacy skills.

practices” in the title of this last empirical chapter follows the theoretical framework that has guided the conceptual analysis of the literature.

To briefly recapitulate, the core issues that continue to engage researchers interested in Deaf education focus on the classical issue of *communication modality choice* and the latter’s implications for academic and reading and writing achievement. *It may be the case that the continuing focus on communication modality choice blurs or downplays the significance of theoretical frameworks and analytical agendas that have developed in the human sciences vis-à-vis communication-practices in the last few decades.* A second reason for focusing communication-practices (and not the communication methodology or modality) lies in the theoretical-analytical agenda that have been characterized by the encompassing term “sociocultural perspective or tradition or studies” (see Chapter 2).

“In the sociocultural tradition, the notion of social practice serves as the primary object of inquiry. Communicative action is seen as relative to, and constitutive of, the specific practice (...) Sociocultural studies (...) *analyse the sociogenesis, meaning and consequences of social action in society.* The analytical unit in this case is a social practice, constituting of actors who engage in an activity with mediational means (material as well as discursive)” (Mäkitalo & Säljö 2002, 65, emphasis in original).

Studies in the literature that have been conceptualized as contributing to the theme of communication-practices focus in one way or another on the *nature of access* that deaf/Deaf children and adults have to literacy practices both inside and outside school settings. It is contended that these studies together contribute to the generation of new knowledge in the area of literacies and Deaf education. At the meta-research level, they throw light on the social construction of deaf/Deaf children’s abilities and what, if any, roles and possibilities teachers, parents and other adults attribute to them with regards to the development of reading/writing abilities and skills.

7.3. A BRIEF NOTE ON RESEARCH-METHODOLOGICAL ISSUES IN THIS BODY OF RESEARCH

The kinds of questions that appear to be focused upon and are often common to the studies presented and discussed in this chapter have a bearing on the research-methodological designs of the studies. Thus for instance, the following questions that are central in this meta-research study, resonate in the few studies being presented here.²²⁵

- How and in which literacy activities do deaf/Deaf (and hearing) children participate in different arenas?
- What opportunities do these children have to participate in a range of literacy practices? What is this range?
- What communicative strategies (spoken language, written language, Signed Language) are used by Deaf children and Deaf and hearing adults in different societal arenas?

²²⁵ These are the aims and questions raised in Chapter 1.

- When and in what contexts, both inside and outside classrooms, do deaf/Deaf children meet texts?
- What kinds of demands are made on them in different contexts and who makes these demands?
- To what extent and with what communicative strategies and demands do parents (deaf/Deaf and hearing) read to their deaf/Deaf children?
- What is the relationship between home and school arenas as far as literacy activities are concerned?

While these types of questions have interested researchers and professionals in the past, they have often been investigated by asking informants for information – either through questionnaires or interviews. What is interesting and different in the studies discussed here is that in addition to these traditional means of eliciting information regarding people’s experiences, the everyday social practices that shape these experiences are themselves the foci in the studies that are conducted. In other words, many of the studies presented and discussed here have implicitly or explicitly followed research methodological principles of ethnography. These projects and studies often describe everyday practices in a more or less systematic fashion. The authors of these texts have spent from between a few months to a few years in their “research sites” and while micro-level descriptions of communication-practices are reported, there is an emphasis on presenting *common patterns of routine communication or socialization activities*. A risk in dealing with issues in institutional fields often characterized as “special” and “problematic” (like for instance “special education” or “deaf education”) is that “one tends to see other situations, the ‘ordinary’ ones, as unproblematic” and perhaps *unworthy of scrutiny* (Wadensjö 1992, 10). The studies reported in this chapter seem to take the opposite route: they “problematize the seemingly unproblematic” (Wadensjö 1992, 10). Thus for instance, researchers whose studies are discussed in this chapter often report:

“This is not an unique example, but rather a phenomena that I have encountered repeatedly when watching deaf students read stories in sign language” (Ewoldt 1994, 4).

The central theoretically motivated assumptions – explicit or implicit – in the literature discussed under this sixth and final theme can be summarized as follows:²²⁶

- (i) the focus is on interaction and practices and not on attributes or characteristics of individuals,
- (ii) literacy is understood broadly in terms of communicative and situated practices and not in terms of isolated neutral skills,
- (iii) learning and development are viewed as collective and situated practices,
- (iv) institutional practices are understood in sociohistorical terms,
- (v) different Signed Languages are seen as normal human languages,
- (vi) Deaf human beings are viewed as minority bilingual citizens who often live in close symbiosis within a majority hearing culture, and

²²⁶ These were discussed previously in Chapter 4.3.

- (vii) Deaf bilingualism is understood broadly in terms of a Signed Language that is central in a given Deaf community and a majority culture language.

The methodological implications for how researchers study literacy are closely related to these theoretically guided assumptions. Some researchers are themselves Deaf and, as far as has been possible to ascertain, the Deaf and hearing researchers whose work contributes to this theme are bilingual in a given SL and the majority culture language. An important point of departure is detailed documentation of actors in interaction with one another and their interactions with other cultural artefacts in Deaf arenas. The assumptions of researchers interested in Deaf bilingualism and literacy are grounded generally in long term studies of sociocultural practices, in institutional settings, where “ethnographic fieldwork is a shorthand term for the *creation* of data through a variety of methods” (Whyte 1999, 239, emphasis added). From such a critical ethnographic point of departure, video documentation is not seen as “capturing” or “collecting bits of reality” in some neutral form, but as one means of enabling micro-level studies of routine activities in everyday life.

These assumptions also assist in understanding why the overwhelming majority of studies that have been identified as focusing on the theme of communication-practices are attempting to understand primarily the “bilingual ideology” models and not other communication models. It needs to be noted that, from a non-prescriptive point of departure, there is a need to understand the local (micro) level everyday communication-practices that comprise other “methodological” or “modality” oriented models in Deaf education as well. Understanding the communication-practices of bilingual models, has and is being conducted by researchers in research groups that generally are non-prescriptively oriented. While their common theoretical orientations probably explains why they have independently of one another chosen the study of social practices, the focus on primarily the bilingual model may also be the result of the fact that these researchers, regardless of their hearing status, are themselves users of ASL and English or SSL and Swedish.

7.4. RESEARCH FOCUSED ON ROUTINE COMMUNICATION-PRACTICES OR SOCIALIZATION ACTIVITIES

7.4.1. *Introduction to studies of language use in Deaf education*

In the introduction to the third volume in the Sociolinguistics in Deaf Communities Series, the General Editor of the series, Ceil Lucas characterizes the study of

“the *use of language in deaf education*, [as] an issue that, at its core, is *essentially sociolinguistic in nature*. It is a sociolinguistic issue because it involves the choice of language that will be used as the medium of instruction for Deaf children; it is sociolinguistic because it concerns the contact of distinct languages and the outcomes of this contact; and it is sociolinguistic because it has direct bearing

on users of language, be they children, parents, administrators, or teachers” (Lucas 1997, xi, emphasis added).

An implicit or explicit point of departure in the research discussed in this chapter is the study of the use of language in Deaf education and the common patterns that underlie this usage of language in institutional settings. Some of the studies that can come under the present theme are reported by the researchers themselves as focusing on the practices of *a given instructional model*. In other words, the ideology prescribed by the educational setting is used sometimes as the qualifying label that the authors use in their own texts. Sometimes the author/s discuss the efficacy of using the model label in getting insight into the socialization practices of the specific setting. In other cases the researchers, appear distanced from and even problematise the labels of the programs in which they conduct their field work.

7.4.2. *Individual micro-level studies*

Some researchers have studied the interactional patterns of Deaf parents as they introduce or participate in literacy practices with their Deaf children. Thus for instance, Andrews and Taylor (1987) report on the strategies that a Deaf mother uses when reading to her three and half year old Deaf child. The mother is reported to being positive in her support both in encouraging the child to respond to comprehension questions and in discussions about the content of the book. The mother is reported as using touching and eye contact to maintain attention during the reading activity. She is also reported as relating the book content to the child’s life experiences and elaborating on the text.

Carolyn Ewoldt²²⁷ completed her doctoral dissertation (1977; see also Ewoldt 1985, 1981, Manson 1982) from the Wayne State University, Detroit, USA on the analysis of the reading and retelling in ASL of a variety of materials by four Deaf students who were between 6 to 16 years old. This piece of work is reported as showing that Deaf children could acquire conceptual knowledge through the process of reading. On the basis of this work Ewoldt also concluded that Deaf children’s “literacy problems” were exaggerated in the literature. Further Ewoldt (1985) examines the reading and writing development in school of 4-5 year old preschool DCDA’s over a period of one year. In this descriptive study Ewoldt concluded that young Deaf children use writing to convey meaning and even create messages and showed proficiency in using writing conventions. In a subsequent 1991 pilot study of four DCHP’s who were 3-4 years old, Ewoldt reports that these children, who had not received any formal writing instruction in school, were aware that print could represent real objects. She reports that

²²⁷ Some of Ewoldt’s research has been discussed previously in Chapter 5.2.

“one instructional implication derived from this study is that deaf children need the opportunity to experiment with pencil and paper *at an early age*. Much of the language play that is so beneficial to hearing children can be done by deaf children through writing. Parents and teachers of deaf children can learn a great deal about their children’s language abilities and print awareness by observing the children in a daily free-writing activity” (Ewoldt 1991, 89, emphasis added).

Ewoldt’s six-month pilot study lead subsequently to the establishment of a three year study of nine DCDA’s and one DCHA who were 4-5 years old. Data were collected from the home and school settings of these children. “The children were observed frequently, and samples of their writing were collected (...) the study also investigated reading, art, and through-the-air story production” in the preschool settings (1991, 90). The home environments of the children are reported as being varied with usage of ASL dominating. During the first year of the project the children were not exposed to any formal literacy instruction. The children were given seven different tasks, adapted from a previous study, and their linguistic behaviors were studied by analyzing the writings and video documentation of the task. The tasks included: writing a letter to one’s mother, writing a story, reading the written story, reading a book, retelling the book, dictating a story and reading the dictated story. Ewoldt reports that

“deaf children and hearing children demonstrate similar behaviors and take similar paths towards literacy (...) It might seem incongruous to include reading and writing behaviors as influences on literacy development. However, these behaviors are as much *facilitators of the process as they are products of it*. As an example, a child’s attention to environmental print is not only evidence of developing literacy but also the stimulus for additional graphic-semantic associations” (1991, 103, emphasis added).

Studies of *writing practices* are limited in the literature. In addition to Ewoldt and her colleagues work, a 1972 article by Andrews and Gonzales reports on “free writing of deaf children in kindergarten”. The year long case study reports on six Deaf children from different “ethnic” and “low socioeconomic” backgrounds in a kindergarten setting where they were immersed in daily literacy rich activities involving books, texts and “read alouds”, language experience stories, etc. Deaf adults who used ASL are also reported to be frequent visitors at this setting. The case studies augmented by free writing samples of the children show that children’s written language production increased during the study period, from scribbling and printing a single letter to learning about spacing between words and even writing stories.

In a study that focuses how ethnicity boundaries are derived from interactions with Deaf and non-deaf group members, R. E. Johnson and C. Erting (1989) report on the communicative interactions of eight four year old Deaf preschool children (four are DCDP and the other four are DCHP) and their hearing teacher and Deaf teacher aide. R. E. Johnson and C. Erting report that they:

“chose to study the processes of linguistic socialization in the classroom rather than in the home because we are interested in discovering how and by whom the majority of deaf children – those who do not have Deaf parents – are socialized” (1989, 82).

The teacher is reported as communicating with the children “through a vocalized variety of sign-supported-speech (SSS). She is assisted by a Deaf teacher’s aide who uses ASL, fluent English signing, and SSS with the children” (1989, 56). R. E. Johnson and C. Erting report on “how the children learn to use ASL and how they learn to sign English” and identify three main processes of linguistic socialization (1989, 70). The first of these is called “*purposeful ASL teaching*” and is empirically exemplified by the correction of signing errors (by the Deaf teacher’s aide and by DCDA). The aide and the DCDA’s are also reported as functioning as “models for ASL use but are not attempting to directly teach ASL principles or signs” and this is reported as the second process of linguistic socialization: *ASL imitation and practice* (1989, 73). The third process called “*nonpurposeful transmission of ASL features*” is seen as arising from the structure of communication in the classroom and in the lunch room. The DCDA’s are reported as accounting for 67 percent of the children’s turns in the classroom interactional data where “this greater percentage of turns can be seen to reflect an interactional structuring of time that provides increased exposure to skilled signing” (1989, 75).

R. E. Johnson and C. Erting also empirically report on different processes through which the children are socialized into the usage norms of English signing. In the *first process* “the Deaf aide communicates that some situations bear heavy hearing-world interpretations and thus require the use of English signing” (1989, 75) and through empirical examples they show how the Deaf aide “switches between English signing and ASL according to situational pressures” (1989, 76). *The significance of such reporting lie in that they demonstrate non-prescriptively how Deaf members in Deaf arenas actually use different language varieties to fulfill different functions.*²²⁸ The second process is related to translation between ASL and English. Describing the heterogeneity of the group of Deaf children in terms of the auditory/oral dependency of one of the children, R. E. Johnson and C. Erting make salient problems associated with use of oral speech together with signing for children with limited hearing in the group. However, for the specific child with greater auditory/ oral dependency, the teachers translations of other Deaf children’s ASL into oral English and signing become crucial to participation in classroom activities. The *third process* by which children are reported as being socialized into the usage norms of English signing is the purposeful teaching of English by the adults. R. E. Johnson and C. Erting present microlevel analysis of the signing and oral language use of the hearing teacher and the Deaf aide to show that,

²²⁸ From an ideological perspective “English signing” or “fluent English signing” maybe looked at negatively if one takes a “pure ASL” position.

“the teacher consistently misarticulates signs, a problem compounded by the fact that her misarticulations often result in signs that actually mean something else (...) The English signing of the Deaf aide stands in sharp contrast to the sign-supported speech of the hearing teacher. She seldom mistranslates an English word and she includes a sign for each of the words critical to the understanding of sentences (...) we propose that the Deaf adult presents a more consistent and accurate model for the learning of English than does the native English speaker” (1989, 81-2).

These kinds of empirical discussions and conclusions, drawn from analysis of communication-practices at the micro-level, throw light on the processes involved in the teaching of the majority language in *visually oriented settings*. Such work also shows that SLs, like all other oral and written languages, have a large repertoire of varieties (see also Lucas 2001) and are used differently in different domains. Discussing and contrasting sociolinguistic *variation* in studies of spoken and Signed Languages, Lucas, Bayley, Valli, Rose and Wulf (2001) suggest:

“that the variation that we observe in all human languages, be they spoken or signed, is for the most part systematic. The linguistic factors that condition the variation have to do with features of the variable in question, the immediate linguistic environment in which it occurs, its function, or with features of the discourse in which it occurs. While many of the social factors that condition variation are the same for spoken and sign languages – e.g. region, age, gender, ethnicity, socioeconomic class – it seems that there are some factors, such as *language use in the home, that are unique to sign language variation*. Furthermore, it is clear that age and region need to be understood specifically within the context of Deaf education” (2001, 109, emphasis added).

Lucas, Bayley, Valli, Rose and Wulf also add that “language varies both in space and in time, as well as according to the linguistic environment in which a form is used” (2001, 61).

Discussing the institutional and linguistic context of Deaf education through an ethnographic microanalysis of the language practices of one hearing teacher, La Bue (1995) throws light on

“a chain of ideological paradoxes and circular thinking that make it possible for a teacher to continue a linguistic practice that she acknowledges as inherently flawed, limiting her students access to meaningful content” (1995, 164).

La Bue’s data corpus included observations of six one-hour literature lessons with 14-year olds during a two month period during which detailed field-notes were maintained. Five of these lessons were also videotaped and enabled a richer base for the field-notes which subsequently informed eight one-hour long semi-structured interviews with the teacher. The audio-taped interviews are reported to have been transcribed and analyzed as well. During the interviews, La Bue and the teacher watched portions of the videotaped data and the teacher provided descriptions, interpretations and analysis of the lessons.

“This interview setting also helped us to compare and contrast her ideas about language and literacy with her actual classroom practice” (La Bue 1995, 167).

Local school documents from school literacy meetings were also included in the data corpus and aided in understanding of how language learning was perceived in the school. The micro level analysis of classroom interactional data suggest, in line with the findings of R. E. Johnsson and C. Erting (1989) discussed above,

“that the linguistic structure of sign – when used while speaking – is constrained and overruled by the speech to the extent that its capacity for presenting systematic syntactic structure and conveying complex curricular content is significantly limited” (La Bue 1995, 168).

In addition to presenting a non-prescriptive empirically grounded analysis of the communication-practices in a Deaf setting where simultaneous signing and speaking occurs, the strength of La Bue’s work lies in that the micro level analysis is presented in the context of the hearing teachers *college training* and the *ideologies of the school* where she was working. While the teacher is reported as being “a well-intentioned teacher, is open-minded with regard to new curricular approaches that seek to improve teaching and learning” (1995, 210), the descriptions of the literature lessons and the micro level analysis of the communication-practices therein suggest a “circular logic” in Deaf education and the classrooms where a focus on the “form of language” interferes with access to the “content of language”. In the teacher’s

“effort to convey narrative event structure to her students, the retelling of the story became primary and the written text secondary. [The teacher] talked about the text. As a result she invited the students into the world of the story rather than the world of the text” (1995, 191).

“She was aware that this text may have been too hard for all of her students to read on their own and that handing the book over to them to read may have been intimidating and/or fruitless (...) The data also demonstrate that [the teachers’] efforts did not reinforce the students’ efforts to learn to read (...) [The teacher] was aware of her students’ limited competence in English and compensated by giving them a *linguistically simplified version* of the story. She was also quite interested in having the students learn and so *compensated* for their inabilities by giving them an informationally enriched version of the story. Thus, the stated purpose of the activity was not accomplished. The children were not reading, nor were they learning to read” (La Bue 1995, 192, emphasis added).

Thus teachers’ understandings of what Deaf children require and the concomitant strategies of instruction – simplifying stories, not evoking the world of the text, and other compensatory strategies (however well intentioned) – in effect *do not allow* the students to receive optimal opportunities to participate in rich literacy activities. This critique of certain “communication models” from studies of “communication-practices” appears to be reflected in the work of other researchers as well. Marlon Kuntze, American Deaf researcher,²²⁹ suggests through work-in-progress related to the use of artificial signing systems that:

²²⁹ Some of Kuntze’s writings have been discussed previously in Chapter 5.4.

“The fallacy of the logic behind signing in English is the assumption that exposure to Manual English will somehow be the answer to teaching English to deaf children and thus help them learn to read” (Kuntze 1998, 7).

7.4.3. *Studies by Maxwell and her colleagues since 1980*

Madeline Maxwell, currently professor of Communication Studies, University of Texas, USA completed her doctoral dissertation titled “Language variation in a deaf child: The interaction of sign variations, speech, and print variations” in 1980 at the Laboratory for Language and Cognitive Studies, The Salk Institute, University of Arizona, USA. This doctoral research (see also Maxwell 1984) is a classical case study of a child called Alice, that describes a young DCDA’s experiences with books going through a developmental sequence of a number of stages. Alice’s deafness was discovered at 8 months of age and until that time “most of the parents communication to the child was in speech” (1984, 194). After discovering her deafness, Maxwell reports that the parents consciously “decided to expose her first to ASL and then to introduce fingerspelling and signed English gradually” (1984, 195). The analysis reported in the 1984 article is based on 22 videotaped sessions of two hours or more each when the child (at the beginning of the study she was one year nine months) was interacting with the researcher and members of her family. While the parents did not consciously teach the child to read, Maxwell reports that

“much of the parent-child interaction took place in the context of books or storytelling. The father also kept a diary of Alice’s language development. She literally grew up watching him write down her spoken and signed utterances” (1984, 195).

The father’s diary is also used as part of the data. The child’s approach to books, by the time she turned 6 years 3 months is reported as having progressed through

“six levels of story knowledge:

- labeling, or naming pictures or signs;
- stating propositions and expressing continuity in terms of story information;
- reading pictures;
- going beyond the pictures;
- projecting into the stories;
- reading independently for meaning” (Maxwell 1984, 196).

The detailed empirical analysis and local level interactional data presented suggests that the Deaf child was clearly aware of the function of texts even before she had turned 3 years old and was spelling out words in her environment by the time she had turned 3. Books are reported as being clearly an important aspect of the child’s life throughout the course of the study. Maxwell reports also on the child’s achievement scores for the first through third grades when her “progress in achieving literacy is remarkably similar, in spite of her profound deafness, to what is being described in

hearing children” (1984, 216-7) and her reading progress is “extremely similar to hearing children’s re-enactments of favorite story books” (1984, 218). Maxwell suggests how Alice was on grade level in the following:

“Alice accomplished the segmentation of orthography (...) by matching sign illustration to printed word and then by fingerspelling the letters of the word. Her analysis of the sign illustrations is like ‘sounding out’, but her analysis is initially only holistic matching to signs, plus spelling. At age four she picked out a few words and vocalized them along with signing and spelling, but there was no indication that the vocalization was related phonemically to the orthography. Around age five Alice did give some evidence that she could derive the spoken forms of at least some words from their orthographic representation (...). For Alice the signed versions of stories and words seem to provide the needed framework for working out the rest of the story” (1984, 218).

Maxwell suggests that Alice’s progress “strengthens existing reading theory considerably, especially involving the importance of parental interaction and of rereading” (1984, 221). While cautioning about generalizing from case studies and what bright children can accomplish in the absence of formal instruction, Maxwell nevertheless suggests that there are lessons to be learnt from Alice’s case, and not least the issue of communication-practices in school settings.

“Teachers who converse with *deaf children* instead of *talking at them*, teachers who tell stories to their children instead of *just reporting events*, and teachers who create the possibility for favourite stories, which the children come to know as well as the teachers” (1984, 222, emphasis added)

are teachers who observe important principles that can support the literacy development of Deaf children.

In an “ethnographic study of the communication of elementary school children at a residential school for the deaf” Maxwell and Doyle (1996, 126) conducted participant observations for 10 _ hours per week for eight weeks in the school and dormitories at the weekends in order to understand the “communication practices and needs of individual deaf children, the strategies used to address those needs, and the language of children’s interactions” (1996, 126). Seven children, aged 8-12 years old were focused. The empirical evidence and the discussions presented suggest that code variations and adaptations to specific situations are common in settings both inside and outside the classroom.

“While some mixing was related to acquisition and proficiency, mixing, a strategy of many deaf individuals, uniquely adapts linguistic resources to communication needs. Investigating deaf children’s language by comparing it to standard English or ASL overlooks *the rich strategies of mixing that are central to their accommodations*” (Maxwell & Doyle 1996, 122, emphasis added).

Maxwell has also reported on Alice’s acquisition of rules of fingerspelling and “knowledge of the relation of fingerspelling to signs and to printed and spoken words” (1988, 377). More than 100 hours of interactional videotaped

data are reported to have yielded a corpus of 447 fingerspelled items. These were subcategorized into six or seven main groupings:

1. *Initialized signs* Signs formed of the first or initial letters that are “restricted characteristically in space, movement and (usually) modulation” (1988, 381).
2. *Loan signs* or English spellings borrowed into ASL.
3. *Displaying awareness* regarding the English alphabet (in observable data).
4. *Spelling practice and “scribble” fingerspelling* in signing interactional settings. The earliest evidence of this usage is reported at age 2 years 11 months and the first case of an invented fingerspelling is reported as occurring at 4 years 5 months. By 6 years 3 months
 “she had apparently acquired the concept that every sign meaning can also be expressed through a conventional fingerspelling, and she frequently asked for the spellings. Sometimes she would rehearse these, as if committing them to memory” (1988, 392).
5. *Recitations and readings* that contained fingerspelling is reported from age 3 years 2 months onwards.
6. *Spontaneous fingerspelling* which is observed for the first time at age 4 years 0 months:
 “the tapes hold the first instance of fingerspelling that is neither coached nor elicited, not a short common word and not a personal name” (Maxwell 1988, 395).

This empirically derived systematic developmental progression enables a grounded understanding of the *acquisition of bilingualism from a visually oriented perspective when both languages are used with and around a Deaf child*. Maxwell’s systematized schema neatly demonstrates Deaf children’s ability to learn more than one linguistic code at the same time, and this (as others have observed through empirical studies) is not different from how hearing children acquire bi- or multilingual competencies. While Maxwell reports earliest evidence of scribble fingerspelling in her study at age 2 years 11 months, C. Erting, Thumann-Prezioso and Benedict (2000) have in another study (discussed below) found scribble fingerspelling occurring at the age of 18 months and Padden and LeMaster (1985) report Deaf children’s first fingerspelling attempts at around 2 years of age. All three studies focus on the language acquisition of Deaf children of Deaf parents. Here it is important to highlight that these studies unwittingly allow us to understand not just ASL or English language acquisition, but more significantly *bilingual acquisition* in visually oriented settings.

Maxwell reports further that at age 5 years 0 months:

“one of the ways that Alice manipulated her various modes of communication was to repeat something she had uttered in a different mode, apparently to add emphasis. Fingerspelling started to serve this function at around age 5.0; e.g. she first spoke the word “don’t” and then fingerspelled DON’T in warning her brother” (1988, 395, emphasis in original).

Maxwell’s detailed analysis of how a Deaf child was simultaneously socialized into two codes and how she gradually made sense of the relationship between the two codes and the fingerspelling system are seen as perhaps providing one of the first local level and longitudinal insights into the

acquisition of the majority language by Deaf children. While Maxwell's case study was perhaps one of the first to discuss elements of the *relationships of the different codes and systems*, a small and growing number of researchers, especially in North America, focus further this relationship issue in the 1990s (see below).

7.4.4. *Some other studies on early acquisition and exposure to fingerspelling*

While north American researcher, Robin Battison, now living in Sweden, already in 1978 described a few ASL signs that originated as fingerspelled words in terms of "loan signs" in his doctoral dissertation, it has been argued that in these instances the original English word is often reduced to two distinct hand configurations and other additions result in the loan sign losing its fingerspelling action (see for instance Padden & LeMaster 1985).

In another early analysis of fingerspelling acquisition and its potential relationship to writing systems, Padden and LeMaster (1985) report from the analysis of videotaped observations of six DCDA who were:

- 2 years 3 months;
- 2 years 9 months & 2 years 11 months;
- 4 years 7 & 8 months & 4 years 9 months;
- 4 years 9 months & 4 years 11 months;
- 5 years;
- 7 years 9 to 10 months & 7 years 11 months.

Padden and LeMaster present a rough measure of frequency of fingerspelled items in three different "sign conversations" involving different conversational partners and suggest:

"In the normal conversational stream fingerspelling is interspersed with signing, but the frequency of appearance of fingerspelling and the choice of fingerspelled items is influenced by a number of sociolinguistic considerations. Frequency of fingerspelling increases in situations perceived as requiring use of English, e.g. reciting from a book, a formal presentation before an audience believed to prefer English, the presence of an English speaker" (1985, 164).

This study suggests that while Deaf parents don't fingerspell to their younger Deaf children as frequently as they do to other Deaf adults, their expectations about their children's fingerspelling – receptive and productive ability – *changes* as the young infant becomes a toddler. Padden and LeMaster also report that while some Deaf parents explicitly instructed their two to three year old Deaf children in the use of fingerspelling, other parents did not take on this role explicitly. However parents' expectations are reported as changing within the span of a few months.

While children's first signs have been reported at around 8 months, this study reports that their first fingerspelling attempts occur in their study at around 2 years of age. While early fingerspelling attempts (2 years 9 months)

are reported as involving at least three hand-configurations, in elicited names of individuals, the young child often

“moved her fingers in a manner mimicking fingerspelling, but only the first letter was distinct; the other letters were not articulated; but the overall form of the imitation was very close in appearance to fingerspelling (...) These forms only resembled the general appearance of adult fingerspelled items enough to be recognized by parent’s for what was intended” (Padden & LeMaster 1985, 168).

While younger children invented spellings for different words, older children (5 years) are reported as using English spellings consistently. Padden and LeMaster suggest that

“Learning to fingerspell is no more difficult than learning other complex sign forms; the child begins to display fingerspelling-like activity as early as 2 years of age, arranges hand configurations in sequence by age 3, and soon after begins to notice correspondences between fingerspelling and other systems” (1985, 168-9, emphasis added).

“By the time the child is in her fourth year, she has acquired a basic understanding of the different systems of signing and fingerspelling, their distinctive properties, and the points where the two meet, as in the large set of initialized signs” (1985, 171).

7.4.5. *Other developmental case studies*

In another developmental study where Maxwell (1983) reports on the case study of a DCDA, who first kept the two codes separated at age 8 years and subsequently continued to mix or link the two codes in patterned ways in the way that her Deaf parents used the two languages. Maxwell suggests that “mixing the two codes” was a natural part of *bimodal-bilingual* communication in Deaf settings.

Maxwell and Doyle (1996) suggest that the emphasis on the two separate codes or even signing that follows the English word order are *models that assume that Deaf children learn these codes “intact” and in isolation from one another*:

“It pushes us to assess levels of competence at reproducing the codes or to list the elements from each code that a child has ‘acquired’. The trouble with this analysis is that it implies that the individual selects features from two (or more) reified systems (...) It is not only theoretically flawed but it is one more version of the *deviance approach to deaf children’s communication*. We end up once again determining how far children are from the target; only now we have two targets, ASL as well as English” (1996, 128, emphasis added).

On the basis of their empirically grounded discussions, Maxwell and Doyle (1996) conclude that communication competence needs to be understood within specific social situations rather than in terms of narrow grammar units. They suggest that educational policy makers need to come to terms with the *nature of variation*, including the continuum of language codes and

mixing that is evident from in-depth micro level studies, in order that they do not continue to distort “children into unrealistic images”:

”[the] code may vary along a continuum of speaking as well as continuum of language codes, with more reliance on speaking for some better hearers and variations in inclusion of ASL and English features in different relationships. As long as members of the community see this mixing as undesirable – and both English-preferrers and ASL-preferrers (...) currently see this as undesirable – they will miss many of the competencies of communicators in the community” (1996, 134).

Maxwell and Doyle thus point to the need for focusing on non-prescriptive ways of understanding how members of the Deaf communities use the two codes in everyday situations and how they socialize newcomers into the culturally appropriate ways of using the two codes. They also highlight the importance of studying the everyday communication-practices themselves and not just what members of Deaf communities report as being desirable, thus drawing attention to the discrepancies between status and attitudes towards prescriptive linguistic behaviors and the patterns of what people do and how they go about accomplishing the same in their everyday lives.

The work reported by American Deaf researcher Arlene Blumenthal-Kelly (1995) can be seen as yet another early empirically driven piece of research which explicitly focuses upon the multi-layered and complex interrelationships in the ways in which competent members of Deaf settings use ASL and written English. Blumenthal-Kelly also studied the developing fingerspelling skills of a DCDP from infancy to toddlerhood. The only available text from her “work-in-progress” is reported as being part of the “Culture and Communication Studies Program (CCSP)” at Gallaudet Research Institute which,

“has collected ethnographic data on Deaf children on Deaf parents by videotaping these families at home and appending field notes. Spontaneous interaction between children and their parents and other relatives is taped, capturing household activities such as storyreading, play, mealtimes, bedtime routines, and even a parents birthday” (Blumenthal-Kelly 1995, 62).

Videotaped data on Debbie – a fourth generation Deaf child – was collected from the time she was 5 weeks old. Blumenthal-Kelly analyzed 31 hours of interaction, transcribed all fingerspelled items that the adults and Debbie produced (she subsequently eliminated fingerspelled items that Debbie might not have seen) and focused

“on items that the parents and other adults intentionally fingerspelled to Debbie. Also included were instances when either parent fingerspelled to the camera-person or to the other parent with Debbie earnestly watching the discourse” (1995, 65).

An additional step in the analysis focused on the local level context in which the fingerspelling occurred. This latter analysis led Blumenthal-Kelly’s identification of a common pattern of linguistic behavior where fingerspelled

items could be regularly found. This she coined “*Mixed or Sandwiched ASL phrases*”:

“Such a phrase is one in which initial and final items of one variety (i.e., either signed or fingerspelled items) occur immediately before and immediately after a medial item of another variety. In my earlier work, I noticed such patterns in which my subjects would combine signs and fingerspelling of the same or similar meanings. For example, my findings yielded the following: NUN#NUN NUN;²³⁰ LOST M-I-S-C-A-R-R-I-A-G-E;²³¹ WRITE D-O-W-N WHAT” (1995, 65).

Blumenthal-Kelly further describes a *full sandwich* (fingerspelled word, signed word, fingerspelled word) and a *half sandwich* (fingerspelled word, signed word or vice versa). The analysis of Debbie’s communication and the communication around her is reported as showing that adults started fingerspelling to her already at age 8 weeks. Ages 7–18 months saw a great increase in fingerspelling of items and between 19–24 months the parents “promoted the learning of fingerspelling by identifying individual letters on blocks” (1995, 66).

24–36 months saw the parents use of other fingerspelled items increase and since Debbie was attending preschool by now, Blumenthal-Kelly argues that “we saw some sophistication in her use of lexicalized terms such as #NAP, #TV, #JOKE, #NO, and #OK” (1995, 67). Adults in Debbie’s environment are reported to have been using half and full sandwiches from as early as age 9.5 months. Sandwiching was often used by the parents for labeling objects, at specific points in a conversation and while reading stories.

“Sandwiching, either half or full, appeared useful in labelling objects – introducing the orthographic form as well as the ASL form – and occurred frequently in the signing of Debbie’s parents. They tended to point at an object, then fingerspell, and finally sign. This behavior also occurred in reverse order: signing, fingerspelling, then pointing. Sandwiching also appeared frequently in reading stories and included in this context, pointing at the graphics in the books. It became apparent that sandwiching, in addition to pointing, is used frequently by Deaf parents in the early education of their young Deaf children” (1995, 71).

7.4.6. C. Erting’s 1982 doctoral study

Carol Erting, currently professor of Education, Gallaudet University, USA wrote her doctoral dissertation titled “Deafness, Communication and Social Identity – An anthropological analysis of interaction among parents, teachers, and deaf children in a preschool” in 1982 at the Department of Anthropology, American University, Washington DC, USA.²³² In a 1985

²³⁰ Following Battison (1978), lexicalized fingerspelling in the international English literature is often represented by “#” preceding the capitalized words.

²³¹ Hyphenated capitalized words represent transcribed fingerspelled items in the literature.

²³² An abridged version of this doctoral thesis was published subsequently in 1994 by Linstock Press.

article published in *Sign Language Studies*, C. Erting (1985a) reports directly from her doctoral dissertation and, like La Bue's work discussed above, describes the rationale for using a variety of research methodologies – both micro and macro approaches – in research in the Deaf area:

“There has been a recent trend in educational research toward the use of ethnographic methods. Often ethnographic studies of classrooms are microanalytic, detailed analyses of recorded video and audio data. While yielding insights into interactional processes that might not have been obtained through other research strategies, these studies can be most useful when the microanalysis is supported by macroanalysis. By approaching research questions from a variety of perspectives on both the micro- and the macro-levels, researchers may achieve an understanding of social life that would not have been possible had the questions been pursued from only one perspective and data examined at only one level of analysis” (1985a, 111, emphasis added).

C. Erting's doctoral research combined both a microlevel analysis of everyday interactions and a sociocultural analysis of groups in an educational setting in order to throw light on the question: “What are the communication patterns that emerge when Deaf and hearing parents and teachers interact with deaf preschoolers” (1988, 194).²³³ In addition to presenting group level analysis of identities and goals of hearing and Deaf adults in the school situation, C. Erting also empirically discusses the local level interactions of a hearing teacher and three Deaf children. She reports that all the self-descriptions of communicative behavior by the teacher in interviews “were contradicted by analysis of the videotapes of her communication with the children” (1985a, 120; see also C. Erting 1985b). C. Erting reports that (i) training as a teacher of the Deaf and the special philosophy during that training which views “deafness as a deficit condition”, (ii) the teacher's relative comfort with and enjoyment of interacting with the children, and (iii) the teacher's own identity and experience as a hearing-person were three primary factors that influence the teacher's communicative behavior during her one-on-one interactions with the Deaf children. She suggests that the philosophical orientation of *teacher education programs* have an important bearing on how teachers perceive their own roles in educational settings. In addition, on the basis of her empirical analysis, she suggests that

“interactions between hearing adults and deaf children are structured by the adults primarily according to their understanding of themselves as speakers of a language who interact with others who are hearers of that language” (1985a, 124).

This research also suggests that,

“deaf children were learning about themselves and their places in the world through interactions with both Deaf and Hearing adults. These interactions

²³³ C. Erting's subsequent post-doctoral research and collaboration in Deaf schools resulted in a number of journal and book articles where different aspects of linguistic and social interactions were pursued in further detail. See further below.

were shaped by competing social identities (“Deaf” and “Hearing”) symbolized by competing linguistic systems (ASL and MCE²³⁴)” (1988, 195).

C. Erting reports on the cultural conflict between hearing educators and Deaf parents in a school setting she was studying and was a teacher in, in a 1985 article in the *Anthropology and Education Quarterly*. By describing the narratives of Deaf and hearing parents vis-à-vis the communicative challenges that they faced in their everyday lives, C. Erting frames the stage for discussing how the hearing educators position themselves in their professional roles in the school setting. While acknowledging the diversity of views within the two primary groups, she discusses two predominating perspectives that emerge in this study: *the educator view of deafness* and the *Deaf parent view of Deafness*. The longitudinal and in-depth micro and macro level analyses suggest that teacher education courses need to incorporate cultural, linguistic and cognitive dimensions of Deaf communities. C. Erting also suggests that while more Deaf personell need to be hired in schools for the Deaf, Deaf children need to meet *both* Deaf and hearing educators in a “team approach” in institutional settings:

“One way in which schools might provide an environment of skilled communicators for deaf children is to use a team-teaching approach with one Deaf teacher and one hearing teacher in each classroom. Not only would such an arrangement provide the deaf children with native speakers, skilled signers, and positive role models, it would also demonstrate productive cooperation between hearing and deaf people who respect each other and each other’s competencies. In addition, it would provide the teachers themselves with an ongoing opportunity to learn about each other’s language and culture” (1988, 216).

7.4.7. *Studies by Padden and her colleagues during the 1990s*

In a chapter from a 1996 anthology, Padden (1996b) summarizes her work with LeMaster (discussed earlier; see also Padden 1996a, 1993, 1991) and describes the early bilingual lives of Deaf children and also draws conclusions from these studies as a means of understanding *bilingualism in Deaf adults*. Padden first makes the case that bilingualism in Deaf individuals is difficult to define conceptually and then points out that

“the language lives of Deaf people involve *constantly moving between languages*, ASL and English, and between cultural worlds, the worlds of ASL signers and English speakers (...) Hardly a day goes by without changing languages and changing channels, from signing to reading, from writing to signing, and back again” (1996b, 100, emphasis added).

Her point of departure is a sociocultural re-framing of

“the discussion of bilingualism in Deaf signers (...) Instead of inquiring in the abstract whether bilingual signers have equal competence in ASL and English,

²³⁴ Manually Coded English.

the question becomes: What are the contexts of their contact with English, and how do these contexts shape their knowledge of English” (1996b, 101).

This perspective is in line with theoretically motivated interests of the meta-research study presented in this book. Framing issues in terms of the problems of defining deaf people in terms of a single population and the fallacy of matching deaf people’s English or Swedish language skills against an abstract or idealized notion of linguistic competence is highlighted by the studies being discussed in the present chapter. Padden is critical of the fact that studies of

“ASL acquisition have focused primarily on an aspect of grammatical structure and the way in which the Deaf child masters this structure over the course of development (...) But these studies pointedly avoid discussing how these same children acquire English structures alongside their mastery of a signed language. If during the course of research on ASL morphology, for example, the child produces fingerspelled items or uttered English words, or perhaps interacts with written text while signing, the English language activities are not reported. *The result is an incomplete view of the dual language lives of Deaf children, especially their acquisition of English as they are acquiring ASL*” (1996b, 102, emphasis added).

Padden (1996a, 1996b) also discusses and summarizes empirical examples of fingerspelled and writing and how the bilingual adults and 4 to 6 year old children and third grade students in a “Bi-Bi” residential school (1996a) in the studies conducted by her and her colleagues *moved between languages and systems*. Describing micro-level examples from a third grade science classroom, Padden uses the metaphors of “distance”, “linking” and “framing equivalences” to describe the teachers communicative style:

“Broadly, her style of explanation drew from *vernacular forms of talk* used in the Deaf community but adapted for use in the classroom” (1996a, 91, emphasis added).

The three terms that Padden uses to describe the teachers’ bilingual talk are briefly explicated here:

- *Distance*: The teacher is reported to have fingerspelled frequently “as a way of purposely highlighting scientific vocabulary to show its distance from everyday concepts in ASL” (1996a, 91).
- *Linking*: An intuitive process whereby the teacher “links” new vocabulary to already assimilated knowledge or artifacts by pointing and underlining.
- *Framing equivalences*: The teacher models various ways of moving between languages and systems:

“the systems of signing, fingerspelling, and print are not merely different languages or representations of different languages; they are markers of distance and proximity, of difference and similarity. The teacher skillfully uses the systems both to convey meaning and to convey systems of meaning – of the everyday to the scientific, of the familiar to the new” (1996a, 93).

