



MYNDIGHETEN FÖR
SKOLUTVECKLING

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Special Assignment to Support and Follow Schools' Work with Carrying out the Changes as Stated in Lpo 94 as well as Lpf 94, in order to Strengthen Schools' Responsibility in Offering Daily and Regular Physical Activity (U2003/1020/S).

The purpose of this final report is to describe the Agency's work with following and supporting the work done in schools¹ in offering children and youth daily and regular physical activity. In addition to an account of what the authority has done in accordance with the mandate, this report includes a description of the present situation with an analysis of schools' work with physical activity.

A partial rapport, Dnr 2004:170, describing The Swedish National Agency for School Improvement's work done on following and supporting schools' work with physical activity has been handed over to the Government Offices on August 25, 2004. The pending final report contains a summery of the partial report as well a report of the Agency's work done during the autumn of 2004 and spring of 2005.

The work on supporting schools' work with physical activity by the Agency is done in cooperation with the National Center for the Promotion of Physical Activity in Children and Youth (Nationellt centrum för främjande av fysisk aktivitet hos barn och ungdom (NCFE) at Örebro University.

¹ By "school" we mean here and in the future preschools, after-school recreation centers, elementary-, secondary-, and high schools.

Summery

The effects of the Agency and NCFE's work is that communities and schools, especially elementary schools, have become aware that there is a mandate in the curriculum. This does not necessarily mean that all schools have initiated work in this area.

That schools offer daily physical activity does not necessarily mean that all children and youths are physically active. Students that are not physically active participate to a lesser degree than other students in courses pertaining to sports and health. Many feel uncomfortable with and are uninterested in physical activity. Among these the older students, more girls than boys and students that for a variety of reasons are not from a home-environment standpoint accustomed to being physically active. The challenge facing the schools is to reach those whom are as of yet not active.

In the partial report we showed that physical activity is an area in which it has been easy to become united and find forms of activity, especially in centers for after-school activities, preschool and elementary schools. This perception has been strengthened during the ongoing work. On the other hand, schools find it more difficult to find venues for daily physical activity above that offered through courses in sports and health in the higher grades of secondary and gymnasium (Swedish upper secondary) schools.

The significance of adults' participation and engagement in order to succeed in this work has become increasingly evident. Of crucial significance is the headmasters' drive and support of the work and that the work is connected to school development and thereby promote students' intellectual development.

The opportunities that the schools especially can utilize are recesses, schoolyards, times of play, walks, outside lectures and dance. This has shown to be successful in reaching those children/youths that as of yet are not active in the subject of Sports and Health or within organized sports.

Students, teachers, headmasters and parents have experienced that the effects of the schools' work with daily physical activity has lead to that the students are happier, it is calmer in the classrooms, they can more easily concentrate, the social climate has improved and the students have increased their rate of knowledge development.

The Agency has made the schools aware of the mandate in the curriculum pertaining to offering all children/youths daily physical activity and followed schools' work with the mandate by way of a letter distributed to all communities. In this letter the communities are encouraged to describe how their schools have worked with the mandate. This has con-

tributed to that the Agency has acquired a good representation of how the schools work.

Stimulation grants have, after application, been distributed to elementary schools that work with physical activity and to those schools that work with outdoor-teaching methods. Even these applications have contributed to increasing the Agency's knowledge on how schools work.

We have carried out our supporting efforts by way of visiting schools and communities, through our website as well as utilizing conferences and meetings that have been arranged in close collaboration with the National Center for the Promotion of Physical Activity in Children and Youth (Nationellt centrum för främjande av fysisk aktivitet hos barn och ungdom (NCFE) at Örebro University.

These conferences and meetings have led to being able to meet with about 10 percent of the Country's elementary schools.

The Agency, together with the Athletic College in Stockholm (Idrottshögskolan i Stockholm), has chosen to concentrate and give support to three schools in the community of Tyresö.

In order to stimulate the activity of dance in the schools, we collaborate with Swedish Ministry of Culture, NCFE, The Student Organization of Sweden and Sweden's Student Council SVEA around one project –Dans i skolan (Dance in School).

The Mandate to the Agency

The Swedish National Agency for School Improvement was given by way of a government decision on May 22, 2003 "Special Mandate U2003/1020/S", as an assignment to support and follow schools' work with following through with the changes that were done in the new curriculum (Lpo 94 and Lpf 94). The purpose of the assignment was to strengthen schools' responsibility in offering daily and regular physical activity. The Agency shall in its work with the assignment be in close consultation with the National Center for the Promotion of Physical Activity in Children and Youth (NCFE) at Örebro University. The final report on the assignment shall be presented on September 1, 2005. The report shall include descriptions of which contributions the Agency has made as well as their extent, methods and eventual measurable effects of the schools' work.

A change in the assignment is included in the Letter of Regulations (Regeringsbrev) 2005 in reference to The Swedish National Agency for School Improvement U2004/5173/DK. The decision is changed in such a way that the Agency in its realizing of the assignment shall work in collaboration with National Center for the Promotion of Physical Activity

in Children and Youth (NCFE). The commission shall, as earlier stated, present the final report on September 1, 2005.

