

Project Danish School Culture

Summary of:

The School's Good and Vicious Circles

An Empirical Preliminary Survey of 4th and 5th Grades' Academic Levels and Attitudes to Noise, Discipline and Learning

Mads Hermansen (Ed.): Forlaget Samfundslitteratur. Copenhagen 2007. 403 pages. ISBN 978-87-593-1281-0

The report can be downloaded from www.forlagetsl.dk where various appendices, including questionnaires and tests can also be found.

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How Do 5000 Children in 4th and 5th Grades and 200 Teachers Feel About What Happens in School?

How come the teacher has such difficulties managing the class? And: How does all this noise and lack of discipline influence the acquisition of academic and other relevant competences? In short, why is there so much noise and problems with discipline in school?

These questions are often asked when good folks or politicians meet and exchange news about what happens in school.

The answers to these questions are not that simple without including a number of circumstances and then attempting to look at the pros and cons by pointing at possible correlations. Together with a research team, I have attempted to elucidate these circumstances and many others in the last 4 years¹. We have worked with the purpose of examining Danish school culture (empirically and theoretically) with a special view to uncover correlations in habits, work procedures, routines, directives, co-operation, relations, communication, discipline, tuition management, academic benefits, etc.

Naturally, the complexity in a survey of this kind is great. However, it has been possible to plan a survey that captures the selected elements and sheds light on them in relation to the entirety. The survey has attempted to answer questions like, for example, what do work climate and discipline mean to the academic benefits of tuition? Should tuition be structured and planned in a different way to achieve the formulated goals? What is quality in social groups and tuition?

The survey's starting point was a theoretical understanding of how important it is to create legitimization of how we live in a democratic society, which is the foundation for what schools should do and the way they should do it.

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To Which Extent Do Teachers and Pupils Agree About What Happens?

The survey was organised so that pupils and teachers to a large extent were asked about the same topics. Generally, the pupils' and teachers' perceptions match quite well, even in relatively precarious areas where it is revealed that matters are not as well handled as one could wish. So there are some things to ponder on.

Tuition's Execution and Organization

The stated percentages show to which extent pupils and teachers were in complete agreement (a scale was used that covered the categories; completely agree, partly agree, partly disagree and completely disagree) in the statement or question presented to them.

It takes more than 5 minutes before the lesson begins	68 %
The lesson begins with the teacher saying what is going to happen	91 %
The teacher gives reasons for the assignments in Danish	71 %
We revise topics in Danish	82 %
The school encourages you to try more difficult assignments	78 %
The pupils benefit the most from tuition if the teacher gives reasons for an activity	52 %
Is the classroom well arranged for tuition?	51 %

Perception of Learning

The pupils benefit more from tuition if they reflect on what they are doing (meta-learning)	69 %
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Rules and Frameworks for Tuition

Are there procedures for what the pupils should do if there are problems in the break?	89 %
Do you avoid conflicts by having rules?	72 %
Does the principal help create a good school?	67 %
The pupils benefit more if the teacher is in control?	81 %

Noise and Bullying

The pupils are bothered by noise in class	44 %
Does the teacher tell the pupils off?	56 %
Are the loudest pupils leaders of the class?	10 %
Is the school a place where pupils are being bullied?	5 %

Is the class noisy?	18 %
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Parent Co-operation

Do the parents trust what happens in class?	37 %
The more information parents have about level, the more pupils want to learn	40 %

The Narrative about the Pupil/the Class/The School

The pupils are good at managing themselves in class	80 %
The pupils feel a sense of belonging to the school	63 %
The class is narrated as good	70 %
The school is narrated as bad	7 %
The class is not very skilful	4 %
The correlation between pupil perception of being valuable and the learning activity that supports it.	77 %
The pupils in class have good self-esteem	84 %

Teacher Co-operation

Does the teacher co-operation strengthen the quality of the tuition?	65 %
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Basically, one can conclude that pupils and teachers to a large extent agree that it is good and satisfactory to be in school. The percentages are an expression of how both pupils and teachers agree, but there are some areas where one could ask oneself why their agreement is not even greater.

However, a few areas will be mentioned because there are some problems:

- 68% agree that it often takes more than 5 minutes before the lesson begins
- 56% agree that the teacher tells pupils off
- 44% agree that the pupils are bothered by noise from the class
- 5% agree that pupils are being bullied
- 18% agree that there is noise in class

What Does School Culture Mean to the Pupils' Benefits of Tuition?

