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UNDERSTANDING  
EFFICIENCY  
DIFFERENCES OF  
SCHOOLS:  
PRACTITIONERS'  
VIEWS ON STUDENTS,  
STAFF RELATIONS,  
SCHOOL MANAGEMENT  
AND THE CURRICULUM

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**Abstract:** This study analyses the views of the staff members of nine upper secondary schools in Finland that were in the upper or lower tails of the efficiency distribution measured with stochastic frontier analysis. Teachers and principals were interviewed on their views about the students, staff relations, school management, curriculum work, parent-school relations, teacher training, and evaluation. In efficient schools, views concerning the students were caring, appreciating all students. Respecting views were also present, with students' own initiative being appreciated. In inefficient schools there was more often frustration or disappointment at the low performance of the students. In efficient schools, staff relations were professional, whereas in some inefficient schools it was characterized as tense. Management and decision making were participative in efficient schools and teachers were happy with their possibilities to influence school matters. In inefficient schools, there were disappointments and frustrated views about the management and possibilities to have an influence. Curriculum work was seen as way to develop the school and the work in efficient schools. In inefficient schools, it was considered as an administrative measure.

**Key words:** Efficiency, upper secondary schools, school management, staff relations, stochastic frontier analysis

**Tiivistelmä:** Tässä tutkimuksessa analysoidaan yhdeksän tehokkaan ja tehottoman lukion opettajien ja rehtoreiden näkemyksiä ja pyritään kuvailemaan lähemmin stokastisella rintama-analyysillä määritetyn tehokkuusjakauman ääripäiden koulujen toimintaa. Analyysi perustuu haastatteluihin, joissa keskusteltiin lukion opiskelijoista, henkilöstön välisistä suhteista, koulun johtamisesta, opetus-suunnitelmatyöstä, vanhempien ja koulun välisestä yhteistyöstä, täydennyskoulutuksesta ja arvioinnista. Tehokkaissa kouluissa suhtautuminen opiskelijoihin oli huolehtivaa tai luottavaista. Tehottomissa kouluissa opiskelijoiden heikko suoritustaso aiheutti useammin turhautuneisuutta ja pettymyksiä. Henkilöstön väliset suhteet olivat tehokkaissa kouluissa ammattimaisia kun taas tehottomissa kouluissa oli selviä ongelmia. Johtamista ja päätöksentekoa kuvailtiin tehokkaissa lukioissa osallistuvaksi. Tehottomissa lukioissa vaikutusmahdollisuuksiin oltiin osin pettyneitä. Opetussuunnitelmatyö nähtiin tehokkaissa lukioissa välineenä työn ja koulun toiminnan kehittämiseen. Tehottomissa lukioissa se koettiin enemmän hallinnollisena työnä, jolla oli vähän käytännön merkitystä.

**Asiasanat:** Tehokkuus, lukiot, koulujen johtaminen, työilmapiiri, stokastinen rintama-analyysi



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# 1. Introduction

Most studies on efficiency differences of schools or school districts have used statistical or non-parametric methods and have usually concentrated on determining these efficiency differences with a set of input and output variables. In more recent studies, efficiency differences have been statistically explained using certain factors related to school size, governance, and competition (see e.g. Bradley *et al.*, 2001; Duncombe *et al.*, 1997; Grosskopf *et al.*, 2001; Kirjavainen and Loikkanen, 1998). The role of school leadership, management, staff relations, evaluation practices, and other related factors have been addressed to a lesser extent (Dodd, 2006; Portela and Camanho, 2007).

In educational research, school effectiveness research has an established research tradition of investigating the characteristics of effective and ineffective schools. These studies have usually concentrated on the effect of school climate, leadership, instructional arrangements, staff development, and monitoring on effectiveness. The findings of school effectiveness research have shown that effective schools are characterized by outstanding leadership, effective instructional arrangements, focus on student acquisition of central learning skills, a productive school climate and culture, high operationalized expectations and requirements for students, appropriate monitoring of student progress, practice-oriented staff development at the school site, and salient parental involvement (see e.g. Reynolds and Teddlie, 2000).

In this study, I examine the school practices and characteristics of nine Finnish upper secondary schools that were mostly in the upper and lower tails in efficiency distributions based on earlier analysis (Kirjavainen, 2007a; b). I concentrate on principals' and teachers' views on students, staff relations, school governance and management, and curriculum development. By categorizing schools into different groups within each of these themes I further describe the differences between the schools and examine whether these differences are related to their efficiency. The analysis is based on interview data.

The identification of efficiency differences is based on an earlier study (Kirjavainen, 2007a) that applied stochastic frontier analysis to determine the efficiency differences of Finnish upper secondary schools. Five-year panel data for students graduating in 2000–2004 were used. The panel data enabled the identification of school-specific effects that are constant through time. These effects are interpreted as inefficiency in this study.

In efficiency measurement, school output was measured with average grades in compulsory subjects in the matriculation examination. The explanatory model controlled for the comprehensive school Grade Point Average (GPA) and family background. School resources were measured with teaching expenditures and

other expenditures. In addition, the model controlled for the length of studies, the average decentralization rate in the matriculation examination, school size, whether the school is municipal, private or state run, and the location of the school. With a high number of controls it was possible to exclude the most important student-related factors that affect student achievement.

This study represents the third phase in a series of studies concerning the efficiency of Finnish upper secondary schools. It was preceded by studies determining efficiency differences with data envelopment analysis (DEA) and explaining these differences with class size, school size and the financial situation of the schools (Kirjavainen and Loikkanen, 1998), a study determining the efficiency differences with stochastic frontier analysis (Kirjavainen, 2007a; b) and a study explaining the efficiency differences in DEA using survey data on the organizational characteristics of schools (Kirjavainen, 1998 and 1999).

The paper continues as follows. In section 2, previous studies on effective and efficient schools are discussed. The design of the study is introduced in section 3 by first briefly discussing efficiency measurement and then describing inefficiency and other characteristics of the selected case schools. At the end of the section the data and analysis methods are presented. Sections 4 and 5 provide analysis of the interviews and section 6 concludes.



## 2. Research on effective schools

In educational research, school effectiveness research has the aim of identifying school processes that characterize effective schools. Effective schools are determined as those having the highest student performance taking into account their intake of students. The research setting is similar to studies on efficiency differences. As effective school research bases the identification of effective schools mainly on student achievement corrected with earlier test scores and family background, studies on school efficiency also take into account school resources. In addition, the methods for identifying differences are distinct. School effectiveness studies usually apply multilevel modelling based on individual level data.<sup>1</sup> Studies of school efficiency use school or district level data and either parametric or non-parametric methods for efficiency measurement.<sup>2</sup>

In school effectiveness research, both quantitative and qualitative methods are used to examine school processes.<sup>3</sup> In school efficiency literature the main emphasis has been on quantitative methods and on determining efficiency differences. Studies explaining efficiency differences also mainly use quantitative methods.<sup>4</sup> In some recent studies, qualitative approaches have also been used (Dodd, 2006; Portela and Camanho, 2007). In the following, I briefly review some of the most influential and significant European studies on effective schools in order to illustrate their methods and results. A few recent studies on the efficiency of schools that complement the results of efficiency measurement with case studies are also discussed.

One of the early studies in school effectiveness research was a case study by Rutter *et al.* (1979) on English secondary schools. It concentrated on examining how differences in various school outcomes were related to school processes after taking into account the school intake. The data comprised 12 inner city schools in the London area that differed in terms of various outcomes. Rutter *et al.* had measures related to the intake of schools for assessing various characteristics of the students, the process of schooling concentrating on the social organization of the schools, and the outcomes of schooling. In addition, there were also some ecological measures referring to certain context or environmental factors. A large and rich data set was collected from the case schools that included questionnaires, interviews and observations. The report concentrated on discussing the correlates of the various measures.

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<sup>1</sup> For multilevel modelling see e.g. Goldstein (2003) and Raudenbush and Bryk (2002).

<sup>2</sup> For methods of efficiency measurement see e.g. Coelli *et al.* (1999).

<sup>3</sup> See for reviews Teddlie and Reynolds (2000) and Sammons (1999).

<sup>4</sup> See for reviews Johnes (2004) and Worthington (2001).

The results of Rutter *et al.* demonstrated that the outcome measures were fairly stable over time and schools performing well in one measure usually also performed well in other measures. Differences in various outcomes were not, however, wholly accounted for by the background of students, physical factors such as the size of the school, the age of the buildings or the space available, administrative status or organization. Instead, differences were systematically related to the schools' characteristics as social institutions. Factors such as the degree of academic emphasis, teacher actions in lessons, the availability of incentives and rewards, good conditions for pupils, and the extent to which children were able to take responsibility were all significantly related to variation between schools. Outcomes were also influenced by the factors outside the immediate control of the teachers. The socioeconomic status of the students, for example, was positively related to outcomes. It did not, however, influence the functioning of the schools based on measures of school processes. The total pattern of findings by Rutter *et al.* indicated a strong probability that the associations between school process and outcomes partly reflect a causal process. This means that to some extent the behaviour and attitudes of students are shaped and influenced by their experiences at school and especially by the qualities of the school as a social institution.

Mortimore *et al.* (1988) used a quite similar approach to investigate primary schools in England. In their study, students aged 7 to 11 in 50 randomly selected schools were followed up for four years. During the four years, various types of data were gathered describing the intake, student outcomes, cognitive and non-cognitive outcomes, classroom and school environment, school and class organization and policies, teacher strategies, views of parents and school life. Questionnaires, interviews and observations were used to collect information on these matters. The analysis of the data was mostly quantitative and applied various statistical methods. Interviews and observational data were mainly used to complement the statistical analyses and broaden the description of school processes.

According to the findings of Mortimore *et al.* (1988), some schools were better at fostering pupils' cognitive and non-cognitive skills, taking into account the intake of the schools, and the effect of the school was even greater than the effect of socioeconomic background of the students. Mortimore *et al.* identified 12 key factors that differentiated effective from ineffective schools. These were purposeful leadership of the staff by the headteacher, the involvement of the deputy head, the involvement of teachers, consistency amongst teachers, structured sessions, intellectually challenging teaching, work-centered environment, a limited focus within sessions, maximum communication between teachers and pupils, record keeping, parental involvement, and a positive climate.

According to Mortimore *et al.* (1988), effective schools were friendly and supportive environments led by heads who were not afraid to assert their views

and yet be able to share management and decision making with staff. Class teachers within effective schools provided a structured learning situation for their pupils but gave them freedom with this framework. By being flexible in their use of whole class, group and individual contacts, they maximized communication with each pupil. Furthermore, through limiting their focus within sessions, their attention was less fragmented. Hence, the opportunities for developing a work-centered environment and for presenting challenging work to pupils increased.

Sammons *et al.* (1998) studied six inner London secondary schools that were outliers based on value added analysis of 94 schools. These included schools with low performance, high performance and schools with mixed effects. Headteachers and deputy heads were questioned about the processes of effectiveness. The results of Sammons *et al.* confirmed many of the earlier results concerning effective schools. According to them, effective schools were characterized as having high expectations and an emphasis on academic achievement, staff consensus and a shared vision of the purpose of the school, great stress on the headteacher's leadership, a strong senior management team, the high importance of the quality of teaching, the importance of high examination entry and effective homework policies and practices, encouragement of parental involvement and feedback. Ineffective and mixed schools were found to have problems in pupil behavior and attendance, whereas good behaviour and attendance were seen as necessary conditions for academic effectiveness, allowing the creation of a safe and orderly working environment and contributing to a positive culture.