New Formulation in the Curriculum Lpo 94 and Lpf 94

The school's responsibility in offering all students regular physical activity within the frame of the school day as well as drawing attention to questions of health and lifestyle has been made clearer by way of the amendment in the curriculums.²

The curriculum for the compulsory school system, preschool classes and after-school recreation centers (Lpo 94) has from and beyond February 27, 2003 has received the following amendments (*cursive*):

Creative work and play are essential parts of the active learning process. *The school shall strive to offer all students daily physical activity within the frame of the entire school day. ...In the school work the intellectual as well as the practical, in particular the esthetic aspects be paid attention to. Even questions concerning health and lifestyles shall be paid attention to.*

In the Curriculum for the Voluntary School Forms (Lpf 94) the following paragraph has been included:

The school shall develop the students' communicative and social competency as well as pay attention to questions concerning health and lifestyles. The school shall also strive to give gymnasium school students opportunities to engage in regular physical activity.

Since all students spend the majority of their time in school, it plays an important role in the students' health. This is why physical activity should be a natural part of the school day, (proposition 2003/04, Budget proposition for 2004).

The curriculum texts do not give any instructions as to how much time should be allocated each day or any specific definitions of physical activity. The Government has although expressed that at least 30 minutes per day should be a goal (Proposition 2003/04, Budget proposition for 2004).

We have in our work not made a point of or specifically brought forth any specific amount of time. Sweden has adopted in the context of public health the British recommendation of physical activity that states that children up to puberty shall be physically active at the minimal level for at least 60 minutes a day.

We emanate from the Swedish National Institute for Public Health's definition of physical activity. Physical activity is defined as all types of

² SKOLFÖR 2003:17, 18

activity the lead to increased energy metabolism. According to the Institute, physical activity is the same thing as exercise or training. *“Exercise is conscious physical activity with a certain goal, such as increased well-being, future better health, that it is a pleasure and fun to exercise. Training implies a clear goal in increasing one’s ability to perform in different types of physical activities, especially within sports.”*

The Swedish National Institute for Public Health emphasizes that our energy consumption is due to physical activity that does not have to do with scheduled exercise or sports. The daily physical activity, such as walking or bicycling to work or school, using stairs instead of lifts, playing or playing with one’s children makes up the most part in the total energy consumption during a week. The great opportunity to improve our health lies in increasing the total level of physical activity in connection to work/ school and leisure time.

In order for schools’ work with physical activity to have lasting effects, that is to say by becoming a natural part of daily life for the rest of the students’ lives, the schools should not see physical activity as a subject of any other defined activity that is scheduled only at certain times. If the time is emphasized, there is a risk that the lasting effect is lost. Elementary schools most often have not worked with the mandate as a clearly defined subject or limited to the 30 minutes. We have found that schools working without a strictly set schedule have an easier time incorporating physical activity into the school day. In the Schedule Delegations partial report, SOU 2004:35³, one can read:

“The practical /esthetic subjects have rather been allocated more time in the schedules, due to that many schools have their own time and are part of subject integrated activities, but also as a consequence of priorities that have been made by the schools. The latter is particularly clear pertaining to physical activity or exercise, which since the curriculum has been adjusted has become a daily activity.”

In the debate in the media it is often emphasized that the subject Sports and Health has been given less time in school. In the National Swedish Agency for Education’s debriefing of the evaluation of the subject Sports and Health,⁴ one can read: *“In the elementary schools there is no great experience among the teachers that the time allocated to the subject has decreased over the past five years”*.

In a few of the communities from which we have received many school descriptions we can see that physical activity is included as a mandate in the community’s controlling documents or that the community has initiated work such as through projects, participation in preschool activities and/ or through in-service training (courses). Common for these com-

³ Utan timplan – med målen i sikte. Delbetänkande av Timplanedlegationen (2004)

⁴ Skolverkets avrapportering av rapporten Skolämnet Idrott och hälsa i Sveriges skolor – en utvärdering av läget hösten 2002, 2003-02-24, Dnr 75-2001-04045.

munities is that they began their work already before the changes in the curriculum. One example is the community of Ale's curriculum where one can read the following:

- *All schools and preschools shall have a plan on how the physical activity shall be increased in the normal school work.*
- *Co-operation between schools and clubs in order to increase the physical activity of children and youths.*

From School Gymnastics to Daily Exercise as a Life Long Habit

It has become all more common to hear alarming reports on the deteriorating health of children, that they are becoming overweight and do not exercise enough. The blame is often placed on the child; it is the child that needs to be changed. Instead, it would be more productive to reflect over what opportunities we give children and youths to exercise daily without the demands of a judged performance. Suggested measures are often simple solutions that are based on what has been done before as well as what has worked for adults. A common solution that has been brought forth in almost all situations, the cause of the problem then being that the children are offered too little physical education, is to increase the number of hours of physical education in the schools. Today there is no evidence that this alone would increase the health of children and youths. The majority of studies show that many children and youths of today are more active and partake in sports than ever before. The problem seems to lie in the fact that those who were prone to not being particularly active have become even more so. We know that participating in sports and other physical activities on one's free time varies and depends on the child's/youth's social background and that participation differs according to age, gender, culture and between those with different physical abilities etc.

It seems as if those that are not physically active in their free time are not participating in the subject Sports and Health. The National Swedish Agency for Education evaluation of elementary school 2003⁵ shows that 15 percent of students do not believe the subject has anything to do with them. The evaluation cites that the subject "Teaches fish to swim", i.e. is interesting to and activates boys that are already involved in sports. One question that should be addressed is, how does the teaching of the subject look that first of all shall meet the needs of those whom are as of yet not physically active?