How do children benefit from schooling? Which correlations can be identified between the interaction in class and the children's benefits of tuition, and which differences can be registered between good and bad learning conditions?

We presented a research design with a view to discuss the benefits of tuition from two perspectives on learning: An academic perspective based on the children's answers in a math test and an emotional perspective based on the children's attitude to school and self-perception at school.

The result of the survey points in several directions.

If we start by looking at the factors that influence the academic benefits, there is a direct correlation between the children's attitude to schooling and the level of math: The more positive the attitude to school is, the higher the children score in math. The same applies to the correlation between math test and self-perception: The more positive a self-perception in school is, the higher the score in the math test. This is hardly a surprise.

However, it is difficult to point out a direct correlation between specific types of interaction in class and the children's academic benefits of tuition. This does not mean that what happens in class is without significance to the children's academic benefits of schooling, but in isolation it is not possible to separate the individual factors that are of significant importance to the academic benefits.

Presumably, this is because the factors are influential with varying intensity in different contexts, or because many factors are active at the same time.

In short, the factors that support the children's attitude to school and their self-perception (which is also influential on the academic level) can be summarized in the following points:

Relations in Class: Teacher Support, Parent Support, Friends

- Teacher support influences the school attitude positively: The more the pupils feel supported by the teacher, the more positive their attitude to school is. Teacher support also has a positive significance on the pupils' self-perception in school. There is also a positive correlation between the experience of support from the teacher and the experience of support from parents and friends. A class culture that emphasizes the relational interaction thus, also seems to open up for interaction amongst others. One can also say that children who feel supported in one context become more susceptible or open to support in other contexts, and tuition works best with children who allow themselves to be supported.
- Parent support influences the school attitude and self-perception in a positive direction, but to a lesser extent than teacher support does. Furthermore, there is also a direct correlation between the experience of parent support and teacher support.
- Friends in the sense of 'having a friend to talk to when needed' has a direct correlation to the relation to the teacher, in that a supportive relation to the teacher is connected to the experience of a supportive relation amongst pupils. In addition, for girls, friendship is directly influential on the academic benefits of tuition.

Noise and Rules:

- Noise influences school attitude negatively: The more children experience noise in class, the less positive is their attitude to schooling. That the noise-score does not distinguish between children's sensibility to noise and the actual noise in class, does not change that the experience of noise has a negative effect on children's attitude to going to school.
- Rules influence school attitude and self-perception positively: Children who experience clear rules in class have a more positive attitude to school and a higher self-perception than those who experience unclear rules. Furthermore, there is also a reciprocal correlation between noise and rules: The clearer the rules, the less noise. Or: The more pupils experience noise in class the more unclear do the rules seem.

Challenge and Feedback in the Learning Process

- Challenge influences school attitude positively: The more children feel challenged, the more positive is their attitude to school. In this context challenge is connected to feedback, in the sense of response to the pupil's academic work.
- Feedback in tuition influences positively on both attitude to school and self-perception, the more the children experience that the teacher responds to their work, the more positive is their attitude to school and self-perception.

Involvement

- The involvement factors: Reasons and experience attachment influence the pupils' attitude to school and self-perception at school positively: The more children feel that there are reasons for the tuition and it is attached to their experiences, the more positive school attitude and self-perception. It also turns out that children, who experience teachers who start by mentioning what they will be working on in the lesson, also feel that there are reasons for the activities and they are attached to their experiences.

How do children benefit from schooling? Which differences can be registered between good and bad learning conditions? The answer to the first question is that children, generally, have a positive attitude to schooling, and thereby to being part of learning processes. Furthermore, they receive support to create a positive self-perception at school, and both school attitude and self-perception are significant to the academic performance, although the correlation is relatively weak.

However, interaction is especially significant to the attitude to school. A good learning environment will thus, be characterized by a good teacher-pupil relation and the pupil's experience of being supported by the teacher, clear rules in class, peace to work, parental support and friendships; and to a slightly lesser degree by challenge and feedback, as well as, experience attachment and reasons for the tuition.

The survey confirms what many in the school environment already knew: The relational matters along with clear rules and peace in class play a very large role in a positive learning environment.

Surprisingly, the correlation between the pupils' benefits as measured in a math test cannot be documented.

One can then ask how come research keeps searching for correlations between schooling and learning with the help of academic tests, and not least how come

there is so much emphasis on exactly this correlation, rather than on developing relational competences and describing efficient types of communication and organization in connection with actual tuition contents.