On the basis of her studies on younger Deaf children, Padden concludes that

“what is most significant about young Deaf children’s early use of fingerspelling and written spelling is not only the uniqueness of the tokens they produce and how they match up (or do not match up) to English, but how the children actively seek to form correspondences between these systems and other categories of symbols, notably ASL” (1996b, 113).

While such work is significant in that it shows, like other studies discussed here, how *competent members* of Deaf communities socialize young Deaf members into culturally significant “ways with words”, Padden steers clear of a prescriptive agenda by noting:

“Before we ask whether the different routes are fruitful ones, we have to understand what these routes are. Then we can ask how these routes influence [children’s] subsequent command of English” (1996b, 114).

7.4.8. Ramsey’s 1993 doctoral study

Claire Ramsey, currently assistant professor at the teacher education program of United College, San Diego, USA and previously at the Department of Special Education and Communication Disorders at the University of Nebraska, Lincoln, presents an abridged version of her doctoral dissertation from 1993²³⁵, in a book titled “Deaf children in public schools. Placement, context, and consequences” in 1997.²³⁶ Ramsey reports that her research is based on a sociocultural perspective and

“ethnographic methods because I wanted to see mainstreaming and self-contained classes from the participants viewpoints” (1997, xiii).

She suggests that it is very important to examine the everyday practices and language use in public school settings where the majority of deaf children in the United States receive their elementary education:

“There are inexcusable gaps in our knowledge of the linguistic and social contexts of deaf education and of the communicative processes at work in these settings. Critically we also lack knowledge about the protagonists in deaf education, that is, deaf children themselves” (1997, 2).

It is proposed here that Ramsey’s work has significance beyond the confines of mainstream settings also in light of the fact that the lived realities of the overwhelming majority of deaf children everywhere in their “out-of-school-settings” resembles the settings of this doctoral study:

“For many deaf children for whom signing is their primary language, the contexts of schooling, and the people they interact with there (deaf and hearing

²³⁵ Titled “A description of classroom language and literacy learning among deaf children in a mainstream program”, written at the University of California, Berkely.

²³⁶ This constitutes Volume 3 of the Sociolinguistics in Deaf communities series by the Gallaudet University Press.

peers, teachers, and interpreters) play a critical role in their lives, especially if *they return to families and neighborhoods where there are few signers*" (1997, 2, emphasis added).

Ramsey's doctoral research focused on two classrooms: a primary grade "self-contained" classroom in a hearing school environment and a regular second grade classroom that had five deaf students enrolled in the afternoons. In the first classroom setting, Ramsey focused on two teachers, one sign language interpreter-cum-instructional assistant and three boys (the class included two other assistants and 10 other children). In the mainstream classroom, Ramsey focused on one teacher, 20 hearing children and five deaf students. Her data included both videotaped naturally occurring events that had a "recurring nature", field notes from participant observations, formal and informal interviews, and texts that were used and produced in the classrooms.

"I analyzed a variety of recurrent activities in the (...) classroom, including language study, journal writing, silent reading, and story reading/book-sharing period. These events provided consistent manifestations of the interactional rules of the (...) classroom as well as many examples of the ways the children used language to keep their own ideas and objectives at the forefront in their attempts to organize classroom activities and interactions for their own purposes" (1997, 23).

Ramsey critically analyzes the complex meaning of mainstreaming as it relates to demographic and achievement results, but more interestingly also to the social interactions and learning possibilities in these environments. The themes of "equality" and "reality" are examined through the ethnographic reporting of everyday life. Ramsey, for example, problematizes the role of the interpreter in the interactional spaces of institutional settings. In one section of the book, Ramsey discusses patterns of language use during literacy activities. The analysis of a few literacy activities from the "self-contained" classroom show different ways in which such a setting "provided multiple tools for gaining access to others, procuring information about language, resolving confusion, and gaining control of writing" (1997, 106). Ramsey concludes her book with two important messages that she reports having learned through her research:

Firstly, "even English, reading, and writing can be discussed using ASL" and secondly, "school for deaf children should be regarded as education first (...) first deaf children must be seen as genuine students who go to school to learn basic skills and to discover how to use their growing abilities and knowledge to continue learning through elementary, middle, high school, and beyond" (1997, 115).

In other words, Ramsey re-iterates the importance of the intimate nature of bilingual socialization activities and the need to focus on the use of both languages by children and adults in educational settings. She also raises a simple issue that can be seen as capturing an important element in both Deaf education and research on Deaf education: deaf children are invariably viewed as "deaf" primarily and this perhaps explains the continuing

domination of the “communications focused” methodological and philosophical discussions in the fields. There is in fact dire need to understand that deaf children are children and in the context of education they are “genuine students”.

7.4.9. *Studies at the Signs of Literacy, SOL, project*

An ongoing longitudinal research and developmental project and the various studies in that project have special significance to the issues being explored in the present study. The research project titled “The Development of Language and Literacy Skills among Deaf and Hard of Hearing Students in ASL-English Classrooms” was initiated under the leadership of Carol Erting in 1993 and is currently called the “Signs of Literacy” (SOL) project (see <http://sol.gallaudet.edu/>, September 2003). This longitudinal study of ASL and English literacy acquisition appears to be unique in a number of ways. In addition to being a collaborative research effort between faculty, staff and doctoral students at Gallaudet University and educators and administrators at the Laurent Clerc National Deaf Education Center, which also functioned as the school where fieldwork was and is being conducted, the longitudinal research agenda of the project focuses *both* classroom and home settings in order to understand individual Deaf children’s pathways to ASL and English biliteracy and bilingualism. The project description from 1993 (Gallaudet Research Institute 1993) states that

“by gathering and analyzing empirical data on the nature of everyday interactions in classrooms, this study will help us to understand the relationships among physical and demographic characteristics of students, language of home and school, social identity, and academic achievement, especially in reading and writing” (1993, 61).

The ethnographic, longitudinal and interdisciplinary research is reported as having two main goals:

“To study the sociocultural context of Deaf bilingual education and individual pathways to American Sign Language/English bilingualism for deaf children from diverse cultural and linguistic backgrounds” (C. Erting, Kuntze, Thuman-Prezioso, L. Erting & Bailes 2002).

During “phase one” of the project (1993-1996), 60 Deaf and hard-of-hearing children and five Deaf and six hearing teachers, all of who used “ASL and written English as primary languages of instruction” were followed (SOL 2002). The teachers in the project “all believed that learning is a social activity, grounded in and emerging from sociocultural interactions with teachers and peers in the classroom” (C. Erting 1999). Data collected during this phase are reported as including biweekly videorecordings in six preschool classrooms, fieldnotes from participant observations, teacher interviews and journals and school records.

“Participants in this project are committed to a collaborative process whereby teacher-researchers and members of the research team work together to collect, analyze, and interpret the data. Teacher-researchers were released from

classroom responsibilities one afternoon each week in order to meet with researchers and review videotapes. In addition, they spent five days in the research lab during each of the two summers participating in data analysis. These analytical sessions allowed teachers to reflect on their teaching as well as the children's progress, providing immediate feedback for the enhancement of classroom practice" (Graduate School and Research 1997, 2).

During "phase two" of the project (1999-present) new data is reported to be collected on six children who had been previously studied during phase one. These children are being focused upon because they "differ with respect to theoretically important linguistic, social, cultural, and educational background variables" (C. Erting, Kuntze, Thuman-Prezioso, L. Erting & Bailes 2002). The current phase is also reported to be focused on the analysis of existing data that includes 1,500 hours of classroom videorecordings, 600 hours of videorecordings from home settings of Deaf families whose children are being followed and 100 hours of interviews and videotaped reviews with teachers and parents, development of innovative database tool, dissemination of research findings and further analysis of data from both the project phases (SOL 2002). The project appears to be trying to accomplish a number of different theoretical and research-methodological objectives simultaneously. Thus for instance, the project group recently reported that their present concerns have expanded to explicitly include the following:

1. Present a theoretical framework arguing for a paradigmatic shift in the conceptualization and study of deaf children acquiring languages and literacies
2. Discuss methodological challenges of collecting and analyzing visually-based naturalistic classroom interaction" (C. Erting, Kuntze, Thuman-Prezioso, L. Erting & Bailes 2002).

While data collection seems to have been the primary focus of the SOL longitudinal project until now, on going findings are reported by the project team as having being made available through the following channels:

- "Publications:
published (2), in press (2), [doctoral] dissertations (2), manuscripts in progress (4)
Presentations:
To teachers, researchers, parents and deaf community (28)" (SOL 2002; see also <http://sol.gallaudet.edu/>, September 2003).

In addition to the recently completed doctoral research by two members of the research team Lynne Erting (2001, see below) and Laura Blackburn (1998),²³⁷ empirically grounded presentations from the project in recent years and two recently published book chapters (that discuss empirical data), have been the major contributions of this project so far to the small but growing knowledge base on communication-practices in Deaf settings. The empirical data available from both home and school settings in this project

²³⁷ Blackburn is currently coordinator of a teacher education program in Deaf education at Northern Illinois University, USA. Her Ph.D from 1998 is titled "Linguistic and cultural interactions among Deaf/hearing family members: Implications for family partnerships in early education" and was written at the Department of Education, Gallaudet University.

are potentially very interesting from the theoretical perspectives that frame the present meta-research study. Future reporting from this longitudinal project has the potential for allowing a better understanding of issues that have riddled Deaf education globally for centuries. The initial analysis that has been recently published (or presented) have focused on the home interactions of

“Deaf children born to college-educated Deaf parents who consider themselves bilingual in ASL and English and want the same for their children” and “upon entry to formal schooling within the context of ASL/English bilingual classrooms” (C. Erting 1999).

Some of the analysis reported so far suggests that the language environment in the project preschool classrooms can be characterized by the following:

- Adult and peer language models (ASL and English) and literacy models
- Language and literacy rich opportunities for interaction with adults and peers
- ASL as the primary language of instruction
- *Emergent literacy* perspective on literacy development
- Abundance of environmental print used in meaningful ways (eg. ABC/fingerspelling charts, daily schedules, children’s drawing/writing on display, labels marking materials and classroom areas, children’s names used in meaningful ways)
- Preschool classroom library area
- Preschool classroom writing centre
- Books and writing materials in various areas around the room
- Daily opportunities for writing/drawing (both group and individual)
- Daily opportunities for children and adults to interact about and with books (both group and individual) (C. Erting, L. Erting & Thumann-Prezioso 1999).

The analysis of the classroom data suggests that teachers beliefs regarding Deaf children’s abilities were in synchrony with the classroom practices they encouraged. The teachers

“practice demonstrated their belief that preschoolers could become fluent in ASL while at the same time becoming literate in English through meaningful, enjoyable interaction in a stimulating language and literacy environment” (C. Erting 1999).

It is also interesting to note that the reporting from this project suggests that “the similarities between the Deaf home environments [that were] studied and these ASL/English classrooms created continuity between home and school for the Deaf children from Deaf families” (C. Erting 1999). This probably suggests that the Deaf and hearing educators were able to create bilingual environments that resembled the linguistic environments that are common in visually oriented Deaf settings (like Deaf homes).

The empirically grounded reporting from the longitudinal SOL project, supports the work of other researchers presented in this chapter, and describes how adult-child/ren interactions in both the home and the school

settings makes use of initialized signing and “fingerspelling in literacy-related contexts to create meaningful relationships among developing representational systems the children were acquiring” (C. Erting 1999). Discussing routines employed in naming oneself and others when children are as young as two years of age, C. Erting reports that, elements were taken from ASL, fingerspelling and written English in the following combinations:

- Only ASL name sign
- Name sign + first letter of English name fingerspelled
- Name sign + first letter of name fingerspelled + first letter of name in print
- Name sign + name fingerspelled slowly
- Name sign + name fingerspelled slowly + printed English name

Similar kinds of routines are also reported in other interactions between very young children and Deaf adults when they are attending to other print like simple word books. While frequency of fingerspelling is not accounted for, evidence from the reporting in this American SOL project suggests that Deaf adults resort to fingerspelling very often even with children as young as 1;2 - 2 years of age. This is in line with the reporting by Padden and LeMaster (1985) and La Bue (1995) (see above). For instance a mother is reported as connecting the picture of a cat and a kitten to the concepts cat and kitten and the signed and fingerspelled representations for those concepts:

“CAT C-A-T and BABY CAT K-I-T-T-E-N” (C. Erting 1999).

C. Erting (1999) explains that the project group’s initial analyses have focused upon fingerspelling and different ways in which this representational system is used to mediate text in bilingual settings following the work of Deaf researchers like Arlene Blumenthan-Kelly (1995; see above) and Carol Padden (1996a & 1996b; see above). C. Erting suggests that the work of these researchers is important since they have reported on the routine usage of this representational system and its significance in “bridging or linking” the two languages. C. Erting too identifies this patterned use of the two language codes in terms of the empirically grounded concept “chaining”.

At the recent international Deaf Way II conference in July 2002, members of the longitudinal SOL project presented initial results from three on-going studies based on data drawn from different parts of the larger project. The first was related to the ongoing post-doctoral work related to L. Erting’s (2001) Ph. D. thesis (see further section 7.4.13 below) on teacher mediation using ASL during book sharing. The second on-going project was related to case studies that throw light on the individual pathways of two Deaf children becoming bilingual. And the third was related to how Deaf parent’s scaffold children’s bilingual learning during parent-child interaction at home settings.

More recently members of the SOL team have also focused on a Deaf family with two Deaf siblings and have presented an analysis of the use of fingerspelling in everyday interactions from viderecordings at ages 3, 6, 9,

12, 18 months and until the children were 4.3 and 2.10 years respectively (C. Erting, Thuman-Prezioso & Benedict 2000). Interested in the role of fingerspelling in the first three years of interaction and literacy development, the research team attempted to throw light on the questions:

“What is the timing and the nature of the Deaf infant’s earliest exposure to fingerspelling; what are the linguistic and interactional contexts within which Deaf parents use fingerspelling with their infants, toddlers, and preschoolers; and how is emerging fingerspelling related to other representational systems the child is acquiring (ASL and written English)” (2000, 45).

The findings reported in this study suggest the common use of fingerspelling in interactions involving children as young as a *few months of age*:

“the first videotape of D at 5 weeks 3 days of age, Mom and Dad fingerspelled one word, A-T, and the loan sign #OR during communication directed at the infant, but there were 125 fingerspelled productions of 85 different words that took place during communication among the Deaf adults present and within the infant’s visual field” (2000, 47).

The parents are reported to using six or fewer fingerspelled words directed explicitly to their children per 45 minutes video session during the first two and half years of life and as exposing them to much larger amounts of fingerspelling as it occurred in other adult-directed signing. These fingerspelled words are predominantly nouns and occur in the flow of ASL talk (see also Blumenthal-Kelly 1995, Padden & LeMaster 1985 above). Referring back to the accumulative knowledge base in her own research group since her own doctoral research in the early 1980s, C. Erting adds that

“Two decades ago, when we began our studies of preschool children and their families, Deaf parents repeatedly objected to preschool hearing teachers inventing signs for words such as bus and truck instead of fingerspelling. In videotaped data collected at that time, the Deaf adults we videotaped fingerspelled much more frequently to their preschool children than the hearing adults. When ethnographers trying to make sense of a cultural scene get the same message repeatedly, they know they have hit upon a *key to solving a cultural puzzle*. It is then that the painstakingly careful work of cultural analysis begins, analyzing a variety of contexts and cultural factors to find the patterns hidden below the surface. Our work is to find the relevant pieces of the puzzle and put them together so that we can better understand what the experts – Deaf people themselves and the hearing people who work with them – have learned about *how to be bilingual in the Deaf way*, and how to pass this cultural knowledge on to the children of their community” (1999, emphasis added).

The “cultural puzzle” that C. Erting refers to is the puzzle regarding why and how some Deaf children and adults manage to become competent users of the written majority language code. The “key” that she alludes to is what Blumenthal-Kelly has called “sandwiching” (1995) and Padden (1996a), Humphries (1997), Humphries and MacDougall (2000, see below), members of the SOL project and others have in the second half of the 1990s called “chaining or linking” in the North American context.

7.4.10. *Some further studies on fingerspelling and their implications' in signing settings*

While the reporting on fingerspelling in the international literature has been occurring at least since the early 1980s,²³⁸ only in the very recent past have researchers become engaged in systematic empirical studies regarding the role/s that fingerspelling potentially plays as a “bridge” between the two languages in bilingual Deaf settings. Thus for instance, discussing “how the alphabet came to be used in a Sign Language” Padden and Clark Gunsauls (2003) suggest that

“as the manual alphabet made its transition from the religious to the educational, it must have undergone significant adaptations as a tool. While the religious used it to convey speech in silent form, educators used it in the service of language education for deaf students” (Padden & Clark Gunsauls 2003, 12).

In addition, while evidence exists that different SLs in Europe, North America, Asia and Australia have different fingerspelling systems and fingerspelling can be seen in the earliest filmed records of SLs from the beginning of the 20th century, this “seems not to have discouraged the popular sentiment” that fingerspelling is English or other written language and that its presence in a given SL is marginal (Brentari & Padden 2001, 102). Brentari and Padden and the researchers whose work is presented in this chapter appear to view fingerspelling as a system both *apart from but also related to* the two codes used by bilingual members of a given Deaf community. The role of fingerspelling in signing settings has been discussed most widely in the (published) literature on ASL. Brentari and Padden (2001) have studied the composition of the ASL lexicon and focus particularly on the status of the types of words containing fingerspelled letters. They suggest that

“the long-standing presence of sequences of fingerspelling has made it possible for fingerspelling sequences to become routinized and for words thus derived to become structurally integrated in sign languages” (2001, 103) and that “although ASL has had intimate contact with English since its beginning, the mechanisms for borrowing English elements into the language – both morphological and phonological – are constrained, systematic, and expressed within the grammar of ASL” (2001, 117).

C. Erting, Thuman-Prezioso and Benedict's (2000) study also reports on “linking ASL signs and fingerspelling” in interactions between Deaf adults and Deaf children when the latter were as young as 17 weeks old. They also report that “an interactional context that becomes increasingly central to parent-child dialogue involving fingerspelling is one characterized by the presence of written English” (2000, 49) and where there is

²³⁸ See for instance Akamatsu (1985), Akamatsu and Andrews (1993), Blumenthal-Kelly (1995), Maxwell (1988), Padden (1996a, 1991), Padden and LeMaster (1985).

“explicit attention to letters and words in print. Using a variety of strategies including letter calling, chaining structures, and play practice with name signs and their fingerspelled translations, Deaf parents mediate English print for their children. The picture that emerges is one of children acquiring representational systems (i.e., ASL, fingerspelling, and English literacy) simultaneously within developmentally appropriate contexts that resemble the everyday lives Deaf people live as they move between languages and worlds” (2000, 52).

7.4.11. *Studies within the “Deaf students as readers and writers” project*

Padden and Ramsey (1996) present the findings of a joint project titled “Deaf students as readers and writers: A mixed mode research approach” in a report to the US Department [Ministry] of Education (see also Padden & Ramsey 1998). While two of the six studies in the project are reported as having a “quantitative” foci (these were discussed earlier in Chapter 5.4), four studies are reported as having a “qualitative” foci. The latter:

“examined instructional strategies employed by teachers in two distinct settings who use different modes of communication during reading and writing instruction. These studies were coupled with analysis of deaf and hard of hearing students’ responses to instructional language as documented in their interaction and engagement with instruction, in their reading and writing practices and in their written products” (1996, 1).

83 deaf and hard-of-hearing students from a state-supported *residential* school for the deaf and 52 from “self-contained” classrooms in a *public* school participated in the project. The quantitative and qualitative studies informed one another and the project is reported as

“as an assessment of the impact of observed classroom language use, instructional techniques and school setting on reading achievement” (Padden & Ramsey 1996, 1).

The first qualitative study involved the analysis of six 15-minute segments of seven teachers (four from the residential school and three from the public school) in six different classrooms (ie. a total of 42 segments) from 90 hours of videotaped classroom data. Two primary results are reported from this study. *Firstly*, deaf teachers are reported to fingerspell twice as often as hearing teachers. *Secondly*, the teachers who fingerspell often tended to repeat the same fingerspelled item a number of times in the same segment.

“Very often fingerspelling was used in what we called ‘chaining’ structures. Chaining is a technique used by some teachers to form a relationship between a sign, a printed word, and a fingerspelled word or sometimes all of them together. In this technique, a teacher might, for example, fingerspell a word, then immediately point to the same word printed on the backboard, and fingerspell the word again. Or, a teacher might produce a sign and then fingerspell its English translation immediately after. This technique seems to be a process for emphasizing, highlighting, objectifying and generally calling attention to equivalences across texts and languages” (1996, 9).

Interestingly, Padden and Ramsey also point out that their data included a native signer in a public school setting who used little chaining and hearing teachers in the residential setting who used more of this linguistic behaviour. They thus suggest that fluency in ASL cannot be seen as the only defining factor with respect to use of chaining.

The second qualitative study focused on the *types of interactions that were initiated* by teachers, the deaf and hard-of-hearing students and their peers. The number of deaf and hard-of-hearing students in the residential school setting is larger at different school levels as compared to the public school setting (101 as compared to 70 at elementary level; 105 as compared to 18 at middle school level). Padden and Ramsey report that while “a great deal of instruction is carried out individually” in the public school classrooms, the greater part of the instruction in the residential school classrooms “is carried out as whole class activities, often in discussions where all students are expected to participate” (1996, 10). Residential school teachers expect their classes to behave as classes, while public school teachers work with students individually. They also report that while the larger class sizes in the residential schools gives students responsibility for paying attention to the teacher during class activities, the smaller class sizes in public school settings means that “teachers are always close enough to students to touch them to get their attention” (1996, 10). While Padden and Ramsey emphasize that individualized teaching in itself may not indicate “poor pedagogy”, they make an important point in relation to what opportunities deaf students have in “small” school settings:

“The majority of public schools simply do not have enough deaf children in their districts to create many groupings by ability, although 70% and 80% of deaf and hard-of-hearing students attend a public school program. The residential school in our study has more choices in classroom grouping because it draws from a larger pool of students” (1996, 11).

Padden and Ramsey’s third qualitative study focuses upon *reading behaviors across the settings* with the aim of *firstly*, discovering possible clues in reading achievement reflected in their observable text approaching strategies. The *second* aim was to study the students exposure to fingerspelling and print in the classroom. The data used in this study was generated by an “aided read and re-tell activity” involving stories at or slightly above each student’s reading level (1996, 12). The activity is reported to have been videotaped and transcribed. The transcript reading was then compared to the target story and coded for different miscue categories. In addition, fingerspelling, mouthing, use of items from the SEE lexicon and the ASL lexicon was noted. The re-telling activity helped see whether students had comprehended the story.

Two contrasting patterns of observable reading behavior are reported through the presentation of two cases of DCDP’s whose reading strategies are distinct even when their reading scores are almost the same. The first dominant strategy focuses individual words where reading was equivalent to

“mapping individual signs onto print words or morphemes” (1996, 12). Such reading is reported as not responding to the text, not indicating dialogue or character shifts, and not displaying sentence boundaries or punctuation marks. It also frequently uses SEE lexicon, and while ASL signs are used they are reported as being uninflected and not used with classifier predicates. The second dominant strategy “was to look at sentences or even larger text structures, and seek coherent meaning in them” (1996, 13). Other aspects of this strategy are reported to being the opposite of the first dominant strategy.

Padden and Ramsey hypothesize that readers who use strategy one “are less able to comprehend extended text, and as a result, we suspect, have less ability to access new vocabulary from print text (a primary source of vocabulary growth as young readers practice and develop fluency)” (1996, 13). They also suggest that readers who use strategy two have the ability to “exploit the translation potential between ASL and English, a relationship that we consider critical for ASL signers who are becoming English readers” (1996, 13-4). Padden and Ramsey conclude their study by hypothesizing that

“these differences are artifacts of experience and pedagogy. Simply put, deaf children are taught how to orchestrate their language competencies differently in the two settings” (1996, 14, emphasis added).

In the last of the four qualitative studies in their project, Padden and Ramsey focus on “*characteristics*” of teachers and their “views” of their students’ achievement. The data for this study comprises four interviews of teachers from classrooms in the two settings where fieldwork was conducted. A theme of “individual teaching/group teaching” of student/s underlies the teachers’ narratives and is closely linked to the findings reported in the second qualitative study of the project. While both the residential and public school classrooms have a range of students (as far as abilities are concerned), the two teachers are reported as *responding to this diversity differently*:

“The public school elementary teacher claimed that she simply could not hold whole-class activities. She also stated that she believed that each deaf student must be seen as an individual, and that deaf children in general are more effectively taught as individuals, or in very small groupings. In order to carry out teaching with this group of students, she prepared many individual lessons tailored to what she perceived as students’ individual differences (...) The residential elementary school teacher, in contrast, was not as compelled by the belief that deaf students must be seen as individuals. During his interview he spoke of his class as a group, while recognizing the strengths and weaknesses of each of the children (...) he considered teaching his class as a group to be routine, and not extraordinary, as other residential teachers did, despite the range of children in his class” (1996, 15).

The work reported by Padden and Ramsey in their different sub-studies throw interesting light on a number of issues that play a central role in Deaf education and particularly in the opportunities that Deaf students can receive in different types of settings. Reporting from a sub-study from this larger study, Humphries and MacDougall (2000) attempt to specifically

“identify and understand how teachers, deaf and hearing, in different types of classroom environments, engage in an interplay of ASL and English texts during instruction of deaf children” (2000, 85). Two school settings are focused – a state residential school for the deaf which identifies itself as a “bi-bi” school and a public school with a large number of deaf and hard-of-hearing pupils who attend self contained classrooms or are “mainstreamed”. The second school identifies itself as a “Total Communication” school.

Humphries and MacDougall report that fieldwork was conducted at each school during three separate weeks during the course of one year. Lessons were videotaped during these weeks and “sample segments of classroom instruction were selected from the large number of hours of videotape” (2000, 86). Six 15-minute segments were identified for seven teachers, four from the residential school setting and three from the public school setting. Three teachers (one public school and two residential school) are reported as being “native signers” and three are reported to be deaf (one public school and two residential school). Each of the “sample segments were closely coded and analyzed with the goal of identifying the ways that ASL and English interact with each other in various forms” (2000, 87). Humphries and MacDougall present their analysis “of who does what in which type of setting” (2000, 87) under the categories:

- Use of print
- Initialized signs
- Fingerspelling
- Chaining
- Introduction of new vocabulary

All seven teachers are reported as using print in the classroom in similar ways. While Humphries and MacDougall report that there is little difference in the frequency of use of initialized signs by deaf and hearing teachers, a slight difference is noted in the frequency of initialized signs used between the two settings (slightly more in the public school setting). This study throws light on some significantly different ways in which teachers (deaf and hearing) in residential school settings and deaf teachers in the public school setting make use of “fingerspelling”, “initialized sign usage” and “chaining” during instructional activity. The four residential school teachers make use of 123 (hearing), 268 (Deaf), 115 (Deaf) and 102 (hearing) fingerspelled items as compared to 44 (hearing), 146 (Deaf) and 31 (hearing) items in the data from the teachers in the public school setting. The use of chaining also follows a similar trend.

Humphries and MacDougall report that “the teachers who fingerspelled often also tended to repeat the same fingerspelled word several times throughout a segment” (2000, 90). Chaining is reported during times when new vocabulary is introduced and Humphries and MacDougall suggest that

“teachers who use it seem to do so naturally, assuming that children need to be given the various forms of the new vocabulary, in print, fingerspelled, and signed forms” (2000, 92).

Teachers are reported to using different approaches when presenting new vocabulary: (i) use of compounding, where signs are used in combinations; (ii) use of ASL signs and shape specifiers and (iii) use of strong facial markers. While Humphries and MacDougall draw attention to the fact that such language use marks both the distance between ASL and English and bridges the gap between them, they also suggest that

“the cultural in a ‘bilingual, bicultural’ approach to educating deaf children rests in the *details of language interaction of teacher and student*, not just in the enrichment of curriculum with deaf history, deaf literature, and ASL storytelling” (2000, 94, emphasis added).

7.4.12. *Literature on ethnically diverse Deaf educational settings*

While the sociolinguistics of spoken languages has a relatively long history, the sociolinguistics of SLs is a much younger science. The heterogeneity of SLs, like the heterogeneity of spoken languages, is based

“on variation occasioned by the race, ethnicity, age, gender, and social status of its speakers (...) Overlooking variation may make linguistics simpler, but sooner or later, somebody is going to notice that people don’t use language the way the grammars prescribe it” (Shuy 2001, xi).

Conspicuously little research with a focus on communication-practices and “ethnically diverse” Deaf students has been identified in the literature. However as the themes discussed in Chapters 5 and 6 indicate, there has been considerable interest in analyzing the different oral-signing contexts that Deaf/deaf children grow up in. In other words, the cultural context of hearing and Deaf families and school settings has been the focus for many years. Both in Sweden and in international settings, the possible role of “linguistically or culturally or ethnically” diverse families with deaf children is raised in discussions related to the school achievement of deaf students. However the lack of empirical data on this subgroup of children and the contexts of their home and school lives, impedes a clearer understanding of how and in what ways ethnic diversity could be contributing to this picture.

A recent anthology edited by Kathee Christensen (2000b) titled “Deaf Plus: A multicultural perspective” is interesting in that it “shifts the margins” from *bilingual-bicultural arenas to multilingual-multicultural arenas* in the area of Deaf education. In one of the contributions in the anthology, Olga Welch, professor of Rehabilitation and Deafness Program at the University of Tennessee at Knoxville, USA underscores the importance of focusing on issues of diversity in the area of Deaf education:

“While attention to the importance of Deaf Culture (it’s history, values, and commitments) is critical in preparing teachers who will work with Deaf students, uniform definitions which exclude or seek to downplay issues of race, ethnicity, gender, class, and sexual orientation provide these same teachers with only a partial understanding of that culture” (Welch 2000, 4-5)

“Educators of Deaf students need to consider a form of multicultural education that is not an isolated addition to the curriculum nor a vehicle for promoting monocultural, uniform Deaf Culture. Multicultural curricula can and must provide educational opportunities to build the kind of critical dialogue about diversity that includes and benefits Deaf students from all ethnic and cultural backgrounds” (Welch 2000, 26).

One of the few studies that addresses issues of ethnic diversity within Deaf culture, from a “differences” perspective rather than a “deficiency” perspective, is the work of Barbara Gerner de Garcia, professor at the Department of Educational Foundations and Research, Gallaudet University.²³⁹ Gerner de Garcia (1995) has presented a “communications study” of three Spanish-speaking families with deaf children.

“An ethnographic approach was chosen to gather data on language use in the homes. It was important to study family communication in the home environment where the deaf child was surrounded by family members in order to provide a picture of the dynamics and complexity of a trilingual environment” (1995, 224).

The research foci are reported to have included “the patterns of language choice and language use in Spanish-speaking families with deaf children” (1995, 227). In addition to focusing on the use of “code-switching”, literacy practices in the families were focused upon. Gerner de Garcia reports that “acceptance of deafness” was a striking theme in the lives of the families and that acceptance of the child’s deafness involved a progression in *three stages*: acknowledgement of the deafness, accommodating to the condition and finally accepting the condition. Gerner de Garcia also reports that the deaf children themselves appeared to use more strategies to communicate with their hearing family members than the other way round. These strategies involved “adopting hearing members’ forms of using home signs, gestures, foreign signs, and oral Spanish” (1995, 240). In addition, it is reported that none of the children used written communication with their family members. Gerner de Garcia suggests that this may be in line with the findings on DCHP more generally where written communication is not stressed in home settings. Supporting the discussions in the literature, she also suggests that,

“Hispanic deaf students’ lack of success should not be seen as their fault but rather must be seen as a result of the interaction between educational institutions, the Hispanic deaf students, the individual student, and society overall” (1995, 242) (...) “Deaf education has been slow to incorporate principles of bilingual education, ESL²⁴⁰ methodology, and multicultural

²³⁹ Gerner de Garcia is currently director of THREADS, a US federally funded project for the preparation of teacher leaders for multicultural education of the Deaf.

²⁴⁰ English as Second Language.

education (...) As a result, schools and educators dealing with multicultural deaf children, particularly those from linguistically diverse families, may view their differences as something to ignore (being color-blind) or eradicate or perhaps as an additional handicap” (1995, 241-2).

Another piece of research that deconstructs static notions of boarders and cultures examines “the social context of education among a group of Mexican heritage families with deaf children in Southern California” and acknowledges that

“it is not uncommon for educators of deaf students to work from the assumption that the status of ‘deaf’ precludes a child’s membership in an ethnic group and effectively wipes out his or her ethnic identity” (Ramsey 2000, 123).

Ramsey reports on the use of a range of qualitative methods, both inside and outside school settings, over a five month period in order to study (i) the mix of languages in classrooms with “Mexican heritage” Deaf children; (ii) school personnel’s perspectives on teaching “Mexican heritage” Deaf children; and (iii) parents and communities perspectives on raising and educating Deaf children. Ramsey briefly describes the “underground multilingual world” where ASL, English and Spanish were used (2000, 132). She also highlights how the “anglo” teachers had created a problem for themselves “because they were unable to make sense of the Mexican heritage parents’ actions on behalf of their deaf and hard of hearing children” (2000, 137) and concluded that these actions were associated with the problems that students had in school. In contrast, Ramsey portrays Mexican parents’ perspectives in terms of the latter’s belief systems and the problems that these are seen to impose in the school setting. While Spanish is not accorded any pedagogical role in the school, this language becomes the external marker of ethnicity in the school setting. More importantly, Ramsey argues, teachers perceptions of parents’ attitudes and roles are crucial to making available opportunities for learning even in the school setting:

“School and classes for deaf children are not rendered bilingual, bicultural, multilingual or multicultural simply because of their location or their student population. Rather the task is to adapt and alter schooling practice in order to find meaningful ways to engage both children and their parents” (2000, 145).

It appears, on the basis of the meager literature that currently exists in the area, that multilingual Deaf students from hearing minority home settings are either (i) totally ignored in the context of Deaf education or they are (ii) viewed as students with “additional” problems. There appears to be dire need to focus on the repertoires of communication-practices that these children participate in both in their home and in their school settings.

7.4.13. Some Ph.D. studies at the turn of the millennium

A couple of doctoral dissertations in the 1990s have focused on literacy practices in Deaf preschool settings. These can be understood as belonging to the research focus of “emergent literacy”. In 1991 Claire Rottenberg

completed her dissertation titled “Literacy Learning is Important Work: Emergent literacy of preschool hearing-impaired children” at Arizona State University, USA. This research was conducted on DCHP’s who had limited access to both oral English and ASL. Through participant observations over a nine month period Rottenberg describes the educational setting as being “littered in literacy” and the children as not lagging behind their hearing peers. Rottenberg reports that the Deaf preschoolers displayed an explicit understanding that literacy was an integral part of their lives and that it was functional.

Cynthia Neese Bailes, Deaf associate professor of education at the Department of Education, and researcher at the Signs of Literacy research team at Gallaudet University, is also curriculum designer in the national Star Schools Project (see Chapters 5.5 & 6.3). Bailes completed her doctoral dissertation in 1999 from the University of Maryland, USA. Her dissertation was titled “Primary-Grade Teachers’ Strategic Use of American Sign Language in Teaching English Literacy in a Bilingual School Setting”. Bailes conducted an in-depth study of a bilingual Deaf school that was established in 1993 collaboratively through the efforts of teachers, parents and community members. This school was established

“expressly for the purpose of providing bilingual education to Deaf children and was the first such charter school for Deaf children to be established in the United States. An overwhelming majority of its teachers are Deaf, and all teachers are required to be fluent in ASL and English” (2001, 150).

Bailes also points out that by choosing this setting she hoped to avoid the

“confounding factors present in schools changing over from a TC to a bilingual philosophy. Such factors include disagreements about and resistance to a philosophy change and lack of a critical mass of teachers who are Deaf and/or fluent in ASL. I also assumed that this context of highly fluent users of ASL, of whom a majority were Deaf, would offer ‘the opportunity to learn’ in ways unavailable in other contexts” (2001, 151).

This doctoral research was focused on adult members of the school – four primary-grade teachers, two management team leaders and three parents – with whom Bailes reports conducting videotaped interviews. In addition, she followed and videotaped the teaching of two teachers in grades one and two during 90 class periods. In addition to other research questions, this doctoral study, was interested in the principles that the teachers “articulate and demonstrate as important for the use of ASL to teach English literacy” and the strategies that the teachers “use to teach English literacy through ASL” (2001, 149).

Bailes reports that ASL was used prominently in the school setting and that

“ASL was integrated seamlessly into the English language arts, which I have termed ‘Integrative ASL-English Language Arts,’ with the attending and signing modes replacing the listening and speaking modes of traditional language arts programs (...) Yet, *English was never ignored* in any grade level,

and there was abundant evidence of its use among teachers and students alike. Spoken English was attended to through pullouts for functional purposes; it was not considered a component of the language arts at [the school]. The teachers appeared to understand the relationships among the four modes and made explicit bridges between them” (2001, 151, emphasis added).

Bailes doctoral study identified “six principles and teaching strategies” which were viewed as the basis of Deaf bilingual education as it was understood in this school setting. These included:

1. *Provision of language models in both ASL and English.* Bailes describes this principle in the following words:

“Immersed in the literacy activities of their teachers, observing how these ready role models negotiated their way between ASL and English, and indeed observing how they used these languages in purposeful and even playful ways, the children learned by example what it meant to live literate lives as bilinguals” (2001, 152).

2. *ASL as the first and natural language for Deaf children.* Bailes reports that this was the unanimous belief of all the adults in the study.

“Because most of the children were from homes in which ASL was not the first language, the teachers served as natural language models, and their infusing of ASL into instruction throughout the day bathed the students in ASL, thereby giving them many opportunities in natural development” (2001, 154). “As the students moved up in grade, the emphasis between the two languages changed based on the students’ developing skills” (p 155).

3. *World knowledge as a prerequisite for written English literacy.* Storybook reading/signing, news sharing sessions and the use of situational contexts during class sessions are reported as being significant in contributing to world knowledge and spontaneous bridging between the different codes and structures.

4. *Promoting metalinguistic awareness and knowledge in ASL and English.* The teachers expected their Deaf students to display this awareness through, for instance, displaying knowledge about equivalencies and distinctiveness between ASL and English.

“The teachers switched back and forth between the two languages, making explicit comparisons between their rules and structures. They clearly bridged the two languages by signing, fingerspelling, writing, and pointing to printed English in subsequent and varying turns” (2001, 159).

Fingerspelling is reported as being frequently used by the primary grade teachers as a bridge between sign and print.

5. *Valuing approximations in both ASL and English.* The teachers are reported as encouraging their students to approximate translations from English to ASL and vice versa.

6. *Involvement of parents in the literacy lives of Deaf children.* This principle is reported as a recurring theme in literacy education and was valued by all the participants in the study. However, Bailes notes that

“although the teachers overwhelmingly agreed on the importance of parents in the education of their children, they did not appear to have figured out how to foster home-school relationships that fostered literacy. The school participants acknowledged this and stated a desire to improve” (2001, 170).

Bailes also reports that her study could not conclusively throw light on whether these strategies were helping students learning to read and write and how to better involve parents and the homes in the literacy development of the Deaf children.

Lynne Erting, currently researcher at the Signs of Literacy research team at Gallaudet University and teacher at the Laurent Clerc National Deaf Education Center, authored a doctoral dissertation titled “Book Sharing the Deaf Way: An ethnographic study in a bilingual preschool for Deaf children” in 2001 also at the University of Maryland, USA. Inspired from the “emergent literacy” research tradition, the study focuses on throwing light on how meaning gets constructed in the interactions between Deaf teachers and Deaf preschool children during small-group book sharing activities. Interactions between two Deaf teachers, two supporting adults (one Deaf, one hearing) and thirteen 3-5 year-old Deaf preschool children from diverse backgrounds (some of whom had special learning needs) were studied. The children’s parents were also interviewed as part of the doctoral research. The primary research questions included:

“What is the nature of book sharing in a bilingual classroom for Deaf preschoolers when the teacher is Deaf, the language used for face-to-face interaction is ASL, and the second language is written English? What are the ways that the Deaf teacher mediates the text in order to support active co-construction of meaning?” (C. Erting, Kuntze, Thuman-Prezioso, L. Erting & Bailes 2002).