⁵ Skolverket Nationell utvärdering av grundskolan 2003, Sammanfattande huvudrapport nr 250

In The Agency for Education's report on the evaluation of the subject Sports and Health 2003⁶, a stated problem area is, "*Even if the majority of students seem to benefit from the subject, the evaluation indicates a completely different situation for a not so insignificant number of girls and students (both boys and girls) that for example due to obesity or other problems are physically inactive in their free time. These individuals do not feel that they are active or otherwise partake in the subject with the consequence being insignificant learning while they develop a negative attitude towards exercise and physical activity and everything that has to do with the subject...*".

Developing the teaching of Sports and Health in such a way that it contributes to the development of a life long interest in all students to be physically active/partaking in daily exercise is a vital question. It is not enough to confine schools' work with physical activity to the subject of Sports and Health. In addition, students need to be given opportunities to be physically active aside from the school day and to and from school.

Some Starting Points for the Agency's Work

The basis for our work with supporting and following schools' work in offering all children and youths daily physical activity is the entire school's task, according to the curriculum. The factors that are important in promoting the development of knowledge shall be emphasized in order for the work with physical activity to be successful. A good learning environment that gives opportunities in knowledge development is characterized by good relationships between adults and students, is safe and free of discrimination and insults. Such an environment includes the right for children and youths to expedite their influence and responsibility for their everyday life.

It is although not enough to offer a good environment for learning. In order for learning to work well, students must even be in good condition and the mind in a state of learning. Being comfortable and feeling good are requirements in order to be able to develop the capacity to learn and progress. This is possible in an environment free of stress and where children and youths have a feeling of trust and calm, desire and curiosity and are able to concentrate on the tasks at hand.

Everyone's equality and equal rights to develop their capabilities are the grounds of our democracy. This means that all children and youths, girls as well as boys, independent of social and ethical background, shall be given equivalent possibilities to develop. We know that partaking in sports and other physical activities during free time varies and partially

⁶ Skolverkets avrapportering av rapporten Skolämnet Idrott och hälsa i Sveriges skolor – en utvärdering av läget hösten 2002, 2003-02-24, Dnr 75-2001-04045

differs depending on the child's/youth's social background and the participation besides differs between different age groups, gender, cultures and between children with different physical conditions etc. This is why the schools' task of reaching all students with physical activities is even more so meaningful. The physical activities must also be executed based on awareness of questions of values, influence, gender and social background and act supporting of the students' development.

Basic starting points in the work with the mandate is that all children and youths shall be offered daily/regular physical activity and that the curriculum mandate is directed towards everyone active in the school. The mandate is not about the subject Sports and Health, even if the competence of the athletics teachers should be seen as an important resource. Studies show that schools have difficulties in reaching all student with the subject Sports and Health. An all too large part of the student body is not participating. Therefore it is of utter importance that the introduction of physical activity in the daily school routine is without performance and grading demands and that creativity, desire and play are focused upon in order to encompass all children and youths. At the same time, each school needs to work with developing the subject Sports and Health so that students develop knowledge in the connection between feeling good/development/ learning and physical activity. The subject shall also give students experience in activities based on each and everyone's individual needs.

Carrying out the Assignment

During the spring of 2004 the Agency's work has been focused on making the amendments to the curriculum known and develop a picture of how schools work with the mandate. During the fall of 2004 and spring of 2005 the supporting efforts were intensified through, among other things, instructive examples, focused dialogues, conferences and meetings in cooperation with NCFE.

Information About the Amendments to the Curriculums

Information about the amendments to the curriculums has been sent out to all communities by way of a letter to schools' head of administration. The Agency has a website addressing physical activity where the assignment is presented

[www.skolutveckling.se/utvecklingsteman/halsa/fysisk aktivitet](http://www.skolutveckling.se/utvecklingsteman/halsa/fysisk_aktivitet).

This can also be found on NCFE's website www.oru.se/ncff.

Other forums for information about the assignment are the conferences and meeting that the Agency and NCFE arrange. That physical activity has been introduced as an amendment to the curriculum had received

little attention up until the Agency presented the partial report in August 2004. Of those communities that answered the Agency's letter 2005 have the majority interpreted it as that the curriculum had a new note on physical activity. On a communal level of management, almost all had noted the change. On the level of headmasters and schools, not all had noted that a change had been made; this pertains especially to the gymnasium schools. That the gymnasium schools had noted the change does not necessarily mean that they in practice execute activities or organizational changes in order to fulfill the change in the curriculum. Since we have received descriptions about the majority of the communities' and schools' work we can now say that that the mandate is known at the community level and in the elementary schools and that it is one of the effects we can see of the Agency's work. Almost all of the communities that answered 2005 think that the Agency's website and information pertaining to the assignment have been very satisfying.

Invitation to Schools to Describe their Work

The Agency had during 2004 and the spring of 2005 collected descriptions of how and to what extent schools and communities carry out the task of striving to offer all children and youths daily physical activity. Communities and schools have been encouraged to come forth with descriptions of their work via the Agency's website, newsletter and the letter to the administration managers. The descriptions have also come in by way of applications for stimulation grants. The Agency has during 2004 descriptions from about half of the Country's communities; some encompass all schools in the community, but the majority are descriptions of one or a few schools' work. Descriptions have even been received from 10 independent schools. The majority of them describe work with young children. During the spring of 2005 a new letter was sent out to those communities that had not sent in descriptions on how they work with the mandate during 2004. 80 communities have not answered as of May 2005. By way of calling to nine of these communities it is clear that they work to a similar extent as those communities that had answered the letters. As an answer as to why they did not reply they divulge that they did not know or that the Agency's letters had disappeared in the handling and that the school has not responded to the Agency's inquiry.

