

## **From Chaos to Learning 2013**



**By Principal Bo Stampe Rasmussen and Paediatrician Annette Steglich-Petersen**

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**This is a success story about an ordinary Danish public primary and lower secondary school with huge social and learning problems.**

**Taking a number of health parameters as its point of departure an initiative, in which cross-disciplinary collaboration was combined with a systemic approach in order to achieve the dual goals of well-being in school and learning, resulted in a completely new school structure.**

## **Preface**

By describing the course of events at the School at Rønnebær Allé I hope to inspire the implementation of similar efforts by other schools that see health and well-being as the preconditions of increased learning. However, it is important to bear in mind that identical initiatives do not have the same effect on different social groups/cultures. The initiative at hand targeted a school with very few resources on the home front, which meant that the school's structure had to be very clear, but at the same time guided by compassion/care for its users.

We have been encouraged to describe what actually took place in this restructuring process along with the general outcome of the project. The entire process took place over a very short space of time, so fast in fact that it was not possible to set up an evaluation protocol. Besides, we could not carry out a proper evaluation due to the lack of finances. Thus, the overriding goal became to create a good school for the children and everything else had to fit in around this.

Therefore, this report is a description of the process whereby an entire school decides to change its daily structure. The precondition for the success of this process consisted of the joint desire of the entire staff to change the conditions for pupils and staff alike, and that everyone had been given the chance to comment on it.

The parameters that could be used to measure an effect were discussed along the way. As the school's primary goal is to provide learning, further education became the key measurable parameter. Unfortunately, a renewal of the career-guidance counsellor's system for registering final marks and further education path took place simultaneously with the project at hand, which means that it is difficult to compare subject proficiency prior, and subsequent, to the project. Hence, the evaluation of the development that has taken place at the school is more of an estimation based on the descriptions of what teachers and pupils have experienced throughout the process.

The initiative was discontinued during the 2013/14 school year due to a political decision not to continue subsidizing daily fruit and exercise, along with general structural reforms that resulted in the amalgamation of a number of local schools within a single school, with a common management body and common school board. This amalgamation has not left room for the implementation of individual efforts in response to the particular needs of this or other schools. All schools are to have similar rules and structures despite the huge differences in the socio-economic backgrounds of their pupils.

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## **Background:**

The School at Rønnebær Allé is situated on the outskirts of Helsingør City, in a residential area comprised of social multi-storey housing mixed with residential neighbourhoods. As a

consequence, the school district covers a wide range of families who live under very different conditions, albeit with a relatively large share of families with a low socio-economic background.

The school had almost 550 pupils. The pupil population consisted of approximately 65 % ethnic Danes and approximately 35 % pupils from other ethnic backgrounds.

Everyday life at the school was marked by unrest, vandalism and inter-pupil conflict, both during break and in class. This in turn marked the teaching and led to numerous distractions in the daily work.

It was necessary to 'put out fires' on a daily basis. The school's collaboration with parents was bad as reflected by an overall low degree of parent participation in various events. This attitude to the school's endeavours was also reflected in the pupils' daily behaviour at the school, which in turn clearly indicated the differences in the children's living-conditions. The pupils demonstrated a lack of interest in school, the older pupils slouched along whenever they felt like it and many of them were beyond instruction. Only a tiny proportion of pupils continued to upper secondary level education, and quite a number of pupils did not even get their final 9<sup>th</sup> class exam with the result that they had no access to further education.

A lot of resourceful pupils were taken out of the school.

School management and the teachers were aware of the problems, felt insecure and were highly frustrated about the situation and the fraught everyday conditions they were working under. This led to many teachers leaving the school and there was a high rate of sick-leave amongst the teachers.

Over a number of years the paediatrician had carried out individual examinations of 9<sup>th</sup> class pupils and had constructed a general health profile that showed the pupils' general health parameters. The 2007/08 school year demonstrated even more clearly than previous years that the proportion of smokers was high, that many of them were only physically active once a week or less and that a large proportion of the pupils did not have breakfast. The proportion of children who had had breakfast was markedly lower in the School at Rønnebær Allé compared to that in the city's other schools. In connection with the individual examinations many pupils talked about heavy social problems such as parents who had an addiction or parents who were unable to take responsibility. The daily diet was poor and there was poor knowledge of the importance of regular sleep. When the general health profile yet again this year proved to be the worst in the city the doctor contacted the school management with a view to implementing health promoting efforts at the school as lacking general health was probably a major cause of the poor learning and lack of well-being at the school.