L. Erting (2001) reports that the book sharing events were visually accessible, bilingual, interactive, co-constructive and supportive in nature and major features of these “biliteracy practices” included:

- Translating the pictures and print into ASL
- Using appropriate adult-child signing register of ASL
- Providing redundancy – this varied ASL complexity and offered multiple exposures to language and content
- Providing the kinds of scaffolding most Deaf children miss in their early years

The microethnographic examples presented in the dissertation are understood in terms of “culturally-derived biliteracy practices” (2001) that the teachers use to mediate text and to construct meaning with both groups of Deaf children and with individual Deaf children. The following five themes or patterns were identified in the analysis of data:

- Book sharing as situated within Deaf culture
- Complex, multi-layered nature of biliteracy practices
- The linguistic, cognitive and literacy foundation enabled in the context of book sharing
- Interplay of redundancy and time in the book sharing activities
- Similarities and important differences between young Deaf children and “culturally-linguistically diverse” hearing children during classroom book sharing activities

Through the presentation of in-depth empirical data L. Erting describes six primary ways in which the teachers mediate the written texts visually in book sharing activities. These include the translation process, presenting through variations in ASL, involving individual children, using cognitively challenging language, using questions and making connections between ASL and English. An overview of the findings in each of the six categories are also presented in the 700 page long dissertation. Thus for instance, the analytical category “making connections between ASL and English” which mediated book sharing is presented in five points:

1. The teachers made developmentally appropriate connections by concretely and linguistically connecting their signing with the pictures and print in the books.
2. The connections were continuous, smooth, rapid, and appeared throughout all of the book sharing events and were part of building the linguistic and cognitive foundation for future academic tasks.
3. Both teachers modelled different ways to sign the same idea and connecting ASL with the pictures and print in the books.
4. The teachers drew from the same set of strategies to link the languages; how they were used was determined by the developmental level of the group.
5. Metalinguistic links occurred occasionally within chaining structures that were referring to a part of the book itself (the title) or in connection with fingerspelling” (2001, 350).

While the Deaf teachers self-reported in interviews that the 3-4 year old

“children were not developmentally ready for explicit metalinguistic connections between the two languages (i.e., using signs like WORD, LETTER, ENGLISH, or ASL to discuss the languages). Instead, they explained that they made connections by concretely and linguistically connecting their signing with the pictures and print in the books. They believed that by repeatedly making these implicit links over time, they were exposing the children to several important language and literacy concepts that would contribute to the establishment of a strong foundation for becoming literate within their unique bilingual context. In general, both teachers moved rapidly and smoothly between ASL and the pictures and print in the book, modeling different ways to sign the same idea and connecting ASL with the pictures and print in the books” (2001, 350-1).

“Pointing to the pictures or to the print” and “fingerspelling” were reported as being striking ways in which the Deaf teachers connected and chained the two languages. L. Erting reports that the teachers often combined pointing to the pictures (85 percent of the time) or the print (15 percent of the time) with other strategies that centered around the book itself and that these strategies were “often part of a larger chaining structure that demonstrated

multiple links between the languages” (2001, 356). In addition, the pointing strategies are reported to being often *combined* with an ASL label, a classifier, “fluent English signing”,²⁴¹ fingerspelling and selected mouth movements that approximate specific words or parts of words.

Discussing the *multitude of ways* in which the fluent bilingual teachers connect the two languages in descriptive terms (rather than prescriptive terms) shows that sometimes the Deaf teachers “translations appeared to take on English-like qualities” (2001, 373; compare also with the discussion of the 1989 study reported by R. E. Johnson & C. Erting in section 7.4.2 above). Thus for instance, L. Erting reports that the teacher uses three ways to represent the title of a book: (i) the printed form, (ii) through the use of English-like signing and (iii) ASL. These three together constitute the chaining structure where the “fluent English signing” is used “as one of the equivalences in the structure” (2001, 375). L. Erting reports that the teachers appeared to use this intuitively and that they “did not discuss this topic in any of [their] interviews nor did [they] discuss it with the children” (2001, 376). While she does not analyze this specific routine behavior during the book sharing activities further, L. Erting suggests that the use of “fluent English signing” is intriguing and needs to be further investigated.²⁴²

Primary findings related to the routine use of fingerspelling during everyday interactions in L. Erting’s book sharing study included:

- Fingerspelling tended to be connected to ASL signs as well as to elements of the book “using chaining within chaining structures” (2001, 378)
- “Fingerspelling tended to be linked with one or more of the following equivalences (a) a sign, (b) the pictures or print (through pointing), (c) mouth movements that represented the word in spoken English, (d) a signed definition” (2001, 378)
- Teachers decisions regarding what to fingerspell appeared to be based on how they perceived the developmental level of the children, the importance of the fingerspelled word to the meaning that they were attempting to mediate, the children’s familiarity of the word and whether or not the word was in the text
- One of the Deaf teachers fingerspelled words in a list-like sequence of hand configurations called “spellings”
- Non-manual signals like body movement and head nods during fingerspelling appeared to offer clues about the English word
- Often strategies such as ‘distancing’ (from the usual space of signing) and ‘repeating the fingerspelling several times’ occurred within the chaining structures
- Often the word that is fingerspelled is clearly mouthed

Two examples of fingerspelled words T-E-E-P-E-E and Z-I-L-L-I-O-N embedded in communication-practices are described and discussed in-depth in the dissertation and illustrate many of the routine ways in which fingerspelling is used during book sharing activities.

²⁴¹ See also R. E. Johnson and C. Erting (1989; discussed above in section 7.4.2).

²⁴² See also a similar discussion in book-sharing activities in Bagga-Gupta (2002c; see further section 7.5).

7.4.14. *Concluding note on research focused on routine communication-practices*

Researchers in North America have during the second half of the 1990s described the ways in which members of Deaf educational settings *connect* ASL and English in everyday communication-practices. These researchers have also used the empirically grounded concepts like “sandwiching”, “chaining”, “chaining structures” and “linking” to describe this patterned use of both the languages in the *local level micro-interactions* in these settings. Thus for instance Carol Padden (1996a), Carol Padden and Claire Ramsey (2000, 1998), Claire Ramsey and Carol Padden (1998), Cynthia Bailes (1999), Tom Humphries and Francine MacDougall (2000; see also Humphries 1997) and the other researchers whose work has been discussed here have from studies of Deaf contexts presented empirical evidence of the “connectedness” and the purposeful associations of the two codes by competent bilingual members of American Deaf communities. These studies and their findings are also interesting since many of these senior researchers and doctoral students are themselves Deaf and members of these Deaf communities and are fluent in at least ASL and English. In other words the body of literature that is discussed here represents emic voices in the literature.

The recent literature on communicative-practices discussed in this chapter shows a marked interest in understanding the relatedness and connectedness between a SL and primarily the written variation of the majority language. Many of the studies discussed here describe everyday strategies and the resources that members use in Deaf arenas. Fingerspelling and the different kinds of “non-native lexicon in ASL” (Brentari & Padden 2001) are actively used in ASL – and probably also in other SLs:

“as a selective tool for cross-modal borrowing, a way to import spoken language vocabulary into the signed language (...) It ideal for this purpose because it imposes segmentation of the English word into units, which are then reconstituted as borrowed vocabulary” (Padden & Clark Gunsauls 2003, 14).

“A deeper understanding of the use of the manual alphabet in ASL and of representational systems in other sign languages is enhanced by a richer historical account of their development (...) the special circumstances of fingerspelling – that it both signifies and is itself a signifier – places the system in a privileged position. Not merely a vehicle for cross-modal borrowing, it has also become a means of actively making meaning in the language” (Padden & Clark Gunsauls 2003, 31).

7.5. SWEDISH LITERATURE ON COMMUNICATION-PRACTICES

The Swedish literature related to Deaf education that can be understood as focusing on “communication-practices”, is in contrast to the North American literature meager. Some Swedish researchers like Gunilla Preisler, professor of psychology at the Department of Psychology, Stockholm University and Kerstin Heiling, earlier senior lecturer at the Institute of teacher education at the University college of Malmö, school psychologist at the regional special school for the Deaf in Lund between 1975-1992 and currently psychologist attached to a local County Council, have employed a “communicative perspective” in their research in the Deaf area. Preisler’s Ph.D thesis from 1983 titled “Deaf Children in Communication” is an interesting study that employs this perspective. While the focus of her doctoral study was not on reading and writing, it is one of the earliest contributions to the Swedish literature that has studied interactions in Deaf settings.

“Detailed descriptions and analysis of the social interactions of deaf children have been non-existent” (1983, 86).

“The *objective* of the present research project is to make a descriptive study of communication strategies used by deaf children in the preschool ages in different social interactions with other deaf children. Registrations of the children’s actions and reactions were made by means of video recordings with simultaneous direct observations” (1983, 87).

Preisler, is also together with other Swedish researchers, currently involved in studying how CI shapes the everyday communication of deaf children and their interlocutors in different settings.²⁴³ In addition to the studies on reading and writing testing that Heiling has been involved in since the mid-1970s (discussed earlier in Chapter 6.4), her doctoral thesis also involved studies of individual children more specifically from a “communicative perspective”. Case studies of four children are reported in part one of Heilings thesis. These children are reported to have been selected during the analysis and as such were not specifically focused upon during the data collection phase.

“I successively chose four children with different positions in the peer group for further analysis and choose to concentrate my observations to the years around the start of school” (1993, 97, my translation).

Heiling’s project group is reported to comprise of 20 DCHP’s born during the period 1970-74.

“The children have been studied through video registrations in combination with direct observations in natural situations in preschool and school environments. Up to ten video registrations [of up to an hour each] were done

²⁴³ See www.psychology.su.se/staff/gp/, May 2003.

per year during the preschool period, and the number of registrations were reduced to approximate four per year during the school period” (1993, 14, my translation).

The data included two types of activities in the preschool settings: (i) teacher lead group work²⁴⁴ where reading and writing were often focused in a playful manner and (ii) free play. In the school situation only lessons are reported to have been documented. The primary question of this doctoral study: “how differences in social status can be related to different social strategies” (1993, 98, my translation) steered the analysis work which is reported to have occurred in several stages. A few examples of microlevel analysis of communication are presented for each of the four children. These do not specifically relate to literacy.

Another early Swedish study that focuses on “communication-practices” more specifically²⁴⁵ was Kjell Lundström’s²⁴⁶ two part study of Deaf classrooms in the mid-1980s (Lundström 1991, 1985). In an article from 1991, Lundström describes the context in which he started the project “Bilingualism in Deaf Education” (my translation) in 1982.²⁴⁷ The aim of the project was to build an understanding of what instruction/education was being imparted from a bilingual perspective and to understand how deaf teachers conceptualized bilingualism. The project is reported to have been made up of two studies: “a questionnaire study to get at Deaf teachers points of view and an analysis of video documented lessons” (1991, 26, my translation; the first part of this project has been discussed earlier in Chapter 6.4).

The second report from the project (Lundström undated) titled “Bilingualism in Deaf Education. Part 2 – analysis of video documented lessons” (my translation) involved the analysis of 14 videotaped lessons from grade one (seven year old students) to grade five (12 year old students) in the regional special schools in different parts of the country. The aim of the study is reported as being the investigation of:

²⁴⁴ Swedish: *samlingar*.

²⁴⁵ The term “communication-practices” is analytically used in the present meta-research study (see Chapter 2). Often the researchers whose work is discussed here themselves do not use this concept.

²⁴⁶ Now retired, Lundström has been a teacher for the Deaf and has also held the position of lecturer in education at the College of Teacher Education in Stockholm. As mentioned previously, he is currently working on this Ph.D.

²⁴⁷ Lundström discusses the title in terms of “Twolingualism in the education of the deaf” in the first page English summary of the report with the following motivation: “I prefer the term twolingualism to bilingualism. Bilingualism refers to immigrants coming with their language and culture to a country with another language and culture. A deaf child is born into a family in a nation where the two languages e.g. SSL and Swedish cover mainly the same culture, e.g. the Swedish culture”. Lundström’s use of the term “twolingualism” is unique in the Swedish literature. It is interesting, as has been noted earlier, that until very recently, Swedish Deaf citizen’s have been conceptualized in terms of “bilingual, monocultural human beings”.

- a) The language of the teachers, eg. What is Signed Swedish?²⁴⁸
- b) The language of the students, eg. what characterizes their language in school?
- c) Interaction and patterns of interaction
- d) The pedagogical process
- e) The language learning of the students, especially Swedish” (Lundström undated, Summary page 1).

The focus of the study is reported as being “the teachers and the language that occurs during the lesson, i.e. school language with sign language and Swedish and interaction between teacher-student-student” (Lundström undated, 28, my translation). The microlevel analysis of the data presented in the report are used to arrive at the following conclusions.

- The type of communication systems used in the classroom are related to how heterogeneous the class is in terms of hearing ability.
- The teachers use simultaneous sign and speech and Lundström notes that “this is not bilingualism” (undated, 158, my translation).

“The languages must be kept separate to achieve real bilingualism. Through this the languages will become autonomous and it will become possible for them to reach the same status, and this is a requirement for teaching bilingualism. One also allows for contrastive teaching to occur by keeping the languages separate. The same thought content can be formulated in sign language and, as suggested here, written Swedish. The teacher and students can together go through and discuss the ways in which differences and similarities exist. They can compare sign-order with word-order etc. The teachers language must be understood by all in the class. This must be a visual gestural language, namely sign language. This will guarantee that information reaches [all students]” (undated, 159-60, my translation, emphasis added).

- All students signed and those students who spoke also signed simultaneously.
- With regards to the interactional patterns, the central finding that is reported is that teachers spoke and signed simultaneously and students signed. In addition it is reported that the interactional patterns in hearing and deaf schools is similar in that:

“the teacher was the one who led and controlled the lesson, even if this was characterized by dialogues. The teacher, like in the regular school, took initiative via questions – primarily pseudo questions. And 78.5% of these could be answered with head movements, yes/no with or without signs, one word with or without signs or one sign” (undated, 160, my translation).

Lundström also reports that communication between a Deaf teacher and Deaf students revealed a different interactional pattern wherein both partners “production was longer and linguistically more

²⁴⁸ Part 1 of the project had arrived at the conclusion that while students could express themselves in three different ways, teachers used Signed Swedish (Lundström 1985).

complex. The students also made more initiatives” (undated, 161, my translation).

- With regards to language learning, Lundström suggests that Deaf children should learn “sign language” early in life as a “primary language”. “However in the same period the written and spoken language can be made use of in *dyads*” (undated, English summary, emphasis in original). At a general level Lundström believes that

“the best way to learn a language is via using it. It is my main impression that the students were passive recipients of language. They met the superficial forms of the language but had absolutely no tools for analyzing [it]. [Secondly] the teacher must work in a contrastive manner” (undated, 164, my translation).
- While Lundström emphasizes the use of a contrastive method in language learning, he does not support the use of metalinguistic grammar terms in teaching practices. He also expresses the need for meaningful teaching and a student centered reality based approach

“which gives students possibilities for the practical use of what they have observed. One example of such a situation is the use of text-telephones. The teacher should thus take [his/her] point of departure from practical uses and not from abstract linguistical reasoning” (undated, 165, my translation).

This two-part study throws interesting light on students interactions with Swedish. Lundström summarizes this interaction explicitly under four themes:

1. Students are exposed to ready made Swedish sentences which they are expected to either imitate or otherwise work with.
2. SL is seen as a “help-language” which is used to support Swedish.
3. Students receive few opportunities to create and work with Swedish language themselves to understand how language works and why it works in the way it does.
4. The emphasis in the teaching lies on the form of the language and not in its function.

Lundström’s undated second report discusses what Deaf bilingualism “really should be” and it also briefly suggests the need for five specific areas that need to be focused upon in teacher-education for Deaf teachers. In addition to the need for knowledge of SL, and a contrastive working methodology, he identifies the following three areas that are related to some of the underlying themes identified in the literature from North America earlier in the chapter:

1. What significance do the two languages have in the everyday lives of Deaf and hard-of-hearing individuals.
2. Students as active writers: “written production with a point of departure from functional writing” (undated, 173, my translation).
3. Knowledge of speech “in addition to good knowledge of sign language with a ‘fluent’ sign production” (undated, 173, my translation).

The Swedish studies that have focused on communication-practices and have been discussed so far have been significant in that they give an insight into the ways in which Deaf children and Deaf and hearing adults interact in everyday settings. Reporting on communication-practices and conceptualizations of Deaf bilingualism in the Swedish context, has also occurred more recently from a set of three different inter-related projects. These three research and developmental projects are reported as having focused on the compulsory level schools (grades 1-10) and/or upper secondary schools (grades 1-4) for the Deaf in Sweden since 1996. These school projects are based at the “Communication, Culture and Diversity – Deaf Studies (KKOM-DS)” research group at the Department of Education, Örebro University. The projects are outlined briefly before some salient findings from the same are presented.

(i) *The RGD-project* is reported as an ethnographically oriented research project at two of the three National Deaf upper secondary schools in Sweden.²⁴⁹ During the course of this three year project, “instructional interactions” were studied and teachers, interpreters, students and assistants were followed as they went about their everyday lives at four of the sixteen, then existing, upper secondary school programs – the Vehicle Engineering, the Bakery, the Construction and the Media programs. Video-documentation of classroom activities (entire lessons) were generated during a two year period. Teachers who were being followed are reported as constituting a core group which met the primary researcher at the university both during the first and the third year of the project. During the first year, teachers attended literature seminars and discussed these in relation to their classroom experiences. They also wrote written reflections that are reported to have been included in the empirical data base of this project.

(ii) *The Swedish SOL project*²⁵⁰ is reported as a two year long developmental project and involved the participation of few teachers from each of the five regional state schools for the Deaf and hard-of-hearing, one local government school for the Deaf and hard-of-hearing, and three local government schools for the hard-of-hearing in Sweden.²⁵¹ Mini-documentation studies were initiated at all the participating schools and the videotaped data was analyzed at the end of the 1990s. Participating teachers also wrote written reflections on themes central to literacy and reading and writing in Deaf school settings.

(iii) *The SS or the special schools project* was a research focused project similar to the RGD-project and involved all the five regional special schools for the

²⁴⁹ See Bagga-Gupta (in press-a, in press-b, 2003a, 2003b, 2003c, 2003d, 2002b, 2002c, 2002d, 2001a, 2001b, 2001c, 2000a, 1999a, 1999b, 1999c), Bagga-Gupta and Domfors (2003, 1997), Bagga-Gupta and C. Erting (2002).

²⁵⁰ This project had no connection with the Signs Of Literacy American project initially. The Swedish acronym SOL stands for Skriv och Läs which means “writing and reading”.

²⁵¹ See Bagga-Gupta (1999a, 1999b), Bagga-Gupta and Domfors (2003, 1997), SOL-projekt (2000).

Deaf and hard-of-hearing in Sweden.²⁵² The SS-project was commissioned by the National Agency for Education in the spring of 2000. Three members from the KKOM-DS research group conducted fieldwork in Grades 2, 3 and 4 during one term at these schools. In addition to video taped and textual data from these settings, other kinds of data are also reported to have augmented the database.

Data from these projects are reported in the available literature as including field notes from participant observations inside and outside classrooms, videotaped classroom instruction and interaction, audio-taped and non-taped discussions with the teachers who were being followed or who were part of the SOL-project, written reflections of teachers from the RGD and SOL-projects, discussions with Deaf students and assistants, texts used and produced in the classrooms and socio-political and developmental documentation related to these schools.

The published reporting from the on-going analysis from the RGD and the SS projects has so far occurred both in Swedish and in English. Some salient initial findings from these projects are presented after briefly throwing light on the context in which these projects were set up. The latter have a bearing on the primary interests of this meta-research study.

While the RGD project was set up at the initiative of the school administrators and teachers from two of the three national upper secondary schools for the Deaf and hard-of-hearing, the SOL project was likewise set up and funding secured for the inclusion of all the Swedish regional and local level compulsory comprehensive schools for the Deaf and hard-of-hearing by the initial interest explicated by teachers at the regional special schools for the Deaf/hard-of-hearing. In other words, *educators and professionals at the Swedish schools were themselves instrumental in drawing the attention of researchers and policy makers to achievement issues in the schools in the latter half of the 1990s*. As has been discussed in the earlier chapters, the national curricula of the 1990s focused on issues of accountability and achievement in newer ways and this undoubtedly shaped the concerns expressed by the schools as they approached researchers and policy makers in order to collaborate and look at ways of understanding these issues. It needs to be recognized that there were no “hard” achievement level statistics to back up the concerns that were being expressed by teachers and school leaders at a time when these research and/or developmental projects were being established. The last of the three projects – the SS project – was commissioned by the National Agency for Education in the beginning of 2000. Even though “hard” demographic data was still wanting, achievement level issues had come center stage, at least for the National Agency, the national Deaf and parents NGO’s and some researchers, by the end of the 1990s.

²⁵² See Bagga-Gupta (in press-a, in press-b, 2003a, 2003b, 2003c, 2003d, 2002a, 2002c, 2002d, 2001c, 2000b), Bagga-Gupta and Domfors (2003), Bagga-Gupta and C. Erting (2002).

The empirical reporting from primarily the RGD and SS projects have so far contributed to the understanding of the everyday communication-practices in Swedish Deaf educational settings and the implicit and explicit understandings of Deaf bilingualism from the perspective of macro level and micro level discourses. The studies from these projects are seen as attempting

“to make visible everyday activities and [these studies] underline the importance of ethnographic studies of communication in order to allow for expanded understandings of diversity and bilingualism in the context of [the Swedish] ‘one school for all’” (Bagga-Gupta 2000a, 55, my translation).

The published or in press literature from these projects present different sets of data that explore how and why language is used in the way that it is. These texts explore

“*how*, under *what* conditions, *where*, *when* and *why* Deaf students, Deaf and hearing teachers (and interpreters) in school settings use language in the way that they do through the presentation of different sets of data: different global lesson patterns, micro-transcripts of everyday talk in classrooms, teachers reflections and an emerging interrelated analytical pattern which draws upon the data corpus” (Bagga-Gupta 2002b, 565, emphasis in original).

These types of data and analyses are reported as being significant for understanding how everyday life at these educational arenas is jointly constituted by human beings through their interactions and how these in their turn influence what opportunities and obstacles students have “to access and participate in written language spheres and thereby *learn* and become competent in written language at school” (Bagga-Gupta 2002b, 565-6, emphasis in original).

The general findings in the literature available from these projects are reported as indicating that a *demarcation exists* between the everyday practices of literacy and the formal practise of Swedish in the project schools. Communication and literacies are described in terms of “complex discursive-technological practices” (in press-b, 2001a).

“Analyses of the high school level data have indicated that Swedish is studied and experienced by Deaf students as a *school* and *theoretical* subject, and in everyday classroom interaction neither teachers nor students, in general, employ Swedish as a medium of communication. This trend appears to be salient even in the data from the compulsory school settings that are now being analyzed” (Bagga-Gupta & Domfors 1997, see also 2003).

A structural analysis of the organization of time and space is reported to have been carried out on almost the entire data in the RGD project and 40 percent of data in the SS project (2002a). The analysis of the “flow of activities” during classtime has given rise to the formation of crude review transcripts of the different lessons. These transcripts have been understood in terms of lesson phases or patterns on the basis of the typologies previously identified in (hearing) classroom interactional research (see for instance Sahlström 2001, 1999). Six types of “global” lesson patterns are reported:

1. Plenary lessons
2. Mixed lessons (plenary and individual work)
3. Mixed cyclic lessons (plenary and individual/group work)
4. Mixed dispersed settings lessons (plenary and individual/group work)
5. Student focused work lessons (individual work)
6. Student focused dispersed settings lessons (individual work)

These global lesson patterns provide an overview of the classroom empirical data from the RGD and SS projects. Representational maps which provide an overview of the flow of activities in different types of these six global lessons are empirically discussed in Bagga-Gupta (in press-a, in press-b, 2003a, 2002a, 2002b, 2001a, 2001b, 2000a). Bagga-Gupta suggests that the six different types of lessons offer *different types of interactional contexts which in turn allow for or limit both general learning opportunities and opportunities to engage in Swedish language more specifically*:

“Some of the preliminary findings from the RGD project indicate that a normative monological focus on Deaf students’ secondary language and a simplifying of written Swedish in Student Focused Work lessons perhaps has a specific bearing on how language gets perceived by Deaf bilingual students and this probably can have a bearing on students’ lack of interest in studying Swedish in general. In addition, and more significantly, a normative focus where the overriding goal is on practicing of Swedish language skills could have a bearing on the nature of access that students have to their secondary language. Some of the preliminary findings presented here also suggest that in classroom settings where a dialogical communicative focus on the students secondary language gets established (not necessarily due to conscious planning on the part of teachers), a richer access to language appears to be a consequence and students unwittingly receive opportunities to become members of language practices in ways that are meaningful to the learning of their secondary language” (Bagga-Gupta 2002b, 583).

In an article in “Learning and Instruction. The Journal of the European Association for Research on Learning and Instruction” two different groups of lesson patterns – the mixed global lessons and the student focused work lessons are explicitly compared (Bagga-Gupta 2002b). The following are reported as being pertinent features that characterize mixed global lessons:

1. this lesson pattern reflects *group teaching* in the sense that teaching is more often than not focused on the entire group of students (three to nine students) and is not directed to individual students one at a time
2. the teacher (actively) elicits participation from different pupils and often, during different phases
3. the teacher attempts to keep everyone in a *public talk frame*, ie. all the students in the classroom are encouraged by the teacher to attend to the same classroom talk
4. students participate in classroom talk both in the public frame and in private talk with individual students or the teacher
5. within the framework of group teaching and public frame talk, student-student interaction appears to be encouraged
6. the language of teaching and public and private talk is overwhelmingly SSL
7. even though written Swedish is not the foci in these classrooms, students are expected to and do participate in complex textual practices where real (not simplified) texts are used and produced

8. teachers very often make explicit *school related demands* (eg. take attendance, explicitly and publicly ask about previous absenteeism, reprimand students if they turn in assignments late) and make *social demands* (eg. not wearing caps during lesson time, wait for their turn while someone else is talking, reprimand students if they come late to class or if they are disturbing the other students, etc.) on their students
9. teachers often use many different kinds of literacy tools (eg. whiteboard, overhead projectors, paper and pens, etc.) in classrooms
10. teachers, not infrequently, initiate or allow discussions focused upon topics that can be of interest to young people and especially to Deaf young people (eg. Deaf culture, growing up in a hearing society, job opportunities, sexuality, etc.)
11. students appear to be more engaged in these classrooms (eg. they are more unlikely to be absent, they are more active in classroom talk and they are more likely to complete home assignments in time)
12. more often than not the teacher-student ratio is 1:3-9 (depending on how many students are present)

And the following 12 points are reported to being pertinent features of most student focused work lessons where students work individually:

1. this lesson pattern reflects *individual student-directed teaching* in the sense that teaching is more often than not focused on individual students one at a time and is very infrequently directed to the student group as a whole
2. the teacher *moves* from one student to the next assisting students in their individual classroom tasks
3. during the lessons second phase very insignificant, if any, explicit interaction occurs in the classrooms *public frame*
4. students participate in classroom talk almost only in a private frame with the teacher or other students
5. within the framework of classwork, student-student interaction appears to occur if the students themselves initiate this type of private talk and this talk is often not relevant to the lesson focus
6. in specialist subject classrooms (not in most Media classrooms) the pragmatic aspects of working with different *real* objects (eg. baking equipment, car engines, park-benches, leisure houses, etc.) means that even though the language of teaching and instruction is SSL the nature of classroom SSL is often pragmatically oriented
7. knowledge of written Swedish is the explicit focus in the Swedish classrooms; here students more often than not are expected to *practise* different aspects of reading and writing and teachers often make use of *simplified texts* in classroom work; simplified texts are also often used in specialist subject classrooms (not Media, and often not in Vehicle Engineering); the rationale behind using simplified texts is that teachers experience students as being weak in Swedish
8. teachers rarely make explicit *school related demands* (eg. take attendance, explicitly and publicly ask about previous absenteeism, reprimand students if they turn in assignments late, etc.) or make *social demands* on their students (eg. not wearing caps during lesson time, wait for their turn while someone else is talking, reprimand students if they come late to class or if they are disturbing the other students, etc.); in these classrooms teachers appear to be “very helpful” towards their students
9. teachers very infrequently themselves use different kinds of literacy tools (eg. whiteboard, overhead projectors, paper and pens, etc.) in classrooms
10. with the exception of one teacher, teachers whose lessons follow this global lesson pattern rarely initiate discussions focused upon topics that can be of interest to young people (eg. Deaf culture, growing up in a hearing society, job opportunities, sexuality, etc.)

11. students appear to experience Swedish and Mathematics classrooms as being “school and theoretical work” and as “not being relevant” to their lives; they appear to be marginally engaged in these classrooms (eg. they are more likely to be absent, they are less active in classroom talk, they are more unlikely to complete home assignments in time and they are more likely to forget their study material at home); students experience most of their specialist subject classrooms as relevant and appear to be generally engaged in the tasks that they are expected to work with here; students and teachers often discuss these specialist subject classrooms in “non-school” terms (eg. “workshop floor”, “professional work”, “occupational roles”) while Swedish and Mathematics get discussed in “school” terminology
12. more often than not the teacher-student ratio is 2-3:3-9; while many teachers whose lessons can be described in terms of this global lesson pattern are competent in SSL, some are not and despite this *none* of the teachers whose classrooms fall into this category make use of SSL interpreters

Bagga-Gupta reports that the six global lesson patterns that have emerged from the data do not map onto clearly defined curriculum categories, ie. the different national program subjects that have been followed *or* core and specialised subjects *or* theoretical and practical subjects *or* language-centred and non-language-centred subjects in the RGD and SS project schools. However, most of the Swedish and Mathematics lessons in the data are reported as falling under the “student focused work lesson” category.

While “even crude *review* transcripts of entire lessons can be fruitful in seeing what dimensions of classroom practices can contribute to linguistically enriching experiences for students” (Bagga-Gupta 2002b, 572), a micro analysis of “visual literacy events” (see Bagga-Gupta 2000a) in these project schools are reported as being important for understanding (i) how teachers and students organize interaction in different language focused classrooms, (ii) what discourse strategies teachers and students use in different language settings, (iii) how meaning is negotiated in routine classroom activities and (iv) how one can re-conceptualize normative understandings of Deaf bilingualism (2001c).

The literature from these projects also report on and “describe three types or levels of chaining” (Bagga-Gupta 2002b, 562; see also in press-b, 2002c). The first two have been termed *local-chaining*²⁵³ and *event-chaining or activity-chaining*. The third type of emerging pattern of face-to-face language use that has been identified more recently in the analysis of the SS project data has been called *Synchronized-chaining* (see Bagga-Gupta in press-a, in press-b, 2002c). Bagga-Gupta suggests that these empirically derived categories throw light on the relationships between the two languages that are used in the Deaf school settings that the projects have focused upon.

²⁵³ The descriptions of “chaining”, “sandwiching”, “linking” provided in the North American literature discussed in section 7.4 above, can be understood in terms of “lokala-länkningar” (local chaining) described in the different studies from these Swedish projects.

Local-chaining is described as a micro-communicative use of resources from both SSL and Swedish. The teacher, sometimes together with an interpreter (in the upper secondary schools) is shown, through empirical examples, to locally-chain a SSL-sign (a sign that is new for the students or which the teacher wants to emphasize) to a fingerspelled word which in turn is locally-chained to back to the SSL-sign. This local-chaining, it is reported, can continue with the Swedish word being written up on a overhead sheet or the white board. Similar examples have also been presented from the SS project data analysis.

The second type of complex patterned language use that has been identified in the data, *event-chaining*, is understood as the use of SSL and Swedish resources on the lessons temporal organizational level. During different phases of a lesson teachers, students and assistants are reported to be primarily using either SSL or Swedish or both languages at the same time. A communicative activity in SSL may be followed by a written activity which could then be followed by an activity where one primarily uses SSL in order to communicate in the classroom.

Synchronized-chaining is reported to have been more recently identified in the analysis.²⁵⁴ Here both Swedish and SSL are chained together in a synchronized manner in at least three significantly different ways:

- Synchronized-chaining that can be characterized by interpreting between oral Swedish and SSL (two human beings are involved in this chaining activity)
- Synchronized-chaining that can be characterized by switching between two languages *periodically* by the same human being in the same activity
- Synchronized-chaining characterized by the individual focused on written text and visually reading by using signing, the visual focus on print and the signing are occurring in the *same time frame*

The literature from the RGD and SS projects currently available suggests two important points in the context of the present meta-research study. Firstly, some adults in the project schools “skillfully use different linguistic codes and modalities to both make available *meaning* and to make available different conventionalized *systems of meaning*” and, it has been suggested that it is primarily in these “linguistically complex settings” that students “unwittingly receive possibilities to participate more frequently in potentially enriching Swedish language practices” (2002b, 580, emphasis in original). In other words, rich sites for learning seem to be exemplified in the empirical examples available in the literature.

Secondly, “complex language use” is seen to exemplify what it means to be bilingual in a non-prescriptive manner, and this according to Bagga-Gupta is

²⁵⁴ Three types of synchronized-chaining have been discussed and it is suggested that at least one type of synchronized-chaining may be close to what C. Erting and J. C. Johnsson (1989) and L. Erting (2001) have previously called “fluent English signing”.

very different from the prescriptive bilingualism that the national curricula and many of the teachers, especially when they are teaching in Swedish language lessons, subscribe to. The latter is described as a “linguistic order” conceptualization of Swedish Deaf bilingualism.

“Close examination of everyday talk and language use in classrooms also reveals that, contrary to suppositions that languages need to be kept separate to maximize learning, visual or oral Swedish and SSL are interlinked *and* chained together. Deaf and hearing actors in these settings are aware that these are different codes, but in the settings explored here these actors “mix” these two codes in complex patterned ways (and this is *not* use of languages in terms of Signed Swedish). It is a normative academic exercise that required the two languages to be kept separate. In practice, visually oriented individuals appear to regularly mix and chain the two languages in complex ways” (2000a, 114, emphasis in original).

Since quantitative and qualitative differences are reported in the usage of these resources in the different lessons and classrooms, concerns regarding opportunities related to literacy learning are raised. Bagga-Gupta questions whether the absence of different resources in terms of complex language usage in many project classrooms can be attributed to the prescriptive rhetoric of Deaf bilingualism and further, whether this restricts the learning opportunities that students receive to participate in literacy practices.

7.6. CONCLUDING REMARKS

The diversity of Deaf school settings and the diversity of the members in those settings beguiles the search for “methods” that invariably have “universalistic” dimensions. And also, the prescriptive agendas in the Deaf literacy and Deaf education research highlight how the field of Deaf education has been shaped during the last couple of centuries. Research from a descriptive perspective can, it is suggested, play an important role in contributing to knowledge in the area of literacies and Deaf education *without re-creating the dichotomies and methodological debates in the field*. While the significance of focusing on communication-practices has been theoretically motivated in the present study, such work is also necessary in order to understand the trends that become available in and through demographic and other types of research. For instance, as was discussed previously in Chapter 5.3, the positive correlation that has been noted between classroom communication mode and achievement levels in, for instance, Mathematics or reading are interpreted as being partially inconclusive. This is because there is very little evidence regarding whether students with higher achievement levels are streamed into particular kinds of settings or whether it is factors in these settings that in fact contribute to higher achievement scores. This too highlights the dire need to keep discussions of “education labels” separate from discussions of communication-practices in educational settings. The studies that have become available during the last decade or so, for the first time in the history of research in the area, implicitly or explicitly allow us to understand communication-practices of competent members of visually oriented

settings. These empirically based studies allow us to understand what it means to be bilingual from a visually oriented perspective.

Expectations regarding the role of research in Deaf education in Sweden are similar to expectations in the North American context and here one can see a parallel with a historically significant trend in the research field of Deaf education. There is a strong tendency to view research as being the means through which one can “fix” the problems that have beguiled the field for centuries. It might be productive to highlight the fallacy of such a mind set by taking the Swedish context as an example.

While there are expectations that the research reporting that is available from the recent Swedish projects will “alleviate” the problems and issues in the Deaf institutional settings in Sweden, Bagga-Gupta cautions against such thinking. To begin with, while the recently initiated Swedish projects have been grounded in the concerns of members of the Deaf institutional settings in Sweden and the reporting is grounded in empirical work, it is primarily the work of a single researcher whose collaborations with colleagues and students has been reported so far. While this dialoging has taken place in the English and Swedish academic contexts, the results have a bearing on the emerging trends primarily in the context of the communication-practices international literature. At the same time a critical mass does not exist in the academic reporting on communication-practices in Deaf education. In the Swedish context, the need for consolidating a critical mass of researchers working in the *area of education* with a focus on issues relevant to visually oriented school, pre-school and even home settings clearly exists (see further Chapter 8).

Secondly, data collection in the Swedish projects is reported to have occurred at different schools in the projects during either one academic term or a maximum of four terms (two years). The value of these projects needs to be understood given the paucity of previous empirically informed research focused on this school form in Sweden. Thirdly, in the absence of both longitudinal and demographic data in Sweden only certain kinds of generalizations and hypothesis can be made in the analysis.

And fourthly, to reiterate an important theoretical point that is guiding the present meta-research study, there is an important and rather misunderstood difference between critically reflecting on the activities that comprise the institutional Deaf educational settings (ie. research oriented activities) and the activities and concerns of the members of the institutional Deaf educational settings (ie. the activities that comprise schools) themselves. Research agendas can throw light on and tell us many things about the latter but it is naive to expect the former to be able to give rise to “methods” that can be applied “successfully” in the latter settings. This does not mean that research efforts should not be made towards such ends. What such an understanding highlights is the need for caution on the part of professionals

working in both "research" and "school" arenas from pursuing the "fix" or the "magic bullet" solution pathways.

These critical reflections bring us to the end of the fifth and final empirical chapter in this book. While Chapters 5, 6 and 7 have been construed around six different themes that were identified during the analysis, Chapter 4 explicitly focused on the nature of texts available in the area of Deaf education and that focus on reading, writing and literacy. Chapter 3 laid the historical background vis-à-vis important philosophical orientations that have shaped the discourses in the research on Deaf education as well as agendas in Deaf education. The concluding chapter in this book will now attempt to frame the salient findings from these empirical chapters against the backdrop of two overarching issues regarding what constitutes research and the politics of representation in research. Some suggestions for future research directions in the Swedish context are also put forth at the end of the next chapter.

CHAPTER 8

A conceptually pushed summarizing discussion and future research directions in Sweden

“As we enter the 21st century, proponents of bilingual [ASL-English, SSL-Swedish, etc.] education are confronted by the technological advances of cochlear implants and implant advocates who suggest that deafness and the need for signed language will be eliminated. The multicultural, multidimensional contemporary environment adds another layer of chaos to the debate around education of children who are deaf. Just as leaders in the field of general education are looking for new frameworks for successful educational outcomes in the 21st century, educators of children who are deaf must consider ways in which we can successfully meet the challenges of the new millennium” (Nover, Christensen & Lilly Cheng 1998, 62).

8.1. INTRODUCTION

What can the conceptually driven analysis of literature presented in this book offer in the way of new frameworks for successful educational outcomes in Deaf education in the new millennium? The analysis of the literature suggests that discussions and shifts in Deaf education generally and shifts in conceptualizations of literacy issues more specifically *continue to take place against the backdrop of more narrow understandings of what language is*. While bio-technologies like Cochlear Implants appear to be discussed primarily within the framework of either a medical-psychological perspective or a linguistic perspective (some notable exceptions exist in the literature), it is the emerging trends presented in Chapter 7 that are particularly significant in providing a direction to the question raised above. Ethnographically inspired studies of everyday communication-practices and long term collaboration with institutionalized educational settings where Deaf children are socialized into citizenship roles can, it is suggested here, help address some important challenges in the new millennium. It would be appropriate to start the final chapter in this book by situating this question both theoretically and sociohistorically:

“literacy marks a phenomenon that includes reading and writing skills but also includes knowledge of social contexts. Holding literacy as a goal entails thinking beyond individual students achievement and beyond the span of the school years. It seems (...) that the best way of bringing deaf students in all education settings, from the preschool to the workplace, closer to the hearing world’s English print literacy expectations is to first devise a developmentally reasonable pedagogy that takes account of the role and history of literacy and English among Deaf people” (Padden & Ramsey 1993, 97).

Here it would be important to underlie the *inclusive sense* that many researchers and writers within the “new ethnicities” paradigm subscribe to when discussing the category “Deaf”. Not only is explicit recognition accorded to the fact that deaf and hearing human beings coexist in different institutionalized settings in societies, but more significantly recognition is accorded to the fact that membership of Deaf spaces is not and cannot be understood as being constituted along audiological lines. The following example from the literature will serve to illustrate this significant point. In Chapter 1 of the 1996 classical text “A Journey into the DEAF-WORLD”, Ben Bahan – Deaf professor of Deaf Studies at Gallaudet University and co-author of this text – introduces and presents himself and his two hearing co-authors: *Harlan Lane*, a scholar with many titles and presently University Distinguished Professor at Northeastern University, Research Affiliate at M.I.T. and Research Associate at the Massachusetts Eye and Ear Infirmary; and Bob Hoffmeister, professor at Boston University who established the first university level specialization in Deaf Studies in 1980 in the United States.²⁵⁵ After a rather unusual introduction by one of the co-authors, the three men – one Deaf child of Deaf parents, one hearing of hearing parents and one hearing child of Deaf parents – take *joint possession of authorship* and note:

“The paragraphs above may strike you as odd ones to the opening passage of a book about Deaf culture (or any book, for that matter), but they are here for a purpose: to give you a taste of that culture at the very outset of the journey upon which we are now embarked, into the world Deaf people call the DEAF-WORLD. When members of the DEAF-WORLD meet, they introduce themselves and their companions as Ben has here introduced the three of us who will be your guides on this journey. They give capsule life-histories so that each can see how the others are *connected to the DEAF-WORLD network*. For unlike other cultures, Deaf culture is not associated with a single place, a ‘native land’; rather, it is a culture based on *relationships among people for whom a number of places and associations may provide common ground*” (Lane, Hoffmeister & Bahan 1996, 5, emphasis added).