Stimulation Grants

In order to stimulate work with physical activity the NCFE in Örebro granted funds to stimulation grants. In ads in teacher's and principal's periodicals, in community periodicals, NCFE:s website and the Agency's website have the Country's communities been invited to send in descriptions of how they manage to give all students the opportunity to daily physical activity. The Agency together with NCFE has chosen 25 of

those replied to receive stimulation grants. The chosen schools were selected in order to have a spread over the spectrums pertaining to the school form, grades and geographical location. The 25 schools that received the grants have been posted on the websites of the Agency and NCFE in order to be instructive examples. Some of these schools have together with the Agency and NCFE arranged meetings in order to distribute their experiences.

During the spring of 2005 additional grants have been advertised. Five gymnasium schools have initiated work with offering daily physical activity for 20 000 SKr each. Five elementary schools that work with outdoor-teaching methods shall receive 10 000 SKr each and two scholarships of 20 000 SKr each shall be awarded to teachers that work with outdoor teaching methods. Erik Johan Ljungbergs Education Foundation finances the stimulation grants and teacher scholarships that have to do with outdoor-teaching methods. The Agency participates in the work with choosing schools that receive these grants.

Visits to Communities and Schools

In order to better understand how the schools work, the Agency has during 2004 and 2005 visited 20 communities and 25 schools spread out over the Country. The visits during the fall of 2004 and spring of 2005 have mainly been in schools of the later years in secondary schools and in gymnasium schools. The purpose of these visits has been to partake in the schools' work and experiences and support their work. The dialog with the schools has been about the schools' work and how they interpret and follow through with the task. The discussions have, among other things dealt with how physical activity can be a part of schools' daily work and what effects the teachers and students see. During the visits the Agency has met with students and teams or groups of school personnel. Headmasters have always been present. At some of the visits we have also met parents and politicians. At some visits there were discussions with communal representatives. The visits are appreciated and inspiring for the schools' continuing work. A statement from one school expresses what many have said:

"It is fun and inspiring that someone cares about what we do".

Support and the Spread of Knowledge by way of the Webb

On the Agency's website there is a special place for physical activity with information to support for schools working with incorporating daily physical activity. Here the schools take part in other schools' work, links to other agencies and organizations that work with these questions, information about studies and material as well as information about conferences, seminars, meetings and other activities.

Conferences

During the fall and winter of 2004 and spring of 2005 has NCFF and the Agency arranged conferences in cooperation with universities and colleges in Örebro, Luleå, Göteborg, Falun, Jönköping, Växjö and Stockholm. Other collaborating partners have been the Association of Local Authorities in these communities, The National Sports Association/Handslaget, The Swedish Ministry of Culture and The Center for Environmental and Outdoor Education at the University of Linköping. The purpose of these conferences has been to make known the assignment in the curriculum, spread good examples about how schools and communities have executed the task and give support to schools by showing where knowledge and competence can be found that can contribute to the schools' developing work. The conferences were attended by about 1 500 people representing almost 500 schools. 50 of these are school leaders. The evaluation of these conferences show that the majority of the attendees were very satisfied or satisfied with the overall impression.

The Meetings

The Agency's regional divisions have in cooperation with a school in the region and NCFF arranged meetings for headmasters and teachers. The purpose of the meetings has been to allow headmasters and teachers partake in each other's experiences and become inspired by one another's work. During the fall of 2004 and spring of 2005 these meetings were conducted at ten schools throughout the Country. The meetings have during this time concentrated on the latter years of secondary school and it has become evident that these grades find it difficult finding venues in accomplishing the task of daily physical activity. The idea with the meetings is based on that one school has initiated work and is then a host who invites in ten schools from the vicinity. Invited from these schools are headmasters, teachers in Sports and Health and two other teachers. One requirement has been that the headmasters must attend. The host school and one other present their work followed by discussions that are taken up in a café form in which schools and functions are mixed in the groups. The idea is that the schools shall inspire one another and continue to have contact with each other. 103 schools have attended these meetings with 67 school leaders represented. The evaluation of the meetings has started in order to build an idea of how these have affected the school's work with development. What we have arrived at in connection to the meetings is that they have been greatly appreciated and that there is a clear need for contacts between schools and personnel. Especially appreciated were those meetings in which students have presented the school's work. At some schools, students have participated in subsequent café discussions, being especially appreciated, and contributed important dimensions to the discussions that would have otherwise not come forth.

During the spring of 2005 work has been started with meetings for the gymnasium schools. Two meetings have been carried out, one in the school in Älmhult and at Tumba Gymnasium in the community of Botkyrka. These meetings have been accomplished in cooperation with the Association for School Sports and respective school. The meetings that have been arranged for these schools were greatly appreciated and it has become clear that the schools have a great need to meet with each other and share their experiences since they find it difficult to find ways of working with and organizing daily physical activity within the gymnasium schools.

Newsletters

NCFF continuously sends out a newsletter about what is currently happening in the area of physical activity in the school.

Summer Academies

Starting the summer of 2005, NCFF, The Agency and The Ministry of Culture have arranged summer academies that address those communities and schools that want to start development work pertaining to physical activity in school. The purpose of the academies is to inspire, show good examples, provide courses and show where knowledge and competence can be found that the schools can use in their work with development. Priority is given to those communities that apply as teams of politicians, headmasters and teachers. NCFF shall give these communities method support for continued work at home base.