Which Interaction is There Between Pupils and Different Types of Teachers or Teacher Profiles?

Which types of teachers can one expect to find in schools? How do they organize tuition and class management, and can explanations be found for the differences in learning styles? These questions are the focus of this paragraph.

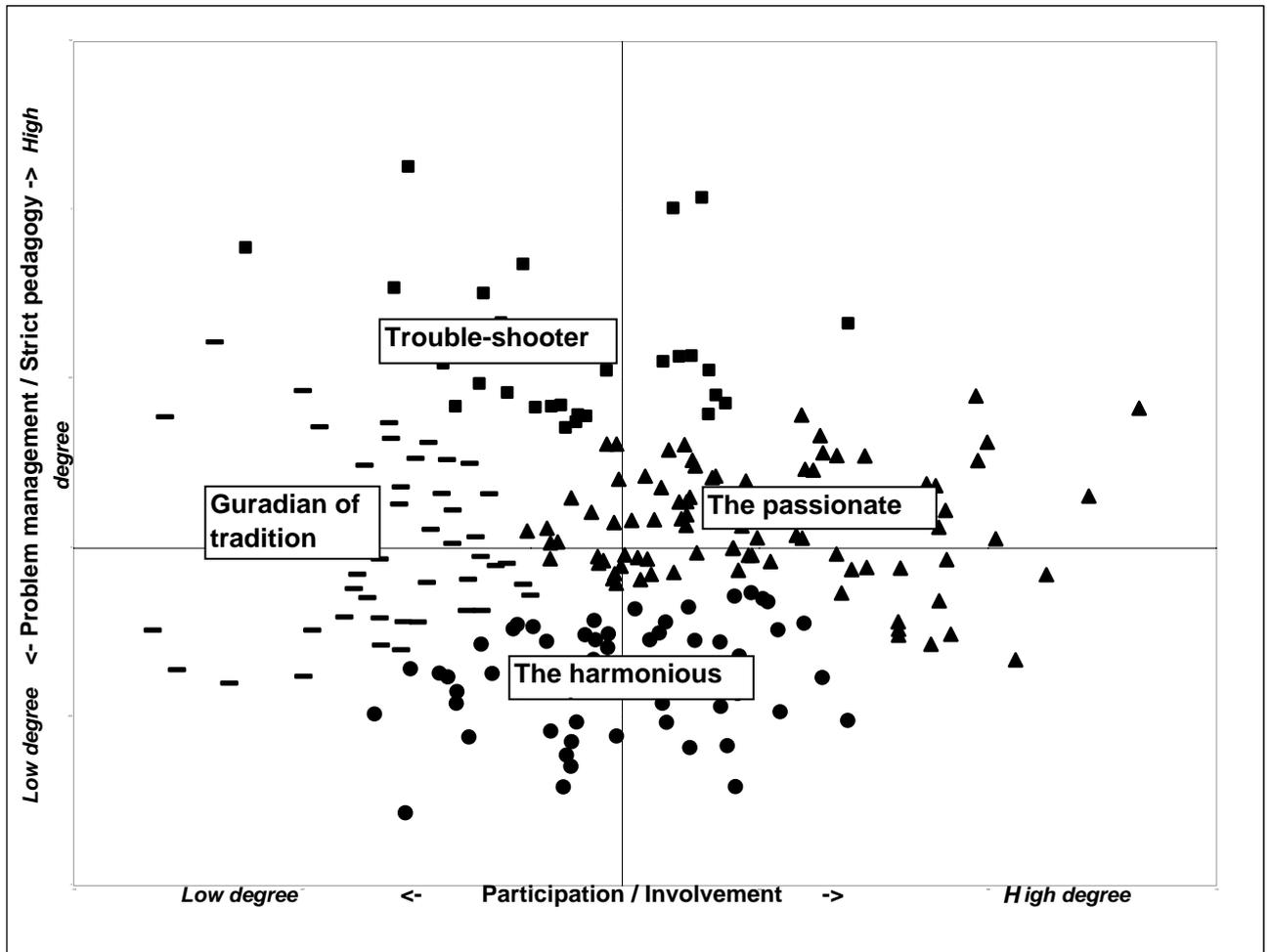
For this part of the survey the starting point was a model of the circumstances in the surrounding world that help create different learning styles. The two circumstances that we assumed would be very influential were influences from pedagogical theories about ‘good learning’ and the actual class the teacher works with at the school and their use of problem solving tools. The empirical survey proved these assumptions right.