It is significant also to realize that this, over 500 page, narrative is presented by hearing and Deaf human beings who view themselves as members of the American “DEAF-WORLD”.

The present study argues that literacy plays a central role in Deaf institutionalized settings,²⁵⁶ and in Deaf arenas. It is also suggested at the onset of the discussion presented in this concluding chapter that the findings in the present meta-research study have implications that go beyond the field of Deaf education and the area of Deaf literacies. *These findings have a bearing on minority issues and democratic education. They also have implications regarding issues of access and representation in higher education and research.* Perhaps not quite obvious in the first instance, is the need to raise questions – and awareness – regarding the continuing unequivocal (financial and

²⁵⁵ Hoffmeister is currently Director of the Programs in Deaf Studies at Boston University.

²⁵⁶ In similar fashion, literacy plays a central role in hearing institutionalized settings in complex societies.

conceptual) support accorded to one perspective – the medical-technical – in the Deaf area internationally and in Sweden. In addition, the focus accorded the structural linguistic perspective in the area of Deaf education, at least in Sweden, also needs to be highlighted. Despite the relative youth of the “science of education” within academic disciplines, the paucity of *educationally defined research* within the Deaf area in Sweden is surprising, not least given the status that the Swedish *Deaf education model* has been accorded internationally.

This concluding chapter attempts to tie together salient issues that have emerged in the meta-research study that is reported in this book. Two overriding discussions on what counts as research today (section 8.2) and issues related to identity politics (section 8.3) are presented in an attempt to lay the framework against which a number of the salient research findings can be understood. Some additional findings from the present study are presented in section 8.4. The chapter concludes with suggestions for future agendas with a bearing on research in Deaf education generally and literacy issues specifically. The discussions in this concluding chapter are framed with the aim of understanding the Swedish context and also with the intention of suggesting future research directions in research with particular relevance for this context.

8.2. SITUATING RESEARCH IN COMPARATIVE TERMS

The analytical focus in the present study gave rise to the need for focusing and highlighting seemingly naïve questions related to the available literature itself. As was indicated in the introductory chapter (and the analysis presented in Chapter 4), the study unwittingly found itself trying to disentangle issues related to what can (and what cannot) count as research knowledge today. This issue, particularly relevant in the field of Deaf education, perhaps has significance to other academic areas as well.

Research, the *re*-searching and the re-conceptualising of issues related to a variety of aspects of the human condition, is one of the three primary agendas in present day Swedish institutions of higher learning (the other two being education and the so called “third agenda” that was added more recently). The analysis process in the present meta-research study identified the need to situate research itself in terms of *what is research*. This seemingly naïve question can perhaps find a more relevant answer if one asks “what is research in a particular discipline or area?” In addition, returning to the opening quote of this book (in Chapter 1), Sleeters (2001) reflections on what counts as research are pertinent. She suggests that

“the more we consider multiple forms of human diversity and multiple ways of knowing that emerge from different histories and disciplines, the more complicated [the issue of what counts as research] becomes” (p 209).

The Swedish online national encyclopedia²⁵⁷ presents the following explanation for the etymology of the term and various categories of “research”:

“Research,²⁵⁸ is a process which through systematic work can give rise to new and increased knowledge. The term became generally accepted by the middle of the 19th century. However the older concept *science-knowledge*²⁵⁹ continues to be used [in Sweden] in roughly the same sense. The term research is in the first instance connected with universities and colleges and is one of its two primary tasks. Its other task is education. Research is also conducted elsewhere at special independent research institutions without any connections to education.

An agreement reached within OECD in 1970 concerning terminology describes research activities in three main directions, *basic research*, *applied research* and *developmental research*. Each of these has also been defined. *Basic research* is defined as a systematic and methodical search for new knowledge and new ideas without any applicability that has been decided before hand. Applied research is described as a systematic and methodical search for new knowledge and new ideas with an application that is decided before hand. Developmental research is characterised as an activity that systematically and methodically uses research results and scientific knowledge in order to realise new products, new processes, new systems or contribute towards substantial improvements of those in existence. This terminology has received general acceptance even if it has been criticised and is seen as falling short of the full essence of the concept research.

The concept basic research has become differentiated during recent years. It is defined partly as pure basic research, when no restrictions are placed on the research, and partly as focused basic research, which can be seen as becoming the basis for future applications. In recent times the term research is misleadingly used also in other activities, for instance, investigation work” (<http://www.ne.se/>, my translation, emphasis in original, December 2002).

A common way of characterizing research thus is in terms of basic, applied and developmental research. While some relationship to the activity of gathering and creation of knowledge can be clearly discerned, there is vagueness with regards to the content of the process. For instance research is understood as a:

”scientific stage of a (partly) unknown area of interest, with the aim of creating the largest possible knowledge and insights” (<http://www.ne.se/>, my translation, December 2002).

The analysis presented in the empirical chapters suggest that the bulk of the reporting in the area of literacy issues in Deaf education occur either in the “applied” research tradition where knowledge production occurs in relation to an “application that is decided before hand” or in the tradition of “developmental” research. Despite the long standing tradition of research on reading and writing issues in this field, there is a clear paucity of reporting that takes its point of departure in the tradition of “basic” research.

²⁵⁷ See <http://www.ne.se/> December 2002.

²⁵⁸ Swedish: forskning.

²⁵⁹ Swedish: vetenskap.

However, on the basis of the differentiation suggested above, many of the studies discussed in Chapter 7 would qualify as contributing to the area of basic research where knowledge building occurs in a long term perspective. There is need to reflect on the clear bias that favors applied and developmental research reporting and what, if any, relationship these studies have to the dogma of finding better methods and applications in this particular area of education during the last few centuries. The analysis of the majority of the English language international literature does indeed suggest that there is some ambiguity regarding

- (i) the difference between Deaf education as an organization and institutional field and Deaf education as a reflective research activity, and
- (ii) the scope and limitations of research activities

This confusion is perhaps even more evident in the majority of the reporting in the Swedish literature. In addition, meta-level analyses of research in areas of science that have traditionally been identified as "special educational research" and "handicap research" in Sweden are marked as following less stringent standards, with weak links to theoretical frameworks and as not being in synchrony with paradigmatic shifts in the general disciplinary area that they are associated with (see for instance Rosengren & Öhngren 1997, Proposition 1998/99 Nr. 105).

The recent evaluation of Swedish research in Education in 1997 by the Swedish Council for Research in the Humanities and Social Sciences – HSFR – discussed previously (see Chapters 3.5 & 4.2), highlights at least three significant issues that have a bearing on the question "what is research". *Firstly*, as Vislie (1997, in the HSFR evaluation) suggests, the narrow focus on disability categories is pronounced even at the end of the 20th century:

"common themes across categories are seldom identified, neither are the links to the educational research agenda or to theory-building in general" (Vislie 1997, 139).

Secondly, the analysis of "special education" research suggests ways in which strong interest groups gain *control over the research agenda and its consequences*:

"Special education research in Sweden seems to be *more firmly* controlled than educational research in general, as a consequence showing clear signs of short-term research efforts, *fragmentation* and *moderate* quality" (Vislie 1997, 140, emphasis added).

Thirdly, and related to the first point raised above, the low interest in theory-building in areas of science that contribute to our current understanding of human diversity is expressed in category terms of functional disabilities more generally. This is also reflected in the isolated lives that research agendas and research results tend to live with little connection to theoretical and or methodological shifts in the sciences in general. While this appears to be the case even in the international literature (see Clark, Dyson & Millward 1998,

Corbett 1996), some international meta-research studies that are available also suggest that research findings are sometimes in need to be “communicated in a manner that can be applied readily to practice” (Lang 2002, 277). This is in line with trends identified in Chapter 4 where it was shown that research findings in the international literature are discussed *primarily* in academic circles. There is reason to believe that, this is not the case at least as far as research related to the area of Deaf education is concerned in the Swedish context. So while there is some amount of “cross-disciplinary openness” and a tradition of robust reporting in the international literature, the Swedish literature is marked by what Keiner (1994) calls “intra-disciplinary coherence” and a tradition of less stringent reporting. In other words, while there is a lack of comparative perspectives at the meta-research level, it may be the case that research in some areas that can come under the deaf “special education” and “handicap” umbrella in Sweden seem to have lived rather secluded lives with little dialoguing at the academic level.

As noted above, an increasing emphasis is placed today in Sweden on the role that researchers should play in making their results available, in addition to the research community, *also* to society at large and particularly the institutions that can benefit from specific research projects. However, the 1997 HSMR evaluation indicated that research on and in these areas is conducted in category terms where theory-building is weak and researchers monopolize different category areas. As such there is then need to turn the issue around and question more broadly: what *kind/s* of research is/are currently conducted in the areas that traditionally fall under the “handicap and special education umbrella”? What counts as research in these areas? In what kinds of departments and disciplines does such research get conducted? Who are members of such research projects? Can one see any particular patterns in how such research has been conducted over time?

The trends that have emerged in the present study are similar to other recent analysis of research conducted in the “handicap area” more generally. As discussed previously, Nilholm (2003) suggests that research continues to be mirrored from a *medical-psychological orientation* even though a clear cut *critical perspective* has also emerged in the general special education area partly as a reaction to the medical orientation. While a “critical perspective” can be seen as having existed at least in the *area of Deafness* research more generally since the scientific and/or political acknowledgement of SLs as human languages in the 1960s, this perspective seems not to have found its footing in the *area of Deaf education*. This meta-research study shows that researchers working within disciplines as far apart as medicine, audiology, sociology, psychology, social-work, traditional linguistics (to name a few) report on issues that are seen as having a bearing on Deaf education. While researchers working within the academic disciplinary area of education also contribute to the agendas in Deaf education (in the international literature), it is not uncommon to hear voices of teachers and school leaders from the institutions of Deaf education in the literature. Researchers working within

the academic field of education become visible in the Swedish literature only in the 1990s.

Nilholm identifies and reports a third, not so well defined, perspective in the international literature in the area of handicap research more generally (see Chapter 1). He suggests that the *dilemma* (or the dialectical or the sociocultural) *perspective* emerges from a critique of the critical perspective and that empirical research with this point of departure is limited (Bagga-Gupta & Nilholm 2002, Nilholm 2003). Empirical directions that are identified in this third perspective include studies of political contexts, micro-political processes and the *concrete practices of education* that in one or more ways can be understood as “special”. *Studies of communication-practices* identified in the present analysis and discussed in Chapter 7, map on to what has been called the sociocultural perspective (Säljö 2000, Wertsch 1998; compare with Chapter 2). Identification of similar trends in different research areas can be understood as being significant since Säljö’s analysis focuses research primarily *general education*, Nilholm’s work encompasses *special education and handicap research* more generally and the present study focuses *Deaf education and literacy issues* more specifically. It is on this basis that one can find patterns in the more over arching shifts within the human sciences, as having contributed to triggering the emergence of new trends with a bearing on literacy research in the area of Deaf education. However, it is equally significant to re-iterate that relatively very few studies of this nature can be found in the areas of general education, special education and Deaf education. A technical, psychological and monological view continues to dominate and frame issues of learning, development and communication in the research literature in all these three areas (see also Linell 1998).

In addition to the dominance of the research reporting from the medical-psychological and linguistically oriented perspectives that have been identified in the present study, there is evidence of the emergence of research on communicative-practices during the last decade or so. This research goes beyond reporting on the ideologies of communication in Deaf education. Research reporting from the medical-psychological and linguistically oriented points of departure (in the area of reading and writing and more generally in the area of language issues) emerge from diametrically different philosophical traditions. The sociocultural perspective *goes beyond* sharing the linguistic perspectives acceptance of different SLs as basic (and different) human languages. Its underlying assumptions (identified and discussed in Chapters 4.4 & 7.2) are based on theoretical shifts in the Social Sciences and Humanities, and not on specific features of category research agendas in the Deaf or the special educational fields. Thus the emergence of research in this third perspective has salience in that research agendas here are theoretically framed more in tune with recent paradigmatic shifts in the sciences. It is suggested here that studies from a sociocultural perspective allow for newer ways in which theoretically driven issues can be attended to and which themselves can contribute to strengthening research agendas. In the area of Deaf research it

can also assist in strengthening research collaboration between Deaf and hearing academicians.

The recurring need expressed by researchers and practitioners in the framing of their research (and results) over the last couple of centuries in terms of discovering the “magic bullet” in order to address problems in Deaf children’s education raises pertinent questions related to both the a-historical and the a-cultural perspectives present within academia. While accepting that knowledge generated from research can assist us in understanding human life in a number of meaningful ways, the present meta-research study also acknowledges that research itself has limitations. Research is in itself a normative enterprise that needs to be situated in sociohistorical contexts.

The redefinition of national boundaries during the last two decades of the 20th century and today’s global village life styles in urbanized parts of the South and particularly in the Northern hemisphere defy static ways of understanding boundaries – political, conceptual and cultural. The explosion of and the access to newer technologies especially in institutions of higher education in the North during the last decade potentially allows for newer ways of collaborating where the concreteness of space and time become blurred.

Post-colonial and post-structural shifts in the sciences suggest that local (or national or regional) level knowledge and events need to be understood in terms of global level knowledge and events where *hybridization represents a “third creative room”* (Bhabha 2002) *and allows for the possibility to develop new positions and frameworks* (see also Eriksson, Baaz & Thörn 2002).²⁶⁰ The research enterprise in terms of re-search and not merely searching activities, then bears a critical relationship to knowledge production and critical reviewing of that knowledge both across and within disciplines. This means that there is need to understand the process of knowledge building more critically. A critical re-search enterprise of necessity needs to interact, communicate and collaborate with other voices in a globalization process. Concretely this can be understood in terms of engaging in dialogues:

- (i) across different academic disciplines;
- (ii) across different national settings;
- (iii) in different thematic (hybrid) areas;
- (iv) across different institutional settings; etc.

Potentially, therefore, both the *content* and the *forms* of conducting research can be re-conceptualized in this process. While the invention of the Gutenberg press enabled the start of the liberation of the written word from the domains of the elite in the 15th century (at least in Europe), IT technologies are shaping research cultures across time and space in newer

²⁶⁰ These specific ideas have been recently developed in a Swedish text (Bagga-Gupta 2004) published in *Utbildning och Demokrati. Tidskrift för didaktik och utbildningspolitik* (Education and Democracy. Journal of didactics and educational politics).

ways. Even though there is reason to question the major focus on IT as a form of democracy, the communicative potential of IT and its role in both research and in Deaf communities remains underexploited.

While e-communications emerged as pragmatic solutions to mundane everyday communication-needs in American university sites in the 1960s, their potential in creating and establishing *research cultures* are less well understood even today. One can say that while the infrastructure and the tools to establish research cultures exist, their potential is under-estimated and under-exploited.²⁶¹

An important critique has been accorded research in the areas that are commonly understood as “handicap research” and “special educational research” in the recent past in the Swedish national context. The present study suggests that there is need to seriously question the paucity of dialoguing in critical knowledge building and global research cultures by researchers whose work has had a bearing on the Swedish Deaf educational model. While it has been argued that the Swedish Deaf education system is unique in the world, it perhaps is the case that the positive response accorded the early shift towards an institutionalized system of Deaf education in the country in itself contributed to the lack of interest in conducting critically informed research or even evaluating the shifts that occurred at the institutional levels in the early 1980s. This can be compared to the situation in Norway where a similar shift during the second half of the 1990s was supported by a major effort to study and evaluate the shift in more research oriented terms (see for instance Ohna, Hjulstad, Vonen, Gronlie, Hjelmervik & Hoie 2003). At the same time the gradual weakening of the cradle-to-grave services provided through Swedish public institutions during the 1990s, highlight further the need to reflect on what (if any) bearing research has on issues of diversity, accessibility and democracy.

8.3. SITUATING CATEGORY RESEARCH WITHIN ISSUES OF REPRESENTATION AND DIVERSITY

“Now we have an opportunity to *think with*, in Friere’s terms, *rather than think for or about* Deaf people in the developing discourse on Deaf bilingual education, recognizing their bilanguaging, as a ‘way of knowing and of living’ that can contribute to the creation of new ways of Deaf education” (C. Erting 2000, emphasis added).

The present study shows that more overarching social processes embedded in the backdrop of sociohistorical developments have shaped the discourse in the academic fields of Disability Studies and Deaf Studies. The increasing demands for self-definitions by groups in societies whose identities were

²⁶¹ See also the critical analysis of contrasts in the trends observed in the reporting of educational research in different national contexts in Europe and the United States (see also Lindberg 2004), and more significantly the contrasts that emerge in the educational research and reporting between these different contexts (Keiner 1994).

stigmatized or marginalized and societal discussions regarding identity politics during the 1970s and 1980s also shaped the discourses of Deaf education at the end of the 20th century (Jankowski 1997).

Human diversity, pluralism and issues related to representation and recognition constitute central themes in many societies today. Post-structural and post-colonial thinking contribute in significant ways to re-conceptualizing these issues (see for instance Eriksson, Baaz & Thörn 2002, Gomes, Bigestans, Magnusson & Ramberg 2002, Said 1978/2002). From a democratic point of departure issues of recognition, representation and pluralism in institutional contexts constitute perhaps obvious aspects that academic institutions and “well informed” human beings can and will automatically take into consideration. However, if history is any indicator of the hurdles that different groups have faced and continue to face with regards to recognition, then there is need to critically examine the “politics of representation” from other standpoints. Some relevant questions then can be: *What* is human diversity? *Who* are the *people involved* in drawing up research and/or policies that have a bearing on human beings as can be conceptualized through the use of more encompassing criteria for diversity? *For whom* are these research/policies being drawn? *How* are issues of representation conceptualized in the process of such work? Such democratically framed questions are important given that

“our identities are partly formed by others *recognition* or absence of this, and *inappropriate*-recognition, such that a person or a group of human beings can suffer from real damage, be affected by a real form of oppression, if human beings or society around them mirror a false, distorted and restricted existence” (Taylor 1999, 37, my translation, emphasis added).

In addition this recognition has relevance to our own ways of being and existence:

”We all have our spontaneous, everyday, sometimes very personal understandings and ways of thinking. But it is first when we see the other and the different that we actually and in a real sense see ourselves” (Gustavsson 1988, 18, my translation).

The dialectical nature of such processes has critical relevance to identity and accessibility issues more generally. And in the present context they are also highly relevant in terms of how these become framed in research and political texts and more critically the practical outcomes of these texts. Identity and accessibility issues also have salience in how agendas get framed in research activities and what gets considered as *legitimate research questions* at different points of time. Such considerations have particular relevance in “Deaf” research given the highly polarized philosophical perspectives that have existed in this area (see particularly Chapter 3).

Historically some human traits and characteristics have been valued as less desirable than others. This however is not the case in some universal sense. Thus for instance, the focus on the lack of auditory perception in human

beings through the ages has been shaped by issues prescribed in different religions, technological innovations related to hearing devices both in the 1950s (the common hearing aids) and the 1980-1990s (the cochlear implants or inner ear hearing aids), and also on “audist-centered”²⁶² notions of normalacy. At the same time there is less recognition of the role and status that visually oriented human beings have played and received in societies which for different reasons accorded a lack of auditory perceptions a less marked status. While a number of such groups and societies have been described in the literature (see Chapter 3), the most celebrated description is that of the situation in Marthas Vineyard during 1600-1800 where all inhabitants – Deaf and hearing – are said to have used ASL in their daily lives and where deafness was considered to be a normal variation in society.

The present meta-research study highlights the fact that limited, if any, energies are dispensed in discussing the *philosophical orientations* of these diametrically opposing perspectives regarding human beings who cannot hear or have limited hearing in the literature. It is contended here that meta-research projects (like the present one) that focus these orientations in-depth both across time and space could contribute to dissolving the distinctly polarized, *a-historical and a-cultural images* of human auditory perception that currently become reified through the technical-medical paradigm on the one hand and the linguistic paradigm on the other (see also discussion in section 8.2 above). However as Lane (1999) succinctly notes:

“The audist narrative of what it is like to be deaf, captured in the literature of the ‘psychology of the deaf’ and in other hearing fiction, is the acceptable one. The *deaf narrative*, rarely committed to paper, is not acceptable; it can be published, but its rebuttal of the hearing narrative *carries no weight*” (1999, 43, emphasis added).

There exists, in other words, an important power differential between these two perspectives. While the category “deaf” and an audist perception dominates both in the popular mind and in research, this has also been the case with other category areas. Examples of *human difference* that have been scrutinized in theoretical terms and discussed in fair depth during the last few decades of the 20th century (at least in the North) include identities and differences that emerge from so called place of origin and both sexual differences and sexual orientations. Ethnicity and Migration Studies, Gender Studies and Queer Studies in one way or another arose, and in so doing gave recognition to the fact that women, gay and lesbians and human beings from different parts of the world were being marginalized socially, culturally and economically. *Of significance to the present discussion is the fact that “people of color”, ethnic minorities in the North, woman, gay and lesbians themselves played prominent roles in establishing these areas of education and research within*

²⁶² Deaf visually oriented senior American researchers like Tom Humphries and Steven Nover discuss the *overriding focus on auditory perception* in terms of “audism”, “hearization” etc. Such terms are seen as highlighting “the paternalistic, hearing centered endeavor that professes to serve deaf people (...) audism is the hearing way of dominating, restructuring, and exercising authority over the deaf community” (Lane 1999, 43).

*academia. These areas emerged after the establishment of a critical mass of voices within academia and in research that started describing identities and ways of being from emic or insider perspectives. Post-colonial scholar Homi Bhabha (2002) positions these kinds of newer perspectives in terms of hybridization in the third creative room.*²⁶³

The establishment of newer, creative post-modern and post-colonial academic domains testify to how politics of recognition can contribute towards expanding our understandings of human diversity and pluralism (see also Bagga-Gupta 2004). This highlights the need for establishing specialized research areas that build on robust theoretical frameworks and in so doing bring newer insights to the human condition in a broader sense. The notion of “politics of identities” arose already at the end of the 1970s to draw attention to how human beings with marginalised identities in newer ways themselves made a claim in formulating who they were and in defining themselves (see Anspach 1979; for a further treatment of this theme see Bagga-Gupta & Nilholm 2002).

The gradual emergence of research domains such as Deaf Studies and Disability Studies during the last decades of the 20th century are in keeping with these shifts in the Social Sciences and Humanities. Events such as the historic Deaf President Now (DPN) mobilisation in 1988 is today identified as having played a key triggering role in creating a consciousness at the grassroots level regarding real recognition (*and not token membership*) in different societal domains and very specifically academia.²⁶⁴ However, despite the recent recognition accorded the newer category areas such as Gender Studies, Ethnicity Studies, Queer Studies, etc. it continues often to be the case that *human beings with functional disabilities* both continue to find themselves marginalized in academic settings and that their voices are not given prominence in these more recent developments in science:

“For centuries, people with disabilities have been an oppressed and repressed group. People with disabilities have been isolated, incarcerated, observed, written about, operated on, instructed, implanted, regulated, treated, institutionalized, and controlled to a degree probably unequal to that experienced by any other minority group. (...)

The case must be made clear that studies about disability have not had historically the visibility of studies about race, class, or gender for [both] complex as well as simple reasons. The simple reason is the general pervasiveness of discrimination and prejudice against people with disabilities leading to their marginalization as well as the *marginalization of the study of disability*. Progressives in and out of academia may pride themselves on being sensitive to race or gender, but they have been ‘ableist’ in dealing with the issue of disability” (Davis 1996, 1, emphasis added)

²⁶³ There is also need to recognize another aspect of the complexities involved in the evolution of new academic domains and the potential for establishing newer impermeable boundaries between disciplines – older and newer ones.

²⁶⁴ For a classical treatment of the subject see Barnartt and Scotch (2001) “Disability Protests. Contentious Politics 1970-1999”; see also Lane (1992) “The mask of benevolence. Disabling the Deaf community”.

This suggests that the oppression faced by human beings marginalized due to a functional disability has been *more substantial* than that accorded to other groups and also that the academic study of disabilities *has not been as legitimate an area of study* as other newly established or emerging post-structural areas of study. Here there is need to note an important paradox:

while there has been considerable discussion in the literature regarding the “inclusion of functionally disabled” human beings in the institutions of schools and other sectors of society, functional disability and functional disabled academicians are perhaps the last category to enter the bastion of “normal” mainstream science.

Studies of marginalisation within different research domains continues to be conducted, as has been outlined in this book, in a rather “segregated” fashion both in terms of theoretical robustness and also in terms of the (separate handicap) categories that continue to define the research. In addition, many such research enterprises continue to be dominated by human beings whose life experiences are not rich sites of oppressions related to their functional disability. A clear example of how the politics of recognition are emerging in the literature from the second half of the 1990s in the area of Disability Studies more generally is how assumptions regarding normalacy are theoretically challenged in the minority perspective accorded Deaf human beings in the research field today known as Deaf Studies. This recognition at the academic level has however, primarily occurred in settings outside of Sweden. Concepts sensitive to visually oriented experiences and emic positions in what can be described as Deaf Studies literature emerged in the 1990s: *The Deaf Way* (C. Erting, R. C. Johnson, Smith & Snider 1994), *The Deaf-World* (Lane, Hoffmeister & Bahan 1996), *Deaf Culture* (Padden 1996a) and *The Deaf Nation* (Turner 2002). These concepts emerged at academic crossroads where grass root agendas found legitimacy within academia. Of significance in the present context is that each of the above concepts is synthesized collaboratively in the works of hearing and Deaf human beings who are visually oriented (see also discussions in Chapters 1 & 7). In other words, it is sharing of cultural norms and linguistic traditions from a visual orientation, and not the condition of deafness per se, that can be said to have contributed to these shifts in the academic arena.

In existence for less than two decades, the relatively young international and multidisciplinary field of Deaf Studies, can therefore be seen as playing an important role in giving *visibility to Deaf voices* in research. The Center of Deaf Studies, Bristol University UK has attempted to capture what this international field is and how it differs from other perspectives on research in deaf/Deaf issues:

“Deaf Studies is the study of *the language, community and culture of deaf people*. It is a study by deaf people, with deaf people, for the benefit of deaf people and for the expansion of knowledge within the community as a whole. It draws on techniques and disciplines which have evolved in the hearing world but seeks to apply a deaf perspective and new deaf professionalism to the study.

Deaf Studies derives its rationale from and acceptance of deafness; it seeks to study the adjustment to deafness and to hearing loss; not the prevention or ‘cure’ of hearing difficulties. The outcome of the work should be an extension of knowledge in comparative areas of spoken language, hearing communities and their functioning, and should lead to greater access and service provision for deaf people.” (<http://www.bris.ac.uk/Depts/DeafStudies/deafstudies.htm>, emphasis in original, October 2001).

Considerable easy accessibility and use of video technology has meant that languages and cultures, which are visually oriented, have been recorded and analyzed primarily in the last few decades. Refined understandings that Signed Languages are human languages and share lexical, syntactic and pragmatic features with spoken languages has also allowed for the more recent detailed analysis of everyday life in Deaf spaces like educational settings and home settings. Deaf Studies departments and research groups in different parts of the world focus upon and bring together findings from different academic areas like history, demographics, linguistics, education, anthropology etc. The Center for Deaf Studies, Bristol University, suggests that the contribution of this emerging academic area lies in that research and education in these departments offers “a unique visual spatial component through a language and culture which we are only beginning to understand” (<http://www.bris.ac.uk/Depts/DeafStudies/deafstudies.htm>, October 2001).

A significant shift that this area represents can be captured in a shift from research for and about the deaf to research by and with the Deaf. In addition, senior Deaf researchers, like Carol Padden suggest, that Deaf academicians have more in common with other academic scholars than with *deaf people as a category*. The emergence of newer voices in Deaf education, voices of Deaf researchers from different academic backgrounds and the voices of Deaf administrators and teachers within Deaf education, *thus together constitute a new platform in the new millennium*. However while we continue to see no established Deaf researchers outside of structural linguistics²⁶⁵ in Sweden and no Deaf professionals who are in positions of administrative leadership within Deaf education in Sweden at the beginning of the 21st century, the situation in the United States is strikingly different. Numerous Deaf staff and faculty teach and conduct research at different universities (including non-traditional linguistics departments) and many comprehensive and upper secondary schools have Deaf administrative leaders and teachers in the United States.

C. Erting (2000) suggests that the absence of “Deaf voices” in administration and in Deaf education is a critical factor that contributes to the specific interpretations of Deaf bilingualism and literacy in Deaf education. This then perhaps also contributes to the specific (and different) approach to Deaf bilingualism that has evolved in Sweden. The paucity or non-existence of “Deaf voices” in research in Deaf education marginalizes “awareness of

²⁶⁵ In the academic field of structural linguistics two Deaf researchers have completed their Ph.D’s during the 1990s in Sweden: Lars Wallin and Johanna Mesch.

[significant] cultural knowledge and its value” and can be understood “as the colonial difference imposed by historically non-Deaf control of educational discourses” (C. Erting 2000).

The role of the Swedish National Deaf Federation, SDR, is generally recognized as being instrumental in the acknowledgement process accorded SSL. While the political acknowledgement accorded to SSL immediately shaped Deaf education and the direction given in the new national curricula in the early 1980s, there is a paucity of empirical analysis that reports of any grassroots level movements that can be compared to the situation in the United States.²⁶⁶

The Swedish general educational model purports that all students have a fundamental right to access and participate in the same education and builds on the important democratic principal of “one school for all”. This together with the top-down decisions of the change in the Deaf educational model in the beginning of the 1980s lead to the implementation of a bilingual educational model for the Deaf where the same national curricula and (since the mid-1990s) similar achievement goals hold for the deaf and hearing school going populations. While the SDR, and the National Parents Association, DHB, supported the changes in policy at the beginning of the 1980s, professionals engaged in Deaf education, both at schools and colleges were not involved in this process. Since the change in national policy had important implications for and shaped all schools for the Deaf *and* teacher education programs for teachers of the Deaf, it is important to recognize that these significant arenas perhaps did not actively participate in any grassroots level movement.²⁶⁷ Professionals at these arenas can be understood as being recipients of new policies that were required to be implemented at the institutional levels.

In addition to the problems associated with the implementation of a new educational model in schools and colleges/departments of teacher education, the lack of direction that the field of Deaf education has received from *research in Deaf education* during the post-1981 period has been problematic (see also Proposition 1998/99 Nr. 105). “A lag exists in knowledge of pedagogical aspects of bilingualism for Deaf students” (Bagga-Gupta & Domfors 2003, 72, 1997). Teveborg and Toll (1991) pointed out over a decade ago that

“bilingual-methods (for the Deaf) move on untrodden ground. Neither teacher education, personal in-service education or the sign language-standards in the [bilingual regional state] schools have reached the levels of the parliamentary intentions mirrored in the Curriculum for the special schools” (1991, 3, my translation).

²⁶⁶ Grassroot level movements in the United States have been briefly outlined in Appendix 3, given the significant role they played in establishing research agendas in the Deaf area and in enabling “Deaf voices” to become visible within higher education and research in the United States.

²⁶⁷ Compare with Appendix 3.

In other words, Deaf education in Sweden in general had not found a clear, well structured direction during the post-1981 period. The national curriculum of the early 1980s could not be implemented in Deaf education because adequate working tools related to Deaf bilingualism were not available for teachers working in Deaf education. And until recently neither had a critical discussion evolved with regards to Deaf students' "first language," "second language" and "Deaf bilingualism" (see also Bagga-Gupta 2002a, 2001a, Bagga-Gupta & Domfors 2003, 1997).

In what ways did the sociohistorical pathway adopted in Sweden to implement a Deaf bilingual system of education shape the evolution of the system itself? Why do we continue to see problematic achievement levels 20 years after changes in policy were made at the national level? Why do we continue to have non-existent and limited participation of Deaf researchers in *the field of Deaf education*? If issues of Deaf education amount to more than just issues of methodologies and ideologies that need to be implemented in classrooms, and the present study takes the stance that they do, why don't we even at the beginning of the new millennium have any Deaf post-doctoral educational researchers participating in teacher education programs for the special schools? A reflection by one of the first Deaf applicants for a Ph.D position at a Department of Education at the university level in Sweden at the end of the 1990s is thought provoking:

"At the research level deaf doctoral students work only towards describing Swedish Sign Language. I think, that that is an important task, but I believe that Deaf students should be able to do their research studies in other academic fields too. Enrolling in a research studies program focused on education is very relevant both for me and for the 'deaf world'" (October 1999, Örebro University, my translation).

At the heart of this very real concern lies the need for serious and professional level participation of Deaf and hearing academicians in Deaf education both at the school level and at the university level. This, it is argued here, has important implications for agendas that can be identified and find legitimacy in both research and in how teacher education gets shaped.

An understanding of the world from visually oriented perspectives circumscribes a need for an audist view of deafness and the essentialistic characteristics that are subscribed to in both research on and services that focus the category of human beings who do not hear. A visually oriented perspective goes beyond quantification and the concomitant reductionistic normativity accorded human auditory perception and instead focuses on the linguistic and cultural sensibilities and orientations of human beings who are Deaf. As outlined earlier, the concept *Deaf*, in contrast to the audist concept *deaf*, emerged in the research literature in the 1980s (perhaps even earlier) and was given legitimation and prominence by Professors Carol Padden and Tom Humphries in their classical account titled "Deaf in America. Voices from a Culture" (1988). However the visual orientation of human beings

who co-construct different “Deaf-Worlds” in different societies is not limited to individuals who do not hear. Sharing knowledge of the linguistic and cultural resources of a particular Deaf community – whether one is Deaf, hard-of-hearing or hearing – is what contributes to becoming a member of that particular Deaf community. The dual concepts *Deaf* and *visual orientation* thus allow for a re-conceptualisation of the human condition that is *neither essentialistic nor patronising*.

An important step forward from these discussions on the politics of recognition and representation, not least within the domain of Deaf education, would thus be to understand the significance of the concepts “diversity” and “pluralism” and how these concepts complement and grow from post-colonial research efforts. Human diversity defined less from a category point of departure and more in terms of the pragmatic *differences and similarities* that constitute human experiences and conditions need to be both recognized and re-researched. The same holds for the newer processes that are enabled through the larger paradigmatic shifts in the sciences when one leaves conceptual frameworks that traditionally build on the dichotomy “center-marginal” (man-woman; heterosexual-gay; white-“colored”; normal-deaf; etc).

8.4. SOME FURTHER SALIENT FINDINGS

The discussions in the previous two sections provide important conceptual frames of references against which central findings of the present study can be understood. Some of these have already been explicitly raised in sections 8.2 and 8.3. Other salient findings are presented in this section.

There appears to be a need for the *research* field of Deaf education to see a more clear cut demarcation between research – whether reported as unpublished reports or conference papers or peer-reviewed articles or published monographs – and *applications* that can then be inferred from this body of research. While this is more valid for the Swedish literature (as compared to the international English literature), the historical shifts and tensions inherent in this research arena perhaps need to see such a demarcation more generally. So readers who have come this far will be disappointed in that no new “model” is being proposed and neither does this concluding chapter present a model of best practices from the existing models in the field. It is contended here that there is particular need to understand literacy issues in the context of the distinction that has been highlighted between Deaf education as a research enterprise and Deaf education as an institutional field.

The analysis presented particularly in Chapter 4 raises issues related to a *crisis of legitimacy* regarding literacy issues in the Deaf education area. This is particularly related to a tendency in the literature to not build on *evidence based reporting*. In addition, the theoretical legitimacy is also compounded by the lack of integration of “Deaf research” in “mainstream disciplinary research”.

There also appears to be an urgent need to understand the existing different school programs – different bilingual approaches and different modality focused programs (oral, total communication, bilingual, etc.) – as research sites where micro-level understandings of the communication-practices that constitute these programs should be studied. Such understandings are, as has been argued on the basis of the analysis presented in the empirical chapters, not only theoretically motivated, but these understandings could be used together with the analysis of demographic and achievement data to resolve the centuries old tensions that have characterized the education of Deaf children. Without an understanding of the communication-practices that human beings co-construct and participate in their everyday lives both inside and outside schools, the research field of Deaf education will continue to re-produce the dichotomies and tensions that have existed and the multitude of reading and writing methods that have been applied in school settings since the first phase of Deaf education in the 16th century.

In other words, the literature in Deaf education is dominated by the prescriptive presentation of the guiding principles of different educational models. While information about these principles make available important baseline criteria, this dominance becomes problematic given the lack of descriptive data and an analysis of the practices that constitute these models. It is contended here that the everyday activities of the different models continue to be veiled in mystery. In addition, some researchers have also raised another issue concerning the guiding principles of different models. Singleton and others (see Chapter 5) also highlight the fact that the *label of a model* (a bilingual model, a total communication model, etc) is not sufficient to adequately inform us about “what is happening” and whether teachers share common pedagogical practices in the same school model, program or even country.

Another significant need in the research field of Deaf education, that has been discussed earlier, is the need for research findings to dialogue in *non-categorical* research arenas. While the debates and discussions in the general political arenas of societies have seen significant changes and greater inclusion of human beings with disabilities – including Deaf human beings – research dialoguing, in the area of Deaf education, occurs primarily in very narrow academic arenas (at least in Sweden). Academic disciplines and arenas are made up of “largely self-regulatory and self-reproducing networks of communication” (Keiner 1994) where the historically accepted channel of academic dialoguing is through scientific publications. However, the character of this dialogue appears to be significantly different in the English language literature and Swedish literature. While the bulk of the English language or international research dialogue continues in category terms, the long standing tradition of publishing in established peer-reviewed journals like the American Annals of the Deaf, The Volta Review, Sign Language Studies, Journal of Deaf Studies and Deaf Education, Deaf Worlds – International Journal of Deaf Studies, Deafness and Education International, etc. suggests both a degree of *quality of the research reporting* and also *wider*

dissemination of findings (with the necessary concomitant critical scrutiny of these texts by other scholars within academia). This type of peer-reviewed publishing is rare in the literature in this area authored by Swedish researchers.

The establishment of the area of Deaf Studies appears to have spurred an increase in anthologies focused on the Deaf issues in recent years. While these would count as category publications, such texts have contributed significantly to knowledge building and some of these publications have also clearly been theoretically driven collections which have incorporated peer-reviewing publishing routines. While these anthologies represent academic dialogues in the emerging field of Deaf Studies, similar dialogues in the area of Deaf Literacies are conspicuously missing.²⁶⁸ This is a bit surprising given the centrality accorded reading and writing issues in the institutional field of Deaf education since the 16th century. Some English texts are also part of more general (non-category) academic dialogues. However these latter appear to constitute a very small part of the literature in the field.

One category focused English anthology titled “Bilingualism in Deaf education” (Ahlgren & Hyltenstam 1994) was an outcome of a 1993 Swedish conference on the same theme with 19 contributions focused on the deaf and hearing area. The affiliations of the authors suggest that only one of these contributions is by a professional who is working in a school for the Deaf and none of the authors are researchers with a theoretical background in the field of education. A review of this particular conference proceedings (see Knoors 1997) also calls attention to the paucity of academically oriented rigorous publications in the area of reading and writing with relevance to Deaf education by Swedish researchers. This trend in the Swedish literature reflects the findings of the 1997 HSFR evaluation of educational research (that has been discussed in this meta-research study), including research in the area of special education. The evaluation suggested that the self presentation of research profiles of University departments engaged in research with a bearing on special education was over rated and that the “examples of such research in the materials we have received, seem moderate” (Vislie 1997, 128). A large portion of the “published materials” sent in to the national evaluation were “reports on developmental/evaluation reports” (ibid, see also discussion in section 8.2 above). The Swedish literature appears to be wanting in both category anthologies and texts that are part of non-category anthologies (only a couple have been identified in the literature). In comparison, the structural-linguistic literature on SSL is both qualitatively and quantitatively more diverse. Having said this it continues to be the case, both in the Swedish context and in the English language international literature, that:

²⁶⁸ A couple of special journal issues that have been identified in the literature represent important exceptions.

“Our understanding of signed language acquisition and reading development is sparse in comparison to our understanding of the linguistic structures of signed languages and how they compare to spoken languages” (Mayberry, Morford & Chamberlain 2000, xiii).