## **The Initiative:**

The task to be resolved through collaboration between the school management, teaching staff and paediatrician became the following:

**How could the school become a place in which the pupils wanted to learn and could acquire healthy habits, which in turn would contribute to an increase in their ability to concentrate and further their motivation?**

The teaching staff was highly motivated for a change in the existing scheme of things and an equal partner in the development of the structure that came to prevail at the school. However, the method lacked anchorage within the municipal administration.

**In connection with the back-to-school season six months later the following changes were introduced:**

- A healthy and free breakfast was offered to all pupils.  
(It was availed of by approx. 25 pupils every day, i.e. 4.5%).
  - Free fruit was made available on a daily basis to all.  
(This was very popular, as all the fruit was eaten every day. It was not thrown about).
  - Lesson periods were reduced from 45 min. to 30 min.  
(The pupils could not concentrate for longer periods of time and manageable modules were hereby designed accordingly).
  - A daily exercise period for all classes.
  - To leave the school premises during school hours was prohibited.  
(In order to prevent the purchase of unhealthy food and smoking and to prevent truancy (be it for half a day or from certain lessons)).
  - Outdoor arrangement in all breaks and in all seasons.  
(So that the pupils could get fresh air, be physically active and in order to improve the indoor climate).
  - Healthy food only in the school, all unhealthy food was confiscated.  
(Parents could collect it from the office after school hours – focus on the fact that children need a healthy diet).
  - Breaks were staggered so that the youngest pupils, intermediate pupils and school leavers had separate breaks.  
(With a view to minimizing the level of conflict and providing the various age groups with a sense of calm and more space to move about in).
  - Focus on reading, everyone reads during the first quarter of an hour.  
(With a view to spreading a sense of calmness and enhance the learning process).
  - The bell only rang once during the day and that was at 8 AM.
  - Classical music every morning between 7.30 – 8 AM (the Mozart effect).
- Promptness both in the morning and after breaks, otherwise the pupils must remain outside the classroom.
- Offer of help to quit smoking from the Municipal smoking consultant.

A canteen service was established so that it was possible to buy lunch.

Six months prior to the commencement of the initiative 2 pedagogues were hired as AKT (Behaviour, Contact & Well-being) – staff<sup>1</sup>. They constituted a key element of the initiative as they were to take care of conflicts so that the teachers could concentrate on teaching.

The first two days after the summer holidays and before the pupils started back at school, the staff had two pedagogical days during which they reached a number of agreements for a "united approach".

## **Results:**

### **Subsequent to 1 year of intervention (2008/2009):**

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<sup>1</sup> AKT staff members are specially educated and have a special insight in relation to the behaviour, contact and well-being of pupils (AKT). This person can be supportive of colleagues who have pupils who require a special effort in order to be a part of the class.

**Spontaneous statements from teachers:**

- There is a greater sense of calmness in the classrooms;
- the pupils' ability to concentrate has improved visibly.
- The pupils are much more committed. Happier pupils, particularly those at most risk.
- Together, the teaching staff had a weight loss of 100 kg during the space of one year. Being a teacher was more fun.
- It was easier to teach after the mid-day break.
- The pupils also lost weight.
- The exercise had a rub-off effect on their social competencies.

**The doctor's observations:**

The teachers were a whole lot happier and more committed to their work. There were no remarks of displeasure despite greater requirements to the teachers' efforts. Previous frustration was no-longer experienced. Fewer notices of one-day sick-leave were registered by staff.

**Spontaneous statements from the pupils:**

The older boys:

- The daily exercise is terrific; one feels a lot better at school.
- Wonderful to be rid of the younger pupils at break time.
- It is difficult to be a smoker, one constantly has a teacher at one's heels because one is not allowed to smoke at school and it is against the rules to leave the school. I would like a stop smoking course!