Similar studies have also been conducted concerning U.S. schools (see e.g. Brookover *et al.*, 1979 and Teddlie and Stringfield, 1993). The results of these and numerous other studies have been summarized by various researchers (see e.g. Purkey and Smith, 1983; Levine and Lezotte, 1990; Scheerens and Bosker, 1997; Sammons, 1999; Teddlie and Reynolds, 2000). These summaries have come up with a list of most important characteristics of effective schools. Factors that are in many reviews associated with effective schools include strong educational leadership, high expectations of student achievement, emphasis on basic skills, maximized time for learning, a safe and orderly climate, practice-oriented staff development at the school site, parental involvement and support, monitoring of student progress, and clear goals. Other correlates include school-site management that allows schools to decide on ways to improve academic performance, instructional leadership that initiates and maintains the development process, staff stability, clear curriculum articulation and organization, schoolwide recognition of academic success, district support, collaborative planning and collegial relationship among staff, and a sense of community.

One of the few studies similar to this study on school efficiency investigating the school characteristics and their impact on efficiency has concerned English

secondary schools (Dodd, 2006). This study differs from the school effectiveness studies in the sense that it used data envelopment analysis (DEA) to identify unusually efficient schools. Several other inputs such as expenditures and teacher qualifications were also used in addition to measures of students' socioeconomic background and earlier school achievement.

The study aimed at verifying the results of DEA, investigating why these schools were effective, and identifying the good practices that would contribute to school's effectiveness. Case study methods were applied to 38 effective schools that were peers for over 100 other secondary schools. Information concerning leadership and governance, people management, policy and strategy, partnership and resources, and processes were gathered during visits to these schools. Staff members and in some schools also the parents participated in structured interviews. In addition, important documents such as the curriculum, strategic plans, and annual budgets were gathered and analysed in the study.

According to Dodd (2006) there were many characteristics that were common to effective schools. However, the schools did also vary and not all characteristics were present in every school. Dodd identified such characteristics as a school ethos that emphasized learning and achievement, very strong leadership personalized in the head teacher but extending throughout the senior leadership team, monitoring of student performance and goal setting based on earlier results, very strong emphasis on the recruitment, retention and development of high quality staff, the staff's willingness to place extra effort on offering support measures to students, the development of a curriculum that would reflect the needs of the students, inclusiveness so that every child is offered an opportunity to participate in education independent of their level of skill, proactiveness in seeking additional funding, strong commitment to planning, and extensive use of and investment in ICT. Dodd also found correlates that would be expected to contribute to school effectiveness but did not. They were related to school governance, the setting and class size, financial management, and the learning environment.

A study by Portela and Camanho (2007) has also taken a closer look at some of the secondary schools in Portugal based on their DEA efficiency scores. With the case study material from three benchmark schools and a few other schools, their purpose was to verify the results of efficiency analysis and identify the effective school practices of benchmark schools. According to their results of Portela and Camanho, the benchmark schools had good resources and infrastructure, a motivated and stable body of teachers, a well defined and inclusive school mission, effective control, self-evaluation and rigorous use of student performance data, a high number of extra-curricular activities with a reasonable involvement of teachers and students, involvement of student' parents, and leadership well adapted to the school context.

Both studies suffered some shortcomings. No description is provided of how the results were obtained. Especially the study by Portela and Camanho (2007) lacks analysis, since there is no description of the case data and methods used for constructing the features of effective schools. Dodd (2006) only examined efficient schools. Since there was no comparison group, it might well be that the same characteristics are also present in the less efficient schools. The need for comparison is also widely established in the school effectiveness literature (see e.g. Purkey and Smith, 1983; Reynolds and Packer, 1992; Gray and Wilcox, 1995; Sammons *et al.*, 1998).

School effectiveness research has been subject to much criticism in past years.<sup>5</sup> One focus of the criticism is associated with the fact that the practices of effective schools explain very little of the total variation in student achievement. For example, Scheerens and Bosker (1997) revealed in their meta-analysis that such school organizational factors as a productive climate and culture, pressure for achievement in basic subjects, educational leadership, monitoring/evaluation, cooperation/consensus, parental involvement, staff development, high expectations, and an orderly climate are only weakly related to school effectiveness based on the results of statistical studies.

The idea of studying and detecting the features of effective schools and transferring their practices directly to ineffective schools has also been criticized. As mentioned by Reynolds and Teddlie (2001), there may be whole areas of schooling that are central to educational life in non-effective schools that simply cannot be seen in effective schools, such as staff groups that possess 'cliques' or interpersonal conflict between staff members, for example. To propose dropping into the context of the ineffective schools those factors that exist in the effective schools may be to generate simply unreachable goals for the ineffective schools, since the distance between the practice of one setting and the practice of another may be too great to be easily bridged. Therefore, Reynolds and Teddlie emphasize the importance of also studying school failure.

Research on failing schools has especially concentrated on the unfavourable context and environment in which these schools are working. Nicolaidou and Ainschow (2005) analysed the experiences and cultures of English schools judged as failing by the authorities and therefore being subject to special measures. Their study revealed that where the improvement efforts failed it was because of the assumption that such schools are faced with predictable and straightforward problems. According to Nicolaidou and Ainschow, the actual situation is quite the contrary and the schools are facing complex and simultaneously unique issues. Because of this, no one leadership style fits best, but there is a need for a reflective and shared leadership style that is adaptable to

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<sup>5</sup> See e.g. Coe and Fizz-Gibbon (1998) and Goldstein and Woodhouse (2000). For a review of the criticism, see Luyten *et al.*, 2005.

the schools' specific culture. The study also stressed the importance of studying cultural assumptions, since they provide insights into the way schools function and also facilitate efforts at improvement.

The impact of the school context was also emphasized in Lupton's (2005) study, which concentrated on examining its connection with the quality of schools. She studied four secondary schools in disadvantaged areas in England. According to Lupton, a high-poverty context exerts downward pressure on quality, and improvement measures concentrating solely on upskilling and motivating the staff will not lead to improved quality. The only way to ensure high quality is to provide additional resources because the schools in high-poverty areas face many additional tasks in addition to teaching. Lupton concluded that a higher level of resources provides the possibility to increase the organizational capacity of schools to better respond to the various problems of students.

In this study, I follow earlier case studies of effective schools and school efficiency by investigating nine Finnish upper secondary schools with varying efficiency. The analysis of schools is mainly based on semistructured interviews of principals and teachers. With this data I aim at determining whether the views of the practitioners are connected with school efficiency.

In analyzing the interview data, I first group the schools into categories based on the themes emerging from the interview texts and then concentrate on describing the emerging categories. Thus, my approach is different from earlier studies (see e.g. Sammons *et al.*, 1998; Dodd, 2006; Portela and Camanho, 2007) that analyze and describe the school practices and views of the practitioners within different categories of school efficiency (schools with high and/or low efficiency). At the end of the study I discuss the relation of the emerging categories with efficiency. With such an approach, I try to illuminate the differences in views and practices within each theme in more detail and attempt to create some new insights into the evaluation of schools and their performance.

### 3. Design of the study

#### 3.1 Measurement of efficiency

Evaluation of the efficiency of the case schools was conducted statistically using Stochastic Frontier Analysis (SFA). Compared to ordinary statistical methods such as OLS, in SFA the error term is divided into a normally distributed error term and inefficiency.<sup>6</sup> As for the unit of observation, the identification of efficiency is based on school- as opposed to student-level data as used in earlier school effectiveness studies applying multilevel models.<sup>7</sup>

The efficiency evaluation of the case schools was originally based on different stochastic frontier models that vary in how they treat and interpret the school effect, which is constant through time and not captured by the explanatory factors of the models. Here, the results of random and fixed effects models are considered. In these models the time constant effect is interpreted as inefficiency.<sup>8</sup> The data comprised 436 day schools from the years 2000–2004. The stochastic frontier models and the efficiency measurement are discussed in more detail in Kirjavainen (2007a; b).

The output of schools was measured with compulsory grades in matriculation examination. As for the explanatory variables, earlier student achievement was controlled with comprehensive school GPA. Students' socio-economic background was measured with the parents' educational level, the proportion of white-collar workers and the proportion of single parents. Other variables characterizing students were the proportion of female students and the proportion of Swedish-speaking students. The resource inputs were measured in monetary terms with two variables, teaching expenditures per student and other expenditures per student<sup>9</sup>. In addition, the model contained a variable measuring the length of the studies, the average decentralization rate in matriculation examinations<sup>10</sup>, and the location (urban, densely populated and rural area) and size of the school. The models also included a dummy for private schools and

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<sup>6</sup> For the method, see Kumbhakar and Lovell (2000) and Greene (2005a; b).

<sup>7</sup> Efficiency measurement with multilevel models is described in Johnes (2004). For multilevel modeling see e.g. Goldstein (2003) and Raudenbush and Bryk (2002).

<sup>8</sup> Efficiency based on random and fixed effects models is discussed in this study because the study concentrates on organizational characteristics that undergo very little yearly fluctuation. These models depict the time constant variation across schools as inefficiency. The inefficiency term in other stochastic frontier models fluctuates yearly. In true random and true fixed effects models, inefficiency and time constant heterogeneity are separated. The inefficiency term captures small yearly variations in input and output variables which may be very difficult to explain with organizational characteristics.

<sup>9</sup> Other current expenditures consist of the cost of meals, health care and counselling, administration, and rents for the school premises.

<sup>10</sup> Tests can be taken in three consecutive examination periods.

state-owned schools. The comparison group was schools maintained by the municipalities (the majority of schools).

The efficiency of schools is depicted with an inefficiency score. This varies between 0 and 1 and the larger the figure the more inefficient (less efficient) the school is.<sup>11</sup> The average inefficiency differed to some extent in random and fixed effects models (see Appendix 1). The average inefficiency was higher in the fixed effects model, at 15 per cent. According to this model, schools could have increased their output on average by 15 per cent. In the random effects model, the average inefficiency was clearly lower, some 6 per cent. There was only modest variation in the rankings of schools based on their inefficiency score in these two models (for further details, see Kirjavainen 2007a; b).

### 3.2 Selection of case schools

Initially, the case schools were selected based on their inefficiency in an earlier study (see Kirjavainen, 1999). The problem with this setting, however, was that there was a considerable time lag between the efficiency measurement and the case study data collection. The efficiency measurement data was based on a cross-section of students graduating in 1991 and the selection of case schools as well as the data collection took place in 1999.

A few years ago I had an opportunity to conduct an efficiency analysis of upper secondary schools using good quality data from students and schools that completed their studies in 2000–2004. Since some of the stochastic frontier models used in the study clearly divided the case schools into ones with a high and with a low inefficiency, I decided to take this measurement as the reference point. In doing so I was able to avoid the problem arising from the time lag which is quite typical in studies relating statistical data and case studies.<sup>12</sup> With this setting though, the two cohorts graduating in 2003 and 2004 started their studies after the data collection. Since changes in schools usually take place quite slowly these two cohorts most probably faced the same environment as the three earlier cohorts.