In recapitulating the empirical chapters briefly, it can be said that while the “inability to be able to break the phonological code” has long been viewed as the stumbling block and the prime reason for the reading and writing difficulties exhibited by deaf students and adults, there is increasing evidence in the reporting that this is not a viable way to either understand the “problem” or to getting closer to any applications. Recognition of the presence of skilled readers and writers in the population of profoundly Deaf individuals has more recently not only drawn attention to the “language deprived and delayed” perspective²⁶⁹ more seriously and spurred an interest in both the nature of reading ability in this subgroup but also “phonological processing” and its role in the lives of Deaf readers. However, while there appears to be a more open understanding that phonological mediation might play a different and perhaps delayed role in Deaf readers (as compared to hearing readers) (see for instance Waters & Doehring 1990), reporting in the emerging literature suggests that there is an equally important, if not more pressing need, for understanding the role that visually oriented patterns and strategies of communication play in the early lives of Deaf children. While some literature does seem to attest to the fact that “biliteracy” in a SL and a majority language go hand in hand, only some emerging trends in very recent literature suggest implications that arise for educational settings. Early acquisition of a SL is often seen as being the reason why DCDA’s (whose pathways to SL acquisition are understood as being similar to hearing children learning a spoken language) exhibit superior skills in *reading and writing tasks* in the international literature. However, it has also been argued recently that at least some DCDA’s have more than average competencies in *school tasks*. While recent estimates suggest that DCDA’s comprise only up to five percent of the total deaf population, researchers outside Sweden continue to study this group in order to understand different aspects of “normal” visually oriented bilingual socialization patterns. As the analysis of the Swedish literature suggests, there has been no interest in studying this linguistically unique sub-population in Sweden.

There is surprisingly limited reporting in the literature on the multilingual and multiliteracy lives of Deaf children who come from spoken minority homes. The few recent studies that have been identified and discussed in the literature call for the need to focus on the complex situation of these children and their families, not least their relationship to schooling. It might be the case that Deaf children from ethnically diverse home backgrounds are either subsumed under only the “deaf category” completely or viewed as “immigrant students with problems”. In other words, ethnicity issues are either ignored in the literature or else they are seen in terms of an

²⁶⁹ Rather than the “language deficiency” perspective.

“additional” handicap. Some recent literature suggests that the situation of many of these children resembles that of DCHA’s more generally, in that their exposure to literacy practices are often restricted.

While early language experiences of both SL and a majority language are today seen as crucial in the international literature, *mere exposure* to the two language codes are not deemed sufficient for successful participation in school tasks. The roles of parents, preschool educators and primary school educators are increasingly viewed in the literature as playing a crucial role in laying the foundations of skills through activities and practices that “connect” the two languages in patterned ways. While the roles of middle and secondary school educators is also understood as being important, the importance of the earlier years is stressed in the literature. On the other hand, the majority of literature that focuses reading and writing issues in Sweden takes the view that the early years (0-6/7) are *not* vital for socialization into Swedish. In other words, while *sequential bilingualism* is advocated as the correct method for teaching Swedish to deaf students during the post-1981 period, the English language international literature seems to argue against this approach on both pragmatic and theoretical grounds. In this regards it is important to highlight the contrasting understandings of Deaf bilingualism represented in the Lund and the Stockholm models (discussed in Chapter 6.4).²⁷⁰ While the Lund model did not receive prominence in the centralized national curricula during the 1980s and 1990s, it shared important principles with the Deaf bilingual approaches identified in the English language international literature.

Research on the micro level communication-practices of members from Deaf home and school arenas during the recent years throws light on some patterns that bridge and connect the two primary languages (discussed in Chapter 7). These have been variously described in the international and Swedish literature as “sandwiching”, “chaining”, “local-chaining”, “linking”, etc. At the activity level interactional patterns where systematic use of both languages occurs in educational settings have been conceptualised in terms of “event-chaining”. Of interest is also what has been described as “fluent English signing” and (one of three types of) “synchronized-chaining” in this literature from the last few years. Some other salient findings in this emerging body of literature include the interesting observations by La Bue regarding the “circular logic” in Deaf education where the dominating focus on form interferes with access to language content (see Chapter 6). While this focus on form is characteristic of and dominates language teaching more generally, its relevance in the Deaf area is more pervasive.

The findings of a number of studies implicitly point to the *early bilingual socialisation* of Deaf children into the two primary codes of the Deaf communities. The present analysis, however, questions the lack of

²⁷⁰ The more recent studies on Deaf bilingualism and literacies reported from Örebro University could be seen as being theoretically aligned to the Lund model.

conceptual discussion regarding the unilateral focus on socialisation into one of these two primary languages in these studies, ie. either English, or Swedish, or Norwegian, or other majority language. In other words, while the analysis of research presented in Chapter 7 demonstrates that Deaf children do not learn the two primary languages of a given Deaf community “intact” and in isolation from one another, there is limited focus in the literature on the *bilingual socialization* of Deaf children. There is thus an implicit tendency in the literature to regard an “assumed monolingual” SL input in Deaf or visually oriented homes. This is problematic since this accords non-recognition to the potential bilingual foundation of DCDA’s. Some studies have explicitly focused upon the bilingual socialisation of very young children and at least one large on-going research project²⁷¹ focuses more explicitly on the bilingual socialisation of Deaf children both inside and outside school settings. There appears to be a tendency to view literacy as a continuum between home and school practices in the literature that describes communication-practices. However an extremely limited number of studies report on the literacy practices of Deaf students outside school settings. No Swedish literature has been identified that has focused literacy practices outside formal institutional settings.

Studies of communication-practices are important in terms of a knowledge building enterprise since they empirically throw light on beliefs and ideologies on which the most recent shift in Deaf education is built. Thus while a general understanding is shared in the bilingual model reporting regarding how English or Swedish are supported by ASL or SSL in the analysis presented in Chapter 6, this body of literature does not explicitly discuss the nature and role that these languages play in the literacy socializations in the lives of Deaf children and adults.

Another salient finding from the studies that report on communication-practices is the role of fingerspelling in different types of settings. In addition to demonstrating the mediating role of fingerspelling as a resource in bilingual settings, some studies also demonstrate that even Deaf children below the age of two years make sense of fingerspelling communicative routines in “Deaf ways”. Sociolinguist Ceil Lucas and her colleagues have more recently emphasized that the use of ASL and English, like the use of other languages, *varies* over time, *varies* in different settings and *varies* in response to the linguistic environment in which a particular form is used. These more general findings may help throw light on the emerging analysis of the acquisition and the role of fingerspelling in visually oriented settings more generally and in relation to literacy issues in these settings more specifically. There is need to question the more traditional view accorded fingerspelling in Deaf settings including educational settings, and the negative connotations regarding fingerspelling that were established in Sweden during the 1980s and 1990s.

²⁷¹ The Signs of Literacy Project (see Chapter 7.4).

The empirically derived concepts such as sandwiching, local-chaining, linking, etc. and the communicative patterns that have been described in the recent literature, emerge from studies conducted in different research groups. The significance of this body of literature also lies in the fact that it emerges from studies of the social practices of members of different Deaf communities in institutionalised and home settings in some parts of the world. While there is pressing need to corroborate the findings from these settings in other visually oriented institutional arenas in other parts of the world, the significance of the studies presented in Chapter 7 lies in that they were being conducted in dispersed research settings during the 1990s. Against the backdrop of the discussion in section 8.3 above on the politics of recognition, it is not insignificant to add that these studies were and are being conducted by researchers who themselves use both the languages being used in the settings that have been studied. The recent empirical literature that has highlighted the “connectedness” of the two primary languages in both Deaf home and school settings have been described in terms of

- (i) “vernacular forms of talk” in Deaf communities adapted for use in classroom talk (Padden 1996a, 91).
- (ii) “cultural knowledge” of Deaf people and the hearing people who work with them to understand “how to be bilingual in the Deaf way” (C. Erting 1999).

It is contended here that findings from research that focuses upon communication-practices in settings where adults are competent users of *both the languages* will play an important role in helping us understand some of the concerns that the field of Deaf education has faced in the area of literacy during the last few hundred years. Subscribing to the centrality of SLs in Deaf educational settings, many of the Deaf and hearing researchers whose work has been discussed in Chapter 7 appear to suggest that

“research is needed to explore what bilingual language practices are and what sociocultural resources actors in these settings make use of, before we make claims of what they should be” (Bagga-Gupta 2002b, 583).

It is also interesting to note that theorizing in the area of sociolinguistics more generally has critical relevance to the discussion of the research that has identified common patterns of routine communication-practices in Chapter 7:

“The local analysis of practice is important not only when it confirms generalizations about social order, which may have been reached independently of sociolinguistic investigation. It is important particularly when it *qualifies* or *conflicts* with normative generalizations” (Coupland 2001, 17, emphasis added).

Since the socio-political scenario vis-à-vis recognition of different SLs in different nation states and their status in Deaf education continues to be different in different parts of the world, there is yet another reason to focus research attention to in-depth understandings of the *communication-*

practices that are deployed in different programs and models. The emerging research trends of everyday language practices explored in Chapter 7 present a challenge to both the research community and to the ideologies of Deaf education that are explored implicitly in the different studies.

We are, in part because of the availability of newer research technologies, for the first time in the history of Deaf education, in a position to carry out studies that critically evaluate “actual” practices of communication – the “what is happening” issues – without becoming entangled in the wire mesh of ideologies. Studying practices and activities of life inside and outside classrooms, through ethnographically inspired in-depth discourse analysis, would be one way of understanding what different purported programs of Deaf education are doing and also relate these to what these models are achieving. We would then find ourselves in a more informed position to understand “what’s meant by the different labels and models” that have been and continue to co-exist in Deaf education. This could potentially lay the foundation for cross-cultural analysis between the different models, what access Deaf children have to literacy activities in the everyday practices of the different models etc. It also seems that the major emphasis in the literature so far has been in creating equivalences between failure or success and different models of Deaf education based often on more “simplified” or “reductionistic” understandings of what constitutes language.

A large body of the “better practice studies” builds on the common, though misguided, conception that the goal of research²⁷² is to improve reading and writing levels, to provide professionals with better methods etc. It has been argued both in the introductory chapter and elsewhere in this meta-research study that the goal of research (not least in the human sciences) in “basic” research efforts is knowledge building and the development of newer insights in different areas. The notion that research should automatically give rise to “better methods”, “better applications” is a gross simplification and builds upon reductionistic views of human development and learning (compare also with the theoretical framework presented in Chapter 2).

We might have access to a totally different kind of data base to make judgments regarding “better practices” if the focus of research activities shifts to understanding how human beings routinely interact in Deaf educational settings and how these measure up, for instance, to skills in school tasks and to participation in other arenas in society in general. One could say then that there exists an urgent need to understand different trends and models through the study of everyday practices that (re)create and (re)organize each of those models. As Ramsey suggests, “there are inexcusable gaps in our knowledge of the linguistic and social contexts of deaf education and of the communication processes at work in these settings” (1997, 2).

²⁷² Compare with discussion in section 8.2.

Despite the head start that the Swedish Deaf education system received, in the move towards the latest phase in Deaf education, after the recognition accorded to SSL in the national curricula, we continue to know very little about the *everyday interactions and lives* of Swedish “signing preschools”, Swedish “bilingual schools”, transition programs between the different institutional settings, the use of technologies like CI and other support systems in the everyday lives of students and adults inside and outside classroom settings. The present analysis, in addition, critically points to the dire need for acknowledging the diverse ways of conceptualizing communication and the diverse “ways with words” and ways of being that potentially exist within different Deaf communities. In other words, there is need to explicitly recognize that there are “different normal ways of being Deaf”²⁷³ and that there are “different Deaf ways” as far as use of languages is concerned in different Deaf communities. The ideological and normative understandings of Deaf bilingual education in Sweden, for instance, reduces all *Deaf* people to being *deaf*. This contrasts with the Deaf bilingual education provided for students in Norway following acceptance of a new bilingual curriculum that was implemented in Norway in 1997 (Ohna, Hjulstad, Vonen, Gronlie, Hjelmervik & Hoie 2003).

In Sweden the acceptance of SSL as a language of instruction in schools has led to a situation where young Deaf children today grow up in a society which not just accepts SSL as their primary language, but which also attempts to provide the children’s hearing family members with SSL competencies. In addition, the goal at the turn of the millennium continues to be to provide language environments that can be compared to the everyday language environments of hearing Swedish children. However, research into the everyday practices in these environments are now perhaps for the first time giving us a glimpse of the routine ways in which languages are used in these settings and more importantly what access children have to language and literacy activities in these settings. As compared to the Swedish context, a larger number of research groups are currently studying the everyday lives of visually oriented Deaf children in bilingual models, mainstream models and in bilingual Deaf homes in the United States. However as Padden suggests “the quantity of this work has yet to reach a critical mass” (1996b, 103). Implementing an educational bilingual, oral, total-communication, or other model is one thing, understanding the communicative-practices in the classrooms to analytically throw light on the model is quite another.

8.5. CONCLUDING SUGGESTIONS FOR FUTURE RESEARCH DIRECTIONS

Reflecting on issues of *citizenship, control and courage* in the introduction of a 2002 issue of “Deaf Worlds. International Journal of Deaf Studies”, Graham

²⁷³ Compare Ohna (2003).

H Turner, editor of the journal, and situated at the University of Lancashire, Preston, England, says:

“I believe that democracy and citizenship matter, and I have been supportive since the 1980s of initiatives (...) for constitutional rights, which set out to examine some of the weaknesses of the British political system. One of the key issues of that campaign was about responding to the *pluralism of our society, including the key matter of how to ensure that minority perspectives are appreciated*. Setting up a conference that would be all about Deaf perspectives, privileging ‘insider’ knowledge as opposed to the ‘outsider’ views of largely hearing academicians, seemed to be a useful contribution to Deaf political life (...)

The role of academics as allies in this context, it seems to me, has to do not with presuming to provide answers – despite the fact that this is what students [practitioners and policy makers] expect! – but more with *trying to ask revealing questions*, to generate opportunities for dialogue, to be aware of and feed in ideas from other sources, to offer reasoned and constructive critique, to help direct attention to insights that might otherwise be overlooked and generally to facilitate the development of a thoughtful environment” (Turner 2002, p 74-5, emphasis added).

The above words highlight the significance of

- i. international academic dialoguing,
- ii. focusing on issues related to the politics of recognition,
- iii. the need for critical self-reflection within academia and
- iv. questioning the instrumental search for better methods, better answers that characterize much of the reporting in the area of reading and writing in Deaf education.

While the need for research in this area to become “integrated” into mainstream science in general clearly exists, there is also – as has been argued – a need for research areas to be developed in order to challenge the hegemony or monopoly of the historical focus and status that some research agendas have received (and continue to receive). Some concluding suggestions for future research directions are briefly identified here. These complement the areas already identified in the sections earlier in this final chapter.

Re-conceptualizing research agendas in the area of literacies and *creating pluralistic agendas in research* that are themselves shaped by differently-abled²⁷⁴ voices constitute *two overarching themes* that underlie the suggestions presented in this concluding chapter.

- *Mainstreaming research of marginalization* within (i) the parameters of established disciplines and (ii) newer thematic areas of studies like Deaf Studies.
- Research on the *multilingual and multiliteracy* lives of Deaf children who come from ethnically diverse backgrounds.

²⁷⁴ Compare “dis-abled”.

- *Comparative perspectives in research agendas:* Such an enterprise is conceived as going beyond inter-national collaboration and research, and includes engaging in dialogues (i) across different academic disciplines; (ii) across different national settings; (iii) in different thematic (hybrid) areas; and (iv) across different institutional settings²⁷⁵. Here there is also a need to initiate research that attempts to understand the philosophical heritage of the two positions that have polarized the field for over two centuries.
- *Academic dialoguing internationally:* The need for researchers engaged in the “handicap area” (including the “Deaf area”) to participate in academic dialogues within the context of globalization appears to be particularly acute in the Swedish context. A (meta) research area that can shed light on the present situation is in terms of understanding the *cumulative research-histories* of individual researchers and of research groups, their network of academic contacts and academic activities. Such a concerted effort could possibly allow the research field in Sweden to engage in self-reflection and understand the critique leveled at this type of research – irrespective of philosophical orientation – in the recent past.
- *Breath and depth in research:* There is a need to focus on both the larger issues related to what types of research efforts exist (including what needs to be looked at) and in-depth empirical studies of, for instance, participation and access in education. Recognising the administration and organisational divisions that steer conceptualisations of education (preschool, compulsory school, upper secondary school, higher education), there is need to – especially in the Deaf area – to study education *across these divisions* in order to contribute to a more nuanced understanding of issues of representation and marginalization at all levels.
- *Research on the everyday lives of differently-abled human beings in education:* Questions that become important under this theme include: Why are Deaf students grossly under-represented in institutions of higher learning in Sweden? What do we know about the opportunities that potential students in higher learning receive within preschools, comprehensive and upper-secondary schools? What life trajectories do successful students display? What does a visually-oriented world look like for members of educational settings in general?
- *Cross-national meta-research on support-services for students within different levels of education:* What kinds of knowledge exists vis-à-vis support services for differently-abled students, teachers and

²⁷⁵ Compare the analysis of meta-research studies in the general area of education and in teacher education by Keiner (1994) and Lindberg (2004).

administrators at different levels in Sweden and how does this compare with support services available in other countries (especially countries in the North)? Are support services like the presence of interpreters, note-takers, etc. steered by *traditions* in different countries or are these made available on the basis of *research generated knowledge*? What are the conditions for learning in situations where support-services have been incorporated? Is there a focus on the deficiencies of the students (the hearing deficit or merely the SL needs of students during teacher-contact time) or are needs conceptualized on the basis of the “whole student” and “what it means to be a student” in the new millennium?

- *Research agendas in education and Deaf representation in research sites:* In addition to what has been highlighted in the preceding sections of this concluding chapter, there is need to focus on representation issues through, for instance, the following types of questions: What kinds of knowledge production forms the basis for courses offered in Swedish universities (courses taken by Deaf students and courses taken by professionals who serve Deaf populations)? In what ways are Deaf voices incorporated in the agendas of these courses and in research? What aspects of the politics of representation can be discerned in the way research on Deaf issues are conducted within academia in Sweden?
- *Research on conceptualizations of the deaf/Deaf within society and academia:* What language is used in different kinds of texts (like research publications, political texts, everyday talk, etc.) with regards to human beings who do not hear? How are human identities and cultures conceptualized in such texts? What bearing do these types of texts have on the democratic rights and responsibilities accorded human beings in the new millennium?
- *Complimentary and/or new research areas in Sweden:* Research and publishing in some areas have taken precedence historically in Sweden. These include medical-technical research that has existed during the entire 20th century; structural linguistics research from 1970s onwards; psychological and sociological research that became prominent first in the 1980s; and educational research (research on teacher-training, history of schooling, interaction in classroom settings) that emerged first in the 1990s. The following six can be identified as potential areas of research that are in need of developing against the backdrop of the historical development of research in the area of deafness in Sweden:
 - Childhood and schools are understood as central periods and sites for *socialization and democracy* in critical educational thinking in Sweden.²⁷⁶ The

²⁷⁶ See the work of members of the SOC-INN (Contents of socialization and dimensions of citizenship) education research group lead by Tomas Englund at Örebro University.

paucity of research in Deaf school sites that generates a body of critical knowledge for school development needs to be attended to, not least, given the considerable attention that the Swedish education model has previously received in many parts of the world.

- There is an important need to initiate research from a *sociolinguistics orientation* ie. research on how visually oriented human beings use languages and other resources in their everyday lives. While resources have been ear-marked for knowledge building on the structure of SSL for over two decades, considerably little efforts are focused upon studying how languages are used in everyday contexts by Deaf and hearing people in visually oriented settings. It is suggested that focusing both structural and sociolinguistics is important and the latter would have significant consequences on the development of SSL courses that are currently offered at Stockholm and Örebro Universities and other non-university based institutions in Swedish society. This would also have important consequences for the development of support-services available for visually oriented citizens more generally.
- Research needs to be initiated on the consequences of the emergence of “different language categories” from historical, present day and future points of departure: how do the labels ‘Swedish’, ‘Swedish as a second language’, ‘Swedish as a second language for the deaf’, ‘didactics of language’, ‘Swedish didactics’, ‘mother tongue’, ‘bilingualism’, ‘foreign languages’, ‘home language’, ‘minority language’, *contribute towards (or restrict) our understanding of human communication, identity and learning?* How do national investigations related to language issues like the ongoing work of the Committee for Swedish Language (SOU 2002 Nr. 27) edify boundaries which then have a bearing on the possibilities (and difficulties) for establishing and conducting research from more post-structural perspectives? While there are good arguments in support of the ongoing national discussions to focus resources in order to allow for the development of sites of excellence vis-à-vis a particular (minority) language at no more than one university in Sweden, there are also convincing arguments to think otherwise in the case of SSL. Given that SSL has as yet to receive the status of a minority language in Sweden and that it is highly unlikely that research on SSL would be conducted in any other part of the world, there is fundamental need to encourage the development of research on SSL at more than one university setting in Sweden (this follows the general argumentation presented earlier and which builds upon the critique put forth by the 1997 HSRF evaluation of Swedish special education research).
- Research on *uses of IT as communicative tools* in: visually oriented communication generally; in the delivery of courses at universities; in the establishment of research cultures. etc. There is particular need to study the role of technologies in supporting Swedish and other majority language competencies from non-prescriptive points of departure.
- Research on *uses of media* in visually oriented settings like schools, Deaf clubs, families, university settings, etc. This has a bearing on supporting language learning in ways that are similar to the preceding point.
- Research on *literacy practices outside institutionalized educational settings*: This area is particularly relevant given the rather strong association that reading and writing are seen as having to the comprehensive Deaf school (and not preschool or home) arenas in Sweden. This research agenda also qualifies on the theoretical basis of, the field of Literacy Studies or New Literacy Studies, wherein everyday literacy practices outside school arenas have come center stage during the last couple of decades.

- Research on the *demographics of diversity* and shifts in demographics as relating to Deaf and visually oriented populations: This has major repercussions on both how research results can be interpreted and on how policies are drawn. Even the recently established national Special Schools Authority – SPM – decries the lack of reliable information regarding its potential school population (see for instance SPM 2000).

Areas of research that build upon a technical-medical perspective on deafness, for instance audiology, genetics, treatment, cognitive perspectives on reading and writing, etc. have not been lifted up as in need of special support here. This is qualified because research from this perspective both clearly dominates the research agenda and also because these areas are *already richly funded* (at least in the Swedish context). This is particularly the case if a comparison is made with the research that takes into consideration a non-audist perspective. For instance the *dramatic increase*²⁷⁷ in the percentage of deaf children receiving Cochlear Implants in Sweden at the turn of the millennium is in sharp contrast to percentages in other countries in the North (the latter have not seen these dramatic increases during the same time period). The fact that research into the social, emotional and educational aspects of medical treatments like CI follows rather than precedes it becomes further complicated given the current scenario where local health authorities make local decisions in Sweden to fund this expensive surgery²⁷⁸ and given that budgets are sometimes not sufficient for covering even basic interpretation needs of Deaf citizens in the same local authorities.²⁷⁹

Such discrepancies and complexities call into focus both the need to recognise the critical importance of research from non-audist perspectives and also the need for critical research dialoguing *across perspectives*. The current situation nevertheless raises important ethical and democratic issues regarding the hegemony of the technical-medical perspective within academia and in the mass-media generally. This does not imply that research from this dominating perspective is unimportant, only that its unquestioning domination – not least in the eyes of politicians and policy makers – needs to be highlighted and problematized. Research from this dominating perspective needs to be complemented with research from diversity and humanistic perspectives. In fact, there is need to study, what proportion of research funding is made available not just to the different perspectives in the Deaf area, but also to the different perspectives that have been identified in the *special education field in general*.

²⁷⁷ Almost all newly identified deaf children in the Stockholm region are reported as being operated with CI currently. See discussions in previous chapters, particularly Chapter 5.5.

²⁷⁸ This *economical bio-ethical* issue perhaps gets further compounded given recent estimates that suggest that many of the implanted children go on to stop using these devices after the operations and will possibly return to special school settings during some stage. Here too demographic data is wanting.

²⁷⁹ It is interesting to note that *local health authorities* in Sweden are in charge of governing the organization of budgets for interpreting costs as well.

There is a clear cut need to look into how funding is spread (or restricted) over different disciplines, faculties, perspectives that make a claim to contributing to developments in the institutions of schooling. This is important if school settings are to be seen in terms of important arenas for the futures of our societies. How are ethical issues handled in the research process from a differently-abled and diversity perspective? Does research in the area of deafness (including research on the hard-of-hearing) itself reproduce the centuries old dualism that has plagued the field of Deaf education? The present study indicates that this is probably the case. *Research into the re-production of this dualism is critical to our understandings of diversity, normalacy and democracy.*

Research in the *various established areas of education* – teacher education, history of education, philosophy of education, didactics in visually oriented school settings (from preschools to university settings), didactics of bilingualism, didactics of SSL, didactics of visually oriented Swedish literacy, interactional research, sociology of education – are wanting at least in the Swedish context. Research in the *area of sociolinguistics* also has special relevance to the areas identified above under the realm of education. Taken together these two areas – established fields within the science of education and sociolinguistics – could complement the existing emphasis on research in the area of deafness that currently focuses structural linguistics and psychology in Sweden. The potential for establishing research in areas of education and sociolinguistics exists today in different parts of Sweden. Here one can mention the colleges of teacher education in Stockholm and Malmö, Lund University, Örebro University and Gothenburg University. The college of teacher education in Stockholm (LHS) has received ear-marked support for research in the area of didactics of natural sciences during the 1990s which focuses Deaf schools. This kind of research is important for enabling a much needed pedagogically driven discussion base in Deaf schools. However, other areas of didactics, not least the critically significant area of *didactics of bilingualism* also needs to be established.

Finally there is need to reflect on the separate lives that research and educational practices live and have lived. Without falling into the confusion regarding the instrumentalism inherent in the overwhelming majority of reporting in reading and writing issues within Deaf education (both international and in Sweden), there is nevertheless need to support connections between education research (particularly ‘basic’ research) and the institutions of schooling:

“The disconnection between research and practice is not a new phenomenon, but as researchers and educators look toward the future of deaf education, it seems *crucial to look back at the reasons* behind this disconnection with the goal of creating a professional milieu in which we use research to improve literacy practice and practice to improve literacy research with deaf students” (Schirmer 2001, 83, emphasis added).

Some of the findings that emerge in this meta-research study – not least the works analyzed and discussed in Chapter 7 – can be understood as highlighting the need for critical reflections regarding practices in the institutional settings of Deaf education (at different levels: pre-schools, schools, parent educational courses, etc.) in Sweden. From a literacy perspective there is clearly a need to re-conceptualize the “monolingual bias” that has been subscribed to in pre-school settings. As Deaf American literacy researcher Marlon Kuntze, suggests:

“An ideal approach to changing schools is through the creation of a situation in which deaf children, as a result of early language and literacy experience at home, arrive at school with both ASL and the early stages of literacy development already in place” (Kuntze 1998, 14).

In Sweden it would not be unrealistic to make this goal a reality given the one-track model of education that is made available in the country. It is the prescriptive nature of the present model that have shaped pre-schools and that have de-emphasized Swedish at this institutional level. In the US while some pre-school programs already make available bilingual experiences to young Deaf children,²⁸⁰ there is a need to resolve the long standing debates regarding “what language is” in the context of the organization of schools and the different philosophies that shape this organization.

Supporting the development of the areas of education and sociolinguistics research would fill some crucial gaps in the existing research foci in the Deaf area in Sweden. These have partly been previously identified in national investigations like Proposition 1998/99 Nr. 105. Enabling the setting up of a broad range of newer areas within existing disciplines in the Social Sciences and Humanities at more than one seat of higher learning would, in addition, allow for new agendas to be identified and established.²⁸¹ This would also enable the strengthening of the overall research scenario so that possibilities to dialogue constructively across the divisions in the two philosophical traditions can emerge.

To recapitulate, there is both a need to encourage different research agendas to flourish in the area of deafness (even within a particular domain of science), and a need to ensure theoretical robustness and a critical mass in research activities within an international framework. This, as Turner (2002) succinctly puts, would respond to “the pluralism of our society, including the key matter of how to ensure that minority perspectives are appreciated” within academia (2002, 74). Against the backdrop of the major ideological shifts in Deaf education that have been “pulled” by prescriptive considerations during the last few centuries, and fundamental concerns

²⁸⁰ In some settings, in and outside the US, hearing children are introduced into visually oriented bilingual preschools and schools as well. Here a given SL functions as the primary language even for the hearing children.

²⁸¹ The need for this in the Swedish context has been argued for in this concluding chapter.

regarding equity and access, an issue that demands attention relates to understanding access issues through studying social practices.

In the Swedish context there is a need to throw light upon how the “one school for all” organizing democratic ideology match up to the new goal oriented principles that are currently focused upon in education generally and Deaf education specifically. How can we understand concerns about Deaf students’ results, two decades after the acceptance of SSL as the “language of the deaf” in school settings? Finding answers to this central question requires knowledge that has a descriptive basis. In other words, we need to know what language is, and reading and writing in particular, in different bilingual Deaf school and out-of-school settings.²⁸² In other words there is need to “unpack” and “deconstruct” the social practices that make up what is called the Swedish model. Prescriptive traditions will continue to be advocated, as has been the case for a very long time now, without such a *long term approach*.

Here it may be worth recalling that while a substantial documentation exists with regards to hearing peoples bilingual communication in institutional settings with diverse ethnic and cultural populations, we continue to know little about *everyday activities* in bilingual settings in general and visual forms of bilingualism in particular. The emerging trends in the research on social practices presented in Chapter 7, for the first time in the history of research in Deaf education provide a view into the “black-box” (Säljö 2000, 1997a) of Deaf education. While the educational settings that are being investigated in the United States and Sweden are prescriptively labeled as “Deaf bilingual” or “Deaf mainstream” or “other label” setting, descriptive knowledge of the practices of these settings allows for more grounded understandings of learning that are enabled there.

²⁸² There is, as has been outlined earlier, an equally important need to study literacy practices in different sub-groups of the Deaf community *outside* school arenas.

APPENDIX I

Further notes on the data and analysis

Work on how researchers and education professionals have historically (and currently) conceptualized issues related to literacy and the language spheres of the deaf/Deaf was initiated in the mid-1990s. At that point in time conventional searches of four different data-bases was conducted at Linköping University. A review of these data-base searches identified potentially interesting titles. These identified titles were then fed into abstract data-bases and the results were further analyzed before articles, books and reports were ordered through Linköping University and the then University college of Örebro libraries in Sweden. These texts formed the primary body of data that was studied. In some cases, unavailability of texts resulted in the abstract being used in this initial study.

The *time-frame of this initial literature search and analysis* is important for a couple of reasons. Firstly, this conventional search identified very little literature relevant to the directions and explorative issues and questions that are raised in Chapter 1.1. In other words, very few studies (that were identified in the literature) appeared to be focused upon activities and practices in Deaf education. The greater portion of the literature reported the success or failure of different (prescriptive) models that focused on the reading and writing abilities of deaf/Deaf school and preschool populations. While this in itself was a significant finding and needed to be reported, participation in international conferences and internet discussion-forums in the later half of the 1990s unearthed evidence that researchers, especially in North America, were working with projects that were studying the everyday lives of Deaf children both inside and outside school settings. Some of these projects and individual studies were focused on literacy issues.

Secondly, the availability of web resources at Swedish universities during the latter half of the 1990s revolutionized the tools that became available for conducting such meta-level studies. The paucity of data-driven studies that described issues related to Deaf literacies in the earlier conventional search and the parallel knowledge concerning new studies (and documentation) that focused literacy in Deaf education that were being initiated during the second half of the 1990s spurred the need to conduct new searches using different kinds of internet related tools. An opportunity to do this arose

during 2001. In addition, a visiting scholar position²⁸³ at the Gallaudet University, USA during 2001-2002, allowed for the possibility to work with a unique e-resource directly related to Deaf education and literacies. This local e-resource being developed at the Signs of Literacy (SOL) Project at Gallaudet Research Institute and Department of Education, with its documented collection of circa 2500 references, were accessed at the laboratory offices of the project and proved to be an invaluable resource for this study.

Internet resources available via the home pages of Gallaudet University, USA and Örebro University, Sweden have been also used during 2001. For instance data bases like “Libris”, “ERIC”, “PsycLit”, “PsycINFO” and “EYRB/NYRIB” have been used to access both titles, abstracts and in some cases full texts. In addition to the literature that had been accessed in the conventional searches during 1995-96, additional (especially new) literature was ordered. Attempts were also made to identify relevant literature by identifying new references cited in the reference lists of texts that were being studied.

A number of different key words and terms have been used in these searches (see also Chapter 4). These include “Deaf” with the following combinations: “demographic”, “literacy”, “communication”, “school achievement”, “oral*”,²⁸⁴ “total”, “total communication”, “cochlear*”, “bilingual”, “classroom practice”, “communication activit*”, “school practice” and “everyday life”. Similar Swedish word combinations were used in data-bases which included Swedish literature. In addition, the names of established Swedish researchers were used to search for literature in the Swedish data-bases. The following key words have been used to identify relevant literature from the e-resource that covers Deaf and hearing literacies at the Signs of Literacy Project at Gallaudet University: “demographic”, “communication practice”, “classroom practice”, “social practice”, “school practice”, “school activit”, “literacy”, “literacies”, “reading and writing”, “school achievement”, “communication”, “classroom communication”, “oral”, “total”, “technology”, “activit”, “bilingual”, “everyday”, “everyday life”, “Swed” and “cross-cultural”.

Entire texts and abstracts have been used in the analysis. Writing and analysis work often went hand-in-hand. Chapters 3, 4, 5, 6 and 7 were conceptualized through the study of this body of literature. Certain initial trends in the literature were further investigated, either through the use of other web tools or in the case of the Swedish context by contacting some researchers directly. An example of the former was the use of the ERIC coding system that has existed since 1979, as a research tool to categorize

²⁸³ P V D Chair of Deaf Studies (<http://gri.gallaudet.edu/funding/pvd.php>, October 2001). See also <http://gri.gallaudet.edu/Archive/sangeeta.html>, October 2001

²⁸⁴ The symbol “*” is used to enable an “open category search”. Thus for instance, the use of “oral*” allowed terms like “oralism”, “oralist”, etc. to be included in the search.

textual trends in the literature in the preparation of Chapter 4. Researchers and students at GRI²⁸⁵ and the Signs of Literacy Project at Gallaudet University, USA and at the KOM-DS²⁸⁶ research group at Örebro University played an important role during this stage of the project. In addition to functioning as important discussion partners in informal and formal contexts,²⁸⁷ they also assisted with identifying and sharing published literature and manuscripts of relevance to this study. The Swedish researchers were also instrumental in locating unpublished reports that were more difficult to access during the analysis and writing process in Washington DC.

²⁸⁵ Gallaudet Research Institute.

²⁸⁶ Kommunikation, Kultur & Mångfald – Deaf Studies (Communication, Culture & Diversity – Deaf Studies).

²⁸⁷ Participation in a number of North American and international conferences/meetings during 2001-2002 have also shaped the analysis work and the writing of the present text.

APPENDIX 2

Summary of projects and work experiences

(related to the Swedish Deaf bilingual model)

The following is a summary of projects and work experiences self reported by Swedish linguist Kristina Svartholm in a 1996 article. These can be understood as contributing to the specific Deaf bilingual model as it has emerged in Sweden during the last two decades (see further Chapter 6.4).

- “*Swedish as a mother tongue for the deaf*” project. Svartholm reports that in this project she attempted to focus on “different syntactical patterns (...) in deaf [peoples] written Swedish and could amongst other things point towards a number of similarities – but also differences with the temporary-language²⁸⁸ of hearing second language learners” (1996, 129, my translation).
- “*Teaching deaf students in Swedish at the Department of Scandinavian languages, Stockholm University*” since early 1980s. Svartholm reports that she is responsible for the course “Swedish as second language for deaf”, a course that is given in collaboration with SSL researchers at the Department of Linguistics, Stockholm University. The course is “taught in sign language [and] the students get a course content that is unique. The written language is viewed from a ‘silent’ perspective, without reference to spoken Swedish, and it is contrasted as much as is possible with sign language” (1996, 129, my translation).
- *Participated actively in the intense work after the 1983 national curriculum came into force in the special schools.* Svartholm reports that she worked “with developmental projects, trial projects of different kinds, in-service training courses, etc. Amongst other things, I wrote a language-guide²⁸⁹ in Swedish for deaf, which was commissioned by the SÖ [National Board of Education] and contributed towards development of other service material for the deaf schools” (1996, 129, my translation).

²⁸⁸ Swedish: *interimspråket*.

²⁸⁹ Swedish: *språklara*.

- *Identifying problems and needs for Deaf people within the adult education arena* and invited by SÖ, National Board of Education, to write a course outline in Swedish for the Deaf at the post-compulsory school level. Svartholm reports that this work did not subsequently receive support when the National Agency for Education, Skolverket, took over the work of the National Board of Education, SÖ (and the latter was dismantled). The course developmental work could not be completed.
- “*Swedish for the deaf at the upper secondary school level*” project. Together with two Deaf lecturers, Svartholm reports that the project “studied communication in classrooms and the linguistic interactions between teachers and students, different aspects of deaf [children’s] reading, documented lessons with reviews of Swedish texts in sign language, everything with the aim to get deeper understandings of what written Swedish really means for the deaf and how the teaching should be best formed” (1996, 130, my translation). Svartholm reports that the work in this project too could not be completed because the National Board of Education, SÖ, was dismantled and further support was not received from the new National Agency for Education, Skolverket. Parameters and findings from this project are presented in Chapter 6.4.7.
- “*Perspectives in written Swedish as compared to sign language*” project is reported as not being focused on “aspects of applications” but it’s:

“aim was to study expressions for perspectives – ‘points of departure’ – in Swedish texts, contrastively as compared to sign language. The knowledge that the project gives however, has many important areas of application. One such is work concerning translation between both the languages, an area that has no real tradition and which even at present finds itself in the beginning of its development. Naturally, the same is the case with language teaching: every new [piece of] knowledge about how the two languages are related to one another is important so that we can reach the goal, a teaching that really leads to full bilingualism in the deaf” (1996, 130, my translation).

This project is reported as on-going in 1996.

APPENDIX 3

Central grassroots level movements that enabled Deaf voices to become visible within academia and Deaf education in the United States at the end of the 20th century

A brief reflection on the recent past can throw light on what enabled “Deaf voices to become visible” in research, administration and teaching in Deaf education in the United States. Sociohistorical developments at the end of the 1980s in the United States are understood as setting the agenda for a new phase in “Deaf Empowerment” and could possibly explain this “new order” (Jankowski 1997). The revolutionary grass-roots level movement in Washington DC which led to the *Deaf President Now* (DPN) actions were “patterned after the civil rights movement” (Jankowski 1997, 130) and led to the new perspectives in the American Deaf communities: a new sense of self-worth, internal participation and community building and the urgency for the right to participate in general society.

Given that the DPN arose from the Deaf social movement of the 1960s and 1970s with its emphasis on its linguistic and cultural roots with a distinct identity which “paved the way to a strengthened ‘can do’ rhetoric” (Jankowski 1997, 99) and that the DPN actions arose at Gallaudet University, Washington DC, this event had clear cut repercussions in conceptualizations of and developments in the field of Deaf education more generally. It can be surmised that Deaf education, probably for the first time ever (anywhere in the modern world), became a serious and realistic agenda *for* Deaf children and by the Deaf in the United States (as opposed to Deaf education being an agenda for Deaf children by hearing professionals²⁹⁰).

The end of the 1980s saw at least three other events that shaped changes in conceptualizations in Deaf education generally. The *first Deaf Way* interna-

²⁹⁰ This does not mean that Deaf education in the United States is an agenda only by the Deaf, and neither that this is some idealized goal. The point being made is that a rationality shift can be observed in this respect in the United States and on a comparative note this is less visible in Sweden.

tional conference and festival took place at Gallaudet University in July 1989. It's planning however dated back to 1987, just before the DPN movement. Deaf Way was to become a turning point, both influencing the American Deaf communities and sending new ripples to Deaf professionals and peoples from around the globe. In terms of it's impact, it is understood as the "Deaf Woodstock" (<http://www.deafway.org/about/genesis.asp>, October 2001). While Deaf Way was not the first large scale conference to discuss, amongst other issues, Deaf education, it was the first which celebrated Deaf culture, "natural" Signed Languages and Deaf history (see C. Erting, R. C. Johnson, Smith & Snider 1994).

A second event that shaped Deaf education generally was the increasing interest in ASL and other Signed Languages in the world and the acceptance and rapid spread of knowledge about and an interest in ASL in north America. A national commission was established in 1987 and it required Congress to evaluate the status of education for Deaf children in the United States (<http://www.deafway.org/about/genesis.asp>, October 2001). A year later the Commission on Education of the Deaf (COED) concluded that the educational system had failed to provide appropriate and acceptable levels of achievement for deaf children. Specifically the Commission criticized the system for failing to recognize and utilize ASL and the Deaf Community as resources.

A third event that can be said to have shaped Deaf education and issues of Deaf literacy was the publication of a working paper in 1989 by three researchers Robert E. Johnson, Scott K. Lidell and Carol J. Erting at Gallaudet University "Unlocking the Curriculum: Principles for Achieving Access in Deaf Education". This (at that time) work-in-progress position paper discussed the "failure of deaf education", the reasons that could explain this before going on to present a set of guiding principles which could constitute a "model program for education of deaf children". This paper was a "powerful catalyst (...) It stimulated widespread discussion and debate in schools all over the country and there were numerous requests for us to travel to these schools for formal presentations to parents, teachers, administrators, other professionals in schools, and deaf community members" (C. Erting, personal communication, November 2001).