Dance in School

Together with NCFF, The Ministry of Culture, The Student Organization and The Sweden's Student Council SVEA, we have initiated a joint work in developing dance in school as a part in promoting physical activity for children and youths. The work is long-term and intends to be active until 2009. An agreement has been made between the partners for 2005 – 2006. The purpose is to promote physical activity in schools by way of making dance available to all. Giving children and youths access to dance in school can be a way to reach those that are as of yet neither active nor interested in sports. In order to realize the goal, evaluating good examples, opinion building, development of knowledge, competence development and other development efforts be carried out. For the work's implementation, a controlling team, a working team and a development leader been appointed. The controlling and working teams consist of representatives from the involved partners. The Ministry of Culture contributes with a full-time employed development leader.

Support in the Community of Tyresö

In early 2004, the health planner in the community of Tyresö contacted the Agency wishing to cooperate in working with introducing daily physical activity. We offered support together with The Athletic College in Stockholm. The College has a government assignment to arrange competence development for the schools' personnel in the area of physical activity, "The Daily Dose".

The inquiry went out to five of Tyresö community's elementary schools if they were interested in support in their work. A requirement from The Agency and The Athletic College was that a headmaster takes responsibility in driving the work and become the contact person for The College and The Agency. Three schools, Strandskolan, Fårdalaskolan and Stimmetaskola took part in the work. The purpose is to support the schools' work with daily physical activity and receive experience on how The Agency can support school development in collaboration with other interested partners.

All personnel at the schools have had opportunities to partake in a variety of efforts towards development competence from The Athletic College and have met two schools from two other communities that have initiated similar work. All teachers have participated in a theme day on adventure teaching and been offered to partake in lectures and seminars that have been arranged by The College. The work has been done in close cooperation with the three schools and based on the schools' qualifications and needs.

The Agency and The College have continuously met the headmasters at the schools and even had a chance to meet all teachers. We have even met parents from one school and students from two schools.

Each and every one of the participating schools develop a long-term plan on how they want the school to develop in relationship to how it is currently. The work with physical activity should be the focus of the plan. The plan should be complete for the start of school in the fall of 2005. The schools have during the spring of 2004 received help in surveying the current situation pertaining to the work with daily physical activity.

We have interviewed the headmasters of the three schools, at the end of May 2005, in order to find out what their experience of the effects the work had up until then been and judge the significance of the support efforts. All three said that the work had above all inspired the personnel to begin thinking about physical activity in all work. One of the headmasters expressed like this: *"a lot has happened, mindset of the teachers has changed and the think about how exercise has an impact on learning. Even in continued subject courses we incorporate how exercise can support learning"*. An increasing number of teachers have begun using outdoor-education methods in their subjects. The factors for success that the headmasters draw attention to is that there has not been any press for

time in the work, already in the beginning a long-term mindset and an investment towards the personnel. The personnel have found the experience as fun, *“they are happier and feel better and then the children are also happier and feel better”*, said one of the headmasters and the others agree. One of them summarizes the support with, *“it has been a process over time with different elements of inspiring development in competence with focus on the personnel”*.

The work is followed up and evaluated by that the community of Tyresö's schools, in their quality accounts to the community, shall describe their work with health and physical activity.

A developmental work has been initiated but effects cannot be secured during the time of this report. The most important experience is that the developmental work takes time, that headmasters must prioritize the work and perhaps most importantly start by giving the personnel positive experiences.

Effects of The Agency's Work

To measure and account for secure effects of The Agency's work is not possible in a time perspective of one and a half year, the time allotted in this report. Those of The Agency and NCFF's experienced effects are that communities and school, above all elementary schools, have become aware that there is a mandate in the curriculum. Although this does not mean that all have initiated work. The participants of conferences and meetings have been very satisfied or satisfied with the functions. They were especially satisfied with the meetings. The meetings and the effects of these shall be followed up on a half year later in the form of a survey in which the participants shall account in which way their schools' work with physical activity was effected by having partaken in the meetings. The effects of the supporting efforts should be followed up on a long-term perspective.

The Schools' Work

The most common question from the communities when asked how they work with the curriculum task is that the students have outdoor recess, pertaining to nursery schools and up to the sixth grade. Many communities mention as well a variety of projects that do not directly have anything to do with exercise but touch on questions of lifestyles. Mainly in the earlier school years up until the sixth grade, the schools accomplish incorporating physical activity in the frame of the school day. A growing number of schools are incorporating physical activity in a greater context and see it as a tool for teaching which leads to physical activity being a natural part of the school day. It seems as if the rural communities are more successful in making a whole of the work.

Only only a few communities mention the Government's venture, "Handslaget", as a tool in creating opportunities for increased physical activity. The majority of those that mention Handslaget cannot name any examples of the work. An exception is the city of Vaxholm that has an extensive program, the project "Young and Healthy" which is planned to stretch between 2004 and 2013. The goal of the work is to promote good eating habits and exercise in youths.

What Elementary Schools do to Incorporate Daily Physical Activity

Walking is a commonly occurring activity. A few schools have almost completely eliminated other forms of transport, the students walk to where they are going instead of taking a bus or car. Parents are encouraged to not drive the children if they are within walking distance. The schools' experience is that walking is an activity in which all children can partake, and those that are not normally physically active see fast results in increased condition, a greater desire for physical activity and better self-confidence.