The drawback of having collected the case study data based on other efficiency measurement is that among case schools there are no such schools that would stay at the very bottom or very top in every measurement. I would, however, argue that since there is instability in the rankings between different stochastic frontier models it would be difficult to find cases that would robustly maintain their position in different measurements and models. Besides, with the analysis method adopted in this study, it is possible to study if the emerging

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<sup>11</sup> The figures can also be interpreted as percentages indicating how much more output school could have produced to be efficient.

<sup>12</sup> See Sammons *et al.* (1998) for problems in retrospective studies.



categorizations have different effect on efficiency in different stochastic frontier models. As such, it gives additional insights to the interpretation of the results of efficiency measurement.

In the selection process, other factors were also considered. The sample included schools having quite a high comprehensive school GPA as well as schools accepting all the applicants. Some of the schools had been performing poorly and some exceptionally well in matriculation examination. The location of the schools also varied from urban to rural areas.<sup>13</sup> Both large and small schools were included, with the size of the schools ranging from around 100 to 700 students. The selected schools had also participated in the earlier survey in 1995 (see Kirjavainen, 1999), so that additional information was available on their organizational practices some years earlier. In the following, the names that I use to refer to each school are fictitious.

### 3.3 Efficiency of case schools

Here, I shortly describe the inefficiency scores of case schools in random and fixed effects models and their location in the inefficiency distributions. The inefficiency of case schools varied in the random effects model from 2.4 per cent to 20.2 per cent (see Table 1). In the fixed effects model the inefficiency varied from 10.2 per cent to 27.2 percent.

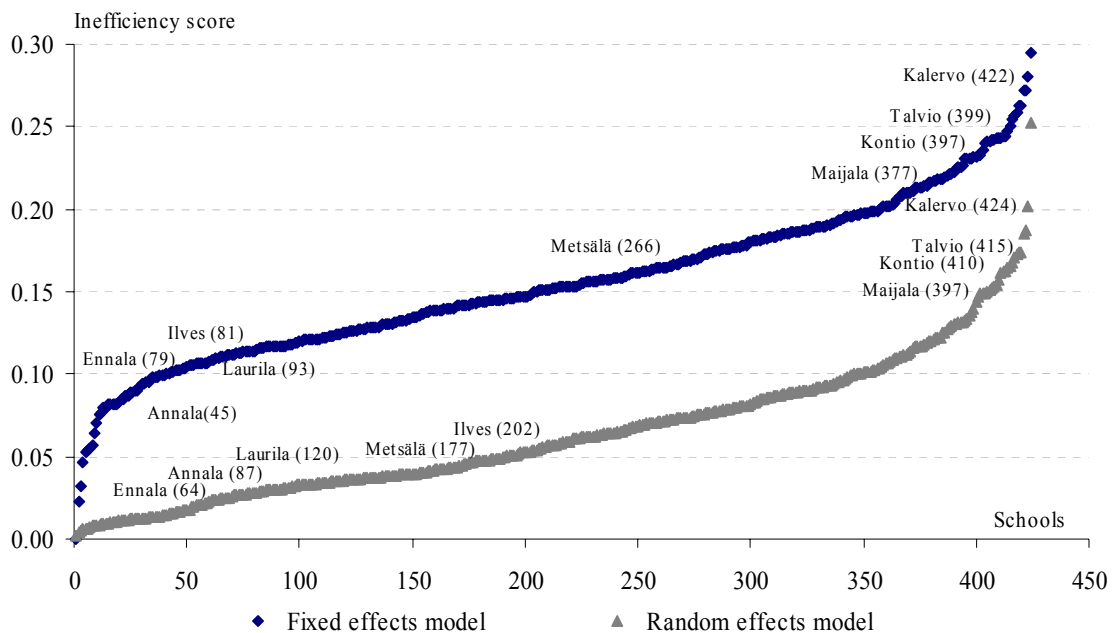
*Table 1*      *Inefficiency scores of the case schools in random and fixed effects models in 2000–2004*

	Random ef- fects model	Fixed effects model
Annala	0.030	0.102
Ennala	0.024	0.114
Ilves	0.053	0.115
Laurila	0.036	0.117
Metsälä	0.047	0.167
Maijala	0.134	0.214
Kontio	0.154	0.231
Talvio	0.165	0.232
Kalervo	0.202	0.272

<sup>13</sup> The schools were located in and around Helsinki and not more than 150 kilometres from the city. This geographical constraint was set for practical reasons, i.e. to limit the amount of travel.

The location of case schools in the inefficiency distribution is quite stable between the two models (see Figure 1). With some exceptions, these models also differentiate the schools into opposite tails of the distribution. Kontio, Kalervo, Maijala and Talvio are among the most inefficient schools. In order to be efficient, these schools should have produced a clearly larger output according to results of both models. Metsälä School is in the middle of the distribution in both models and Annala, Ennala and Laurila schools are among the most efficient schools (i.e. have low inefficiency). Ilves school somewhat changes its rankings in these two models.

*Figure 1 Inefficiency distribution and the location of case schools in the distribution in random and fixed effects models in 2000–2004. Rankings based on inefficiency scores are in parentheses*



### 3.4 Other characteristics of the case schools

Case schools differed from each other in terms of the family background of the students, the comprehensive school GPA, the heterogeneity of the student body, the proportion of female students, and the matriculation examination results. In

Figure 2, each school is depicted in terms of these factors as a percentage deviation from the sample mean in 2000. The grey circle in bold in the figure depicts the national average. Circles outside describe performance above the national average and circles inside performance below the national average.

Considering the high efficiency schools, Annala upper secondary school was located in the Helsinki area in a wealthy and pleasant neighbourhood. It could be characterized as an average Finnish upper secondary school in only one respect, namely its intake measured in terms of the comprehensive school GPA was close to the national average. As for other factors, it scored clearly above the average in the matriculation examination results, the family background of students was clearly favourable and the heterogeneity of the student body was lower than on average. It was larger than an average school. The premises were quite old and unpractical and they needed renovation. There was also an upper school in the same building. Interviewees were quite satisfied with the location and surroundings of the school.

Ennala upper secondary school was quite a small school in a small town in southern Finland. Many of its students studied there because it was the nearest upper secondary school in the area. It was a school with quite low entrance requirements. As for the other measures, many of them were below the national average, and the comprehensive school GPA in particular was clearly lower than on average. The heterogeneity of the student body and parental education were close to the national average. The school was located in a quiet neighbourhood and the premises had recently been partly renovated and extended. The school shared the premises with the upper school.

Ilves upper secondary school was closest to the average Finnish upper secondary school. It was located in the surroundings of Helsinki in an area with a high educational level. It attracted students from nearby upper schools and had a quite high entrance requirement. Quite a high proportion of the students also came from its upper school. The nice neighbourhood was reflected in the background of students, which was somewhat more favourable than on average. The results in the matriculation examination had normally been on the national average level or higher. Ilves School was quite large in size.

Laurila and Metsälä upper secondary schools had a very similar profile in the sense that they performed close to the national average in the matriculation examination and both the comprehensive school GPA and family background of the students were somewhat unfavourable. Laurila was a fairly large school in a small town in southern Finland and students came from different upper schools. The school premises were quite old and also somewhat too small and renovation and extension was therefore taking place. Metsälä upper secondary school was located in a rural area in southern Finland. It was a small school accepting basically all its applicants. The upper school was also located in the same

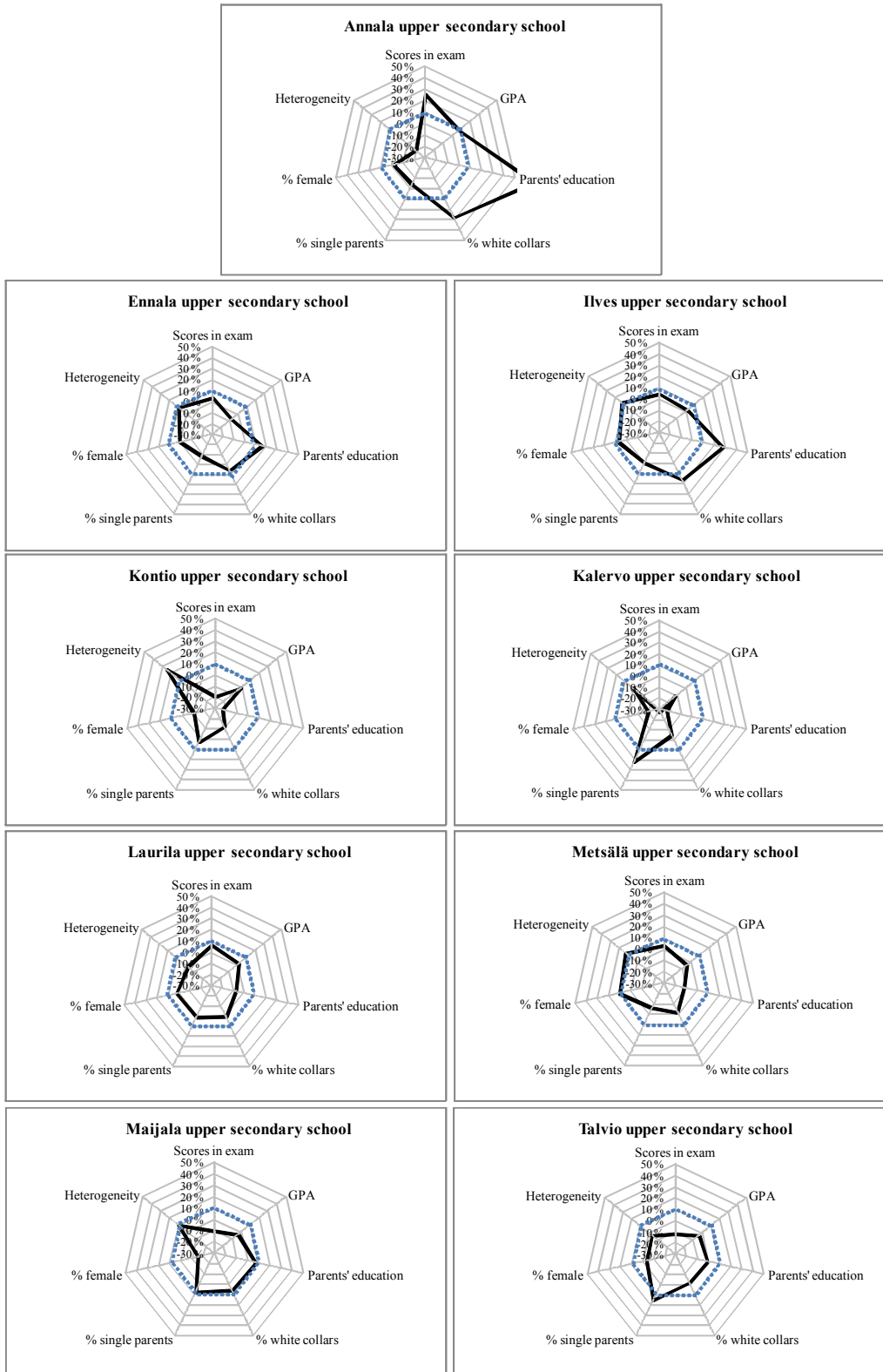
premises and the majority of the teachers had instruction in both schools. Many of the teachers enjoyed working in these schools because of the location and the surroundings.