Four types of teachers were identified:

The four types:

- Some teachers are excited about and apply the more recent ‘relation-orientated theories’, we call them passionate teachers.
- Others are less convinced of the excellence of pupil involvement and so appear as *guardians of tradition* and the more traditional views on how to create a soundboard for learning.
- Some teachers also first and foremost function as trouble-shooters in the lessons, as they often have serious difficulties with noise and class discipline, and consequently have to organise tuition accordingly.
- A contrast to the trouble-shooters is *the harmonious teacher* who differs by not having any problems with noise and discipline.

Figure 1: The Individual Teacher's Position Indicated on the Map of Teacher Positions



The symbols on the map indicate which type the teacher belongs to:

- The harmonious teacher, ■ Trouble-shooter — Guardian of Tradition, ▲ Passionate teacher

The different teacher types are placed in the area of teacher positions, as can be seen above. A general summary of the types (keywords) can be found in the boxes below.

A General Summary of the Teacher Types:

The passionate teacher
Very involved in the pupils' social life in class
Emphasizes involvement/democracy and imagination in learning
<i>"Learning is best supported if the pupils feel at home in the class"</i>
Differentiation of teaching

The harmonious teacher
Spends extremely little time on problems with noise/disturbance in class
Moderately involved in the pupils' social life/class environment
Moderate advocate for letting the pupils decide the contents of the lesson
Differentiation of teaching
Emphasizes discussion and pupil co-operation as much as the passionate teacher

The Trouble-shooter
Involved in the pupils' social life
Spends an extreme amount of time on noise management
"Imagination is important to learning"
"It is important to give reasons for the tuition"
Pupil co-operation is avoided

Guardian of Tradition
Not involved in the pupils' social life/class environment
Primarily interested in subject knowledge
Does not believe in recent didactic theories about how learning is supported by acknowledgement
Not in favour of pupil co-operation, involvement, challenging and imaginative assignments are instruments of learning and motivation

The Correlation Between Handling Problems and Noise

The trouble-shooter spends much energy on controlling and managing the class. However, the harmonious teacher hardly uses any resources on it, while the passionate teacher and the guardian of tradition are located in a middle position in relation to managing the class.

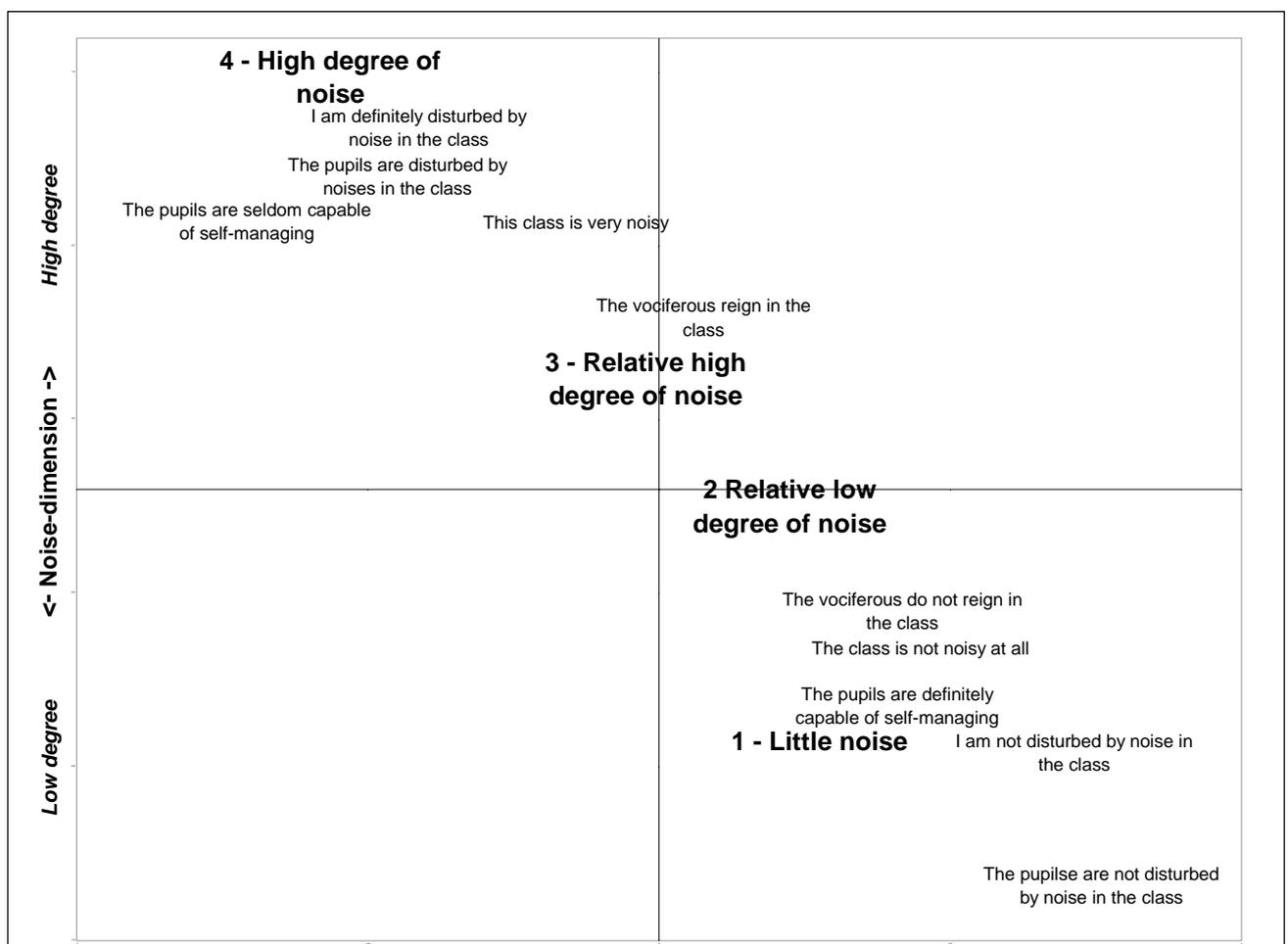
Where there are so substantial fluctuations in the different teacher types' time spending on management, it is logical to assume that the differences are not merely an expression of conscious pedagogical choices, but rather have to do with the teachers' reactions to different types of noise in the classroom. For example, one can imagine that what is seen, is that the harmonious teacher has no problems with noise and disturbances because there are none in her class, while the trouble-shooter has a very noisy pupil basis. We have examined this obvious hypothesis closer.