It appears that the emergence of new voices that shaped Deaf education in the United States at the end of the 1980s was a result of empowerment movements from the grassroot levels. From a political perspective the COED report also corroborated the failure of the educational system in providing adequate programs that were accessible to Deaf children and these different events *together* can be understood as opening the stage for newer understandings of Deaf education and Deaf communities more generally.

REFERENCES

- Adelswärd, V (1999) *Kvinnospråk och Fruntimmersprat. Forskning och fördomar under 100 år [Womens language and womens talk. Research and prejudice during 100 years]*. Stockholm, Brombergs
- Ahlgren, I (1988) Tvåspråkig undervisning i dövskolan – ett pilot-projekt [Bilingual teaching in the deaf school – a pilot project]. In *Första symposiet om Svenska som andra språk. [The first symposium on Swedish as a second language]*. Vol II. 201-205. Publisher K Hyltenstam & I Lindberg. Stockholm Centrum för tvåspråkighetsforskning, Stockholm University
- Ahlgren, I (1984) *Döva barn och skriven svenska [Deaf children and written Swedish]*. Forskning om teckenspråk [Research on sign language] XIII. Department of Linguistics. Stockholm University
- Ahlgren, I & Hyltenstam, K Eds (1994) *Bilingualism in Deaf Education. International Studies on Sign Language and Communication of the Deaf*. Vol 27. Hamburg, Signum
- Ahlström, K-G (1972) On evaluating the effects of schooling. In *Proceedings of the international congress on Education of the Deaf*, Stockholm 1970. Vol 1. Stockholm, Sveriges lärarförbund
- Ahlström K-G & Amcoff, S (1966) SMID-projektet. Försök med självinstruerande material i tyst läsning för döva och hörselskadade [The SMID project. Attempts with self instructional materials in silent reading for deaf and hard-of-hearing]. *Nordisk tidskrift för dövundervisningen [Nordic journal of deaf education]*. 3 (73-93).
- Akamatsu, C (1985) Fingerspelling formulae A word is more of less than the sum of its letter. In W Stokoe & V Volterra Eds SLR '83 *Proceedings of the third international symposium on sign language research*. 126-132. Silver Spring, MD, Linstok Press
- Akamatsu, C & Andrews, J (1993) It takes two to be literate Literacy interactions between parent and child. *Sign Language Studies*. 81. 333-360.
- Albertorio, J R, Holden-Pitt, L & Rawlings, B (1999) Preliminary results of the Annual Survey of Deaf and Hard of Hearing Children and Youth in Puerto Rico The first wave. *American Annals of the Deaf*. 144(5). 386-394.
- Allard, K (2003) *Literacypraktiker i flerspråkiga visuellt orienterade pedagogiska arenor [Literacy practices in multilingual visually oriented educational arenas]*. C-uppsats [Bachelors thesis]. Department of Education, Örebro University
- Allen, T E (1998) Mathematics. Successful transition requires curriculum reform. *Perspectives in Education and Deafness*. 16 (5). 12-13.
- Allen, T E (1994) ASL use and recognition How many people use ASL. <http://gri.gallaudet.edu/Demographics/qxreasl.html>, October 2001
- Allen, T E (1992) Subgroup differences in educational placement of deaf and hard of hearing students. *American Annals of the Deaf*. 137(5). 381-388.
- Allen, T E (1986) A study of the achievement patterns of hearing-impaired students 1974-1983. In A Schildroth & M Karchmer Eds *Deaf Children in America*. 161-206. San Diego, College Hill Press
- Allen, T E & Schoem, S R (1997) Educating Deaf and Hard-of-Hearing Youth What works best. Paper presented at the Combined Otolaryngological Spring Meetings of the American Academy of Otolaryngology, Scottsdale, Arizona. May 1997
- Amcoff, S (1977) Läs- och skrivinläring: Hörselskadade [Reading and writing learning: Hearing impaired]. *Pedagogisk forskning i Uppsala [Educational research in Uppsala]*. 9 (75-76). Conference report.
- Amcoff, S (1973) *Relationer mellan språkliga uttrycksformer. En undersökning av elever i specialskolan för hörselskadade [Relationships between different forms of language. A study of students in the special schools for the hearing impaired]*. Pedagogisk forskning i Uppsala [Educational research in Uppsala]. 1. Ph. D. Thesis.
- Amcoff, S (1968) *Språktillägnande hos elever i åk 1-7 i specialskolan för hörselskadade [Language learning of students in grades 1-7 in the special schools for the hearing impaired]*. Department of Education, Uppsala University. Masters Thesis.

- Amcoff, S & Ahlström, K-G (1967) Färdigheter i läsning och skrivning hos hörselskadade elever i årskurs 5-9 [Skills in reading and writing of hearing impaired students in grades 5-9]. *Nordisk tidskrift för dövundervisningen [Nordic journal of deaf education]*. 3 (53-68).
- Andersson, B (1978) *En erfarenhet rikare: en bok om att bli döv [One experience richer: A book about becoming deaf]*. Lund, Br. Ekstrand
- Andersson, R (1995) Classroom interaction at the gymnasium for the deaf in Sweden. Paper presented at the XII World Congress of the World Federation of the Deaf. Vienna, Austria, 6-15 July 1995
- Andersson, R (1994) Second Language Literacy in deaf Students. In I Ahlgren & K Hyttenstam Eds *Bilingualism in Deaf Education. International Studies on Sign Language and Communication of the Deaf*. Vol 27. 91-101. Hamburg, Signum
- Andersson, U (2001) *Cognitive Deafness the deterioration of phonological representations in adults with an acquired severe hearing loss and its implications for speech understanding*. Linköping University. Ph. D. Thesis.
- Andersson, Y (1981) *A cross-cultural comparative study: Deafness*. (Unpublished) University of Maryland, College Park. Ph. D. Thesis.
- Andrews, J (1988) Deaf Children's Acquisition of Prereading Skills Using the Reciprocal Teaching procedure. *Exceptional Children*. 54(4). 349-355.
- Andrews, J F & Gonzales, K (1972) Free writing of deaf children in kindergarten. *Sign Language Studies*. 74. 63-78.
- Andrews, J F & Taylor, N E (1987) From sign to print. A case study of picture book 'reading' between mother and child. *Sign Language Studies*. 56. 261-274.
- Andrews, J F, Winograd, P & DeVille, G (1996) Using sign language summaries during prereading lessons. *Teaching Exceptional Children*. 28. 30-34.
- Anspach, R (1979) From stigma to identity politics political activism amongst the physically disabled and former mental patients. *Social Science and Medicine*, 13. 765-773.
- Antonson, S (1998) *Hörselskadade i högskolestudier möjligheter och hinder [Hard-of-hearing in higher education possibilities and constraints]*. Department of Education and Psychology, Linköping University. Ph. D. thesis.
- Armstrong, D F, Karchmer, M A & Van Cleve J V Eds (2002) *The Study of Signed Languages. Essays in Honor of William C Stokoe*. Washington DC, Gallaudet University Press
- Arnberg, L (1988) *Så blir barn tvåspråkiga [This is how children become bilingual]*. Stockholm, Wahlström & Widstrand
- Aronsson, K (1984) Språket i bruk [Language in use]. In K Aronsson, M Cederblad, G Dahl, L Olsson & B Sandin Eds *Barn i tid och rum [Children in time and space]*. 43-63. Stockholm, Liber Förlag
- Bagga-Gupta, S (in press-a) "Bilingual talk and talking about bilingualism". A birds eye view of research and developmental projects in the Swedish Deaf educational landscape. In Proceedings of the Nordic Conference Inclusive or excluding classrooms. Deaf Education – a case to learn from?, Oslo University & Skådalen Competence Center, Oslo
- Bagga-Gupta, S (in press-b) Visually Oriented Language Use. Discursive and technological resources in Swedish Deaf pedagogical arenas. In M V Herreweghe & M Vermeerbergen Eds *Sociolinguistics in European Deaf Communities. Vol 10. The Sociolinguistics in Deaf Communities Series*. Washington DC Gallaudet University Press
- Bagga-Gupta, S (2004) Forskning om mångfald och utbildningsinstitutioner som arenor för mångfald Demokratiska aspekter [Research on Diversity and educational institutions as arenas for diversity Aspects of democracy]. *Utbildning och Demokrati. Tidskrift för didaktik och utbildningspolitik [Education and Democracy. Journal of didactics and politics of education]* 13(2). 115-149.

- Bagga-Gupta, S (2003a) Gränsöverskridande och gränsdragning. Identiteter och språkande i visuellt orienterade skolsammanhang i Sverige [Crossing boundaries and drawing boundaries. Identities and language usage in visually oriented school contexts in Sweden]. In J Cromdal & A-C Ewaldsson Eds *Ett vardagsliv med flera språk [Everyday life with many languages]*. (154-178). Stockholm, Liber
- Bagga-Gupta, S (2003b) Bilingual ideologies and Visually Oriented Language Practices. Reflections from research. Invited keynote presentation at the international conference “Segni-Parole percorsi di bilinguismo”, Biella, Italy, November 2003
- Bagga-Gupta, S (2003c) Språk och lärande i visuellt orienterade flerspråkiga pedagogiska miljöer i Sverige. Orientering kring forskning [Language and learning in visually oriented multilingual educational settings in Sweden. Overview of research]. Invited keynote presentation at the nordic conference “Inclusive or excluding classrooms Deaf education – a case to learn from?”, Oslo University Norway, November 2003
- Bagga-Gupta, S (2003d) Drawing boundaries in everyday life. Identity markers in everyday school settings in Sweden. Paper presented at the 10th Biennial Conference of EARLI European Association for Research on Learning and Instruction. Padova, Italy, August 26-30 2003
- Bagga-Gupta, S (2002a) *Vardagskommunikation, lärande och måluppfyllelsen i tvåspråkiga regionala specialskolor [Everyday Communication, Learning and achievement in the bilingual regional special schools]*. Stockholm, Skolverket (<http://www2.skolverket.se/BASIS/skolbok/webext/trycksak/DDD/1030.pdf>)
- Bagga-Gupta, S (2002b) Explorations in Bilingual Instructional Interaction A sociocultural perspective on literacy. *Journal of the European Association on Learning and Instruction*. 5(2). 557-587.
- Bagga-Gupta, S (2002c) Communication and Literacies in Visually Oriented Classrooms – exploring the activity of “högläsning” in Deaf schools in Sweden. Paper presented at the 23rd Ethnography in Education Forum conference at the University of Pennsylvania, USA, March 2002
- Bagga-Gupta, S (2002d) Keynote lecture – Swedish Research on Deaf Bilingualism with a focus on literacies. Presented at the Star Schools Project conference on Deaf Bilingualism at the New Mexico School for the Deaf, Santa Fe, New Mexico, USA
- Bagga-Gupta, S (2001a) Diskursiva och teknologiska resurser på visuella tvåspråkiga pedagogiska arenor [Discursive and technological resources in visual bilingual educational arenas]. *Utbildning och Demokrati. Tidskrift för didaktik och utbildningspolitik [Education and Democracy. Journal of didactics and politics of education]* 10(1). 55-83.
- Bagga-Gupta, S (2001b) Tid, rum och visuell tvåspråkighet [Time, space and visual bilingualism]. In S Lindblad & F Sahlström Eds *Interaktion i pedagogiska sammanhang [Interaction in educational contexts]*. 125-142. Stockholm, Liber
- Bagga-Gupta, S (2001c) Discursive-technological practices and belonging to a language Explorations of diversity and signs of deaf and hearing memberships. Paper presented in the panel “Desire, technology and language The discursive power of technologies in Deaf arenas” (Society for linguistic anthropology) at the 100th American Anthropological Associations Conference. Washington DC, November-December 2001
- Bagga-gupta, S (2000a) Visual Language Environments. Exploring everyday life and literacies in Swedish Deaf bilingual schools. *Visual Anthropology Review*. 15(2). 95-120.
- Bagga-Gupta, S (2000b) Everyday language practices and notions of identities in Deaf bilingual school settings. Paper presented in the panel Heterogeneous groups and pupils participation in educational conversations, at the 7th conference of International Pragmatics Association (IPrA). Budapest, Hungary, July 2000
- Bagga-gupta, S (1999a) “Deaf Children Practising Literacy or Participating in Literacy Practices? Or understanding some of the paradoxes & dilemmas in Swedish Deaf Education at the end of the 20th century”. Invited plenary lecture at European Days of Deaf Education (EDDE) conference. Örebro. September 1999

- Bagga-gupta, S (1999b) Instructional interaction Practising language and the practices of language at the bilingual Swedish Schools for the Deaf. Paper presented at the Symposium "Literacy Matters Inside & Outside Classrooms" at the European Association of Research in Learning & Instruction conference, Gothenburg, August 1999
- Bagga-Gupta, S (1999c) Instructional interaction in Deaf Bilingual Upper secondary Schools in Sweden An exploration of language ideologies and practices. Paper presented at the 2nd International Symposium on Bilingualism in New Castle, England, April 1999
- Bagga-Gupta, S (1999d) Interaktion, lärande och literacy i tvåspråkiga RGD-klassrum Tankar om språkideologier och språkpraktiker [Interaction, learning and literacy in bilingual RGD classrooms Thoughts about language ideologies and language practices] Paper presented at the 7th research conference Människa-Handikapp-Livsvillkor [Human beings – Handicap – Life conditions] Örebro, Sweden, March 1999
- Bagga-Gupta, S (1995) *Human Development and Institutional Practices. Women, Child Care and the Mobile Creches*. Linköping Studies in Arts and Science. 130. Linköping University. Ph. D. Thesis.
- Bagga-Gupta, S & Domfors, L-Å (2003) Pedagogical issues in Swedish Deaf education. In L Monaghan, C Schmalig, K Nakamura & G H Turner Eds *Many Ways to be Deaf International and Sociocultural Variation*. 67-88. Washington DC, Gallaudet University Press
- Bagga-Gupta, S & Domfors, L-Å (1997) Notions of Deaf Identity in the Minority Period in Sweden. Paper presented in the panel "Ethnically Deaf Identity, Language and the making of Sign Language Communities" (Society for linguistic anthropology) at the 96th American Anthropological Associations Conference. Washington DC, November 1997
- Bagga-Gupta, S & Erting, C J (2002) Cross-cultural Explorations in Deaf Bilingualism Sweden and the United States. Paper presenterad vid The Deaf Way II Conference. Washington DC, Gallaudet University, July 2002
- Bagga-Gupta, S & Nilholm, C (2002) Situerad mångfald i skolan [Situating Diversity in the school]. In P Linell & K Aronsson Eds *Jagen och rösterna Goffman, Viveka och samtalet [Selves and Voices Goffman, Vrveka and Dialogue]*. Studies in Communication 42. 277-287. Linköping University
- Bahan, B (1996) *Non-manual realization of agreement in American Sign Language*. (Unpublished). Boston University. Ph. D. Thesis.
- Bailes, C N (1999) *Primary-Grade Teachers' Strategic Use of American Sign Language in Teaching English Literacy in a Bilingual School Setting*. (Unpublished). University of Maryland, College Park. Ph. D. Thesis.
- Bailes, C N (2001) Integrative ASL-English Language Arts Bridging Paths to Literacy. *Sign Language Studies*. 1(2). 147-174.
- Barnartt, S & Scotch, S (2001) *Disability Protests. Contentious Politics 1970-1999*. Washington DC, Gallaudet University Press
- Barr, B (1955) *Pure tone audiometry for pre-school children A clinical study with particular reference to children with severely impaired hearing*. Karolinska institutet, a medical university, Stockholm. Ph. D. Thesis.
- Barton, D (1999) The role of literacy in social participation. Paper presented at Symposium "Literacy Matters Inside & Outside Classrooms" at the European Association of Research in Learning & Instruction conference, Gothenburg, August 1999
- Barton, D (1994) *Literacy. An introduction to the ecology of written language*. Oxford UK, Blackwell
- Barton, D & Hamilton, M (1998) *Local Literacies. Reading and Writing in One Community*. London, Routledge
- Battison, R (2000) American Sign Language Linguistics 1970-1980 Memoir of a Renaissance. In H Lane & K Emmorey Eds *The Signs of Language Revisited An Anthology to Honor Ursula Bellugi and Edward Klima*. 5-16. Mahwah, NJ, Lawrence Erlbaum Associates
- Battison, R (1978) *Lexical Borrowing in American Sign Language*. Silver Spring MD, Linstok Press

- Bednar, L (1989) Letter to the Readers. Literacy and the Deaf – Editorial. *The Writing Instructor*. 8(2). 53-56.
- Bergman, B (1982) *Studies in Swedish Sign Language*. Department of Linguistics, Stockholm University. Summary. Ph. D. Thesis.
- Bergman, J (1991) Sveriges förste döve student “Låt de döva ha sitt språk” [First upper secondary school graduate in Sweden “Let the deaf have their language”]. *Norrländska Socialdemokraten* [Regional newspaper]. 24-07-1991. 10.
- Bergman, P, Sjöqvist, L, Bulow, K & Ljung, B (1992) *Två flugor i en smäll. Att lära på sitt andraspråk [Kill two birds with one stone. To learn in one's second language]*. Eskilstuna, Almqvist & Wiksell
- Bess, F H, Dodd-Murphy, J & Parker, R A (1998) Children with minimal sensorineural hearing loss Prevalence, educational performance and functional status. *Ear & Hearing*. October 1998. 339-354.
- Bhabha, H (2002) Det tredje rummet [The third space]. In C Eriksson, M Eriksson Baaz & H Thörn Eds *Globaliseringens kulturer. Den postkoloniala paradoxen, rasismen och det mångkulturella samhället [The cultures of globalisation. The post-colonial paradox, rasism and the multicultural society]*. 283-294. Nora, Nya Doxa
- Bishop, D V M (1991) Developmental Reading Disabilities. The role of phonological processing has been overemphasised. *Mind & Language*. 6(2). 93-101.
- Blackburn, L (1998) *Linguistic and cultural interactions among deaf/hearing family members Implications for family partnerships in early education*. (Unpublished) Gallaudet University. Ph. D. Thesis.
- Blackledge, A (2000) Languages, literacies and identities in multilingual settings South Asian women in Birmingham, UK. Paper presented at the 7th conference of International Pragmatics Association (IPrA). Budapest, Hungary, July 2000
- Bliss, J & Säljö, R (1999) The Human-Technological Dialectic. In J Bliss, R Säljö & P Light Eds *Learning Sites. Social and Technological Resources for Learning*. Advances in Learning and Instruction Series. 1-16. Amsterdam, Pergamon
- Blomberg, E (1992) “Låt oss komma till tals” Profilen professor Arne Risberg [”Let our voice be heard” Profile of Professor Arne Risberg]. *Information om rehabilitering [Information about rehabilitation]*. 3. 9+11.
- Blumenthal-Kelly, A (1995) Fingerspelling Interaction A Set of Deaf Parents and Their Deaf Daughter. In C Lucas Ed *Sociolinguistics in Deaf Communities*. 62-73. Washington DC, Gallaudet University Press
- Bottino, R M & Chiappini, G (1995) Technology and learning computer mediated communication between deaf children. In J D Tinsley & T J van Weert Eds *Proceedings of the sixth IFIP World Conference on Computers in Education, 1995*. 693-701. London, Chapman & Hall
- Bradley, P & Bryant, L (1985) *Children's Reading Problems. Psychology and Education*. Oxford, Basil Blackwell
- Bragg, L Ed (1997) *Deaf World. A Historical Reader and Primary Sourcebook*. NY, New York University Press
- Brantlinger, E (1997) Using Ideology Cases of Nonrecognition of the Politics of Research and Practice in Special Education. *Review of Educational Research*. 67(4). 425-459.
- Brentari, D & Padden, C (2001) Native and Foreign Vocabulary in American Sign Language. A Lexicon With Multiple Origins. In D Brentari Ed *Foreign Vocabulary in Sign Languages. A Cross-Linguistic Investigation of Word Formation*. 87-119. NJ, Mahwah, Lawrence Erlbaum Associates
- Brill, R G (1984) *International Congresses on Education of the Deaf. An Analytical History 1878-1980*. Washington DC, Gallaudet College Press
- Bulter, K G (1998) From the Editor. *Topics in Language Disorder*. 18(4). iv.
- Börestam, U & Huss, L (2001) *Språkliga möten. Tvåspråkighet och kontaktlingvistik [Language Meetings. Bilingualism and contact linguistics]*. Lund, Studentlitteratur

- Caccamise, F & Hicks, D Eds (1978) *American Sign Language in a Bilingual, Bicultural Context*. The proceedings of the Second National Symposium of Sign Language Research and Teaching. Frontispiece entitled "RESOLUTION". Silver Spring, MD, National Association of the Deaf
- Carlsgren, I (1999) Pedagogy and teachers' work. *Journal of Nordic Educational Research*. Theme issue Theory and practice – The Janus head of education? 19(4). 223-234.
- Carlsson, R & Bagga-Gutpa, S (submitted Jan 2004) "Verktøy og lådor". En studie av språkfokuserade aktiviteter för minoriteter på förskolearenor ["Tools and Boxes" – A study of language focused activities for language minority children in pre school arenas. *Nordic Educational Research Journal*.
- Carlsson, R. & Bagga-Gupta, S. (2001). Verktøy og Lådor – En explorative studie av institutionaliserade språkfokuserade aktiviteter för språkminoriteter på förskolearenor [Tools and Boxes – An explorative study of institutionalised language focused activities for language minority children in pre school arenas]. Paper presented at the Nordic Educational Research Associations conference Stockholm, March 2001
- Carraher, T N, Carraher, D W & Schliemann, A D (1985) Mathematics in the Streets and Schools. *British Journal of Developmental Psychology*. 3(1). 21-29.
- Caselli, M C (1994) Communicative Gestures and First Words. In V Volterra & C J Erting Eds *From Gesture to Language in Hearing and Deaf Children*. 56-67. Washington DC, Gallaudet University Press
- Caselli, M C (1987) Language acquisition by Italian Deaf children: Some recent trends. In J Kyle Ed *Sign and School: Using Signs in Deaf Children's Development*. 44-53. Clevedon, Multilingual Matters
- Caselli, M C (1983) Communication to language Deaf children's and hearing children's development compared. *Sign Language Studies*. 39. 113-143.
- Chamberlain, C & Mayberry, R I (2000) Theorizing about the relation between American Sign Language and reading. In C Chamberlain, J P Morford & R I Mayberry Eds *Language Acquisition by Eye*. 221-259. Mahwah, NJ, Lawrence Erlbaum Associates
- Chamberlain, C, Morford, J P & Mayberry, R I Eds (2000) *Language Acquisition by Eye*. Mahwah, NJ, Lawrence Erlbaum Associates
- Christensen, K (2000a) Emerging Literacy in Bilingual/Multicultural Education of Children Who Are Deaf: A Communication-Based Perspective In K Christensen Ed *Deaf Plus. A multicultural perspective*. 41-58. San Diego, Dawn Sign Press
- Christensen, K Ed (2000b) *Deaf Plus. A multicultural perspective*. San Diego, Dawn Sign Press
- Christoffersen, A B (2001) *Barn og unge med cochleaimplantat – hvordan opplever de sin kommunikasjonsituasjon [Children and young people with cochlear implants – how do they experience their communicative situation]*. Skådalen publication series nr 11. Research and development division. Skådalen Competence Center, Oslo.
- Ciucci, S R & Baran, J A (1998) The use of conversational repair strategies for children who are deaf. *American Annals of the Deaf*. 143. 235-245.
- Clark, C, Dyson, A & Millward, A (1998) *Theorising Special Education*. London, Routledge
- Cokely, D R (1978) Program considerations in a Bilingual "ASL-English" approach to education. In F Caccamise & D Hicks Eds *American Sign Language in a Bilingual, Bicultural Context*. The proceedings of the Second National Symposium of Sign Language Research and Teaching. 211-218. Silver Spring, MD, National Association of the Deaf
- Cook, J H & Harrison, M (1995) Private sign and literacy development and preschoolers with hearing loss. *Sign Language Studies*. 88. 201-226.
- Corbett, J (1996) Bad Mouthing. *The Language of Special Needs*. London, Falmer Press
- Corina, D P (1998) Studies of neural processing in deaf signers Toward a neurocognitive model of language processing in the deaf. *Journal of Deaf Studies and Deaf Education*. 3(1). 35-48.

- Coupland, N (2001) Introduction Sociolinguistic theory and social theory. In N Coupland, S Sarangi & C N Candlin Eds *Sociolinguistics and Social Theory*. Language in Social Life Series. 1-26. Harlow, England, Longman Pearson Education
- Coye, T, Martin, B & Humphries, T (1978) A bilingual, bicultural approach to teaching English or How two hearing and a deafie get together to teach English. In F Caccamise & D Hicks Eds *American Sign Language in a Bilingual, Bicultural Context*. The proceedings of the Second National Symposium of Sign Language Research and Teaching. 257-268. Silver Spring, MD, National Association of the Deaf
- Crafoord, E & Axelsson, M (1975) *Personlighetsutveckling vid dövhet – Del 1 & 2 [Personality development with deafness- Part 1 & 2]*. Stockholm University. Undergraduate Thesis.
- Cromdal, J (2002) Tvåspråkigt samspel [Bilingual interplay]. *Språkvård [Language care]* 1. 4-9.
- Cromdal, J (2000) *Code-switching for all practical purposes Bilingual organization of children's play*. Linköping Studies in Arts and Science. 223. Linköping University. Ph. D. Thesis.
- Cromdal, J & Evaldsson, A-C Eds (2003) *Ett vardagsliv med flera språk [Everyday life with many languages]*. Stockholm, Liber
- Cummins, J (1981) *Schooling and language minority students A theoretical framework*. Los Angeles, California State University, Evaluation, Dissemination and Assessment Center.
- Curry, J & Curry, R (1978) Deaf students can use their fluency in ASL to develop their English competency. In F Caccamise & D Hicks Eds *American Sign Language in a Bilingual, Bicultural Context*. The proceedings of the Second National Symposium of Sign Language Research and Teaching. 233-256. Silver Spring, MD, National Association of the Deaf
- Dandels, C (1990) Bättre kontaktmöjligheter för döva PC ersätter dyr texttelefon [Better contact possibilities for the deaf PC's replace expensive text-telephones]. *Uppsala Nya Tidningen* (Regional newspaper). 12-02-1990.
- Danielsson, L (1994) *Ung och döv i mångfaldens Sverige [Young and deaf in Sweden's diversity]*. Tumba, Mångkulturellt centrum
- Davis, L J (1996) Introduction. In L J Davis Ed *The Disability Studies Reader*. 1-6. New York, Routledge
- Davies, S N (1991) *The Transition Toward Bilingual Education of Deaf Children in Sweden and Denmark Perspectives on Language*. A Paper Presented at Gallaudet University February 21, 1991. Gallaudet Research Institute Occasional Paper 91-1. Washington DC
- Denton, D M (1990) Responses from the panel. In R C Johnson Ed *Access Language in Deaf Education*. Proceedings of a seminar sponsored by the Gallaudet Research Institute concerning Unlocking the Curriculum Principles for Achieving Access in Deaf Education. 15-21. Gallaudet Research Institute Occasional Paper 90-1. Washington DC, Gallaudet University
- Denton D M (1987) The Total Communication Revolution. In J Kyle Ed *Sign and School. Using Signs in Deaf Children's Development*. 75-80. Clevedon, Multilingual Matters
- Dolman, D (1992) Some concerns about using whole language approaches with deaf children. *American Annals of the Deaf*. 137(3). 278-282.
- Domfors, L-Å (2000) *Döfstumlärare – specialpedagog – lärare för döva och hörselskadade. En lärarutbildnings innehåll och rationalitetsförskjutningar [Deaf and dumb teacher – special teacher – teacher for deaf and hard-of-hearing A teacher education's content and rationality shifts]*. Örebro Studies in Education 1. Örebro University. Ph. D. Thesis.
- Dysthe, O Ed (2001) *Dialog, samspel och lärande [Dialogue, interaction and learning]*. Lund, Studentlitteratur
- Ek, B & Möne, E (1995) Dövas tidiga läs- och skrivinlärning [Early reading and writing learning of the deaf]. *Nordisk tidskrift för dövundervisningen [Nordic journal of deaf teaching]*. 2. 267-82.
- Ellström, E (1993) *Integration i institutionaliserad verksamhet en studie av gruppintegration av hörselskadade och döva barn i förskolan [Integration in institutionalized activities/systems A study of group integration of hard-of-hearing and deaf children in pre-school]*. Linköping University. Ph. D. Thesis.

- Emanuelsson, I, Persson, B & Rosenqvist, J (2001) *Forskning inom det specialpedagogiska området – en kunskapsöversikt*. Stockholm, National Agency for Education
- Enerstvedt, T (1999) New Technology To what does it lead? *American Annals of the Deaf*. 144(3). 242-249.
- Englund, S-O (1999) Sammanställning över terminsbetyg och slutbetyg år 10 från samtliga specialskolor 1997-99 [Compilation of term grades and end of compulsory school year grades from all the special schools for the deaf and hard-of-hearing in Sweden for the period 1997-99]. Birgittaskoaln, Örebro. Manuscript.
- Eriksson, C, Eriksson Baaz, M & Thörn, H Eds (2002) *Globaliseringens kulturer: Den postkoloniala paradoxen, rasismen och det mångkulturella samhället*. Nora, Nya Doxa
- Eriksson, P (1998) *The History of Deaf People. A Source Book*. Örebro, Daufu
- Erting, C J (2000) *Ideologies and Local Practices in Deaf Bilingual Education in Sweden and the United States*. Paper presented at the 99th Annual Meeting of the American Anthropological Association. San Francisco, November 17, 2000
- Erting, C J (1999) Two languages at home and at school Early literacy in ASL/English contexts. Invited plenary lecture at European Days of Deaf Education (EDDE) conference. Örebro, September 1999
- Erting, C J (1994) *Deafness, Communication, Social Identity Ethnography in a Preschool for Deaf Children*. Burtonville, MD, Linstok Press Dissertation Series
- Erting, C J (1988) Acquiring linguistic and social identity interactions of deaf children with a hearing teacher and a deaf adult. In M Strong Ed Language, *Learning and Deafness*. 192-219. Cambridge, Cambridge University Press
- Erting, C J (1985a) Sociocultural dimensions of deaf education Belief systems & communicative interaction. *Sign Language Studies*. 47. 111-126.
- Erting, C J (1985b) Cultural Conflict in a School for Deaf Children. *Anthropology & Education Quarterly*. 16(3) 225-243.
- Erting, C J (1982) Deafness, Communication & Social Identity – An anthropological analysis of interaction among parents, teachers, and deaf children in a preschool. (Unpublished). Department of Anthropology, American Univesity, Washington DC. Ph. D. Thesis.
- Erting, C J, Erting, L & Thumann-Prezioso, C (1999) Sharing books at home and at school Making connections through fingerspelling. Paper presented at the Convention of American Instructors of the Deaf. Los Angeles, CA, July 1999
- Erting, C J, Johnson, R C, Smith, D L & Snider, B D, Eds (1994) *The Deaf Way. Perspectives from the International Conference on Deaf Culture*. Washington DC, Gallaudet University Press
- Erting, C J, Kuntze, M, Thuman-Prezioso, C, Erting, L & Bailes, C (2002) Signs of Literacy. Constructing Literacy through American Sign Language/English Bilingualim. Symposium presented at the Deaf Way II conference, July 2002, Washington DC
- Erting, C J, Thumann-Prezioso, C & Benedict, B S (2000) Bilingualism in a Deaf Family Fingerspelling in Early Childhood. In P E Spencer, C J Erting & M Marschark Eds *The Deaf Child in the Family and at School. Essays in Honor of Kathryn P. Meadow-Orlans*. 41-54. Mahwah, NJ, Lawrence Erlbaum Associates
- Erting, L (2001) *Book Sharing the Deaf Way An ethnographic study in a bilingual preschool for deaf children*. (Unpublished) University of Maryland, College Park. Ph. D. Thesis.
- Eron, C (1988) Sound advice for deaf learners. *Science News*. 134 (5), 71 & 76.
- Evans, L (1991) Total Communication. In S Gregory & G M Hartley Eds *Constructing Deafness*. 131-136. Milton Keynes, The Open University Press
- Ewoldt, C (1994) Language and Literacy from a Deaf Perspective. *The Whole Language Newsletter: Teachers Networking*. 13(1). 1+3-5.
- Ewoldt, C (1991) The early literacy development of deaf children. In D F Moores & K P Meadow-Orlans Eds *Educational and Developmental Aspects of Deafness*. 89-114. Washington DC, Gallaudet University Press

- Ewoldt, C (1985) A descriptive study of developing literacy of young hearing impaired children. *The Volta Review*. 87(5). 109-126.
- Ewoldt, C (1983) Text simplification A solution with many problems. Perspectives for *Teachers of the Hearing Impaired*. 1(5). 23-25.
- Ewoldt, C (1981) A psycholinguistic description of selected deaf children reading in sign language. *Reading Research Quarterly*. 17. 58-88.
- Ewoldt, C (1977) *A Psycholinguistic Description of Selected Deaf Children Reading in Sign Language*. (Unpublished) Wayne State University, Detroit, Michigan. Ph. D. Thesis.
- Ewoldt, C, Israelite, N & Dodds, R (1993) The ability of deaf students to understand text A comparison of the perceptions of teachers and students. *American Annals of the Deaf*. 137(4). 351-361.
- Fjord, L L (2001) Desire, Kinship and Biotechnology Pediatric Cochlear Implants in the US, Denmark and Sweden. Paper presented at the Annual American Anthropology Associations meeting in the panel "Desire, Technology and Language The Discursive Power of Technologies in Deaf Arenas, Washington DC, USA November 28-December 2 2001
- Fjord, L L (2000) 'Voices Offstage'. How vision has become a symbol to resist in an audiology lab in the US. *Visual Anthropology Review*. 15(2). 121-138.
- Fjord, L L (1997) Becoming Deaf. Medical Diagnosis and Hearing Families. Paper presented in the panel "Living Deaf in America An interdisciplinary approach to deaf experience. 96th Annual Meeting of the American Anthropological Association. November 1997. Washington DC
- Fjord, L L (1996) Images of Difference. Deaf and Hearing in the United States. *Anthropology and Humanism*. 21(1). 55-69.
- Foster, S, Mudgett-Decaro, P, Bagga-Gupta, S, Domfors, L-Å, Emerton, G, Lampropoulou, V, Ouellette, S, van Weert, J & Welch, O (2003) Cross-cultural definitions of inclusion for deaf students – a comparative analysis. *Deafness and Education International*. 5(1). 1-19.
- Fredang, P (2003) *Teckenspråkiga Döva. Identitetsförändringar i det svenska dövsambället [Deaf Sign Language Users – Identity Changes in the Swedish Deaf Community]*. Uppsala University. Förlags AB Godolin. Ph. D. Thesis.
- Gallaudet, E M (1881) The Milan convention. *American Annals of the deaf*. 21. 1-16.
- Gallaudet Research Institute (1996) *Stanford Achievement Test, 9th Edition, Form S, Norms Booklet for Deaf and Hard-of-Hearing Students* (Including Conversions of Raw Score to Scaled Score & Grade Equivalent and Age-based Percentile Ranks for Deaf and Hard-of-Hearing Students). Washington DC, Gallaudet University
- Gallaudet Research Institute (1993) *The Development of language and Literacy Skills among Deaf and Hard of Hearing Students in ASL-English Classrooms*. GRI Annual Report 1992-93. 61. Gallaudet University
- Gallimore, L E (2000) *Teachers' stories: Teaching American Sign Language and English Literacy*. University of Arizona. Ph. D Thesis.
- Gee, P G (1986) Orality and Literacy From the Savage Mind to Ways with Words. *TESOL Quarterly*. 20(4). 719-746.
- Geers, A E & Moog, J (1992) Speech perception and production skills of students with impaired hearing from oral and total communication education settings. *Journal of Speech and Hearing Research*. 35(1). 384-93.
- Geers, A E & Moog, J (1978) Syntactic maturity of spontaneous speech and elicited imitations of hearing-impaired children. *Journal of Speech and Hearing Disorders*. 43(3). 380-391.
- Geers, A E, Moog J & Schick, B (1984) Acquisition of spoken and signed English by hearing-impaired children of hearing-impaired or hearing parents. *Journal of Speech and Hearing Disorders*. 49. 378-388.
- Geers, A E & Schick, B (1988) Acquisition of spoken and signed English by hearing-impaired children of hearing-impaired or hearing parents. *Journal of Speech and Hearing Disorders*. 53. 136-143.

- Gerner de Garcia, B (1995) Communication and Language Use in Spanish-Speaking Families with Deaf Children. In C Lucas Ed *Sociolinguistics in Deaf Communities*. Vol 1. 221-252. Washington DC, Gallaudet University Press
- Goffman, E (1963) *Stigma. Notes on the management of spoiled identity*. NJ, Prentice-Hall
- Gomes, N B, Bigestans, A, Magnusson, L & Ramberg, I (2002) *Reflections on Diversity and Change in Modern Society*. A Festschrift for Annick Sjögren. Botkyrka, Mångkulturellt centrum
- Goody, J (1977) *The Domestication of the Savage Mind*. Cambridge, Cambridge University Press.
- Graduate School and Research, The (1997) Language and literacy development in ASL/English preschool classrooms. In *Research at Gallaudet*. 1-2. A publication of the Graduate School and Research, Gallaudet University
- Gregory, S & Bishop, J (1991) The Mainstreaming of Primary Age Deaf Children. In S Gregory & G M Hartley Eds *Constructing Deafness*. 165-172. Milton Keynes, The Open University Press
- Gregory, S, Smith, S & Wells, A (1997) Language and identity in sign bilingual deaf children. *Deafness and Education. Journal of the British Association of Teachers of the Deaf*. 21(3). 31-38.
- Groce, N E (1985) *Everyone here spoke sign language Hereditary deafness on Martha's vineyard*. Cambridge, MA, Harvard University Press
- Grosjean, F (1996) Living with two languages and two cultures. In I Parasnis Ed *Cultural and Language Diversity and the Deaf Experience*. 20-37. New York, Cambridge University Press
- Grosjean, F (1982) *Life with Two Languages. An Introduction to Bilingualism*. Cambridge, Harvard University Press
- Gullacksen, A-C (1993) *Hörselskadade i arbetslivet ett stress/kontroll perspektiv [Hard-of-hearing in working life A stress/control perspective]*. Lund University. Masters Thesis.
- Gustafsson, A (1984) *Svenskspråkliga färdigheter hos specialskolelever. En litteraturöversikt och en empirisk studie [Swedish language competencies of students in special schools. A literature review and an empirical study]*. C-uppsats [Bachelors thesis in Psychology]. Department of Psychology and Education, University College of Örebro. Published by RPH-HÖR.
- Gustason, G (1990) Responses from the panel. In R C Johnson Ed *Access Language in Deaf Education*. Proceedings of a seminar sponsored by the Gallaudet Research Institute concerning Unlocking the Curriculum Principles for Achieving Access in Deaf Education. 22-24. Gallaudet Research Institute Occasional Paper 90-1. Washington DC, Gallaudet University
- Gustason, G Ed (1988) *Signing English in Total Communication Exact of Not?* Los Alamitos, CS Modern Sign Press, Inc
- Gustavsson, B (1988) *Världsbilder. Synen på människa, samhälle, natur [World pictures. Views on human beings, society, nature]*. Stockholm, Wahlström & Widstrand
- Gustavsson, K (1987) *Vad går det hela ut på egentligen?: En kvalitativ organisations- och probleminventering av döv- och hörselpedagogisk verksamhet [What is the point of this actually?: A qualitative organisational and problem inventory of deaf and hard-of-hearing educational services]*. Uppsala, Rapport från Planeringsberedning i mellersta regionen
- Hannerz, U (1992) *Cultural complexit: Studies in the social organization of meaning*. New York, Columbia University Press
- Hannerz, U (1983) *Över gränser. Studier i dagens socialantropologi [Over boundaries. Studies in current social anthropology]*. Lund, Liber
- Hansegård, N E (1968) *Tvåspråkighet eller halvspråkighet? [Bilingualism or half-lingualism?]*. Stockholm, Aldus/Bonniers
- Hanson, G (1962) Begåvning, hörselrester och skolprestation [Talent, hearing levels and school achievement]. *Nordisk tidskrift för dövundervisning [Nordic journal of deaf education]*. 64 (20-25).
- Hanson, V & Fowler, C (1987) Phonological coding in word reading Evidence from hearing and deaf readers. *Memory and Cognition*. 15. 199-207.