As for the low efficiency schools, Kontio and Kalervo upper secondary schools had the most distinctive profile among the case schools. Kontio upper secondary school was located outside Helsinki in a small town and provided upper secondary schooling for this area. Many of its teachers mentioned that they preferred to live in a small town and therefore they chose to work in this school. The students' socioeconomic background was lower and the heterogeneity of the student body was higher than on average in this school. Results in matriculation examination had been clearly below the national average. The size of the school was close to the national average. The school building was old but had recently been renovated.

Kalervo upper secondary school was a small school in the Helsinki area in a neighbourhood with a somewhat lower socioeconomic status. Its profile was very close to that of Kontio upper secondary school with a low comprehensive school GPA and a low socio-economic status among the students. The heterogeneity of the student body was below the national average, reflecting the fact that there were very few high achieving students in the school. The school did not have upper school in the same premises and the building was quite old. Nevertheless, interviewees felt comfortable in this school because of its cosy atmosphere.

Maijala and Talvio upper secondary schools were located in the Helsinki area and both were quite large schools. They also shared the premises with an upper school. Therefore, some of the upper school students continued their studies in the same upper secondary school. The entrance requirements were quite low in both schools but students still felt, according to one respondent, that they had been accepted, which was a crucial difference. As for the results in the matriculation examination, they had been clearly below the national average. In Maijala School the socioeconomic background of the students and the heterogeneity of the student body were close to the national average. In Talvio School they were lower than the average

*Figure 2 The score in the matriculation examination, GPA, socioeconomic background and heterogeneity of the student body in case schools in 2004. Percentage deviation from the sample mean. The dotted circle indicates the 0 level*



### 3.5 Interview material

The analysis of case schools is based on interview data.<sup>14</sup> The interviews were conducted between 10 May and 16 June 1999. Therefore, they reflect the school practices taking place when students completing their studies in 2000–2002 were studying. Since schools do not change unless something dramatic happens, students completing their studies in 2003 and 2004 most probably faced a similar environment to the three earlier cohorts.

In each school the principal and two teachers were interviewed. The first contact with the school was made with the principal by phone. On the phone, I explained the research project and its aims to the principal and asked for consent to include the school as one of the case schools. The first appointment was also made with the principal. Teachers were selected by asking the principals to name two possible teacher candidates for the interviews. Teachers teaching subjects included in the matriculation examination and with a longer career in the school were given priority. Teachers with a longer career in the school were preferred, since the initial purpose was to use the data from an earlier efficiency measurement. None of the principals or the teachers turned down my request.

The method of selecting the participating teachers was not random. Principals clearly did not name their strongest opponents as candidates. The opposite was more likely to be the case. Thus, teachers may have given a somewhat more favourable view of the school than a randomized sample. In the same way, if some problems in the school were mentioned, they were probably real and not just the complaints of an unhappy teacher. Despite this, the interviewees were horizontally comparable, since the method of selection was the same in all schools.

Another problem created by the research setting was the contrasting of efficient and inefficient schools. Even though the interviewees were not told in which category their school was placed, they may have given a more positive view of their school compared to the real situation. The concept of efficiency is, however, not very intuitive and school results are most of the time measured by the success in matriculation examination. Therefore, the interviewees were probably most of the time thinking of this measure rather than efficiency.

As for the characterization of interviewees, the majority of the nine principals were male (7), and only two were female. By contrast, 11 of the teachers were females and seven males. As for professional experience, the average employment of teachers in their current school was quite high, being almost 19 years and ranging from 3 to 33 years. Among the principals it was considerably

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<sup>14</sup> The interview data was supplemented by school annual reports and school curricula from some of the schools. This material is not, however, analysed in this study.

lower, on average 10 years, ranging from one year to 33 years. It should be noted that three of the interviewed principals had been principals in their present school for only one year.

Since the selection of teachers was based on the proposals of principals, I had no prior knowledge of how different subjects would be represented. It turned out that eight teachers taught humanities such as history, biology, geography, religion, and psychology. A foreign language was taught by seven of the teachers. Three of the teachers taught mathematics, physics or chemistry. None of the interviewees taught the mother tongue, Finnish. As for the principals, five had a background as humanities teachers, two in mathematical subjects, one in foreign languages and one in the mother tongue.

As for access to schools, it was surprisingly easy to make appointments. I think that one of the reasons why schools were so willing to participate and cooperate was that the information obtained from the interviews was promised to be kept anonymous. In addition, since the results of earlier efficiency analyses were presented so that individual schools were not identified (even though it would have been possible), it probably helped to gain the trust of the participating schools, despite the research topic itself being sensitive from schools' point of view.

The interviews followed a semi-structured schedule such that the interview guide contained several themes and questions related to each theme. The themes were clearly introduced during the interview and the main questions were always posed for the interviewee. When discussing questions the conversation proceeded loosely, giving each interviewee the freedom to speak without the interruption of interviewer. Even though the interview guide was mainly followed in each interview, exceptions were also made if the interviewee introduced an interesting topic.

The themes discussed during the interviews were mainly the same as in the earlier survey (see Kirjavainen, 1998 and 1999). They were mainly selected based on findings of school effectiveness studies (see e.g. Purkey and Smith, 1993; Levine & Lezotte, 1990; Scheerens and Bosker, 1997). The interview guides included questions concerning the students of the school, the school's physical facilities, the role of the parents, and factors related to the school's management such as the school's goals, teacher participation in school planning and decision making, the teachers' possibilities to influence school decision making and their own work, as well as questions on job training, evaluation practices, cooperation between the teachers, and student counselling. In their responses, the interviewees were asked to describe the current situation in their school and express their own views about it. There were also questions concerning major changes in the past years.

The interview guide used with the principals differed from that of teachers mainly in the sense that it also included some questions concerning the teachers. The similarity of principals' and teachers' interview guide enabled the comparison and validation of the responses, and the identification of areas of disagreement and difference.

When contacting the candidates to set up the appointments I also asked if they would like to see the interview guide beforehand and get to know the interview themes. About half of the candidates became acquainted with the interview guide in advance. Some of the respondents had also prepared some notes for themselves.

The interviews took place in each of the schools. They lasted from approximately one to two and a half hours. The average length was an hour and a half. Each interview was tape recorded with the consent of the interviewee. At the beginning of each interview the normal confidentiality of the information obtained through interviews was stressed.

The climate during the interviews was good. Some of the respondents were somewhat distant, probably because of the generational gap and position between the interviewer and the interviewee. However, some respondents were very open.

The interviews were transcribed word for word. For the purposes of the analysis it was not necessary to transcribe the taped interviews verbatim. As for the quality of the tapes, they were mostly good. A certain amount of editing took place so that all the pauses, laughs, or expletives were left out. The language used by the interviewees was not, however, transformed into written text. Only the selected passages were translated into English using more formal language.

### **3.6 Analysis of the interviews**

The interview data were interpreted as describing the realities of the school. They were, in other words, "treated as giving direct access to experience" (Silverman, 2000). The descriptions of the interviewees were taken as presenting facts that are encountered in these schools. When interpreting the data, however, one realizes that by spending time in the school and collecting more diverse data it would be possible to perform a more in-depth analysis of the schools. However, this was not possible in this study.

The analysis of the interview data started with the re-reading of the transcribed texts. The aim was to gain an understanding of the different themes and views the respondents brought up in the interviews. The responses of the principals and teachers in each school were also cross-checked and most of the time teachers and principals expressed similar views. During this process the texts were



grouped into themes.<sup>15</sup> In the next phase, each theme was studied and coded separately. During this phase, special attention was paid to the differences between schools within each theme.

Several themes emerged from the texts. Within some of the themes, views and practices of the schools were so similar that it was not possible to distinguish different categories and group the schools based on them. These themes were concerned with staff development, evaluation and monitoring practices, and parent-school relations. Four of the themes were such that it was possible to identify different categories within them and group the schools. They were:

- views of about the students
- staff relations
- school governance and management
- views about the curriculum and curriculum planning

Each of the categories had their own characterizations. In some cases the differences between the categories were, however, small.

The results of analysis are presented so that each theme and its categories is discussed in turn, stressing the most distinctive features. In presenting each of the themes and their categories, interview extracts are used to demonstrate the empirical basis for the categories and to verify the views expressed by the respondents. The quotes have been translated from Finnish. Pseudo identifiers referring only to schools are used for the quotes in order to protect the anonymity of the respondents and the schools. These identifiers also show how each school is placed into these categories. After presenting the different categories, their relationship to efficiency is examined with category averages and simple cross-tabulations.

Finally, it should be noted that no attempt is made to draw any causal conclusions or identify mechanisms that produce inefficiency in this study. For such purposes a more extensive study using longitudinal data would be needed.

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<sup>15</sup> The analysis of the texts was carried out using QSR N6 and VIVO 7 computer software designed for qualitative research analysis.

## 4. Views concerning the students

The characteristics of the students are a central part of the school. They mostly determine the work of the teachers and affect the school's reputation. The role of the teachers and schools is usually smaller. Student characteristics also affect teachers' decisions to apply or not to apply to certain schools. It is an established fact in the literature that schools in deprived areas and with students having difficulties have problems in recruiting highly qualified teachers. Staff turnover is also usually higher in such areas.

Student characteristics affect to the way teachers perceive their work. However, teachers also differ in how they react to certain characteristics of students. In some sense the views of the teaching staff and personal traits of the students intertwine so that it is difficult to distinguish them from each other. At some point, however, they develop into views that perhaps characterize the whole school rather than being just the views of individuals. The differences in views are more evident when the background of students is kept constant.

Four categories emerged when respondents' descriptions and characterizations of the students were analysed. The teachers' stance or view could be characterized as attentive and sensitive, trustful and confident, educating, or frustrated. Each category has a characterization of its own so that the behaviour of students and the stance of respondents towards it can be seen as interacting.

### 4.1 Attentive and sensitive view

The attentive and sensitive view emphasizes that every student is important and should be taken care of regardless of his or her personal motivation or skills. Some respondents made a comparison with parenthood by considering that part of their role as a teacher included being a mother or a father figure for the students. Attentiveness and sensitiveness also involved an internalization of the school's social task to provide upper secondary education for everyone, as one respondent comments:

“As we are a small school in a rural neighbourhood we have aimed to provide opportunities for those wanting them.” [Metsälä]

The composition of the student body did not differ from the average and there were both high and low performing students with differing motivation to study in an upper secondary school. Most students had their minds set so that “they had decided that they would pass the matriculation examination or their parents had decided that their child would pass the matriculation examination.” [Metsälä] However, there were also students who were not so sure about their goals. These latter students were considered as the ones “with problems” [Metsälä]. Even

though the motivation of students varied, the overall situation was seen as quite good because “most of the students have quite good motivation to study when they start school” [Metsälä].

The view towards the least able students was perhaps the most distinctive feature. Students with low motivation were taken as quite a natural part of school life. Instead of seeing them as a burden, an encouraging and soliciting stance towards them was taken.

“But I guess these things happen in every school. There are the ones that fall behind, especially if you have a low GPA. They realize that they don’t necessarily succeed. But then we have tried to encourage them, both teachers and the principal have tried to encourage them.” [Metsälä]

”[...] [...] I try to keep everyone involved and encourage and try not to put students down, even if they don’t know. [...] [...]” [Ennala]

Weaker students also required special attention from teachers and the role of ‘care takers’ was taken quite seriously. Respondents emphasized that “students with a poorer grade point average were also accepted and they have also matriculated”. This meant that teachers had then “worked very hard with these students and succeeded” [Metsälä].