In table 2 below a number of statements about noise and disturbance have been placed on the map of teacher positions. It is clear that teacher statements about

noise, disturbance of pupils/teacher, as well as whether the pupils are good at managing themselves, are placed in the same positions on the map as the teachers, who to a large extent apply problem-solving tools. Reversely, the teacher statements about no noise, etc. are placed on the other side of the map where the teachers typically spend no time on problem solving.

We have also made a scale of disturbance on basis of the teacher's statements about noise and pupil discipline². It is included. It shows that the scale to a large extent follows the vertical axis for problem management, as just identified.

Figure 2. Supplementary answers on teachers experience of noise and pupils discipline placed in the map of teacher position



As could be expected, there is a very large correlation between the teacher's focus on problem management and the teacher's experience of disturbance and disruptive elements in class.

It is hardly surprising to anybody that the teachers have to be reactive to disturbance and problems of discipline in the classes. However, the results can be seen as documentation of how large an effect the disturbance in class has on the

² The scale is continuous and moves from 1 to 4 (1 = low noise to 4 = loud noise).

teacher's pedagogical practice and use of time in relation to problem management. Thus, it is striking how unambiguously the teachers adjust to the 'class temperament'.

Differences Between First and Second Rounds of Survey

About Good and Vicious Developmental Circles

The overall impression, which crystallized after the analyses of the pupils' attitudes to school, self-assessment and perception of tuition is an image, which you can either describe as a good or vicious circle. The correlations are strong and positive and can only be expressed as a statement that a push in a positive or negative direction on one of the factors, will pull the rest of the factors in the same direction. Next to these matters the analyses also reveal that the effect of external matters, e.g. size of school, type of school and gender is of relatively limited significance, although, admittedly, it can be traced.

Naturally, this result is in itself positive. It shows that there will be an indirect positive gain in all areas if it is possible through a targeted, pedagogical effort in class to influence just some of the issues in a positive direction.

The risk of a vicious circle can, however, not be ignored and it even becomes very urgent when comparing the pupils' description of the situation in 4th and 5th class. Apart from the fact that the pupils naturally are better at math, and apart from the fact that the pupils experience how challenges in 5th class are slightly greater than in 4th class, there is a picture of deterioration in all areas.