- Hansson, H (1993) *Monauralt döva: audiologiska, socialpsykologiska och existentiella aspekter* [Monaurally deaf persons audiological, social psychological and existential aspects]. Stockholm University. Ph. D. Thesis.
- Haug, P (1998) *Pedagogiskt dilemma. Specialundervisning* [Educational dilemma. Special Teaching]. Stockholm, Skolverket
- Havelock, E A (1982) *The literate revolution in Greece and its cultural consequences*. Princeton NJ, Princeton University Press
- Havelock, E A (1963) *Preface to Plato*. Cambridge, Mass, Harvard University Press
- Heath, S B (1983) *Ways with words. Language, life and work in communities and classrooms*. Cambridge, Cambridge University Press
- Heiling, K (in preparation) Working title – Teckenspråk är nödvändigt men inte tillräckligt [Sign Language is necessary but not enough]. Report manuscript.
- Heiling, K (1998) Bilingual vs. Oral Education. Academic Achievement Levels in Deaf Eight-Graders from Two Decades. In A Weisel Ed *Issues Unresolved. New Perspectives on Language and Deaf Education*. 141-147. Washington DC, Gallaudet University Press
- Heiling, K (1997) Döva barns språkliga situation [Deaf children's language situation]. In R Söderberg Ed *Från joller till läsning och skrivning* [From babbling til reading and writing]. 199-211. Malmö, Gleerups
- Heiling, K (1996) Deaf children's reading and writing: Comparison between pupils of different ages from oral and bilingual school. In A M Vonen, K Arnesen, R T Enerstvedt & A V Nafstad Eds *Bilingualism and literacy concerning deafness and deaf-blindness: Proceedings of an International Workshop*, 10-13 Nov 1994. 101-114. Oslo, Skådalen Competence Centre
- Heiling, K (1995/93) *The development of deaf children. Academic achievement levels and social processes* (translated by Gunilla Layer). International Studies on Sign Language Research and Communication of the Deaf. Vol 30. Hamburg, Signum
- Heiling, K (1994) Reading and writing in deaf children Comparisons between pupils in different ages from oral and bilingual schools. Paper presented at the International Workshop on Bilingualism and Literacy, Oslo, Skådalen Competence Centre, November 10-13
- Heiling, K (1993) *Döva barns utveckling i ett tidsperspektiv Kunskapsnivå och sociala processer* [The development of deaf children in a time perspective Academic achievement levels and social processes]. Stockholm, Almqvist and Wiksell
- Henning, M P (1928) *Obrenärztliche Untersuchungen von Schülern der Taubstummenschulen Schwedens nebst Bemerkungen zur Frage des Unterrichts der Schwerhörigen* [Ear-specialist investigations of pupils in Swedish deaf-mute schools along with remarks on the question of teaching the hard-of-hearing] Uppsala University, Almqvist & Wiksell. Ph. D Thesis.
- Hickok, G, Bellugi, U & Klima, E S (2001) Sign Language in the Brain. *Scientific American*. 284(6). 58-65.
- Hoffmeister, R (2000) A piece of the puzzle ASL and reading comprehension in Deaf children. In C Chamberlain, J P Morford & R I Mayberry Eds *Language Acquisition by Eye*. 143-164. New Jersey, Laurence Erlbaum Associates
- Hoffmeister, R, de Villiers, P, Engen, E & Topol, D (1997) English reading achievement and ASL skills in deaf students. *Proceedings of the Annual Boston University Conference on Language Development*. 21, 307-318.
- Hoiting, N & Slobin, D I (2000) Foreword. In C Chamberlain, J P Morford & R I Mayberry Eds *Language Acquisition by Eye*. xv-xvi. New Jersey, Laurence Erlbaum Associates
- Holden-Pitt, L & Diaz, J A (1998) Thirty years of the Annual Survey of Deaf and Hard-of-Hearing Children and Youth A glance over the decades. *American Annals of the Deaf*. 143(2). 72-76.
- Holme, L (1996) Handikapp och teknik i ett samhällsperspektiv [Handicap and technology from a social science perspective]. In T Ginner & G Mattsson Eds *Teknik i skolan* [Technology in school]. 100-109. Lund, Studentlitteratur

- Holmgren, L (1939) *Hearing tests and hearing aids. A clinical and experimental study*. Karolinska institutet – a medical university, Stockholm. Ph. D. Thesis.
- Holt, J A (1994) Classroom attributes and achievement test scores for deaf and hard of hearing students. *American Annals of the Deaf*. 139(4). 430-437.
- Holt, J A & Allen, T (1989) The effects of schools and their curricula on the reading and mathematics achievement of hearing impaired students. *International Journal of Educational Research*. 13(5). 547-562.
- Holt, J, Hatto, S & Cole, K (1994) Demographic aspects of hearing impairment Questions and Answers. Third Edition. <http://gri.gallaudet.edu/Demographics/factsheet.html>, October 2001
- Holt, J A, Traxler, C B & Allen, T (1997) *Interpreting the Scores A User's Guide to the 9th Edition Stanford Achievement Test for Educators of Deaf and Hard-of-Hearing Students*. Gallaudet Research Institute Technical Report 97-1. Washington DC, Gallaudet University
- Holzrichter, A S & Meier, R P (2000) Child-directed signing in American Sign Language. In C Chamberlain, J P Morford & R I Mayberry Eds *Language Acquisition by Eye*. 25-40. New Jersey, Laurence Erlbaum Associates
- Humphries, T (1997) Adding links to the chain Characteristics of teachers' language use in two types of classroom settings for deaf children. Paper presented in the panel "Living Deaf in America An interdisciplinary approach to deaf experience. 96th Annual Meeting of the American Anthropological Association. Washington DC, November 1997
- Humphries, T & MacDougall, F (2000) 'Chaining' and other links. Making connections between American Sign Language and English in Two Types of School Settings. *Visual Anthropology Review*. 15(2). 84-94.
- Hyltenstam, K Ed (1996) *Tvåspråkighet med förbinder? Invandrar- och minoritetsundervisning i Sverige [Bilingualism with obstacle? Immigrant and minority education in Sweden]*. Lund, Studentlitteratur
- Hågbrandt, G (2003) Interaktion och kommunikation i literacypraktiker. En studie av vardagliga aktiviteter i skolans tidiga årskurser [Interaction and communication in literacy practices. A study of everyday activities in the early grades in schools]. C-uppsats [Bachelors thesis]. Department of Education, Örebro University
- Högsten, M (1989) *Elever från riksgymnasiet för döva/gravt hörselskadade som gick ut skolan 1979-83. En uppföljning [Deaf/severely hard-of-hearing students who graduated from the national Upper Secondary School for the deaf 1979-83. A follow up]*. Örebro, Skolöverstyrelsen, Swedish Board of Education
- Jacob, E (2001) The Council on Anthropology and Education as a Crossroad Community Reflections on Theory-Oriented and Practice-Oriented Research. CAE 2000 Presidential Address. *Anthropology and Education Quarterly*. 32(3). 266-275.
- Jacobsson, K (2000) *Retoriska strider konkurrerande sanningar i döv världen [Rhetorical conflicts competing truths in the deaf world]*. Lund University. Ph. D. Thesis.
- Jamieson, J R (1995) Visible fault. Deaf children's use of signed and spoken private speech. *Sign Language Studies*. 86. 63-80.
- Jankowski, K A (1997) *Deaf Empowerment. Emergence, Struggle, and Rhetoric*. Washington DC, Gallaudet University Press
- Johnson, R C (1994) Foreword. In C Erting. *Deafness, Communication, Social Identity Ethnography in a Preschool for Deaf Children*. Burtonsville, MD, Linstok Press Dissertation Series
- Johnson, R C Ed (1990) *Access Language in Deaf Education*. Proceedings of a seminar sponsored by the Gallaudet Research Institute concerning "Unlocking the Curriculum Principles for Achieving Access in Deaf Education". Gallaudet Research Institute Occasional Paper 90-1. Washington DC, Gallaudet University
- Johnson, R E (1991) Sign Language, Culture & Community in a traditional Yucatec Maya village. *Sign Language Studies*. 73. 461-474.

- Johnson, R E (1990) Authors overview of GRI Working Paper 89-3. In R C Johnson Ed *Access Language in Deaf Education*. Proceedings of a seminar sponsored by the Gallaudet Research Institute concerning "Unlocking the Curriculum Principles for Achieving Access in Deaf Education". Gallaudet Research Institute Occasional Paper 90-1. 9-11. Washington DC, Gallaudet University
- Johnson, R E & Erting, C J (1989) Ethnicity and Socialization in a Classroom for Deaf Children. In C Lucas Ed *The Sociolinguistics of the Deaf Community*. 41-83. San Diego, Academic Press
- Johnson, R E, Lidell, S & Erting, C (1989) *Unlocking the Curriculum Principles for Achieving Access in Deaf Education*. Gallaudet Research Institute Working Paper 89-3. Washington DC, Gallaudet University
- Jones, C (1986) The Need for Interactive Video in the Education of the Deaf. *Journal of the Programmed Learning and Educational Technology*. 23(2). 156-158.
- Josberg, D (1993) *Döv – javisst: leva i två världar [Deaf – ofcourse: living in two worlds]*. Stockholm, Bonnier, Alba
- Kannapell, B (1993) *Language choice and identity*. Linstok Press Dissertation Series. Silver Spring MD, Linstok Press
- Kannapell, B (1978) Linguistic and sociolinguistic perspectives in sign systems for educating deaf children. Towards a true bilingual approach. In F Caccamise & D Hicks (Eds) *American Sign Language in a Bilingual, Bicultural Context*. The proceedings of the Second National Symposium of Sign Language Research and Teaching. 219-232. Silver Spring, MD National Association of the Deaf
- Kannapell, B (1974) Bilingual Education. A New Direction in the Education of the Deaf. *The Deaf American*. 26(10). 9-15.
- Karchmer, M & Allen, T (1999) The functional assessment of deaf and hard of hearing students. *American Annals of the Deaf*. 144(2). 68-77.
- Kavanagh, J F (1991) *The language continuum. From infancy to literacy*. Parkton, MD, York Press
- Keating, E (2001) New Technologies for Talk-in-Interaction. Innovations in Sign Language Use in Computer-Mediated Communication. Paper presented in the panel "Desire, technology and language. The discursive power of technologies in Deaf arenas" (Society for linguistic anthropology) at the 100th *American Anthropological Associations Conference*. Washington DC, November-December 2001
- Keating, E (2000) How Culture and Technology Together Shape New Communicative Practices. Investigating Interactions Between Deaf and Hearing Callers with Computer-Mediated Videotelephone. Texas Linguistic Forum. *Proceedings of the Seventh Annual Symposium About Language and Society*. 99-116. Austin
- Keating, E & Merus, G (2002) American Sign Language in Virtual Space. New computer-mediated communication spaces and some impacts on language practices. Language Culture Symposium # 9. <http://www.language-culture.org/colloquia/symposia/>, May 2002
- Keiner, E (1994) Reference patterns and disciplinary identity. Comparative perspectives on educational communication. Paper presented at the 38th Annual Meeting of the Comparative and International Education Society (CIES), March 21-24, 1994, San Diego, California
- Kelly, L (1995) Processing of Bottom-Up and Top-Down Information by Skilled and Average Deaf Readers and Implications for Whole Language Instruction. *Exceptional Children*. 61(4). 318-334.
- Kelly, L (1990) Cognitive theory guiding research in literacy and deafness. In D F Moores & K P Meadow-Orlans Eds *Educational and Developmental Aspects of Deafness*. 202-231. Washington DC, Gallaudet University Press
- Khan, F A (1999) The social context of learning mathematics – stepping beyond the cognitive framework. *Mind, Culture and Activity*. 6(4). 304-313.
- King, S, DeCaro, J, Karchmer, M & Cole, K (2001) *College and Career Programs for Deaf Students, 1st Edition*. Gallaudet University and Rochester Institute of Technology, USA (also at <http://gri.gallaudet.edu>)

- Klima, E & Bellugi, U (1979) *The Signs of Language*. Cambridge, Harvard University Press
- Kluwin, T & Kelly, A B (1992) Implementing a Successful Writing Program in Public Schools for Students Who Are deaf. *Exceptional Children*. 59(1). 41-53.
- Knobel, M (1999) *Everyday Literacies. Students, Discourse and Social Practice*. New York, Peter Lang
- Knoors, H (1997) Book review "Bilingualism in deaf education, edited by Inger Ahlgren and Kenneth Hyltenstam". *Deafness and Education. The Journal of the British Association of Teachers of the Deaf*. Special Focus Edition Sign bilingualism in the education of deaf children. 21(3). 53-54.
- Kuntze, M (1998) Literacy and Deaf Children The Language Question. *Topics in Language Disorders*. Special Theme – ASL Proficiency and English Literacy Acquisition New Perspectives. 18(4). 1-15.
- La Bue, M A (1995) Language and Learning in A Deaf Education Classroom Practice and Paradox. In C Lucas Ed *Sociolinguistics in Deaf Communities*. 164-220. Washington DC, Gallaudet University Press
- Ladd, P (2003) *Understanding Deaf Culture. In search of Deafhood*. Clevedon, England Buffalo, Multilingual Matters
- Landsvik, B (2001) *Barn med cochlearimplantat – kommunikasjon og samspill i barnehagen [Children with cochlear implants – communication and interaction in preschool]*. Skådalen publication series nr 12. Research and development division. Skådalen Competence Center, Oslo
- Lane, H (1999) The Mask of Benevolence. *Disabling the Deaf community*. Dawn Sign Press
- Lane, H, Hoffmeister, R & Bahan, B (1996) *A Journey into the DEAF-WORLD*. San Diego, Dawn Sign Press
- Lang, H G (2002) Higher Education for Deaf Students Research Priorities in the New Millennium. *Journal of Deaf Studies and Deaf Education*. 7(4). 267-280.
- Lartz, M & Lestina, L J (1995) Strategies deaf mothers use when reading to their young deaf or hard of hearing children. *American Annals of the Deaf*. 140(4). 358-370.
- Lartz, M & Lestina, L J (1993) Introducing deaf children to literacy. What deaf mothers can teach us. Paper presented at the 56th Biennial meeting of the convention of American Instructors of the Deaf, Baltimore, MD
- LaSasso, C J (1987) Survey of reading instruction for hearing-impaired students in the United States. *The Volta Review*. 89(2). 85-97.
- Lave, J (1988) *Cognition in Practice. Mind, Mathematics and Culture in Everyday Life*. Cambridge, Cambridge University Press
- Lave, J & Wenger, E (1991) *Situated Learning. Legitimate Peripheral Participation*. Cambridge, Cambridge University Press
- Leybaert, J (1993) Reading in the deaf: The roles of phonological codes. In M Marschark & M Clark Eds *Psychological perspectives on deafness*. 269-309. Hillsdale NJ, Lawrence Erlbaum Associates
- LeNard, J & Delk, L (1992) Three R's and a Very Big C: Reading, wRiting, Replication and Change. *Perspectives*. 10(3). 8-11+16.
- LeVine, R A & White I W (1986) Human Conditions. *The Cultural Basis of Educational Development*. New York, Routledge
- Lgr 80 (1980) *Läroplan för grundskolan. [National Curriculum for the compulsory school]*. Stockholm, Liber Utbildningsförlaget
- Lgy 70 (1970) (III edition 1983) *Läroplan för gymnasieskolan [Curriculum for upper secondary school]*. Stockholm, SÖ, National Board of Education
- Liberth, A K (1994) Literacy assessment and training strategies for deaf adults. *Teaching English to Deaf and Second Language Students*. 10(2). 22-29.

- Liberth, A K (1992) Literacy training for deaf adults. *Teaching English to Deaf and Second Language Students*. 10(1). 4-10.
- Lidell, S K (1990) Authors overview of GRI Working Paper 89-3. In R C Johnson Ed *Access Language in Deaf Education*. Proceedings of a seminar sponsored by the Gallaudet Research Institute concerning "Unlocking the Curriculum Principles for Achieving Access in Deaf Education". Gallaudet Research Institute Occasional Paper 90-1. 5-8. Washington DC, Gallaudet University
- Lidell, S R & Johnson, R E (1992) Towards Theoretically Sound Practices in Deaf Education. In *Conference Proceedings "Bilingual Considerations in the Education of Deaf Students ASL and English"* June 28-July 1, 1990. 8-34. College for Continuing Education. Washington DC, Gallaudet University
- Liljedahl, B (1975) *Kodningsstrategier hos hörselskadade vid inläring av trigram under två olika instruktioner [Coding strategies of hearing impaired during the learning of trigrams under two different instructions]*. Department of Education, Uppsala University. Report 51.
- Lindberg, O (2004) *Utbildningsvetenskap och utbildningsvetenskaplig forskning – några europeiska nedslag [Educational sciences and research in educational science – some European thoughts]*. Vetenskapsrådets rapportserie [The Swedish Council Report Series] 2004:1
- Lindblad, S & Sahlström, F Eds (2001) *Interaktion i pedagogiska sammanhang [Interaction in educational contexts]*. Stockholm, Liber
- Linden, E (1994) Fönstret mot omvärlden. Arbetshjälpmedel [Window towards the world. Work support tools]. *Social Försäkring [Social Insurance]*. 12. 4-6.
- Linell, P (1998) *Approaching Dialogue. Talk, interaction and contexts in dialogical perspectives*. IMPACT Studies in Language and Society Vol 3. Amsterdam, John Benjamins Publishing Company
- Linell, P (1996) *Approaching Dialogue. Talk and interaction in dialogical perspectives*. Working report series 7. Department of Communication Studies. Linköping University
- Livingston, S (1983) Levels of development in the language of deaf children ASL grammatical processes, Signed English structures, semantic features. *Sign Language Studies*. 40. 193-286.
- Lloyd, K (1994) Reaching the Deaf community for literacy. In C E Erting, R C Johnson, D L Smith & B D Snider Eds *The Deaf Way. Perspectives from the international conference on Deaf culture*. 291-294. Washington DC, Gallaudet University Press
- Lpf 94 (1994) 1994 Års Läroplanen för de Frivilliga Skolformerna, Särskilda Program för Gymnasieskolans Nationella Program. Kursplaner i Kärnämnen för Gymnasieskolan och den Gymnasiala Vuxenutbildningen [National Program Curriculum for the Upper Secondary school. Course plans in core subjects for upper secondary and the post-compulsory adult education]. Utbildningsdepartementet [Ministry of Education]. Stockholm, Fritzes
- Lpo 94 (1994) *Läroplan för det obligatoriska skolväsenden. Grundskolan, Sameskolan, Specialskolan och den Obligatoriska Särskolan [National Curriculum for the Compulsory School. Compulsory school, Sameer school, Special school and the Compulsory-special school]*. Utbildningsdepartementet [Ministry of Education]. Stockholm, Fritzes
- Lucas, C Ed (2001) *The Sociolinguistics of Sign Languages*. Cambridge, Cambridge University Press
- Lucas, C (1997) Editor's Introduction. In C L Ramsey *Deaf Children in Public Schools. Placement, Context, and Consequences. Vol 3 The Sociolinguistics in Deaf Communities Series*. xi. Washington DC, Gallaudet University Press
- Lucas, C Ed (1990) *Sign Language Research. Theoretical Issues*. Washington DC, Gallaudet University Press
- Lucas, C, Bayley, R, Valli, C, Rose, M & Wulf, A (2001) Sociolinguistic variation. In C Lucas Ed *The Sociolinguistics of Sign Languages*. 61-111. Cambridge, Cambridge University Press
- Lundström, K (1991) Forskning kring döva och hörselskadade [Research on the deaf and hard-of-hearing]. *Didactica minima presenterar. Specialpedagogisk påbyggnadslinje* 25-27.

- Lundström, K (1985) *Tvåspråkighet i dövundervisningen Delrapport 1. En enkätstudie [Bilingualism in deaf teaching Report Part 1. A questionnaire study]* Institutionen för pedagogik. Högskolan för lärarutbildning [Department of Education. College of Teacher Education] Stockholm
- Lundström, K (1973) Relationer mellan språkliga uttrycksformer [Relationships between different language forms]. *Nordisk tidskrift för dövundervisningen [Nordic journal of deaf education]*. 73. 111-130.
- Lundström, K (undated) *Tvåspråkighet i dövundervisningen Delrapport 2. Analys av videospelade lektioner [Bilingualism in deaf teaching Report Part 2. Analysis of video recorded lessons]*. Institution för specialpedagogik. Högskolan för lärarutbildning [Department of Special Education. College of Teacher Education] Stockholm
- Malmström, S-E (2001) Bikulturalitet och tvåspråkighet [Biculturalism and bilingualism]. Invited lecture at the Nordplus nätverks träff [Nordic teacher education network meeting seminar].
- Manson, M (1982) Explorations in language arts for preschoolers (who happen to be deaf). *Language Arts*. 59. 33-39.
- Marazita, M L, Ploughman, L M, Rawlings, B, Remington, E, Arnos, K & Nance W (1993) Genetics. *American Journal of Medicine*. 46. 486-491.
- Markova, I (1990) Introduction. In I Markova & K Foppa Eds *The Dynamics of Dialogue*. 1-22. NY, Harvester Wheatsheaf
- Marschark, M (2001) Language Development in Children Who are Deaf A Research Synthesis. Manuscript prepared for Project FORUM. National Association of State Directors of Special Education (NASDSE). U.S. Department of Education
- Marschark, M (1997) *Raising and educating a deaf child. A comprehensive guide to the choices, controversies and decisions faced by parents and educators*. New York, Oxford University Press
- Marschark, M & Harris, M (1996) Success and Failure in Learning to Read. The Special Case (?) of Deaf Children. In C Cornoldi & J Oakhill Eds *Reading comprehension disabilities. Processes and intervention*. 279-300. Hillsdale, NJ, Lawrence Erlbaum Associates
- Martin, D, S (2001) The English-Only Movement and Sign Language for Deaf Learners. An Instructive Parallel. *Sign Language Studies*. 1(2). 115-124.
- Martin, D S (1990) Responses from the panel Dr. David Martin, Dean, School of Education and Human Services. In R C Johnson Ed *Access Language in Deaf Education*. Proceedings of a Seminar sponsored by the Gallaudet Research Institute concerning "Unlocking the Curriculum – Principles for achieving access in deaf education. 30-33. Gallaudet Research Institute Occasional Paper 90-1. Washington DC, Gallaudet University
- Martin-Jones, M & Jones, K Eds (2000) *Multilingual Literacies. Reading and Writing Different Worlds*. Vol 10 Studies in Written Language and Literacy. Amsterdam, John Benjamins Publishing Company
- Martony, J (1974) *Om talperception hos gravt hörselskadade och döva [On speech perception of seriously hard-of-hearing and deaf]*. The Royal Institute of Technology, Stockholm. Ph. D. Thesis.
- Masataka, N (2000) The role of modality and input in the earliest stage of language acquisition: Studies of Japanese Sign Language. In C Chamberlain, J P Morford & R I Mayberry Eds *Language Acquisition by Eye*. 3-24. New Jersey, Laurence Erlbaum Associates
- Masataka, N (1992) Motherese in a signed language. *Infant behaviour and development*. 15. 453-460.
- Mashie, S (1995) *Educating Deaf Children Bilingually*. Washington DC Gallaudet University Pre-College Programs
- Mason, D (1997) Response to Mayer and Wells The answer should be affirmative. *Journal of Deaf Studies and Deaf Education*. 2(4). 277-279.
- Maxwell, M (1988) The alphabetic principle and fingerspelling. *Sign Language Studies*. 61. 377-404.

- Maxwell, M (1984) A deaf child's natural development of literacy. *Sign Language Studies*. 44. 191-224.
- Maxwell, M (1983) Language development in a deaf child of deaf parents – Signs, sign variations, speech and print. In K Nelson Ed *Children's language* Vol IV. 283-313. Hillsdale NJ, Lawrence Erlbaum Association
- Maxwell, M (1980) *Language variation in a deaf child. The interaction of sign variations, speech, and print variations*. (Unpublished) University of Arizona, Tucson. Ph. D. Thesis.
- Maxwell, M & Doyle, J (1996) Language codes and sense-making among deaf schoolchildren. *Journal of Deaf Studies and Deaf Education*. 1(2). 122-136.
- Mayberry, R I (1993) First-Language Acquisition After Childhood Differs From Second-Language Acquisition The case of American Sign Language. *Journal of Speech and Hearing Research*. 36. 1258-1270.
- Mayberry, R I, Morford J P & Chamberlain, C (2000) Preface. In C Chamberlain, J P Morford & R I Mayberry Eds *Language Acquisition by Eye*. xi-xiv. New Jersey, Laurence Erlbaum Associates
- Mayberry, R I & Lock, E (1998) Critical period effects on grammatical processing. Privileged status of the first language. Paper presented at the American Psychology Society Convention, Washington DC, May 1998
- Mayer, C & Akamatsu, T C (1999) Bilingual-bicultural models of literacy education for deaf students. Considering the claims. *Journal of Deaf Studies and Deaf Education*. 4(1). 1-8.
- Mayer, C & Wells, G (1997) Endnote. The question remains: a rejoinder to Mason. *Journal of Deaf Studies and Deaf Education*. 2(4). 280-282.
- Mayer, C & Wells, G (1996) Can the linguistic interdependence theory support a bilingual-bicultural model of literacy education for deaf students? *Journal of Deaf Studies and Deaf Education*. 1 (2), 93-107
- McLarey, K (1995) *Literacy and Deafness. A look of some dimensions of literacy among deaf children in a bilingual program*. Essay, Institutionen för Specialpedagogik, Lärarhögskolan i Stockholm [Department of Special Education, College of Teacher Education, Stockholm]. Published by SIH.
- McIlvenny, P (1995) Seeing Conversations Analyzing Sign Language Talk. In P ten Have & G Psathas Eds *Situated Order Studies in the Social Organisation of Talk and Embodied Activities*. Washington DC, University Press of America
- McIlvenny, P (1991) Some thoughts on the study of sign language talk. In K Sajavaara, D Marsh & T Keto Eds *Communication and Discourse across Cultures and Languages*. Afina Yearbook 1991. 187-202. Jyväskylä University
- Meadow, K (1968) Early manual communication in relation to the deaf child's intellectual, social and communicative functioning. *American Annals of the Deaf*. 113. 29-41.
- Meadow-Orlans, K P (2001) Research and Deaf Education Moving Ahead While Glancing Back. *Journal of Deaf Studies and Deaf Education*. 6(2). 143-148.
- Meier, R P (1991) Language acquisition by deaf children. *American Scientist*. 79(1). 60-70.
- Miller, D W (1999) The Black Hole of Education Research. Why do academic studies play a minimal role in efforts to improve the schools? *The Chronicle of Higher Education*. 45(48). 17-18.
- Minick, N J (1985) *L. S. Vygotsky and Soviet Activity Theory New Perspectives on the Relationship between Mind and Society*. (Unpublished) Northwestern University, USA. Ph. D. Thesis.
- Mitchell, R & Karchmer, M (2004) Chasing the mythical ten percent Parental hearing status of deaf and hard of hearing students in the United States. *Sign Language Studies*. 4(2). 138-163.
- Monaghan, L (2003) A World's Eye View Deaf Cultures in Global Perspective. In L Monaghan, C Schmaling, K Nakamura & G H Turner Eds (2003) *Many Ways to Be Deaf. International Variation in Deaf Communities*. 1-24. Washington DC, Gallaudet University Press
- Monaghan, L, Schmaling, C, Nakamura, K & Turner, G H Eds (2003) *Many Ways to Be Deaf. International Variation in Deaf Communities*. Washington DC, Gallaudet University Press

- Monten, R (1984) *Hörselhandiapp och tv samt text-tv i Sverige 1984 [Hearing handicap and TV and Text-TV in Sweden 1984]*. SR publik- och programforskning [Swedish Radio – public and program research]. Nr. 4.
- Moore, D F (2001) *Educating the Deaf. Psychology, Principles and Practices* (fifth edition). Boston, Houghton Mifflin Company
- Moore, D F (1991) The Great Debates Where, How, and What to Teach Deaf Children. *American Annals of the Deaf*. 136(1). 35-37.
- Moore, D F & Sweet, C (1990) Factors Predictive of School Achievement. In D Moore & K Meadow-Orlans Eds *Educational and Developmental Aspects of Deafness*. 54-201. Washington DC, Gallaudet University Press
- Morford, J & Mayberry, R (2000) A re-examination of “early exposure” and its implications for language acquisition by eye. In C Chamberlain, J Morford & R Mayberry Eds *Language Acquisition by Eye*. 111-128. Mahwah NJ, Lawrence Erlbaum Associates
- Mozzer-Mather, S (1990) *A strategy to improve deaf students' writing through the use of glosses of signed narratives*. Gallaudet Research Institute Working Paper 90-4. Washington DC, Gallaudet University
- Musselman, C (2000) How Do Children Who Can't Hear Learn to Read an Alphabetic Script? A Review of the Literature on Reading and Deafness. *Journal of Deaf Studies and Deaf Education*. 5(1). 11-31.
- Mäkitalo, Å & Säljö, R (2002) Talk in institutional context and institutional context in talk categories as situated practices. *TEXT*. 22(1). 57-82.
- Naussbaum, D, Waddy-Smith, B & Laporta, R (2001) Cochlear Implants and Sign Language Meeting a Range of Student Needs. Poster presented at the American Speech, Language and Hearing Association Conference, November 2001. See <http://clercenter.gallaudet.edu/CIEC/presentations.html/>, March 2002
- Nelfelt, K (1998) *Simultaneous sign and speech a multimodal perspective on the communication of hearing-impaired children*. Department of Linguistics, Gothenburg University. Ph. D. Thesis.
- Nelfelt, K & Strömquist, S (1990) *Semantiska aspekter på hörselkades språkutveckling – projektrapport 1 [Semantic aspects of the language development of the hard-of-hearing – project report 1]*. Gothenburg papers in theoretical linguistics.
- Neuroth-Gimbrone, C & Logiodice, C (1992) A cooperative bilingual program for deaf adolescents. *Sign Language Studies*. 74. 79-91.
- Neville, H J (2002) Effects of experience on the development of the language systems of the brain. Keynote presentation at the Neural and Behavioral Aspects of Early Language Development Symposium, April 25, 2002. New Perspectives in Language Research symposium series. National Institutes of Health, MD, USA
- Newman, A J, Bavelier, D, Corina, D, Jezard, P & Neville, H J (2002) A critical period for right hemisphere recruitment in American Sign Language processing. *Nature Neuroscience*. 5(1). 76-80.
- Newport, E & Meier, R (1985) Acquisition of American Sign Language. In D Slobin Ed *The cross-linguistic study of language acquisition*. Vol 1. 881-938. Hillsdale NJ, Lawrence Erlbaum Associates
- Nilholm, C (2003) *Perspective på specialpedagogik [Perspectives on Special Education]*. Lund, Studentlitteratur
- Niskar, A S, Kieszak, M K, Holmes, A, Esteban, E, Rubin, C & Brody, D J (1998) Prevalence of Hearing Loss Among Children 6-19 Years of Age. *JAMA Journal of the American Medical Association* 279(14). 1071-1075.
- Nordén, K (1974) *Psykologiska studier av döva ungdomar [Psychological studies of deaf youth]*. *Pedagogiska-psykologiska problem [Educational-psychological problems]*. Report 267. Malmö, College of teacher education
- Nordén, K (1969) *Begåvningsstrukturen hos en grupp döva ungdomar [Talent structures of a group of deaf youth]*. Stockholm, PA-rådet

- Nottingham Paediatric CI programme (1997) Progress Report. *Outcomes for Paediatric Cochlear Implantation in Nottingham Safe Effective Efficient*. University Hospital NHS Trust. Queen's Medical Centre
- Nover, S M (2000) *History of Language Planning in Deaf Education. The 19th century*. (Unpublished). University of Arizona, Tucson. Ph. D. Thesis.
- Nover, S M & Andrews, J F (2000) *Critical Pedagogy in Deaf Education Bilingual methodology and staff development*. Year 2 Report (1998-1999). USDLC Star Schools Project Report. Santa Fe, New Mexico School for the Deaf, USA
- Nover, S M & Andrews, J F (1999) *Critical Pedagogy in Deaf Education Teachers' reflections on creating a bilingual classroom for deaf learners*. Year 3 Report (1999-2000). USDLC Star Schools Project Report. Santa Fe, New Mexico School for the Deaf, USA
- Nover, S M, Andrews, J F & Everhart, V S (2001) *Critical Pedagogy in Deaf Education Teachers' reflections on implementing ASL/English bilingual methodology and language assessment for deaf learners*. Year 4 Report (2000-2001). USDLC Star Schools Project Report. Santa Fe, New Mexico School for the Deaf, USA
- Nover, S M, Christensen, K M & Lilly Cheng, L-R (1998) Development of ASL and English Competence for Learners Who Are Deaf. Topics in Language Disorders. Theme Issue ASL Proficiency and English Literacy Acquisition. New Perspectives. 18(4). 61-71.
- Ohna, S E (2003) Education of Deaf Children and the Politics of Recognition. *Journal of Deaf Studies and Deaf Education*. 8. 5-10.
- Ohna, S E, Hjulstad, O, Vonen, A M, Gronlie, S M, Hjelmervik, E & Hoie, G (2003) *På vei mot en ny grunnskoleopplaering for dove elever. En evalueringsstudie etter Reform 97 [On the way to a new compulsory comprehensive school curriculum for deaf students. An evaluation study after Reform 97]*. Skådalen Publication Series No. 20. Oslo
- Olson, D R (1994) *The world on paper. The conceptual and cognitive implications of writing and reading*. Cambridge, Cambridge University Press
- Olson, D R (1977) From utterance to text the bias of language in speech and writing. *Harvard Educational Review*. 47. 257-281.
- Ong, W J (1982) *Orality and Literacy. The Technologizing of the Word*. London, Methuen
- Oviedo, A (1996) Bilingual Deaf Education in Venezuela: Linguistic Comments on the Current Situation. In C Lucas Ed *Multicultural Aspects of Sociolinguistics in Deaf Communities. Vol 2 The Sociolinguistics in Deaf Communities Series*. 61-79. Washington DC, Gallaudet University Press
- Padden, C (1996a) From the Cultural to the Bicultural. The Modern Deaf Community. In I Parasnian Ed *Cultural and Language Diversity and the Deaf Experience*. 79-98. New York, Cambridge University Press
- Padden, C (1996b) Early Bilingual Lives of Deaf Children. In I Parasnian Ed *Cultural and Language Diversity and the Deaf Experience*. 99-116. New York, Cambridge University Press
- Padden, C (1993) Lessons to be learned from young deaf orthographers. *Linguistics and Education*. 5(1). 71-86.
- Padden, C (1991) The acquisition of fingerspelling by deaf children. In P Siple & S Fischer Eds *Theoretical issues in sign language research* 2. 191-210. Chicago, University of Chicago Press
- Padden, C (1990) Responses from the panel. In R C Johnson Ed *Access Language in Deaf Education*. Proceedings of a seminar sponsored by the Gallaudet Research Institute concerning "Unlocking the Curriculum Principles for Achieving Access in Deaf Education". Gallaudet Research Institute Occasional Paper 90-1. 25-29. Washington DC, Gallaudet University
- Padden, C (1985/2001) GLAD Publishes Position Paper on Cochlear Implants. In L Bragg Ed *Deaf World. A historical reader and primary sourcebook*. 309-315. NY, New York University Press
- Padden, C & Clark Gunsauls, D (2003) How the Alphabet Came to be Used in a Sign Language. *Sign Language Studies*. 4(1). 10-33.
- Padden, C & Humphries, T (1988) *Deaf in America. Voices from a Culture*. Cambridge, Mass, Harvard University Press

- Padden, C & Le Master, B (1985) An alphabet on hand The acquisition of fingerspelling in deaf children. *Sign Language Studies*. 47. 161-172.
- Padden, C & Ramsey, C (2000) American Sign Language and reading ability in deaf children. In C Chamberlain, J P Morford & R I Mayberry Eds *Language acquisition by eye*. 165-189. Mahwah, NJ, Lawrence Erlbaum Associates
- Padden, C & Ramsey, C (1998) Reading Ability in Signing Deaf Children. *Topics in Language Disorders*. Special Theme – ASL Proficiency and English Literacy Acquisition New Perspectives. 18(4). 30-46.
- Padden, C & Ramsey, C (1996) *Deaf Students as Readers and Writers A Mixed Mode Research Approach*. Final report of the Research Program in Language and Literacy to the US Department of Education. HO23T30006 10/1/93 to 9/30/96
- Padden, C & Ramsey, C (1993) Deaf Culture and Literacy. *American Annals of the Deaf*. 139(2). 96-99.
- Patrie, C & Mertz, J (1997) *An Annotated Bibliography on Interpretation*. Gallaudet Research Institute Occasional Paper 97-1. Washington DC, Gallaudet University
- Persson, O (1978) *Letter-Writing by Telephone. A study of a computer based communication system for the deaf*. Interim report from the project TERESE-five telecommunication projects. Supported by the Swedish Board for Technical Development. University of Umeå
- Petersson, M, Liljestrånd, A, Turesson-Morais, G, Eriksson, C & Hendar, O (2000) *Resultat från lästest genomförda i klasser med teckenspråkig undervisning – med modifierade instruktioner [Results från the reading test conducted in classes with sign language instruction – with modified instructions]*. YFPDH [The Association of Psychologists for deaf and hard-of-hearing] Report 2000:1
- Petitto, L A (2002) What babies need to acquire language: On cortical specificity and cortical plasticity in the emergence of language. Keynote presentation at the Neural and Behavioral Aspects of Early Language Development Symposium, April 25, 2002. New Perspectives in Language Research symposium series. National Institutes of Health, MD, USA
- Petitto, L A (2000a) The acquisition of natural signed languages Lessons in the nature of human language and its biological foundations. In C Chamberlain, J Morford & R Mayberry Eds *Language Acquisition by Eye*. 41-50. Mahwah NJ, Lawrence Erlbaum Associates
- Petitto, L A (2000b) On the biological foundations of human language. In K Emmorey & H Lane Eds *The signs of language revisited. An anthology to honor Ursula Bellugi and Edward Klima*. 447-471. Mahwah, Lawrence Erlbaum Associates
- Petitto, L A & Marentette, P F (1991) Babbling in the manual mode Evidence for the ontogeny of language. *Science* 251. 1493-1496.
- Petitto, L A, Zatorre, R J, Gauna K, Nikelski E J, Dostie D & Evans A C (2000) Speech-like cerebral activity in profoundly deaf people processing signed languages Implications for the neural basis of human language. *Proceedings of the National Academy of Sciences of the United States*. 97(25). 13961-13966. (also at <http://www.pnas.org/cgi/content/full/97/25/13961>, November 2001).
- Pintner, R (1927) The survey of schools for the deaf-V. *American Annals of the Deaf*. 72. 377-414.
- Pintner, R (1918) The measurement of language ability and language processes of deaf children. *The Volta Review*. 20. 755-764.
- Pintner, R & Paterson, D G (1918) The measurement of language ability and language progress of deaf children. *The Volta Review*. 20. 755-765.
- Pintner, R & Paterson, D G (1917) The ability of deaf and hearing children to follow printed directions. *American Annals of the Deaf*. 62. 449-472.
- Pintner, R & Paterson, D G (1915) The Binet Scale and the deaf child. *Journal of Educational Psychology*. 6. 201-210.
- Polansky, D W (1985) The American School for the Deaf Computer Literacy Program. *American Annals of the Deaf*. 130(5). 392-396.
- Pollard, G & Shaw, C C (1982) Microcomputer Reading Comprehension Improvement Program for the Deaf. *American Annals of the Deaf*. 127(5). 483-487.