There was also some sort of pride when respondents talked about the weaker students and how hard they worked with them and succeeded in preparing them for the matriculation examination. It was also considered “not always a very easy task” [Ennala].

“In practice, we have to turn the weaker students into matriculating students. And in that, I claim, we are really good. None of our students have failed the matriculation examination.” [Metsälä]

Teachers also felt that weaker students brought a differing aspect to their work. “[...] [...] Sometimes I think that, from the teachers’ work point of view, the job would be different without the weak ones to be taken care of.” [Ennala] The hard work with the weaker students was also considered rewarding.

Although the respondents emphasized the weaker students in the interviews, good students were also mentioned with respect and care.

“The good students are really great and wonderful and you also have to take care that they are given demanding tasks and proceed normally.” [Ennala]

The provision of remedial courses was considered important and a part of the process of ‘also making the weaker students matriculate’. Teachers felt that students took these courses quite seriously and almost all students participated in them in most the important subjects at the beginning of their studies.

“Yes. Very much. We have this entry-level test and then we recommend that everyone should participate in a remedial course, even the good students. And they do.” [Ennala]

Some were concerned whether these courses were enough. “Sometimes I have the feeling that despite the courses, the weaker students don’t learn. Because they have these gaps in knowledge, it is really difficult to fill them. [...] [...]” [Ennala]

## 4.2 Trustful and confident view

Trust or confidence perhaps best describes the views that teachers and principals expressed towards the students with high motivation and a high comprehensive school grade point average. Accordingly, students were treated more as grown-ups who were responsible and able to take care of their studies. They were also described as “conscious youngsters whose goals were mostly clear and high set” [Ilves]. In addition, it was not only students that had “ambitious minds”, but this behavior had its roots in their families. Parents “often had quite a high educational level with university degrees” and “the families themselves provided encouragement to study”. This was a fact that was seen to “affect the way students approached studying” [Ilves]. Teachers also appreciated this fact.

Professionalism and formal roles were stressed when teachers characterized their roles. Accordingly, they were “subject teachers”, “student counsellors” or “homeroom teachers”, or even “colleagues to other teachers”. While the teachers in attentive and sensitive schools also mentioned their roles as mother and father figures, here these roles were not present. If teachers stressed their ability to understand or be concerned with the lives and sorrows of the students, it was because of their professional background and not because of their personal traits.

Principals characterized themselves and their role by a feeling that they were the “first and last caretakers” in the house, meaning that they were ultimately responsible for the school. They also were quite task oriented in describing their various roles. They mentioned being a pedagogical leader, developer of the school, leader of the personnel, teacher, the one responsible for the finances, a care taker of social relations in the neighbouring community, and the marketing person of the school.

The attitude towards the skill and knowledge differences among students in this setting was not very concerned. The differences were not seen as a problem, but were recognized as being caused by the varying grading practices of comprehensive schools. Teachers also commented that they “learn to know what a nine from a particular school actually is” [Annala]. Apparently, the differences were quite small and did not affect the classroom work of teachers, since none of them mentioned that they somehow adjusted the pace in teaching. Teachers only mentioned that as a consequence of skill differences some of the students start getting lower marks.

“Some of those who have been getting tens may continue getting tens, but not so much anymore. And then it is also possible that grades sink to four, five, or six. I mean, in the end there are some differences in what they have learned.” [Annala]

The way teachers motivated students was quite light in nature. As teachers respected the independence of the students, motivation was mainly based on emphasizing the students’ own responsibility. Therefore, it was rather a matter of reminding students that they should study or should start studying and it did not involve any discussion about encouragement or concern. This view was partly due to the fact that only a small group of students had to be motivated or reminded every now and then.

“[...] [...] naturally there are some students who have to be motivated and even I motivate some of the students by saying should you not work now.” [Annala]

The same view emphasizing personal responsibility was applied to final year students with low motivation. Their own initiative and responsibility rather than teachers work was stressed when teachers described that “a few months before the matriculation examination they [students] start studying so that they will pass the examination. And some of the students even graduate with good marks.” [Annala]

Students losing their motivation to study were seen as youngsters searching their identities. In this sense there was little concern about the well-being of the students involved. It could also be argued that the role of the school was externalized and that the students’ own views were emphasized and respected.

“But there is always someone who has been accepted with a high GPA and who has wanted to study in this school, but then suddenly starts to reconsider during secondary school whether this is what she really wants. It can be considered as searching for the self when being young.” [Annala]

In some cases the stance towards the low performing and low-motivated students could also be characterized as quite harsh. They were considered strictly as “unbelievable losers” and persons “that cannot be kept under discipline because they are individuals and they work at their own pace and they don’t want to hurry into life” [Ilves].

Because most students were high achievers, they did not need any remedial instruction at the beginning of their studies. These courses were offered in the most important subjects (such as mathematics and Swedish) during the first year “but there weren’t very many youngsters attending these courses”. They thought that “they were good enough, so that it was not necessary for them to attend.” [Annala]

Teachers emphasized and took seriously the demanding nature of high achieving students. Such students were also considered as motivating. Therefore, schools carefully thought over how they could serve the students best. “Students know

what they are worth and that places certain demands on the instruction” [Annala], meaning that, for instance, the selection of new teachers has to be made carefully. In addition, teachers had to pay extra attention to their preparation of instruction and lessons.

“You can’t go in front of the class empty-handed. You have to have a certain amount of knowledge and you also have to be able to pass on this knowledge to the students.” [Annala]

Despite the high requirements, the work itself and positive attitude of the students towards studying was so rewarding that “teachers didn’t want to teach in any other school, just because of students. [...] [...]” [Annala]. Teachers also pointed out that they found their job easy in a sense “because they don’t have to make any extra effort to create a positive learning environment. Instead, it is already there when they enter the classroom.” [Annala]

### 4.3 Educating view

The educating view involved a somewhat distant attitude and in some cases also frustrated views about the students and their behaviour. Students were more or less average. There were both high and low performing students and the family backgrounds of students also varied. Teachers perceived their role in a task-related manner and very little else was considered as being part of it. Principals were “running the show” and felt they were “responsible for everything”.

Respondents felt that the motivation of the students was “quite good” [Talvio]. There were students with “clear motivation and with a good study technique” [Talvio], but with some of the students, it “could have also been better” [Talvio]. At the other extreme, there were “students who don’t do anything” [Talvio]. This diversity was considered by some of the interviewees as one of the strengths and facilitated the work. The role of the higher achieving students was to draw the weaker students into achieving better results. Strongly performing and motivated students were, in other words, used as a teaching aid that also motivated weaker students.

“What I consider as positive is that there are both students with a high GPA and with a low GPA. [...] [...] Such a school is an easy school. There the weaker students can also hang on the coat-tails of the better students.” [Talvio]

The stance towards the students with low motivation was somewhat divided. In some sense, the respondents felt that it was natural and acceptable that “there are some students who start studying (here) because of friends and because they don’t know what else to do” [Talvio] or because they, as a whole, “wonder what to do with the life” [Laurila]. These students were also seen as the “ones that are here for child minding” [Laurila], which was also considered an “acceptable

reason” [Laurila]. This view did not, however, include any emphasis on the students’ own responsibility or caring by the teachers.

Besides this, there was also a tougher view according to which some of the students “shouldn’t be in upper secondary school in the first place” [Laurila]. Some interviewees characterized students proceeding with a slower speed as decelerators. The somewhat negative emphasis of the term can be sensed from the descriptions of one teacher.

”[...] [...] Then there are weaker students who in the sense opt out to join the group of decelerators. And these decelerators have a high status, she’s a ‘decelerator’. Earlier, they were ‘repeaters’, and that was negative. But a decelerator, who has her own curriculum, has a higher status. And there are students who want to be in that group, even though they have the resources to complete their schooling in three years.” [Laurila]

A disciplinary approach was also mentioned by some of the respondents. This especially applied to first year students who “come into the classroom unprepared or forget to bring their textbooks”. Teachers felt that “the first year students can be surprisingly carefree.” [Laurila] Motivating in this environment was considered a difficult task.

“[...] [...] In other words, it is a big question how we can make this whole thing work. And we have been thinking about it a lot, but have not yet found any philosopher’s stone for how it would work better. [...] [...]” [Laurila]

Concerning instructional methods, teachers felt that they were unable to use them freely because some methods “would just create chaos” [Talvio]. As for the planning of the instruction and progression in the classroom, the strategies were mixed. Some teachers emphasized that they mostly proceeded in terms of the more motivated students and didn’t take that much account of the weaker students. Some teachers even purposefully dropped students who were not interested in their subject.

“I don’t actually plan it in a different way. We proceed in terms of the best students. During the lessons, of course, to get the attention of the ones who are not interested is a challenge. One should use some tricks. I personally try to use humor so that I don’t run anybody down too much.” [Laurila]

“I drop the students who are not interested in this subject so that they really don’t take this subject. That way I have quite good students in the end. In other words, the group is then smaller but they are also quite interested. [...] [...]” [Talvio]

Sometimes, a softer strategy was applied so that only the compulsory topics were covered during the courses. The content of the courses was also facilitated so that everyone could participate and find it interesting.

“[...] [...] This year I only taught the compulsory topics. [...] [...] I have chosen to teach general things to those ones that are not so interested. I give lectures on important persons in this field. In

that way it's somewhat easier. I also usually start from the very basics when I start teaching advanced special studies." [Talvio]

Some measures were taken to improve the skills of the weakest students. Schools offered some remedial courses in some of the subjects. Some of the differences in skills were also due to 'quality' differences between the upper schools at the comprehensive level.

"We have noticed that in different upper schools [comprehensive] they give somewhat different grades. The grading practices differ. And naturally that's not fair for the students. [...] [...]" [Laurila]

#### 4.4 Frustrated view

The greater the proportion of low-performing students, the more there was frustration and concern in the voices of the interviewees. The common denominator was the unhappy and in some cases clearly frustrated views concerning the students and especially the low-performing students. A distinctive feature compared to other categories was the presence of a slightly higher proportion of low-performing students and only a few top-performing students. The heterogeneity of the performance was also high. These factors made teachers' work more demanding and also influenced their views.

Teachers had a very diverse view of their role in this category. Some of them emphasized very strongly their role as a teacher. Some teachers also stressed the administrative roles that they were involved with. For some they provided recreation for the demanding and exhausting teaching. Men also brought up the idea of being a "disciplinarian" or a "father" where male teachers were in a minority in the school. Especially the older teachers felt they were like "grandmothers or grandfathers", taking their responsibilities in a somewhat more flexible manner. Teachers with a longer career felt they represented "authority" and "status". In this group, as with other groups, principals emphasized their role as a person being responsible for the whole school.

Some of the respondents used the term underperformance when describing students' motivation and attitude towards schoolwork. It referred to the fact that many students were happy when they achieved the minimum requirements. The teachers had the opinion that many of the students could do better if they worked harder.