The attitude worsens, self-esteem diminishes and the perception of the teaching situation deteriorates. This impression is confirmed by the observable changes in the course of the first 6 months amongst the pupils who participated in both the first and second surveys. Apart from the fact that the tuition contains more challenges six months after the first survey, there is general deterioration on all fronts. For each of the individual points included in the analysis, the vicious circle was the dominant one. The effect of both the background factors and the experience of the situation in the first survey was, however, modest.

Should just one striking result be emphasized, it must be that the deterioration was most prominent amongst the pupils, who had a (relatively) good attitude, good self-esteem and a positive experience of the tuition in the first survey. Thus, a picture takes shape of a situation where the positive results from the first survey to some extent are lost, while the less positive results from the first survey are maintained at the same level. A downward spiral where the bottom has maybe been reached for some pupils already in 4th/5th grades. How long this tendency continues, this survey cannot say. The only thing we can say is that for the pupils in 5th grade in the first survey and who were followed into 6th grade, the attitude to school continues to decline.

Co-operation Amongst Pupils and Amongst Pupils and Teachers

In the survey we ask whether it is the strong or the weak pupils who think that co-operation improves the lesson.

The results from the analysis show that the pupil's assessment of the extent of pupil-co-operation is connected to a positive attitude to school and self-esteem. We cannot make plausible that more pupil-co-operation brings more self-esteem and better attitude to school over time. However, there is a clear correlation between the pupil's self-esteem and assessment of whether respectively the teacher and pupil co-operation provide the best outcome. A similar tendency can be found when looking at the same questions about co-operation in relation to the pupil's attitude to school.

The better an attitude to school the pupils have, the more likely they will be to feel that the lesson improves if the teachers co-operate. The same unambiguous correlation cannot be found in relation to pupil co-operation. Admittedly, there is a significant, statistic difference in the pupils' assessments of the benefits of the pupil co-operation. However, by looking closer at the statistic results, it is the weakest pupils who differ. Thus, it is primarily the weakest pupils, who are likely to feel that they do not benefit the most from the lesson by co-operating with the other children.

In spite of this, the general conclusion must be that there is a positive correlation between the pupils' resources and their assessment of how co-operation (between pupils and teachers) is important as regards the benefits of schooling.

It is the weakest pupils, here meaning the ones who have had the most negative development in attitude to school, who will most often feel that the lesson improves if the teachers co-operates.

Consequently, there is a statistically significant tendency for pupils, who have the greatest risk of developing weak school competencies (i.e. bad attitude to school and self-esteem), to be the most likely to believe that co-operation amongst teachers helps.

In short, the result indicates that the strongest pupils, that is, those who either preserve or strengthen their self-worth and attitude, do not feel that they have as great a need for interdisciplinary teacher help as the weak pupils do.

On basis of the analyses we can merely present weak indications of which circumstances the weak pupils feel improve when teachers work together. It is possible that it is academic problems which the weak pupil feels could be improved through broader and better teacher coordination. It is also possible that it is more a matter of acknowledging circumstances, where precisely the weak pupils can be assumed to feel the greatest alienation from the dominant school culture (and the dominant pupils), and therefore have the greatest need to receive coordinated teacher acceptance and support.

Comparison Across Counties

Comparisons across municipalities and schools seem to be popular at the moment. In this survey we have compared test results and attitude to school in the country's different counties.

The school culture and the economic frameworks around the school are not homogeneous from one end of the country to the other, so there is reason to expect that these differences also manifest themselves in relation to the targeted issues in the survey.

The expectations were met. At both class levels and in all examined areas, we can prove differences between the counties. Unfortunately, or maybe really fortunately, these differences are in no way systematic. The hierarchy of the counties is partly different from area to area, but also different from 4th to 5th grades. Apart from the fact that Ringkøbing County is strikingly high, no systematic differences can be proved between the counties.

Therefore, the result of this analysis is negative. Nothing was found, which can be used to point at specific matters, which possible weakly organized areas could benefit from. Next to these negative findings, one can naturally also use it as a warning about how not to take results of comparative surveys of municipalities, schools and classes too literally.

There is considerable uncertainty in the results when we look at small units and it may turn out that surveys conducted in exactly the same manner in subsequent

years will provide completely different data about where things are good and bad. The results here tell us that generalizations about these matters that are based on information from a single year group do not hold, and therefore risk doing more harm than good if they are still applied.

Conclusion

This was a small extract of the survey. For those interested there is another source about the survey's results, which one can refer to. The book is aimed at the practice-orientated issues and emphasizes the main results, theoretical, didactic and practical suggestions to how one can actually improve the situation.

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