One of the visited schools situated in a large urban ethnically diverse area describe their work and their experiences thereof. The children take a walk every day at the same time together with their teacher. This creates a need and becomes a natural part of the school day. The experienced effects of the teachers is that the lessons are calmer and good, the children feel good which is reflected in greater attendance, they eat better and above all, the adults have better contact with the children than they would have in a traditional classroom situation. One teacher says, "*The children are able to speak freely and confide. We get to know the children. There is a quality in the contact. For many children, this is their only individual adult contact during the day.*" The teachers see that the walks have a particularly great effect on those that exercise too little and those that are overweight. The teachers point out that children from other countries are often not accustomed to and are frightened of wooded environments. This fear dissipates after a while thanks to the continual walks in adjacent natural environments.

The walks are utilized in various ways in the schoolwork. In one variation, each student or class notes each walk around a measured path and follow on a map how far they have come on their way through Sweden or around the world. This can incorporate the subjects of mathematics, history and biology as well as to various themes. The walk is usually used as an open-air walking quiz, converting to skiing in the winter when there is snow, or jogging. Most characteristic of the walks is perhaps the opportunity for dialogue between children, and between children and adults.

Some schools have started "walking school busses" in which a parent or other adult gathers a group of children and walks with them to school. An

estimated every 4th child is driven to school by car. This creates dangerous traffic situations around the schools and pollutes the air, even inside the school. In addition, this impairs an opportunity to exercise. The more dangerous the traffic situation becomes, the more the children are driven. Children at a school in Älvsjö with a walking school bus think that, *“it is fun because we can talk and you are more alert. When we ride in the car, we are tired when we get to school.”* The children feel safe by walking together with others and an adult. This makes the way to school safer for children in many ways. “The walking school bus” reduces stress and improves the traffic situation at the schools. Most importantly, it creates possibilities for dialogue a feeling of solidarity to others.

Physical activity integrated with subjects is not uncommon. It can be an assignment in mathematics, biology and even writing. There are examples where physical activity is part of preparedness development in language and math in both nursery and grade schools. Work is done with improving motor activity as a part in special education. The students enjoy the activities, which is seen as positive for learning.

Playing inside and out in all forms is the most important source of physical activity. Schools that give children time, space and materials for play see that they continue to play as they get older. An important requirement in order for older children to continue playing is that the adults partake. This has been pointed out by the youths we have spoken with.

Older children require other activities. Here are some examples from a secondary school that has integrated physical activity into its' subjects. They head out into nature and for example calculate the weight of different artifacts. Mathematics is a subject that many schools associate with physical activity. In Science Orientation they construct nature posters, identify leaves and measure the pH value in streams and rivers. In language class they use old games and rhymes that use movement. One can bicycle and bird watch with binoculars and a bird book and all conversations are in English. Vocabulary walks are when they speak in English and pause for “vocabulary quiz” on things they see around them. Exercise to music or dance is very popular with the youths. It is also common that the youths themselves lead the activities in which teachers are involved. In order to involve more students it is important that the youths choose the activity and contribute in what the choices are.

Recess and the playground are perhaps the largest resource in the work with physical activity. Parents are often involved in the building and maintenance of the schoolyards. Many have obstacle courses that the parents have been involved in building. The activities vary according to the season and where the school is situated in the Country.

A growing number of schools have switched to longer, but fewer recesses instead of many short. In addition, the children and youths are offered short breaks in their work.

In elementary school is common with half or full days for open-air activities. It is not unusual with weakly visits to wooded areas. The outdoors has become an important learning environment that contributes to developing knowledge. This environment gives opportunities for their own discoveries and experimentation. This is an example of integrating physical activity and learning. It gives children knowledge, exercise, a habit and feeling safe in being in the woods and other natural environments.

There is cooperation with athletic clubs in which children and youths are encouraged to try different sports during, before and after school, even during the holidays.

Work in the Gymnasium Schools

It has become evident that it is difficult finding ways to integrate daily physical activity in the gymnasium schools. The most common explanation is the difficulty in scheduling. It is difficult to find room for a subject that is not necessarily confined to a specific course or subject. We have a few examples from schools that have worked with offering students daily physical activity.

Norsjö Community is relatively typical in that within the frame of the elementary and secondary schools they have organized physical activity for almost every day but not initiated work in the gymnasium schools. The reason for this seems to be the more slack description of the task as written in Lpf.

The community Arjeplog has attempted incorporation to a greater extent in the upper level. A project running throughout the spring term attempts to give students knowledge about

- *Connection between health and achieving good results from one's studies*
- *How they can themselves influence their health*
- *How they can achieve better study results through a change in lifestyle*

Falköping Community works by using student-planned activities to try to create environments in the gymnasium schools where students see entirety, connection and create purpose. The community works together with other organizations around a variety of areas in order to strengthen the individual/ student and physical activity is an area they try to develop.

The most common solution in the gymnasium schools is to use local elective courses as an opportunity to be active or by increasing their time in the course Sports and Health. There are some schools that have scheduled added courses in the subject for all three years in gymnasium. The risk with these solutions is that they do not reach those that are not active and the group that finds the subject Sports and Health uninteresting.