"Quite a lot of them are under-performing. They are satisfied if they just graduate, even though they could do much more than that." [Kalervo]

This low-performing group of students was considered to be in the school "for child-minding" and "they had to be hustled" [Kontio]. The frustration was also clearly spelled out by some teachers who felt that almost every student in their



classes was “more or less just passing time”. According to them, there were “normally only a few students in a class who could be characterized as normal.” [Maijala]

“Their skills and knowledge are pretty weak. Take, for example, the answering in an essay form. They do not answer the question. Or it is difficult to figure out what question they are answering. Their skills are mainly weak. It takes basically the first year to teach them how, for example, to answer the questions. It’s something one would expect them to learn at comprehensive school. Sometimes I feel like I’m shepherding them. If I look at someone and see that he can hardly write, I start wondering if he’s earlier only been playing with the books. And the content is also missing.” [Kalervo]

In addition, for some teachers the low skills of some of the students invoked emotional wonder, disappointment and concern. One teacher asked “what are they basically doing at comprehensive school?” [Maijala], since many students had major deficiencies in their basic skills. Some teachers became emotional when talking about the students.

“Sometimes when I have had a maths lesson, I’m very much affected, when I realize that they don’t even know this thing. We don’t have such easy courses in maths or Swedish that the weakest students could do.” [Kalervo]

Alongside the frustration and compassion, some respondents expressed an attentive view towards the weaker students, emphasizing that they “have to be especially taken care of”. Teachers felt they “must be more like mothers here than in some other kind of upper secondary school”. This meant that they “have to take care of practical matters and make sure that they don’t get fours or that they complete their courses in time.” [Kontio]

Because of the students with low motivation, teachers perceived their work to be quite hard and demanding. They did not expect students to study independently and acquire the knowledge from elsewhere. They emphasized that “here, the teacher has to repeat until the student really grasps it” [Maijala]. The choice of teaching methods was also problematic and teachers had to be prepared to change their style according to the situation. They found this very demanding. The teaching also caused some disappointment because certain teaching methods could not be used.

“I teach history and philosophy. I’ll comment first on the history. It is [the student body] very heterogeneous. And just that is the biggest problem in pedagogy. You have to think it over and change the style and the way of teaching all the time. [...] It influences the teaching methods in the sense that I haven’t been able to get a feeling of success when using interactive teaching methods, even though I always try them once or twice during the course. [...]” [Maijala]

Lack of strongly performing students was also considered a problem. Since students are always comparing themselves to their classmates, in a class where hardly anyone is taking schoolwork seriously, there were no good role models to raise the standards. “When they look at the student next to them and see that she

can't do better than they do and that she doesn't work any harder than they do, they will not work harder." [Kalervo] For this reason, teachers felt that "it is clearly easier to work with groups having a couple of hard-working and good students." [Kalervo]

"[...]And I think that such an example also teaches the weaker ones. And it keeps up with positive learning atmosphere. If all (students) are quite weak ones and in a sense reluctant to learn, it follows that the whole climate in the classroom is unpleasant. And it feels like you would be pulling a sledge full of stones, as is usually said. But even two or three able and positive students will eventually draw the weaker ones along." [Kontio]

Weak skills were taken seriously by devoting some extra resources to remedial courses at the beginning of the upper secondary school. Teachers also described that they devoted extra work to get students to the required level, especially during the first year. In many subjects, all students are required to participate in these courses. Good study skills also have to be taught to some of the students.

"Quite a lot of time is spent on remedial instruction and therefore we are not able to proceed as far as one would hope. Then the students have another problem, related to their working habits. They think that, for instance, by only attending the course one learns Swedish. Just like the students do in comprehensive school. But naturally that's not how it works." [Kalervo]

## 5. Staff relations

Collegial and good staff relations are mentioned as one of the key characteristics of effective schools (Sammons, 1999; Teddlie and Reynolds, 2000). This involves good working relations among staff members, sharing good practices, exchanging ideas, supporting each other, observing each other and giving feedback, and working together to improve the teaching programme.

In this study, the focus in staff relations was on staff members' descriptions of the atmosphere, discussion culture, cooperation, and respect for each other. Based on the descriptions of staff relations, three quite traditional categories emerged in this study. In most of the case schools, relations were professional and in some schools they were characterized as friendly. There were also schools that had tense relations among staff. The difference between professional and friendly relations was small. Most of the characteristics were present in both categories, but with a higher degree in friendly relations.

### 5.1 Professional relations

Typical for professional staff relations were respondents' comments on staff relations such as "quite relaxed and unreserved" [Annala] as well as "open" [Laurila]. There was also some formality and mixed feelings involved when they were described as "not so warm, but rather warm than on the minus side" [Annala]. Despite these differences, many respondents stressed that there was "a good climate that could also be sensed in the staff room" [Ilves].

Professionalism manifested itself when it was emphasized that the focus was clearly on school work and "there was this sense of doing and working in the air" [Annala]. People were not so hard and fast about different things. There were certain rules and things were usually performed according to schedule. The relations between staff members were also good in the sense that there were no cliques.

"In my view it's very pleasant. There are no cliques. Nothing like I have heard these unbelievable stories that people sit together and some of them haven't even talked for a year. And brawl and quarrel. We don't have anything like that. Our climate is very nice." [Talvio]

The independence of teachers in their work was emphasized and that there had always been "the freedom of doing" [Ilves]. Colleagues and their work were also respected so that everyone "was able to do their field of work without someone breathe down their neck" [Ilves]. This included the management of the school. Teachers felt that they were "trusted to take care of their own work" [Ilves]. Some teachers also mentioned a tolerant climate in the school, which also extended to allowing impetuous opinions and discussion.

“I have been happy in this school, I would say very happy. I have felt this is a good and pleasant working place and work community. The students are nice. In principle, the work community is very nice and the climate in the staff room, even though it is large, is nice. There are always some tensions when there are many people, but they have been solved. The general climate is, however, nice. Then I have also appreciated that the principal doesn't intrude in everything but we have very high autonomy.” [Laurila]

Good and open relations among the staff members also created job satisfaction. All the interviewees told that they were happy in their current situation. Some of the teachers were actually very satisfied and many mentioned the good climate in the staff room and among the colleagues as one of reasons for their satisfaction. The professionalism of their colleagues was also appreciated by most of the respondents.

The discussion culture was open. Teachers had always engaged in discussion about instructional matters in these schools. The school climate had been supportive and open for them. The discussions were somewhat dependent on the personal chemistry of people. However, for instance, the language teachers very vividly discussed the instructional methods and matters, such as “how you do this thing or I did it like that but it didn't work out” [Annala] or “changing ideas of what to try out and how to do things and how they work out” [Ilves]. In subject group meetings there was also lively discussion.

“These kinds of discussions have always been unofficially going on in the staff room and after school. And more so that different subject groups discuss objectives and problems. Let's take as an example that some student has many problems in studies and she's not completing courses. Teachers discuss such cases. Equally, if some student is often absent from school. Such problems can be discussed.” [Annala]

Respect for independence also had some drawbacks. Some respondents felt that even though the discussion culture was open, certain topics were somewhat avoided. Discussions concerning instructional methods and the content of subjects and instruction were especially needed. In this area, teachers felt that they were alone and that there was a lack of support.

“The discussions are not very general or subject related concerning instructional methods or subject content. Mostly it's concerned about the students, so that teachers think over what to do with this student who hasn't attended lessons and hasn't completed her work. Very practical. And also important. So I think it remains at that stage.” [Talvio]

“[...] [...] We somehow support each other. Maybe in this social side. But not enough in the content of instruction. Inside the subject I think each teacher is quite alone. It naturally depends on the subject. But I think that everyone is perhaps doing too much in their own way.” [Talvio]

Despite the good overall situation there were also areas that could be improved. Some respondents commented that some of the teachers were more active and some wanted to stand aside. But even there, the teacher's own responsibility was emphasized and it was found more or less useless to try to force teachers to cooperate more.

“In some subjects the teachers are active. But I think it’s a personal attribute. We also have subjects that don’t have any cooperation. They don’t discuss with each other, they don’t share materials and tips or anything. And that’s naturally a very inconvenient situation. And if it’s not possible to change, there is no use forcing anyone into it.” [Talvio]

Occasionally, emerging disputes and disagreements between some of the staff members were considered quite normal. Some balancing between different subjects and subject groups also sometimes took place. However, these problems were minor. If disagreements emerged between certain people they were usually dealt within the staff room with understanding. They did not cause long-lasting problems or distress.

“Sometimes people get nervous and discharge their feelings very fiercely, but it doesn’t cause any catastrophe. There are no cliques so that one teacher belongs to one and one to the other. Instead, if someone is feeling bad, others try to understand that she was maybe tired or something.” [Laurila]

Teachers’ independence and responsibility for their own work was also reflected in problem situations. Normally, teachers coped with and settled these problems alone. But it was also emphasized that the climate was open to discussions and teachers openly exchanged information on, for instance, problems with students. It was also quite common to share difficult situations with other colleagues in the staff room.

“[...] [...] But we also have a sort of openness so that you can hear teachers talking with each other that damn, I had such and such an experience.” [Annala]

Some mostly quite difficult situations were also discussed with the principal. In such cases teachers did not feel that their credibility would be affected in front of the students. In fact, no such theme emerged during the interviews in these schools. Nevertheless, some concerns were expressed about the culture of teachers solving the problems mostly by themselves.

“It’s also a matter I have been thinking of a lot and in my view there is a lot to improve. In general I think that teachers are quite alone. If a teacher opens up to some of her colleagues, she doesn’t necessarily get sympathy and understanding. And especially young teachers may feel alone.” [Annala]

Because of the good interpersonal relations, teachers had many enjoyable after-school activities together such as trips, dinners and parties. The climate was usually nice and relaxed, even though in some schools some teachers also mentioned the slightly formal climate by saying “that the atmosphere wasn’t exactly very easy going” [Annala]. Often, groups of teachers also spent time together outside school hours.

## 5.2 Friendly relations

Friendly staff relations occurred in schools where respondents characterized them as “very good” and “relaxed”. The situation in the schools in this category was somewhat more open than in schools with professional relations. Everyone praised the climate, “even the substitute teachers coming from outside” [Kalervo]. The cooperation between staff members was also described as very good. Interviewees were satisfied with the situation and commented that there was “nothing to complain about”.

“The working climate and relations among staff are very good... Colleagues are easy going. There are no controversies or anything else. We have a nice climate. The visitors have also enjoyed staying with us. I don’t have the feeling that I somehow hate to come here and that again I have to see some odd persons. I have no such concerns.” [Kalervo]

“It’s nice to be here. There is no need to be nervous in the staff room or elsewhere. I think we are enjoying it here.” [Kalervo]

Teachers were clearly more unanimous and the climate for discussion was open. In the interviews, there was a sense that teachers were in the same boat, so that they were doing their work together. Teachers were unanimous about the less motivated students causing problems and therefore problems related to instruction, for instance, were considered natural.

“Teachers can freely discuss the problems here. One doesn’t have to brood over them by oneself. We all have problems because students don’t learn. And we all complain there (in staff room) together. Thank god, it’s not so that everyone should do one’s stuff and show that everything is under control. And to say that in my class no one behaves like that.” [Kalervo]

A relaxed and good climate was one of the key factors that created job satisfaction in this group. Teachers felt that they were part of the group and not outsiders in any way. So, for them the satisfaction had other sources in addition to the good climate such as the possibility to develop their professional skills, professional freedom and challenging tasks.

The respect for each other was high in these schools. The discussion culture was also open and problems with both students as well as instructional and subject matters were discussed and developed together. Similarly to schools with professional relations, these factors were mostly considered in smaller groups within the subject or subject group.

“Teachers of related subjects discuss matters quite a lot. Mathematics teachers have discussions, then language teachers. They have cooperation. They discuss instructional methods and related things.” [Ennala]

Disagreements seem not to cause any disturbing arguments. Differing opinions were considered as natural and they were tolerated as long as they did not harm the individual freedom to work.