The older girls:

- Daily fruit is good.
- Irritating to have to be outdoors during all breaks.
- Participating in ball games is fun.

**The doctor's observations:**

The pupils demonstrate a high level of involvement in class with a sense of calm and concentration, happy children with positive contact and enhanced physical activity during the breaks.

**Spontaneous statements from the Principal:**

- There is a greater sense of calm in the school. There are very few serious conflicts and almost no vandalism. No confiscation of weapons (which was a common occurrence previously entailing flick knives, knuckledusters and replica guns). We have less contact with the police due to the decrease in theft, vandalism and violence.
- One sees the older girls playing ball games during break.
- Teachers have not been fleeing from the school and numerous teachers have contacted us because they are interested in working here.
- Resourceful pupils have stayed on. The school's reputation has improved.

**The doctor's observations:**

A proud and happy principal, present as a sparring partner throughout the school, and showed a great respect for his staff and pupils. There was a visible change in spontaneous contact with the principal, who had become positive and safe: Hi Bo, are you well? I don't eat sweets anymore, etc.

**Results of the health profile from 2007 (prior to the initiative) and 2009 (following the initiative).****Health Profile 09/10:**

1. Fewer smokers
2. More pupils are eating breakfast
3. More pupils are never drunk

#### 4. More pupils take exercise on a daily basis

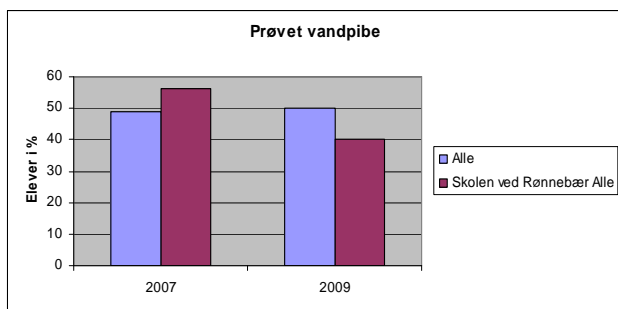


Figure 1. Proportion of 9<sup>th</sup> class pupils in Helsingør and at the School at Rønnebær Allé who 'have tried a hookah'

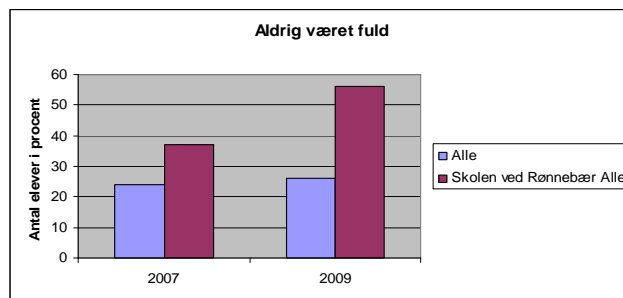


Figure 2. Proportion of 9<sup>th</sup> class pupils in Helsingør and at the School at Rønnebær Allé who 'have never been drunk'

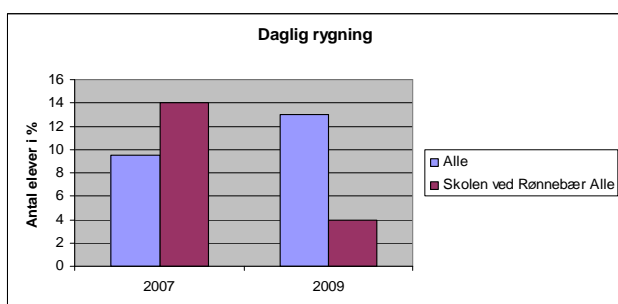


Figure 3. Proportion of 9<sup>th</sup> class pupils in Helsingør and at the school on Rønnebær Allé who 'smoke on a daily basis'

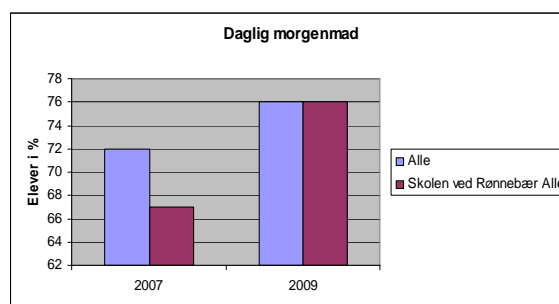


Figure 4. Proportion of 9<sup>th</sup> class pupils in Helsingør and at the school on Rønnebær Allé who 'have breakfast on a daily basis'