There are schools that in addition to working with developing Sports and Health have also found other possibilities for students to be physically active in school. Recesses and free periods are resources already available. The schools have seen to that on the school grounds or nearby there are opportunities to exercise. Some examples come from Åkrahäll School in Nybro where there are boules courts, soccer fields, volleyball courts, tennis courts and materials for croquet and kubb games. A growing number of schools have regular walks during the school day. The Nursing Program at Strömbacka School in Piteå schedules the walks according to a rolling schedule so as to affect all subjects. They have also introduced gymnastics breaks. The Construction Program at Fredrika Bremer Gymnasium in Hanninge has 30-minute morning walks. Students and teachers walk together. Soltorg's Gymnasium in Borlänge has walks with speech training, "Walk and Talk".

An important resource in gymnasium schools' work are School Athletics Clubs in which the students themselves are responsible in offering activities during the school day.

Communities where decisions were made in committees and at an administrative level to work with daily physical activity often did not include the gymnasium schools.

The Students' Picture of what is required for Successful Work

Students' perception of what is required of a successful work is described in the partial rapport. Longer recesses, a stimulating outdoor environment for activities and adults that participate and are engaged are the factors the students strongly emphasize. Students do not want adults as "guards". It can be mentioned that the significance of the adults' engagement and participation has become all the more clear. This pertains as well to the latter school years.

Effects of Schools' Work

Those effects that can be described, in the short-term perspective in which this rapport encompasses, is first of all those of students', teachers', headmasters' and parents' experienced effects of the work. A few

schools have done their own assessments and research has been done together with a university or collage. One example is a rapport of the work at the Sanden School in Boden for the grades 7-9⁷. The results of these assessments are in agreement with the experienced effects we concluded following the discussions with the visited schools.

Those effects in which almost everyone (students, teachers, headmasters and parents) emphasize, and which are also stated in the assessments and research, are that daily physical activity leads to more concentrated students and a calmer learning environment, which there is a shortage of in today's schools. Many mention also that the children are happier. Almost everyone agrees that the social climate between students as well as between students and teachers is improved. Many teachers also mention an improved student self-image. Some state that insults have either decreased or disappeared. A few schools see improvement on the national academic tests. It seems as if an investment in daily physical activity in the schools contributes to a better environment for learning, resulting in an improved development of knowledge in students.

Summarizing Viewpoints

The assignment of working with physical activity has had impact above all in the elementary schools. The gymnasiums and secondary schools have had a more difficult time finding venues for incorporating daily physical activity.

The hesitations that have been forthcoming, pertaining to the assignment, are about where to find the time, which is responsible and how it will be done. The most important factor for success is that the headmaster takes responsibility for creating the right conditions in order for schools to accomplish the task and that is connected to the school's assignment in developing their activity. Support from the community is also vital. There are communities that have decided to work with physical activity and support assistance in trial operations and in-service training. Such decisions and support strengthen of course the chances of success and that it will be long-term, signaling the importance of the work for the schools.

Gymnasiums are unfortunately often not included which contributes to that they are not involved to the same extent. We also observe that successful work in one school inspires others.

⁷ Att vara tonåring och må bra – samarbetsforskning och skolutveckling avseende lärande, relationer, motion och hälsa vid Sandenskolan i Boden. Ulf Numan Luleå tekniska universitet.

(*"Being a teenager and feeling good"* – by Ulf Numan, Luleå Technical University)

Physical Activity and the Subject Sports and Health

The schools' work with physical activity is not limited to the subject Sports and Health. Although, the teaching of the subject together with the competence of its teachers are important supports in the work with physical activity.

Sports and Health is an area of knowledge that is meant to teach why physical activity is important and also give experience in various forms of activities suited to the individual needs. Despite this, evaluations show that today's subject on sports does not involve all students. All students, especially those of the secondary and gymnasium schools, do not partake in the activities arranged by the schools.

The goal must be to develop the activity so as to reach all students with Sports and Health as well as daily physical activity and that these strengthen each other in creating interests and habits in the students. Being physically active should be of a concern for the entire school and cannot be limited to the subject Sports and Health. In order to maintain continuity in the work and opportunities for daily physical activity, the assignment can be done in such a way that the subject gives knowledge and experience in various activities and that these are used during the school day.

Those that are Not Yet Physically Active

Several schools point out that despite offering physical activity, not all children and youths are active. Walks seem to be the activity that all partake in as long as the adults are with. Some schools feel that the walks have become a port to participation in other activities. A few have even seen the large scale effects of arranging activities that appeal to those not yet active or are not active in sports. Examples of such activities are outdoor-teaching, various games as well as dance.

It is valuable that children from other cultures learn to know nature so that they dare to venture freely in it in order to develop knowledge and can be part of the Swedish culture as well as being an opportunity to exercise.

The schools' work with daily physical activity must first of all be directed towards finding a way of working, contents and organization that stimulates and give lasting daily habits as children and youths continue with into adulthood.