- Preisler, G (1983) *Deaf children in communication. A study of communicative strategies used by deaf children in social interactions*. Department of Psychology, University of Stockholm. Ph. D. Thesis.
- Prinz, P M & Strong, M (1998) ASL Proficiency and English Literacy within a Bilingual Deaf Education Model of Instruction. *Topics in Language Disorders. Special Theme – ASL Proficiency and English Literacy Acquisition New Perspectives*. 18(4). 47-60.
- Proposition 1998/99 Nr. 105 (1999) *Elever med funktionsbinder – ansvar för utbildning och stöd [Students with functional disabilities – responsibility for education and support]*. Stockholm Ministry of Education
- Proposition 1980/81 Nr. 100 (1981) *Bilaga 12 till budgetpropositionen 1981 – Utbildningsdepartementet [Appendix 12 to the budget bill 1981 – Ministry of Education]*. National Bill. Stockholm, Ministry of Education
- Pugh, G S (1946) Summaries from “Appraisal of the silent reading abilities of acoustically handicapped children”. *American Annals of the Deaf*. 91. 331-349.
- Pärsson, A (1997) *Dövas utbildning i Sverige 1889-1971 En skola för ett språk och ett praktiskt yrke [The education of the deaf in Sweden 1889-1971 A school for one language and one practical occupation]*. Gothenburg University. Ph. D. Thesis.
- Ramsey, C (2000) On the Boarder Cultures, Families, and Schooling in a Transnational Region. In E Christensen Ed *Deaf Plus. A multicultural perspective*. 121-147. San Diego, Dawn Sign Press
- Ramsey, C L (1997) *Deaf Children in Public Schools. Placement, Context, and Consequences*. Washington DC, Gallaudet University Press (Abridged version of Ph. D. Thesis)
- Ramsey, C L (1993) *A description of classroom language and literacy learning among deaf children in a mainstream program*. (Unpublished) University of California, Berkely. Ph. D. Thesis.
- Ramsey, C & Padden, C (1998) Natives and Newcomers Gaining Access to Literacy in a Classroom for Deaf Children. *Anthropology and Education Quarterly*. 29(1). 5-24.
- Reamer, J C (1921) *Mental and educational measurements of the deaf*. Princeton, Princeton University Press (Abridged version of Ph. D. Thesis)
- Ries, P W (1994) *Prevalence and Characteristics of Persons with Hearing Trouble: United States, 1990-91*. Vital and Health Statistics. Series 10: Data from the National Health Survey No. 188. Maryland, U.S. Department of Health and Human Services
- Rindler, E (1999) Sammanställning Behörighet statistic till gymnasieskolan RGD/RGH [Compilation of entrance requirement statistics to the National upper secondary schools for the deaf and hard-of-hearing]. Tullängsskolan, Örebro. Manuscript
- Ringaby, A (1994) Skrivna svenska är ett dött språk för döva [Written Swedish is a dead language for the deaf]. *Tolkningsperspektiv [Interpretation Perspectives]*. 2. 4-5.
- Risberg, A (1979) *Bestämning av hörkapacitet och talperceptionsförmåga vid svåra hörselskador [Determining hearing capacity and speech perception with severe hearing damage]*. Stockholm, Institute of Technology. Ph. D. Thesis.
- Rogers, D (1989) ‘Show-me bedtime reading’ An unusual study of the benefits of reading to deaf children. *Perspectives for Teachers of the Hearing Impaired*. 8(1). 2-5.
- Rogoff, B (1990) *Apprenticeship in thinking*. NY, Oxford University Press
- Roots, J (1999) *The Politics of Visual Language. Deafness, Language Choice and Political Socialization*. Ottawa, Carleton University Press
- Rosengren, K E & Öhngren, B (1997) *An Evaluation of Swedish Research in Education*. Stockholm Swedish Council for Research in the Humanities and Social Sciences (HSFR)
- Rottenberg, C (1991) *Literacy Learning is Important Work Emergent literacy of preschool hearing-impaired children*. (Unpublished). Arizona State University. Ph. D. Thesis.
- Runfors, A (1996) “För barnens bästa” *Lärarperspektiv på andraspråksinlärning [For children’s best Teachers’ perspectives on second language learning]*. Stockholm, Mångkulturellt centrum

- Sahlström, F (2001) Likvärdighetens produktionsvillkor [Conditions to achieve equality]. In S Lindblad & F Sahlström Eds *Interaktion i pedagogiska sammanhang [Interaction in educational contexts]*. 91-110. Stockholm, Liber.
- Sahlström, F (1999) *Up the hill backwards. On interactional constraints and affordances for equity-constitution in the classrooms of the Swedish comprehensive school*. Uppsala Studies in Education 85. Uppsala University. Ph. D. Thesis
- Said, E W (1978/2002) *Orientalism [Orientalism]*. Stockholm, Ordfront
- Sawyer, K R (2001) *Creating Conversations Improvisation in Everyday Discourse*. Cresskill, NJ, Hampton Press
- Saxe, G B (1991) *Culture and Cognitive Development. Studies in Mathematical Understanding*. New York, Hillsdale
- Schildroth, A N & Hotto, S A (1996) Changes in student and program characteristics 1984-85 and 1994-95. *American Annals of the Deaf*. 141. 68-71.
- Schildroth, A N & Hotto, S A (1995) Race and ethnic background in the Annual Survey of Deaf and Hard of Hearing Children and Youth. *American Annals of the Deaf*. 140(2). 96-99.
- Schildroth, A N & Hotto, S A (1994) Inclusion or Exclusion? Deaf students and the inclusion movement. *American Annals of the Deaf*. 139(2). 239-243.
- Schildroth, A N & Hotto, S A (1993) Annual Survey of Hearing-Impaired Children and Youth 1991-92 school year. *American Annals of the Deaf*. 138(2). 163-171.
- Schirmer, B R (2001) Using research to improve literacy practice and practice to improve literacy research. *Journal of Deaf Studies and Deaf Education*. 6(2). 83-91.
- Schleper, D R (1994) Whole Language. Getting the Bugs out. *Perspectives in Education and Deafness*. 12(3). 12-16.
- Schleper, D R (1993a) A Novel Way to Teach American History. Gallaudet Research Institute 1991-92. Small Research Grant. Washington DC
- Schleper, D R (1993b) Using Picture Books to Introduce Literacy Devices to Deaf Adolescents. Gallaudet Research Institute 1991-92. Small Research Grant. Washington DC
- Schleper, D R (1993c) Whole Language Works... and I've Got Proof! *Perspectives in Education and Deafness*. 11(3). 10-15.
- Schleper, D R (1992) When "F" Spells "Cat". Spelling in a Whole Language Program. *Perspectives in Education and Deafness*. 11(1). 11-14.
- Schleper, D R & Farmer, M (1991) An Interdisciplinary Approach to Applying Recent Research in Literacy in the Education of Hearing Impaired Learning Disabled Students. US Department of Education Teacher/Researcher Grant #R11780077.
- Schneiderman, E (1990) Communication Games in Print. *Perspectives in Education and Deafness*. 9 (2), 18-19.
- Scribner, S & Cole, M (1981) *The Psychology of Literacy*. Boston, Harvard University Press
- Schirmer, B R (2001) Using Research to Improve Literacy Practice and Practice to Improve Literacy Research. *Journal of Deaf Studies and Deaf Education*. 6(2). 83-91.
- Selander, Per (undated) Döva barns inlärning [Deaf children's learning]. Manuscript.
- Shuy, R W (2001) Foreword. In C Lucas, R Bayley & C Valli Eds *Sociolinguistic variation in American Sign Language*. Vol 7 The Sociolinguistics in the Deaf Communities Series. xi-xiv. Washington DC, Gallaudet University Press
- Simonsen, E, Breilid, N, Jochumsen, U & Kristoffersen, A-E Eds (2001) *Utvikling og livskvalitet. Rapport fra nordisk konferanse i Oslo 21-23 nov 2001 [Development and life quality. Report from the Nordic conference in Oslo 21-23 Nov 2001]*. Skådalen publication series nr 14. Research and development division. Skådalen Competence Center, Oslo.
- Simonsen, E & Kristoffersen, A-E (2001) *Forskning om barn med cochleaimplantat – en kunnskapsöversikt [Research on children with cochlear implants – a review of literature]*. Skådalen publication series nr 13. Research and development division. Skådalen Competence Center, Oslo.

- Singleton, J L, Supalla, S, Litchfield, S & Schley, S (1998) From Sign to Word Considering Modality Constraints in ASL/English Bilingual Education. *Topics in Language Disorders. Theme issue ASL Proficiency and English Literacy Acquisition New Perspectives*. 18(4). 16-29.
- Sjögren, A, Runfors, A & Ramberg, I Eds (1996) *En ”bra” svenska? Om språk, kultur och makt [A ”good” Swedish? On language, culture and power]*. Stockholm, Mångkulturellt centrum
- Skolverket, National Agency for Education (2002) *Specialskolan. Kursplaner och betygskriterier [The special school. Course plans and grade criteria]*. Stockholm, National Agency for Education
- Skolverket, National Agency for Education (1997) Utvärdering av den statliga specialskolan – metod, slutsatser och resultatbedömning [Evaluation of the State special schools – methods, conclusions and results of assessments]. Dnr 9701591. Stockholm, National Agency for Education
- Skolverket, National Agency for Education (1996) *Specialskolan. Kursplaner, timplaner, betygskriterier och kommentarer [The special school. Course plans, time plans, grade criteria and comments]*. Stockholm, National Agency for Education
- Skolverket, National Agency for Education (1983) *Läroplan för specialskolan Kompletterande föreskrifter till Lgr 80 [Curriculum for special schools Complimentary texts for Lgr 80]*. Special School Supplement. Stockholm National Agency for Education
- Skoog, M (2001) Tidiga literacypraktiker i klassrumsmiljö. Barns möte med skolans läs- och skrivundervisning [Early literacy practices in classroom environments. Childrens meetings with reading and writing instruction]. C-uppsats [Bachelors thesis]. Department of Education, Örebro University
- Sleeter, C E (2001) Epistemological Diveristy in Research on Preservice Teacher Preparation for Historically Underserved Children. *Review of Research in Education* 25. 209-250.
- SOL (2002) Signs of Literacy. A Longitudinal Study of ASL and English Literacy Acquisition. Collaborative research between Gallaudet University and the Laurent Clerc National Deaf Education Center. Presentation to the Committee on National Deaf Education at the Board of Trustees meeting, Gallaudet University, 7 February 2002
- SOL-Projekt (2000) Dokumentation från ett projekt för kompetensutveckling för lärare inom undervisning för döva och hörselskadade barn och ungdomar 1997-2000 [SOL-Project. Documentation from a project for in-service development of teachers working with deaf and hard of hearing children and young people 1997-2000]
- SOU 2002 Nr. 27. (2002) *Mål i mun. Förslag till handlingsprogram för svenska språket [Language in the mouth. Suggestions for an action program for Swedish]*. Stockholm, Ministry of Culture
- SOU 1997 Nr. 192 (1997) *Steg mot en minoritetspolitik. Europarådets konvention om historiska minoritetsspråk [A step towards politics for minorities. The European Council's Convention regarding historical minority languages]*. Official report of the Minority Language Committee. Stockholm, Ministry of Agriculture
- Spens, K-E (1984) *To 'bear' with the skin*. The Royal Institute of Technology, Stockholm. Ph. D. Thesis.
- SPM, National Special School Authority (2000) *Årsredovisning 2000 [Year Review for 2000]*. Örebro, SPM
- Stinson, M S & Foster, S (2000) Socialization of deaf children and youths in school. In P E Spencer, C J Erting & M Marschark Eds *The Deaf Child in the Family and at Home. Essays in Honor of Jathryn P Meadow-Orlans*. 191-209. Mahwah, NJ Lawrence Erlbaum Associates
- Stokoe, W C (1978) *Sign Language Structure. The first linguistic analysis of American Sign Language*. Silver Spring MD, Linstok Press
- Street, B (2000) Literacy events and literacy practices Theory and practice in the New Literacy Studies. In M Martin-Jones & K Jones Eds *Multilingual Literacies. Reading and Writing Different Worlds*. Vol 10 Studies in Written Language and Literacy. 17-35. Amsterdam, John Benjamins Publishing Company
- Street, B (1995) *Social Literacies. Critical approaches to literacy in development, ethnography and education*. London, Longman
- Street, B (1984) *Literacy in Theory and Practice*. Cambridge, Cambridge University Press

- Strong, M (1995) A review of bilingual/bicultural programs for deaf children in North America. *American Annals of the Deaf*. 140(2). 84-94.
- Strong, M & Prinz, P (2000) Is American Sign Language skill related to English literacy? In C Chamberlain, J Morford & R Mayberry Eds *Language Acquisition by Eye*. 131-142. Mahwah NJ, Lawrence Erlbaum Associates
- Strong, M & Prinz, P M (1997) A study of the relationship between ASL and English literacy. *Journal of Deaf Studies and Deaf Education*. 2. 37-46.
- Stuckless, E & Birch, J (1966) The influence of early manual communication on the linguistic development of deaf children. *American Annals of the Deaf*. 111(4). 527-536.
- Svartholm, K (1998) Bilingual approach for the deaf Evaluation of the Swedish model. In G L Zaitseva, A A Komarova & D M Pursglove Eds *Deaf Children and Bilingual Education. Proceedings of the international conference on Bilingual Educaiton of Deaf Children*. Moscow, April 1996. 136-146. Moscow, Zagrey
- Svartholm, K (1997) Svenska som andra språk för döva – vad är det? [Swedish as a second language for the deaf – what is that?]. *DHB Dialog [The national parent's association magazine]*. 24(2). 9+11.
- Svartholm, K (1996) Svenska som andraspråk för döva [Swedish as a second language for the deaf]. *ASLA-Information [Association suédoise de linguistique appliqué (Swedish association for applied language sciences)]*. 22(3). 128-131.
- Svartholm, K (1994) Second language learning in the deaf. In I Ahlgren & K Hyltenstam Eds *Bilingualism in Deaf Education. Bilingualism in Deaf Education. International Studies on Sign Language and Communication of the Deaf*. Vol 27. 61-70. Hamburg, Signum
- Svartholm, K (1990) *Dövas två språk. Språklära. Svenska för döva [The two languages of the deaf. Grammar. Swedish for the deaf]*. Skolöverstyrelsen S 9017 Servicematerial [The National School Board Service Material]. Stockholm
- Svartholm, K (1984) *Döva och samhällets skrivna språk. En forskningsöversikt och en tillbakablick [Deaf and the written language of society. A research review and a look back]*. Forskning om teckenspråk XII [Research on sign language XII]. Report from the Department of Linguistics, Stockholm University
- Svartholm, K, Andersson, R & Lindhal, U (1993) *Samspråk i dövundervisning. Studier av klassrumskommunikation i två olika skolformer för döva [Conversations in deaf teaching. Studies of class room communication in two different school forms for the deaf]*. Report from the Department of Scandinavian Languages, Stockholm University.
- Svonni, M (1996) Skolor och språkundervisning för en inhemsk minoritet – samerna [Schools and language education for a domestic minority – The Sameer]. In K Hyltenstam Ed *Tvåspråkighet med förbinder? Invandrar- och minoritetsundervisning i Sverige [Bilingualism with obstacle? Immigrant and minority education in Sweden]*. 148-186. Lund, Studentlitteratur
- Säljö, R (2000) *Lärande i praktiken. Ett sociokulturellt perspektiv*. Stockholm, Prisma
- Säljö, R (1997a) Tal, skrift och soikulturell dynamic Skriftspråk som kitt och differntierande mechanism id et komplexa samhället [Talk, script and sociocultural dynamics Written language as cement and differentiating mechanism in the complex society] In SOU 1997 Nr. 108 *Att lämna skolan med rak rygg – om rätten till skriftspråket och om förskolans och skolans möjligheter att förebrygga och möta läs- och skrivsvårigheter [To leave school with a straight back – on the right to written language and on preschools and schools possibilities to avoid and confront reading and writing difficulties]*. Stockholm, Utbildningsdepartementet [Ministry of Education]
- Säljö, R (1997b) *Learning and sociocultural change*. Inaugral lecture, Belle van Zuylen Chair, Faculty of Social Sciences, University of Utrecht, July 1997. Research Papers, Onderzoekschool Arbeid, Utrecht University
- Säljö, R Ed (1988) *The written world. Studies in literate thought and action*. New York, Springer-Vlg
- Säljö, R & Wyndhamn, J (1990) Problem-Solving, Academic Performance and Situated Reasoning. A study of joint cognitive activity in the formal setting. *British Journal of Educational Psychology*. 60(3). 245-254.

- Säljö, R & Wyndhamn, J (1988a) A Week Has Seven Days. Or Does It? On bridging linguistic openness and mathematical precision. *For the Learning of Mathematics*. 8(3). 16-19.
- Säljö, R & Wyndhamn, J (1988b) Cognitive Operations and Educational Framing of Tasks. School as a Context for Arithmetic Thought. *Scandinavian Journal of Educational Research*. 32. 61-71.
- Säljö, R & Wyndhamn, J (1987) The Formal Setting as Context for Cognitive Activities. An Empirical Study of Arithmetic Operations under Conflicting Premises for Communication. *European Journal of Psychology of Education*. 11(3). 233-245.
- Säwe, F (1999) *Om samförstånd och konflikt samtal mellan föräldrar och skolledning på en specialskola [About mutual understanding and conflict conversations between parents and school leaders at a school for the deaf]*. Department of Sociology, Lund University. Ph. D. Thesis.
- SÖ, Swedish National Board of Education (1986) *Special Education in Sweden*. Nr. 1 86:12. Stockholm, Swedish National Board of Education
- SÖ, Swedish National Board of Education (1983) *Läroplan för specialskolan. Kompletterande föreskrifter [National curriculum for the special schools. Supplementary regulations]*. Stockholm, Swedish National Board of Education
- Söderberg, R (2000) Reading and Writing as Language Acquisition From the First Year of Life. In *Proceedings of the Research Symposium on High Standards in Reading for Students From Diverse Language Groups Research, Practice & Policy*. 59-77. US Department of Education & Office of Bilingual Education and Minority Languages Affairs (OBEMLA). Washington DC April 2000
- Söderberg, R (1997a) Tal och skrift i samspel i den tidiga språkutvecklingen [Speech and writing in interaction in early language development]. In R Söderberg Ed *Från joller till läsning och skrivning [From babbling to reading and writing]*. 264-277. Kristianstad, Gleerups
- Söderberg, R Ed (1997b) *Från joller till läsning och skrivning [From babbling to reading and writing]*. Kristianstad, Gleerups
- Söderberg, R (1985) Early reading with deaf children. *Prospects*. 15(1). 77-85.
- Söderberg, R (1981) Teaching deaf preschool children to read in Sweden. In P Dale & D Ingram Eds *Child Language An International Perspective*. 373-386. Baltimore, University Park Press
- Söderberg, R (1976a) Learning to read between two and five Some observations on normal hearing and deaf children. Paper prepared for the Georgetown University Round Table on Language and Linguistics 1976. Preprint No 12. Department of Scandinavian Languages, Stockholm.
- Söderberg, R (1976b) Learning to read Breaking the code or acquiring functional literacy?. In R Lado & T Andersson Eds *Early Reading. Georgetown University Papers on Languages and Linguistics* No 13. 16-34. Washington DC, Georgetown University Press
- Söderfeldt, B (1994) *Signing in the Brain. Sign Language Perception Studied by Neuroimaging Techniques*. Uppsala University. Ph. D. Thesis.
- Taylor, C (1999) *Det mångkulturella samhället och erkännandets politik [The multicultural society and politics of recognition]*. Göteborg, Daidalos
- Terstriep, A (2001) Listen Up Hearing as Work in a Cochlear Implant Clinic. Paper presented at the Annual American Anthropology Associations meeting in the panel "Desire, Technology and Language The Discursive Power of Technologies in Deaf Arenas, Washington DC, USA November 28-December 2 2001
- Teruggi, L A Ed (2003) *Una scuola, due lingue. L'esperienza di bilinguismo della scuola dell'Infanzia ed Elementare di Cossato [One school two languages. Experiences of bilingualism at the preschool and compulsory school level in Cossato]* Milano, FrancoAngeli
- Teveborg, L & Toll, I (1991) Förord [Preface]. In SÖ *Dövas två språk. Metodbok svenska för döva – läsa, skriva, tala [The two languages of the deaf. Method book Swedish for the deaf – reading, writing and speaking]*. S 917 Servicematerial. p 3. Gothenburg, Förlagshuset Gothia

- Tjärnström, L (2000) Hugo Edenås, författare och kulturprismottagare "Som döva behöver vi både teckenspråk och svensk!" [Hugo Edenås, author and recipient of the culture prize "As deaf individuals we need both sign language and Swedish!"]. *DÖV-tidningen [Magazine of the Swedish National Association of the Deaf]*. 4. 16-17.
- Törnberg, U (2000a) Vad menas med "innehåll" i språkundervisningen? [What is meant by "content" in language teaching?] In C A Säfström & P O Svedner Eds *Didaktik – perspektiv och problem [Didactics – perspectives and problems]*. 93-106. Lund, Studentlitteratur
- Törnberg, U (2000b) *Om språk-undervisning i mellanrummet - och talet om "kommunikation" och "kultur" i kursplaner och läromedel från 1962 till 2000 [On language teaching in the middle space – and discourses regarding "communication" and "culture" in the syllabi and teaching materials from 1962 to 2000]*. Uppsala Studies in Education 92. Uppsala University. Ph. D. Thesis.
- Traxler, C (2000) Measuring up to performance standards in reading and mathematics Achievement of selected deaf and hard-of-hearing students in the national norming of the 9th Edition Standard Achievement test. *Journal of Deaf Studies and Deaf Education*. 5. 337-348.
- Turner, G H (2002) The Deaf Nation notion. Citizenship, control and courage. *Deaf Worlds. International Journal of Deaf Studies*. 18(3). 74-78.
- Udd, L (1993) Kontakt via bild-telefon [Contact through picture-telephone]. Allt om hjälpmedel [Everything about support tools]. 48(2). 21-23.
- Ulfsparré, S (1991) Dövas två språk Teckenspråk och svenska [The two languages of the deaf Sign language and Swedish]. *Didactica Minima Presentera 1991*. 28-30.
- Vernon, M & Koh, S (1970) Effects of manual communication on deaf children's educational achievement, linguistic competence, oral skills and psychological development. *American Annals of the Deaf*. 115. 527-536.
- Vestberg, P (1989) *Beyond Stereotypes: Perspectives on the Personality Characteristics of Deaf People*. Gallaudet Research Institute Working Paper 89-2. Washington DC, Gallaudet University
- Viberg, Å (1996) Svenska som andraspråk i skolan [Swedish as second language in the school]. In K Hyltenstam Ed *Tvåspråkighet med förbindelser? Invandrar- och minoritetsundervisning i Sverige [Bilingualism with obstacle? Immigrant and minority education in Sweden]*. 110-147. Lund, Studentlitteratur
- Vislie, L (1997) Special Educational Research. In K E Rosengren & B Öhngren Eds *An evaluation of Swedish research in education*. 128-142. HSFR – Swedish Council for Research in the Humanities and Social Sciences
- Volterra, V (1981) Gestures, signs and words at two years When does communication become language? *Sign Language Studies*. 33. 351-361.
- Volterra, V & Caselli, M C (1985) From gestures and vocalizations to signs and words. In W Stokoe & V Volterra Eds *Sign Language Research '83. Proceedings of the Third International Symposium of Sign Language Research*. Rome, June 1983. 1-9. Rome/Silver Spring, Linstok Press
- Volterra, V & Erting, C J Eds (1994) *From Gesture to Language in Hearing and Deaf Children*. Washington DC, Gallaudet University Press
- Vonen, A M, Arnesen, K, Enerstvedt, R T & Natstad, A V Eds (1996) *Bilingualism and literacy concerning deafness and deaf-blindness Proceedings of an International Workshop*. Oslo, Skådalen Competence Center. 10-13 November 1994
- Vygotsky, L S (1986/1934) *Thought and Language* (Alex Kozulin, translated). Cambridge, Harvard University Press
- Wadensjö, C (1992) *Interpreting as interaction On dialogue-interpreting in immigration hearings and medical encounters*. Linköping Studies in Arts and Science 83. Linköping University. Ph. D. Thesis.
- Walters, G & Doehring, D (1990) Reading acquisition in congenitally deaf children who communicate orally. Insights from an analysis of component reading, language and memory skills. In T Carr & B Levy Eds *Reading and its development Component skills approaches*. 323-373. New York, Academic Press

- Webster, A (1987) Reading and writing in severely hearing-impaired children. *International Journal of Rehabilitation Research*. 10(2). 227-229.
- Wedenberg, E (1951) *Auditory training of deaf and hard of hearing children Results from a Swedish series*. Karolinska institutet – a medical university, Uppsala. Ph. D. Thesis.
- Welsch, O (2000) Building a multicultural curriculum Issues and dilemmas. In E Christensen Ed (2000) *Deaf Plus. A multicultural perspective*. 1-28. San Diego, Dawn Sign Press
- Wertsch, J V (1998) *Mind as Action*. Cambridge, Harvard University Press
- Wertsch, J V (1985) *Vygotsky and the social formation of mind*. Cambridge, Harvard University Press
- Whyte, S R (1999) Ethnographic fieldwork A pragmatic perspective. *Nordic Educational Research Journal*. 19(4). 235-244.
- Wilbur, R B (2000) The use of ASL to support the development of English and literacy. *Journal of Deaf Studies and Deaf Education*. 5, 81-104.
- Wilbur, R B (1998) Editor's Notepad. *Sign Language and Linguistics*. 1(1). 1-2.
- Wilhelmsson, B (1986) Videobandspelare för döva Kulturpolitik – eller hjälpmedel? [Video record players for the deaf Cultural politics – or support tools?]. *Information om Rehabilitering [Information about Rehabilitation]*. 2. 16-17.
- Wingstedt, M (1998) *Language ideologies and minority language policies in Sweden historical and contemporary perspectives*. Stockholm University. Ph. D. Thesis.
- Woodward, J (1978) Some sociolinguistic problems in the implementation to bilingual education for deaf students. In F Caccamise & D Hicks Eds *American Sign Language in a Bilingual, Bicultural Context*. The proceedings of the Second National Symposium of Sign Language Research and Teaching. 183-210. Silver Spring, MD, National Association of the Deaf
- Wyndhamn, J (1993) *Problem-Solving Revisited On School Mathematics as a Situated Practice*. Linköping Studies in Arts and Science. 98. Linköping University. Ph. D. Thesis.
- Yoshinaga-Itano, C, Sedey, A L, Coulter, D K & Mehl, A L (1998) Language of Early- and Later-identified Children with Hearing Loss. *Paediatrics*. 102(5). 1161-1171.
- Zorfass, J, Corley, P and Remz, A (1994) Helping Students with Disabilities Become Writers. *Educational Leadership*. 51(7). 62-66.
- Äng, T (1992) Funktionsnedsättningar ingår i det normala [Functional disability is part of normality]. *Att undervisa [To teach]*. 3. 8-9.
- Öhngren, G (1992) *Touching voices components of direct tactually supported speechreading*. Uppsala University. Stockholm, Almqvist & Wiksell. Ph. D. Thesis.

INTERNET RESOURCES:

Chapter 1: Deaf Education. What can we learn from research?

<http://www.gallaudet.edu/> : Gallaudet University Home Page (September 2001)

<http://www.skolverket.se/english/system/index.shtml/> : The Swedish School System, Skolverket (May 2003)

http://www.skolverket.se/english/system/special_schools.shtml/ : Special Education and Special schools, Skolverket (May 2003)

Chapter 3: Perspectives and methodological discussions in Deaf education and literacy research. Manual-Oral-Total-Communication-Bilingual

http://www.ur.se/dova/tecknade_fakta.html/ : Här tecknade alla – fakta och bakgrund [All signed here – facts and background] (November 2003)

<http://www.eudeaf2003.org/> : EU Deaf 2003 (February 2003)

Chapter 4: Textual, theoretical and methodological trends in the literature

<http://www.edrs.com/webstore/help/glossary/pubtype.cfm/> : Resource Guides ERIC: The Educator's Reference Desk (September 2001; certain services discontinued 18 December 2003)

Chapter 5: Specific research themes in the literature

<http://gri.gallaudet.edu/Demographics/annsrvy.html/> : Annual Survey of Deaf and Hard-of-Hearing Children (October 2001)

<http://gri.gallaudet.edu/AnnualSurvey/combyaud.html/> : Relationship of Communication Mode in the Classroom to Hearing Loss (October 2001)

<http://gri.gallaudet.edu/AnnualSurvey/elem.html/> : Selected Characteristics: Elementary school aged deaf kids (October 2001)

<http://gri.gallaudet.edu/AnnualSurvey/whodeaf.html/> : Who are the deaf and hard-of-hearing students leaving high school and entering postsecondary education? (October 2001)

<http://gri.gallaudet.edu/Demographics/qxreasl.html/> : How many people in USA and Canada use ASL as a primary language and how many use it as their second or other language? (October 2001)

<http://gri.gallaudet.edu/Demographics/factsheet.html/> : Demographic aspects of hearing impairment: Questions and answers Third Edition, 1993 (October 2001)

<http://gri.gallaudet.edu/Literacy/#reading/> : GRI Research Areas – What is the reading level of deaf and hard of hearing people? (October 2001)

<http://www.sih.se/laromit/tspdator/linkit.htm/> : The National Swedish Agency for Special Education (the agency no longer exists) (April 2002)

<http://www2.skolverket.se/BASIS/skolbok/webext/trycksak/DDW?W=KEY=1030/> : Swedish Board of Education publication “Vardagskommunikation, lärande och måluppfyllelse i tvåspråkiga regionala specialskolor [Everyday communication, learning and achievement in the bilingual regional special schools]” (November 2002)

<http://www.sit.se/net/Startsida+SIT/In+English/Educational+materials/Deaf+and+Hard+of+H>

earing/Products/Adam%27s+Book/ : Swedish Institute for Special Needs Education – Adam’s Book (March 2004)

<http://www.sit.se/net/Startsida+SIT/> : Special pedagogiska institutet [Swedish Institute for Special Needs Education] (July 2002)

http://communication.ucsd.edu/people/f_padden.html/ : USCD Department of Communication Faculty – Carol Padden home page (March 2002)

<http://clerccenter.gallaudet.edu/CIEC/index.html/> : Laurent Clerc National Deaf Education Center – Cochlear Implant Education Center (March 2002)

<http://www.sit.se/net/Startsida+SIT/In+English/Educational+materials/Deaf+and+Hard+of+Hearing/Products/Link-it/> : Swedish Institute for Special Needs Education – Link-it (April 2002)

<http://www.starschools.org/nmsd/misc/mvstate.html/> : USDLC Star Schools Engaged Learning Project (February 2002)

Chapter 6: Deaf bilingualism. An established research theme in the literature

<http://gupress.gallaudet.edu/socio-series.html/> : GU Press – The Sociolinguistics in Deaf Communities Series (May 2002)

<http://www.starschools.org/nmsd/misc/mvstate.html/> : USDLC Star Schools Engaged Learning Project (February 2002)

<http://www.skolverket.se/kursplaner/specialskolan/svenska.html/> and

<http://www3.skolverket.se/ki03/front.aspx?sprak=SV&ar=0405&infotyp=24&skolform=12&id=4058&extraId=1571/> : Skolverket Specialskola – kursplan svenska [The Swedish National Agency for Education Special schools – Syllabi for Swedish] (November 2001 and March 2004 respectively)

<http://www2.skolverket.se/BASIS/skolbok/webext/trycksak/DDW?W=KEY=1030/> : Swedish Board of Education publication “Vardagskommunikation, lärande och måluppfyllelse i tvåspråkiga regionala specialskolor [Everyday communication, learning and achievement in the bilingual regional special schools]” (November 2002)

<http://www.ncbe.gwu.edu/ncbepubs/symposia/reading/reading3.html/> : Reading and writing as language acquisition from the first year of life – Ragnhild Söderberg (February 2002)

Chapter 7: Research on communication-practices. Emerging trends from a new theme in the literature

<http://sol.gallaudet.edu/> : Signs of Literacy home page (September 2003)

www.psychology.su.se/staff/gp/ : Stockholm University, Department of Psychology Faculty – Gunilla Priesler (May 2003)

Chapter 8: A conceptually pushed summarizing discussion and future research directions in Sweden

<http://www.ne.se/> : The Swedish national encyclopaedia internet services (December 2002)

<http://www.bris.ac.uk/Depts/DeafStudies/deafstudies.htm/> : Center for Deaf Studies Bristol, UK home page (October 2001)

Appendix 1: Further notes on the data and analysis

<http://gri.gallaudet.edu/funding/pvd.php/> : Gallaudet Research Institute – Powrie V Doctor

Chair of Deaf Studies (October 2001)

<http://gri.gallaudet.edu/Archive/sangeeta.html/> : Gallaudet Research Institute – P V D Chair of Deaf Studies 2001-2002 Sangeeta Bagga-Gupta (October 2001)

Appendix 3: Grassroot level movements that enabled Deaf voices to become visible within academia and Deaf education in the United States at the end of the 20th century

<http://www.deafway.org/about/genesis.asp/> : First Deaf Way conference (1988) home page (October 2001)

SERIEN FORSKNING I FOKUS VID MYNDIGHETEN FÖR SKOLUTVECKLING

Är en skriftserie som etablerats för att möjliggöra utgivning av material som producerats med stöd eller på uppdrag av Myndigheten för skolutveckling.

Det gemensamma för skrifterna är att Myndigheten för skolutveckling gjort bedömningen att materialet är av intresse för t.ex. pedagogiskt yrkesverksamma, beslutsfattare och forskare.

Författarna svarar själva för innehållet och de ställningstaganden som görs.

Publikationerna finns också på hemsidan www.skolutveckling.se

Från och med 2003-03-01 övergick serien genom en omorganisation från Skolverket till Myndigheten för skolutveckling.

Tidigare forsknings- och kunskapsöversikter i Skolverkets monografiserie och Myndigheten för skolutvecklings serie Forskning i Fokus

Glenn Hultman och Cristina Hörberg

Kunskapsutnyttjande

Ett informellt perspektiv på hur kunskap och forskning används i skolan

Ingegerd Muncio

Genomförande

Vem tolkar beslut och vem ser till att reformer blir mer än ord?

Britt Hallerdt

Studieresultat och social bakgrund

– en översikt över fem års forskning

Kjell Granström och Charlotta Einarsson

Forskning om liv och arbete i svenska klassrum

– en översikt

Ingrid Pramling Samuelsson och Ulla Mauritzson

Att lära som sexåring

En kunskapsöversikt

Birgitta Sahlin

Matematiksvårigheter och svårigheter när det gäller koncentration i grundskolan

En översikt av svensk forskning 1990-1995

Erik Wallin

Gymnasieskola i stöpsleven – då, nu, alltid

Perspektiv på en skolform

Mats Börjesson

Om skolbarns olikheter

Diskurser kring ”särskilda behov” i skolan – med historiska jämförelsepunkter

Hans Ingvar Roth

Den mångkulturella parken

– om värdegemenskap i skola och samhälle

Ulla Forsberg

Jämställbetspedagogik

– en sammanställning av aktionsforskningsprojekt

Jens Pedersen

Informationstekniken i skolan

En forskningsöversikt

Peder Haug

Pedagogiskt dilemma

Specialundervisning

Moira von Wright

Genus och text

När kan man tala om jämställdhet i fysikläromedel?

Tullie Torstenson-Ed och Inge Johansson

Fritidsbrevet i forskning och förändring

En kunskapsöversikt

Thomas Tydén och Annika Andræ Thelin (Red.)

Tänkar om lärande och IT

En forskningsöversikt

Ulla Riis (Red.)

IT i skolan mellan vision och praktik

En forskningsöversikt

Pia Williams, Sonja Scheridan och Ingrid Pramling Samuelsson

Barns samlärande

En forskningsöversikt

Monica Söderberg Forslund

Kvinnor och skolledarskap

En kunskapsöversikt

Mats Ekholm, Ulf Blossing, Gösta Kåräng, Kerstin Lindvall och Hans-Åke Scherp

Forskning om rektor

En forskningsöversikt

Ingemar Emanuelsson, Bengt Persson och Jerry Rosenqvist

Forskning inom det specialpedagogiska området

En kunskapsöversikt

Ulla Lind

Positioner i svensk barnpedagogisk forskning

En kunskapsöversikt

Karin Rönnerman

Vi behöver varandra

En utvärdering

Irene Rönnerberg och Lennart Rönnerberg

Minoritets elever och matematikutbildning

En litteraturöversikt

Maj Asplund Carlsson, Ingrid Pramling Samuelsson och Gunni Kärrby

Strukturella faktorer och pedagogisk kvalitet i barnomsorg och skola

Karin Wallby, Synnöver Carlsson och Peter Nyström

Elevegrupperingar

En kunskapsöversikt medfokus på matematikundervisning

Gunilla Härnsten

Kunskapsmöten i skolvärlden

Exempel från tre forskningscirkelr

Elisabet Öhrn

Könsmönster i förändring

En kunskapsöversikt om unga i skolan

Rolf Helldin

Specialpedagogisk forskning

En kritisk granskning i ett omvärldsperspektiv

Anna Klerfelt

Var ligger forskningsfronten?

67 avhandlingar i barnpedagogik under två decennier, 1980-1999

Louise Limberg, Frances Hultgren och Bo Jarneving

Informationssökning och lärande

En forskningsöversikt

Jan-Eric Gustafsson och Eva Myrberg
Ekonomiska resursers betydelse för pedagogiska resultat
 En kunskapsöversikt

Björn Eriksson, Odd Lindberg, Erik Flygare, Kristian Daneback
Skolan – en arena för mobbning

Forskning i Fokus

1) Eva R Fåhræus och Lars-Erik Jonsson
Distansundervisning
 Mode eller möjlighet

2) Ingrid Nilsson
Fristående skolor
 – internationell forskning 1985-2000

3) Ingegerd Tallberg Broman, Lena Rubinstein Reich och Jeanette Hägerström
Likvärdighet i en skola för alla
 Historisk bakgrund och kritisk granskning

4) Birgit Lendahls Rosendahl och Karin Rönnerman
Handledning av pedagogiskt yrkesverksamma
 – en utmaning för skolan och högskolan

5) Bernt Gustavsson
Vad är kunskap?
 En diskussion om praktisk och teoretisk kunskap

6) Eva Johansson
Möten för lärande
 Pedagogisk verksamhet för de yngsta barnen i förskolan

7) Gunnel Colnerud och Robert Thornberg
Värdepedagogik i internationell belysning

8) Peder Haug
Om kvalitet i förskolan
 Forskning om och utvärdering av förskolan 1998-2001

9) Per Andersson, Nils-Åke Sjösten och Song-ee Ahn
Att värdera kunskap, erfarenhet och kompetens
 Perspektiv på validering

10) Lars Holmstrand och Gunilla Härnsten
Förutsättningar för forskningscirklar i skolan
 En kritisk granskning

11) Joakim Ekman och Sladjana Todosijević
Unga demokrater
 En översikt av den aktuella forskningen om ungdomar, politik och skolans demokrativärden

12) Staffan Selander (Red.)
Kobran, nallen och majjen
 Tradition och förnyelse i svensk skola och skolforskning

13) Helena Korp
Kunskapsbedömning
 – hur, vad och varför

14) Tullie Torstenson-Ed
Ungas livstolkning och skolans värdegrund

15) Gunnar Berg och Hans-Åke Scherp (Red.)
Skolutvecklingens många ansikten

16) Anders Marner och Hans Örtegren
En kulturskola för alla
 – estetiska ämnen och läroprocesser i ett mediespecifikt och medieneutralt perspektiv

17) Therese Welén

Kunskap kräver lek

18) Mikael Alexandersson och Louise Limberg

Textflytt och sökslump

Informationssökning via skolbibliotek

19) Håkan Jenner

Motivation och motivationsarbete

– i skola och behandling

20) Malene Karlsson

Kunskap om familjedaghem

21) Monica Rosén, Eva Myberg och Jan-Eric Gustafsson

Läskompetens i Skolår 3 och 4 – en jämförelse mellan 35 länder

Progress in International Reading Literacy Study (PIRLS)

22) Jan-Eric Gustafsson och Monica Rosén

Förändringar i läskompetens 1991-2001

En jämförelse över tid och länder

I föreliggande text redovisas ett metaforskningsprojekt där begreppsmässig analys av litteraturen har fokuserat språk och lärande i såväl formella utbildningssammanhang för Döva, som i vardagskontexter inom och utanför skolan. Följande typer av frågor har fokuserats: Vilka typer av texter ingår i den akademiska litteraturen? Vilka teoretiska och metodologiska mönster kan urskiljas? Vilka teman kan upptäckas i litteraturen? Vilkas röster kan höras och ges uppmärksamhet inom området?

På ett övergripande plan kan sägas att humanistiska, socialvetenskapliga, naturvetenskapliga och teknologiska discipliner finns representerade i litteraturen inom området "literacy och Dövpedagogik". En ytterligare dominerande bild som urskiljs antyder att forskare och professionella inom området har fokuserat kommunikations *former* i försöket att kunna (implicit eller explicit) beskriva "vad språket är". Den orala-manuella-total-kommunikativa-tvåspråkiga debatten är tydlig i Dövpedagogikens historia. Dessa diskussioner utformar också nutidsförståelsen kring läsning och skrivning samt tvåspråkighet när det gäller döv utbildningssammanhang.

Den analyserade litteraturen har kategoriserats i följande, övergripande teman: (i) litteratur som på ett eller annat sätt förespråkar *bättre modeller eller praktik* i skolvärlden; (ii) *demografisk forskning*; (iii) *tvärkulturella studier*; (iv) forskning kring ljud/talförstärknings-*teknologier* och/eller *literacy-teknologier*; och (v) *tvåspråkighetsforskning*. Teman som framträder i analys av litteraturen från senaste tiden kan förstås i termer av (vi) forskning om *kommunikativa-praktiker* som utgör det sjätte temat.

I boken urskiljs även perspektiv och frågor i den svenska litteraturen mot bakgrund av tendenser som har identifierats i den internationella litteraturen. Medan ett handikapp och medicinskt perspektiv har dominerat forskningsdagordningen i Sverige under förra seklet, har under de senaste 30 åren lingvistiska, psykologiska och sociologiska perspektiv blivit mer synliga. Utbildningsideologiska strömningar under hela denna period – från ett "parallellfokus på olika modaliteter" till den "orala" och senare den "total-kommunikativa" och nu till den "tvåspråkiga" modellen – verkar ha skett i frånvaro av kritiskt tänkande som tar pedagogiskt forskningsperspektiv som utgångspunkt. Utöver identifiering av framtida forskningsinriktningar i den svenska kontexten, uppmärksammas också frånvaro av inhemska eller emic röster i litteraturen.

FÖRFATTARPRESANTATION

Sangeeta Bagga-Gupta är docent i pedagogik vid Örebro universitet och Fil. Dr. i kommunikation från Linköpings universitet. Hennes forskningsintresse inkluderar flerspråkighet, literacy, lärande, mångfald, mänsklig identitet, demokrati och institutionella praktiker. Hon är ledare i KKOM-DS forskningsgrupp vid Pedagogiska institutionen, Örebro universitet och har varit verksam som forskare och lärare i England, Indien och USA.