### Results from the 2011/12 school year:

- **Learning process**

According to the KREVI<sup>2</sup> institute's registration of positive teaching results the School at Rønnebær Allé achieved the highest average exam result in the municipality of Helsingør in connection with the national 9<sup>th</sup> class final exam. Following the final exam, 45 % of these pupils went on to study at the gymnasium and only one pupil could not be placed in further education.

- **Parent-teacher collaboration**

The parents are much more involved in their children's schooling, and have acquired a greater awareness of the importance of a healthy diet so the children's packed lunches are a lot healthier now.

- **Physical activity**

The school wins a large number of the school sports-meetings and a large number of pupils attend after-school activities.

- **The pupils' health awareness**

At school sports-meetings the pupils express spontaneous disbelief at the amount of sweets other students' have with them, saying: "do other kids not know how unhealthy it is to eat sweets and that having a healthy diet makes one smarter?" as they relished the fruit they had with them.

In connection with the national tests that lasted 2 days the pupils described their awareness of the importance of general health for learning and well-being in concrete terms. Having scored lower on the first day and higher than average on the second day, they explained: "of course it makes sense, we had gym just before the test on the second day and had a lot more energy and were more clear-headed as a result".

<sup>2</sup> Danish Evaluation Institute for Local Governments

## **Discussion:**

There could be a number of reasons for the positive effect that the initiative had on the pupils' learning process and well-being at school. It is therefore difficult to point out the particular importance of each of the contributing factors. That the teachers and management were very clear and unanimous in their attitude that the actions had to be carried out and adhered to, and that the overall aim of the initiative was for the good of the pupils: 'the school will make competent pupils of you just like those in the rest of the municipality' must have been a very important factor. The school was very aware of the pupils' need for support and a clear framework in order for them to feel secure, and this feeling was a precondition of their enhanced well-being and thereby learning.

Individual areas of action must, however, be mentioned:

1. **The fact that pupils are not allowed to leave the school:**

- Reduced the proportion of smokers. The social pattern connected to smoking amongst children and youth was broken. Instead, they found other, and more constructive, ways of being together.
- Reduced the intake of a poor diet (the local kebab shop was forced to close)
- Increased socialisation within the classes. The fact that one had to remain on the school premises during break-time led to potential conflicts becoming more clear to teachers, thereby providing the opportunity for conflicts to be resolved before they developed into major problems. Hence weaker pupils were drawn into the class communities. Combined with the fact that the pupils had learnt fun physical activities and had gained the opportunity to use them during the breaks, this provided a good basis for positive interaction during break-time.

2. **Healthy food only at school:**

- This created awareness amongst pupils and teachers that it is not good to eat sweets and the like on a daily basis and that a healthy diet is important for one's general well-being and ability to concentrate.
- The parents learned how to prepare healthy food and with time they came to back this up as well.

3. **Physical activity:**

- Particularly the boys thrived a whole lot better and stated spontaneously that they could now stand going to school; it was a lot more fun.
- The focus on exercise and easy access to a sports club, along with collaboration with the local sports club means that more pupils attend sports and become affiliated with the sports club.

4. **Morning reading sessions on a daily basis:**

- Focussing on reading in this way rapidly spread a sense of calm within the classes in the morning and was a support for pupils who were weak readers and pupils who had not done their homework at home.

Schools with another socio-economic background and resources would probably not experience the same effect in connection with a similar initiative.

This might explain why the school cannot continue with the initiatives targeted at the school, not even the expense neutral initiatives, following the amalgamation with the neighbouring school that has a completely different socio-economic background. The new school board that covers both school districts is mainly comprised of parents to pupils from the area that is strong in terms of resources and has another point of focus in terms of what pupils' needs are. This is why the above initiatives are no longer a priority.