Physical Activity, Boys and Girls

Which gender-related patterns have research identified pertaining to participation in the subject Sports and Health and in physical activity? One study shows that in the 9th grade in secondary school, the boys are more positive to the subject than the girls. But girls respective boys are not homogenous groups. Among these boys are those that do not favor the subject.⁸ Boys participate to a greater extent than girls, which is particularly true for older girls.⁹ Even class and social background can be related to the question of physical activity. Researchers see differences in girls' and boys' socialization processes in physical activity and sports, in which parents' and friends' patterns of activity have an impact.¹⁰

The area of physical activity, together with many others, is characterized by generalizations and stereotyping of the sexes. There are conceptions that boys like ball sports better than do girls. But a closer inspection reveals great variations within the sexes. All boys do not like ball sports and there are quite a few girls that do. When schools teach various activities and assume these stereotypes they create and strengthen the picture of how normal girls and boys are supposed to be and inhibit students' development of their talents. The school can thereby even contribute to creating a difficult situation for those not fitting the context of "normal".¹¹

It is about being sensitive and noticing what experiences children and youths have of the contents and character of physical activity. Researchers have used group interviews, observation studies and allowed student to keep diaries in order to gain an understanding of students' experiences. They found that students that have aversions to physical activity often feel uncomfortable, uninterested and have not found a fitting type of exercise.¹²

Knowledge of the body, what promotes health and how one can influence their lifestyle with among other things physical activity should be part in schools' health-promoting work in order to reach all students, even those hard to reach. This is how for example a gymnasium in Gothenburg

⁸ Karin Redelius, Bäst och pest! I Mellan nytta och nöje Håkan Larsson och Karin Redelius (red) Idrottshögskolan i Stockholm 2004

⁹ Jane Meckbach, Ett ämne i förändring, I Mellan nytta och nöje Håkan Larsson och Karin Redelius (red) Idrottshögskolan i Stockholm 2004

¹⁰ Suzanne Lundvall, Bilder av ämne idrott och hälsa, - en forskningsöversikt, I Mellan nytta och nöje Håkan Larsson och Karin Redelius (red) Idrottshögskolan i Stockholm 2004

¹¹ Håkan Larsson, Skolidrotten befäster traditionell genusordning, KRUT nr 113

¹² Suzanne Lundvall, Bilder av ämne idrott och hälsa, - en forskningsöversikt, I Mellan nytta och nöje Håkan Larsson och Karin Redelius (red) Idrottshögskolan i Stockholm 2004

(Portalens Gymnasium) works with the subject Sports and Health. The goal is to make the students aware of their bodies and their health and start with some form of exercise in their free time. They run health analysis with agility tests.¹³ In order for the school to be successful in reaching more students with physical activity, it is vital to not have ‘gender-branded’ activities and instead offer several alternatives that are open to all. Consciously not imposing competition and teams and instead starting with a sense of well-being and taking care of your body as a way of thinking about physical activity in order to stimulate all students.

Physical Activity and the Environment

It is vital that schools’ work with physical activity, in order for it to be lasting over time, become a part in creating an environment that promotes learning.

The most important resource in this work is recess and the schoolyard. In order for it to work, the schools need schoolyards that stimulate activities and are seen as a resource for learning and development. If play is given space and stimulation, the physical activity comes by itself. Walks during the school day and back and forth to school are also simple tools in initiation. That adults participate is a requirement in order for it to work.

A great deal of learning in subjects can successfully be done outside. Research results from the University Hospital in Linköping in cooperation with the Community of Linköping have shown that lectures outside positively influence the students’ sense of well-being. Particularly boys feel better and are calmer if they are able to be outside. The research was lead by Nina Nelson, a senior lecturer and chief physician at the University Hospital. The research shows that stress can negatively influence memory and learning. The researchers are seeking answers to if physical activity and outdoor teaching methods can reduce stress and influence well-being and thereby facilitate the development of knowledge. The results from this research, which are not yet fully analyzed, indicate that a sense of well-being increases for those students that are outside a lot and that there is a decrease in psychological symptoms. There is a particularly clear improvement for the boys in the research.¹⁴

Physical Activity and Learning

The schools’ main mission is teaching, giving children maximum opportunities to develop knowledge. This is why the assignment of physical activity should be seen in this context. Does physical activity have an

¹³ Idrottslärares, Nr 4 2004

¹⁴ Lärartidningen nr 4, 2005

impact on learning? A growing number of studies indicate that physical activity and learning are strongly connected in children and youths. Researcher Ingegerd Ericsson has for a number of years followed children's development and learning at a school that offers them daily physical activity (Bunkefloprojectet).¹⁵

On a radio program¹⁶, Ingegerd Ericsson describes the effects that daily walks have on children's learning. The children romp and play and chatter, which results in a calmer classroom environment. Children that have not been given the chance to exercise enough in their development do not automate their motor activity and have a more difficult time learning. Ericsson means that the walks strengthen the sense of direction, which is significant in how children interpret letters and can follow a text.

The result that indicates that physical activity influences learning in a positive way, gives new strength and is important for children's development is accounted for in The Swedish National Agency for School Improvement's rapport series *Forskning i fokus (Research in Focus)* nr 17, *Kunskap kräver lek (Knowledge requires play)* and nr 25, *Hur kan man få fysisk aktivitet att bli en naturlig del i skolans arbete (How to make physical activity a natural part of the school's work)*.¹⁷

Children, youths and teachers in the schools we visited and spoke with see that physical activity has an impact on learning. Despite this, more research is required to show the correlation between physical activity and the effects on the learning environment and development of knowledge in children and youths. Today's research is mainly focused on showing the correlation between physical activity and the health aspects. The next step must be to establish if and how physical activity affects learning and thinking.

¹⁵ Ericsson, Ingegerd (2002). Motorik, koncentrationsförmåga och skolprestationer en interventionsstudie i åk 1-3. Svensk idrottsforskning.

¹⁶ P1 Kropp & själ, 11 januari 2005

¹⁷ Myndigheten för skolutveckling, *Forskning i fokus* nr 17, *Kunskap kräver lek* and 5 *Lärande och fysisk miljö*.