“There are differences in courses of action. But one can also disagree. Some teachers are much stricter than others and some teachers feel that everyone should follow the same routines. But I don’t think that’s the case. And that’s also accepted, as long as it doesn’t disturb the work of someone else.” [Kalervo]

Teachers’ collegial relations were also manifested in after-school activities, which seemed to be most plentiful among the case schools. Teachers had parties, trips and other recreational activities together. They were also content with the situation.

“They meet a lot. They practice sports together and they travel together.” [Ennala]

“We arrange joint gatherings and trips. Tomorrow, for example, we are going on a field trip. So it’s not formal by any means. Then we arrange Christmas parties at someone’s place etc. and also other related activities.” [Kalervo]

“[...] [...] The yearly planning meeting, for example, is always arranged in some nice place so that the environment would be nice. I think they all have been very successful. And when it comes to other things, they have been really nice. We go and have dinner together after some event and things like that.” [Ennala]

### 5.3 Tense relations

In schools with tense staff relations the interviewees openly admitted that the situation “could be better” [Kontio] and that there were “obvious conflicts between some of the teachers” [Kontio]. In some cases the descriptions and charges were even more severe, so that the relations and the atmosphere in the staff room were described as “unpleasant” or “unfriendly”.

Problems in staff relations were common in this category, but there was variation in their severity. Some respondents had the view that disagreements mainly concerned some of the staff members and most of the teachers got along quite well with each other most of the time. The climate, for example, in the staff room was also mostly relaxed. However, there were also feelings that the atmosphere was oppressive and elusive.

“[...] [...] When you come here in the morning and say hello at the door, someone might answer, or then not.” [Maijala]

Despite problems between staff members, many interviewees emphasized that the relations between students and teachers were good and the problems did not affect them.

“In the classroom everything is okay. There are no problems with the students.” [Maijala]

The tenseness of the school climate also reduced the well-being and job satisfaction of the staff members. Quite many of them commented that they did not feel very happy in their current school. As could be expected, none of the

interviewees mentioned that they felt happy because of good relations among staff. Things that were mentioned in connection with job satisfaction were related to nice students or the current position satisfying their expectations. If colleagues were mentioned it was because of a long common history, which created some fellowship. Some of the interviewees even emphasized that they purposefully wanted to stay out of disputes and concentrate on their own goals and teaching. Work satisfaction was gained by fulfilling these own professional goals, since the communal or social factor was missing.

“I have been happy here just because I can carry out my own goals, as I said earlier. But I would say that there are some conflicts and they certainly disrupt the working climate here. My climate. And it is a serious matter. [...]” [Maijala]

Even if it was not admitted by all the interviewees, the problems were also reflected in the broader discussion culture of the schools. Some respondents had the opinion that a real discussion culture was lacking and people did not express their views openly. Or sometimes they were expressed somewhat too openly, causing open arguments. All of this created disappointments and withdrawals. To some extent the frictions also prevented the development of the school as a whole. Problems in the discussion culture and considerable differences in views certainly complicated cooperation.

“I have this impression, and I have been also told, that there isn’t any culture for discussion, I mean real culture for discussion. [...]” [Kontio]

“The tradition in this school does not encourage to such discussions. Therefore, it relies on occasional relations. It only depends on some random factors and in that sense there are things that have not been put into practice as well as they could.” [Maijala]

In daily matters the culture was partly similar to that in other categories. Teachers discussed school matters mainly with other teachers of the same subject group. Some of the staff members cooperated, but in some cases conflicts between individuals prevented or disturbed this. Some teachers had the opinion that cooperation and the exchange of ideas was unsystematic and it was limited to school matters, and problems related to individual teachers were not discussed.

“There is quite a lot of discussion going on during the breaks and lunch hours. And it’s mainly between the teachers of similar subjects, like language teachers. To a smaller extent with teachers teaching very different subjects. This would also be quite difficult, since the content is so different.” [Kontio]

“The discussions are not very organized. Individual teachers discuss with each other. I have discussions a couple of times during the school year with the science and humanities teachers. I also cooperate quite a lot with my closest colleague.” [Maijala]

Awareness of the problems was clear and there had been attempts to solve them with different approaches. Discussions had been started after open disputes and they had somewhat improved the situation. Other measures included the use of



outside speakers or consultants. Teachers, however, felt that the latter approach was useless and therefore the results had been limited.

In terms of problems encountered by the teachers, for instance, in the classroom, the strategy of coping with them somewhat varied and the problems in staff relations clearly affected this. Where the problems were less severe, teachers were able to discuss them and unload their classroom experiences openly in the staff room.

“[...] [...] It’s quite usual to explode so that one comes indignant during the break and everyone then gets to know how terrible it has been. This is a way to relieve the pressure and often it’s resolved this way. Naturally, we also discuss if someone has concrete problems and try to solve them.” [Kontio]

When relations were tenser the attitude of colleagues was less emphatic. In such cases, teachers basically tried to solve their problems independently and alone. None of them mentioned an open and inclusive climate, e.g. the possibility to share unpleasant experiences in the staff room. Teachers’ independent role was emphasized and even the help of the principal was considered as creating a credibility problem. For example, consulting the principal was considered questionable because teachers felt they could lose their face in front of the students.

“As an old hand, the starting point is, I think, to take care of the problems under one’s own steam. Because once you go and ask for your superior’s assistance, students know your rating. Okay, in this kind of situation she needed the principal’s help. You kind of narrow your margins. During my stay here I have asked for the principal’s assistance once, because one has to be very careful with this. And in that case there was also some humour in my mind.” [Maijala]

A poor climate and frictions among the staff members were also reflected in after-school activities. Teachers had them quite rarely and the cooperation between teachers was mainly related to instruction during the school hours. Teachers either did not feel that it was necessary or they did not have the time and interest to spend time together after school. Some of the teachers commented on the joint events with a highly negative tone. They felt that it was pretence to try spending leisure time together with people that you hardly say hello to during the day.

## 6. School governance and management

Educational leadership has been one of the key characteristics of effective schools, as was mentioned earlier. It refers to a wide range of factors such as how the school leader provides information, articulates the school goals, coordinates, and orchestrates participative decision making. In a narrower sense it refers to the leadership directed at the school's primary process and its immediate facilitative conditions, such as time devoted to educational versus administrative tasks, controlling of classroom processes, quality controlling of teachers, facilitating work-oriented teams, and initiating and facilitating staff professionalization (Scheerens and Bosker, 1997).

This study also examined some of the above-mentioned factors, but the main focus has been on governance and management rather than on school leadership. Therefore, governance and management are discussed here. This refers to the formal organizational structure, decision making and staff participation in decision making, and the development of school practices as a whole. The collaboration between the staff members is also discussed in this connection.

Upper secondary schooling has been quite tightly regulated in Finland and this has also been reflected in school governance, because it was quite similar in most of the case schools. The most common case was characterized as participative. There was also a case school with hierarchical governance and management. At the other end of the continuum it was characterized as equal.

### 6.1 Participative

In the majority of the case schools, management was open and participative. The roles of the school management and teachers were clear and accepted by the staff members. The principal had the leading role and was assisted by the vice-principal. Communication between the principal and vice-principal was characterized as open. The tasks and roles of the vice-principal varied to a small extent depending on the schools. In some of them, principals pointed out that the role and tasks of the vice-principal were considerable. As one of them playfully stated, "our division of tasks is such that vice-principal is doing everything and I'm doing nothing" [Talvio]. At the other extreme was the vice-principal's view that she was more in a role of "lessening the workload of the principal" [Kontio].

Typical responsibilities of the vice-principal included preparing work schedules with the list of courses, a weekly info magazine, chairing the quality committee, space/facility arrangements, maintenance of the student database, chairing some special working groups, some responsibilities related to school resources and maintenance of computer facilities.

Only one of the schools had a management group, but in all of them there were some assisting groups such as a development group, planning group, quality group, quality committee, or subject groups. Their tasks differed little from those of a management group. Common properties for the groups were that they had representatives from different subject groups and their task was to assist the principal and vice-principal in some broader issues and prepare matters that could then be discussed in the staff meetings. The tasks of the subject groups were mainly related to curriculum development.

In most of the schools some additional working groups were also established. They ensured that teachers' views were not dismissed in important matters. Many of these groups had meetings, for example, once a month or once a period, but this varied to some extent depending on the group and its purpose.

“Always when we have some project to take care of we have this practice of appointing a working group. The members then sit down and work on their task... The results are then discussed in the staff meeting. Everyone has a chance to participate.” [Ilves]

The staff meetings were usually arranged once a week or every two weeks, but there were also exceptions that were based on teachers' requests. If meetings were less frequent, some discontent arose because principals consequently felt that professional discussions between teachers were reduced. In order to plan the upcoming semester and school work, additional planning meetings were held two or three times a year. Sometimes these meetings also had some special theme related to school development.

The division of the teaching load did not cause any major problems in these schools. In small schools it was considered more or less 'automatic' because in most of the subjects there was only one teacher. In that sense, “it followed the titles” [Ennala]. In larger schools, the division of the teaching load and preparation of the working plan was usually completed either by the vice-principal or some other person. After the proposal had been prepared, teachers discussed it by themselves and divided up the courses. It was usually settled in a good spirit. The principal naturally settled the matter in cases where there were differences in opinions.

“We always decide by ourselves in subject groups. In my subject it has gone well. There have never been any disagreements and I haven't heard of anyone else having them either.” [Annala]

In three of the schools, the principal was in her first year in the post. All the principals had brought changes in school leadership and these were greeted with a positive attitude. Greater openness and less authority were noteworthy features of the new principals. There had been “a change in generation” in that sense [Annala]. Moreover, teachers' opportunities to influence the development of the school had clearly improved. According to the teachers, this change was absolutely positive.

Decision making in these schools could be characterized as fairly open and participatory. Teachers' opinions were listened to and teachers were mainly satisfied with how their views were taken into account. Some principals stressed the importance of teachers' views by pointing out that they were not able to run the school by themselves. Therefore, it was also important that teachers felt free to express their opinions about school matters.

“Even if some teachers think that in some matters I stipulate, I would say in substantial matters, everyone is able to have an influence. It wouldn't make any sense if I would do it all by myself. I would burn myself out if I would stubbornly do it in my way.” [Kontio]

According to teachers it was usually easy to discuss different matters with their principal and vice-principal. In this sense the communication between staff members and the management of the school was working in most cases.

“I can say that I find it personally easy to discuss with them (principal and vice principal) about every matter, even some troublesome matter. It's easy to talk to them and we have always reached some kind of agreement.” [Laurila]

Teachers also felt that their views were taken seriously. All important matters were discussed together in the staff meetings and “all the decisions that were essential for the operation of the school have usually been quite freely made at the staff meetings” [Ennala]. According to the teachers “there were no such notion that someone would dictate from above” [Ennala]. Teachers also felt that everyone “takes part in the discussions and brings their own ideas and thoughts” [Metsälä]. However, the main point that “surely we all have a possibility to influence” [Metsälä], was clearly expressed.

Financial matters were also usually discussed in staff meetings, but the principal was the final decision maker. Teachers, however, stressed that there was open discussion about the principles and even difficult discussions were not avoided.