**Conclusion:**

Targeted systemic health-promoting initiatives implemented in socially deprived schools will have a huge effect upon the prevailing social inequality, as the preconditions for learning will hereby be radically altered.

Based on the fact that general health and well-being constitute the preconditions for a positive learning environment a systemic initiative, implemented in a socially deprived school, was seen to have a positive effect on the pupils' learning and well-being after a relatively short period of time. After a couple of months of implementing the initiative the teachers noticed that the pupils' ability to concentrate in class had increased. After a year the test results had improved and after 5 years there was a marked change in the choice of further education and health behaviour: with an increase in physical activity, more appropriate dietary habits, very few smokers and a low level of alcohol consumption.

If the required effect is to be achieved it is important that initiatives are targeted towards the needs of each school specifically, while bearing in mind the resources that otherwise exist amongst the parents, at the school and in the surrounding society.

In order to acquire the necessary evidence regarding systemic general-health promoting initiatives, it is still necessary that we systematically gather knowledge from schools that promote general-health and for whom learning is a goal that has general-health as a precondition.





The Municipality of Helsingør



# The School at Rønnebær Allé

## 2008 – 2011 Project

December 2007

### Overall goals:

- To provide all pupils with competencies that enable them to complete an education
- To raise the academic level
- To strengthen efforts within the natural sciences
- To eliminate the social inequalities
- To improve integration into the Danish society
- To improve the general-health of pupils
- To ensure that pupils have the necessary knowledge about, and contribute to them achieving, a healthier way of life

By introducing daily exercise and free food (breakfast – fruit – lunch service) we want to improve the pupils' ability to concentrate and thereby raise their academic level. It is also our aim, to contribute to the acquisition of a greater sense of self-esteem by each pupil and thereby to the elimination of existing social inequalities.

This entails a multi-year project with regular evaluations. The project will be adjusted on an ongoing basis as we gain experiences that show the areas in which there is a positive development.

### Collaborators:

Within the natural sciences the school collaborates with Helsingør Gymnasium and Grydemoseskolen, a collaboration that entails the sharing of knowledge, internal seminars etc.

The school also collaborates with diet and nutrition professionals, sport and exercise scientists, the municipality's paediatricians and other professionals with a view to ensuring the best conditions for our pupils.

### Budget:

The school allocates funds in the shape of staff hours (i.e. teacher hours and a canteen assistant) and the purchase of goods, along with expenses relating to external collaborators (i.e. consultants and lecturers, amongst others).

We are applying for funding from the municipality and various ministries, along with a whole series of private foundations and the school's regular sponsors.

The project has been approved by the board, pedagogical council and MED-committee<sup>3</sup>.

The budget is available separately.

### Appendix 2

Example of a timetable, per the 1<sup>st</sup> of January 2008, characterised by 30 min. lessons.

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<sup>3</sup> The MED-committee aims to ensure co-determination, participation in decision-making and joint responsibility.

The possibility of lowering to 15 min. or 20 min. lessons is to be investigated, just as is the possibility for including shorter breaks.

	Module	Intro.	Intermed.	Leaving
8.00 – 8.30	1.	Math	Danish	German
8.30 – 9.00	2.	Danish	Danish	Danish
9.00 – 9.30	3.	Break	Exercise	Danish
10.00-10.30	4.	History	Break	Exercise
10.30-11.00	5.	Art	Physics	Break
11.00-11.30	6.	Art	Physics	Math
11.30-12.00	7.	Break	English	Math
12.00-12.30	8.	Christianity	Break	English
12.30-13.00	9.	Danish	Math	Break
13.00-13.30	10.	Exercise	Math	Physics
13.30-14.00	11.		Christianity	Physics
14.00-14.30	12.		German	Social St.
14.30-15.00	13.			Social St.
15.00-15.30	14.			
15.30-16.00	15.			

The benefits of shorter lessons in comparison with the current 45 min. is that the timetable can be fitted to the requirements of the subject and teaching-methods, either by providing one short lesson per day or by putting a number of lessons together.

Something else that is achieved is that the pupils' breaks are staggered so that the number of pupils in the schoolyard at any given time is reduced, and the canteen is better able to service the pupils as their visits to the canteen are spread out over a longer period of time.