“[...] [...]After the resources have been distributed there is always information about it and we get the numbers in paper. Everyone can then go through them and sometimes there have been very strict and difficult discussions about the principles. But they have always been open.[...] [...]” [Laurila]

Most teachers stressed the significance that important matters were discussed with them. Questions related to their own subject were naturally emphasized most, but general matters were also considered important. In matters concerning their own subject, teachers were usually very independent.

“The curriculum work is important and also the development of one's own teaching subject. But I also find it important that teachers can take a stand on the general goals. It's not working if everything comes from the top. I don't think it would work out if the principal would just say that that's how we are going to do. I think that it is important that teachers experience/feel that this is our shared view. Teachers have to feel that they are pulling together, that this is our common interest.” [Kontio]

Teachers felt it was usually fairly easy to get new ideas through and the success was mostly dependent on the nature of the ideas. Decision making was a joint process in which not only the principal's opinions affected the final result, but also the opinions of other staff members.

“I would say we would take it up in staff meeting and discuss about it. And if other staff members would also agree it was a good idea, I think it would be realized. We have had different kinds of projects that have required extra work from teachers and the involvement of students. They all have been realized. I don't remember that anybody has been turned off because of new ideas. In other words, I have the impression that if someone has good ideas and there are enough financial resources, they will be carried out.” [Kontio]

Since decision-making power always involves responsibility, some teachers emphasized that they did not want to make decisions in matters they were not able to take responsibility for. As one teacher expressed it:

“There are matters that I don't want to be involved in when making decisions, since I'm not the one making decisions in matters that I'm not responsible for. I only make decisions on matters that I also take responsibility for.” [Ilves]

## 6.2 Equal

In one school the governance could be characterized as being equal. The character of the principal had mainly created this climate. The principal could be described as being “one of the staff members”. Teachers expressed their satisfaction with the principal's style of managing the school. The small size of the school also made it easy to take such an open and equal approach. One teacher commented on the decision making and teachers' participation by saying that

“Our school is of the right size in a sense.[...][...] In our staff room we have a large table that everyone fits around. Everyone comes together there and drinks coffee. It's a daily routine that we sit and discuss things there together. There is no tribalism in the sense that the teachers of mathematical subjects get together in one place and the language teachers or teachers who smoke or teachers who don't smoke in another place.[...][...]” [Kalervo]

The division of work between the principal and vice-principal followed the same principles as in the schools characterized as open and communicative. Because of the size of the school there were mostly no permanent groups assisting in school management. Working groups were formed to take care of certain specific tasks that were related to preparing, for example, the curriculum or other comparable tasks or reports. In addition to weekly staff meetings there were the usual planning meetings two or three times a year.

The division of the teaching load did not cause any problems. Where there was more than one teacher teaching the same subject they were able to negotiate the division of teaching lessons.

“I think where there are several teachers teaching the same subject, it is possible to bargain with them. Since the principal makes the schedule in the end she also is responsible for it. They can’t be arranged however one likes, there are many things to be taken into account. But teachers can have an influence. If some teacher wants to lecture advanced or special courses, I’m sure it’s okey.” [Kalervo]

Teachers’ opinions were carefully listened to. In this school the principal also pointed out that she was not able to run the school by herself and therefore it was important that teachers also participated. The power of teachers to influence school matters was considered important.

“I always try to get everyone with me when I present some ideas. Because I can’t do anything alone...It has to come from the teachers and I hope that teachers would have more ideas of all kinds.” [Kalervo]

The atmosphere was open and teachers seemed to be very satisfied with it. They were especially happy with the principal’s open style of management. There was an open dialog between the teachers and the principal. Teachers felt that they were able to influence the decision making and they also were quite active in school matters.

[So teachers participate quite a lot in decision making?] “Yes, very much. The principal also pays attention to the teachers’ views and listens them very much in matters related teaching and their own work.” [Kalervo]

### **6.3 Hierarchical**

The governance in one school was characterized as hierarchical and individualistic. The principal had centralized quite a lot of power and decision making and as a consequence teachers felt somewhat constrained. Teachers also had the opinion that the principal was quite authoritarian.

As for the role and tasks of the vice-principal, they were quite limited. They mainly included “preparing monitoring lists, monitoring at the matriculation examinations, arranging a proper space for meetings and instruction, and teacher training. There were no management or other permanent assisting groups. The decision of not having a management group was a conscious one. According to principal, such a group would not work and could actually easily create friction among teachers because of jealousy.

“In some schools that have management groups they cause this tendency of many teachers feeling that the members form an odd clique that gains extra benefits. And often they also do. And this does not necessarily benefit the school but can actually harm it.” [Maijala]

Even though there was no management group, some working groups were sometimes formed. Their tasks were related to preparing, for example, the curriculum or other comparable tasks or reports.

The role of the staff meetings was emphasized by the principal. They were open to all teachers and were considered as the main instrument to inform teachers of the current issues. She also underlined that transparency and the equal distribution of information is best ensured through collective decision making and thus that all teachers attend the staff meetings.

In addition to staff meetings there were some planning meetings two or three times a year. In addition to planning the upcoming semester, another goal was to increase “the fellowship among the staff” [Maijala]. In that sense, the practices were very similar to other case schools.

Regarding the decision making, teachers’ discretion concerning their own classroom work was considerable and there were no constraints so that they “were able to do everything they wanted” [Maijala]. They also had “all the necessary support and training” [Maijala]. Teachers naturally appreciated this very much.

“I would thank the principal that she doesn’t interfere in my teaching. In some sense it’s nice that she gives responsibility... So she doesn’t interfere and there aren’t any hindrances or anything on how to proceed. I mean, you can teach here very independently.” [Maijala]

The problem was the development of the school as a whole, which created discontent among teachers. Even if teachers had initiative they had the opinion that it was difficult to get approval for their ideas where they concerned the whole school. Therefore, teachers felt more or less constrained and frustrated when it came to school development outside their own classroom work.

“I would say that teachers participate very much. Teachers have many propositions and ideas. But they are perhaps difficult to realize because the principal makes the final decision. And there is real rigmarole when we try to get something done. [...]” [Maijala]

The principal tried to emphasize open discussion in all matters, but the teachers did not have the same experiences in actual situations. Rather, they commented that there was no discussion culture and there were no attempts to develop any practices for the whole work community. Problems in staff relations also further complicated the situation.

“[...]” But let’s say that there are no opportunities for an open discussion. The pedagogical development takes place at the subject level and in your own brains. But if we take matters concerning the development of the whole school, they pass unnoticed and stay in the spare time and at the pub discussion level. In other words, the ideas don’t find their way to the development of the day school and the improvement of the process of developing.” [Maijala]

“[...]” But, on the other hand, there is no platform where new ideas could come up and be kicked. It falls down to single individuals. And if you work like that for many years you get into a rut. So, I think it would be a good idea to think over these matters together in the work community.” [Maijala]

## 7. School curriculum

At the beginning of the 1990s, school-level autonomy and decision making was considerably increased in upper secondary schools in Finland. As a consequence of this reform, the new national curriculum for upper secondary schools published in 1994 was less detailed and schools were obliged to devise their own school curriculum. By the end of 1996 all schools had completed this work. At the time of the interviews, all case schools were in the process of renewing and making some required amendments to the curriculum.

The results of school effectiveness research showed that in successful schools teachers were involved in curriculum planning and played a major role in developing their own curriculum guidelines. As for the case schools, there were some clear differences in the process of making and renewing the curriculum. Partly they reflected the overall situation of the school and partly they were a result of teachers' own attitudes towards the development of the school processes and school work. In some cases the school curriculum was considered as an administrative measure that has to be written. For some, the process and curriculum was a way to develop the work and the school. There were also mixed views and practices containing features from both of these categories.

### 7.1 Administrative tool

In this category the school curriculum was mainly considered as an administrative measure. Many of the interviewees in these schools questioned its relevance for practical work. It was seen as one of those papers that have to be written with no other significance.

“It’s much of an administrative measure. And what is written in a certain section in the curriculum does not have any significance in daily work. [...] [...]” [Kalervo]

The national curriculum and text books were considered as one of the reasons for seeing the curriculum an administrative paper. Some of the interviewees had the opinion that it is quite difficult for teachers to have any other goals than that of students absorbing the required knowledge. In practice, instruction is dependent on the content of text books and thus, the content of the curriculum is restricted. Therefore, teachers felt that they didn’t have much of a choice.

“In the end, you have to follow the text books. You can’t do everything by yourself. But you can emphasize certain things. And therefore, I sometimes when I read the original curriculum find it somewhat too grand and important if you compare it to what happens in practice. But I guess they are some kind of backbone but the meat is somewhere else.” [Talvio]

The process of writing the curriculum was usually experienced as somewhat problematic. Neither the teachers nor the principals were totally satisfied with it.



In some cases, the principal was somewhat disappointed about the passiveness of the teachers. In other cases, things were described as even worse.

“Unfortunately it’s also here so that I have made the draft. Then I have asked teachers to read and comment on it during the development days. I think it’s not a curriculum if it’s prepared by the principal. But there were very few proposed alterations. So I really don’t know how to do it.” [Talvio]

Mostly, the work itself was organized so that the general part was written by the principal and a group of teachers. Every teacher was responsible for their own subject. If there was more than one teacher teaching the same subject the work was conducted together. All the subject-specific parts were pulled together by the working group that was responsible for the general part.

“All teachers are responsible for their own subject and in case there are three teachers, together they are responsible. And then there is this general part which was also worked out together in a sense. The text I or the working group had first written was handed out and we went through it together.” [Maijala]

Problems in staff relations also manifested themselves through this process. The discussions were quietened by some of the staff members and teachers felt the situation was very unequal and depressing. They also felt that they were unable to influence the content of the curriculum as much as they wanted. Partly, that was clearly due to some tensions between certain teachers and partly it was due to inter-generational differences in views.

“The curriculum work was, I would say, a quite a negative experience of the cooperation that existed in this school. There were a few older teachers who practically dictated what was written down. Persons that love their own voice and complicated sentences and empty mumble. We have one teacher who made a short and succinct and clear version, but it was completely torpedoed by those people. It was something that indicated right away: be quiet, you don’t understand anything.” [Maijala]

There were also exceptions to the negative views where case staff relations were working. Even though the staff members did not seem to value the curriculum very highly, the process of renewing it was considered good and productive since it opened up a possibility for thorough discussions. The work itself gave a chance for people to think over the school work and discuss the content of it with colleagues.

“The ideas were discussed, which probably had some effect. We could have done it in other ways, too. But once in a while it is good to sit down and discuss and think over of what is most important.” [Kalervo]

## **7.2 Tool for school development**

The views towards the curriculum were quite positive and a realistic approach to preparing the curriculum was characteristic of this category. The process of

updating and writing the curriculum had been rich and people were usually satisfied with it. It gave the staff members a possibility for open discussion about the school goals. Teachers also gradually took the curriculum as tool to develop their own work.

When the work started interviewees took a somewhat reserved stand towards it. In some schools this was because teachers were somewhat afraid of expressing their personal opinions and felt a lack of confidence when faced with new tasks and responsibilities.

“[...] [...] It was a new and strange situation when you had to start thinking of some principles by yourself. Naturally, quite many were longing for clear guidelines on how to proceed. It was the way it had always been so why couldn't it still be that way. [...] [...]” [Laurila]

However, as soon as teachers realized all the possibilities involved they started seeing the curriculum in a more positive light. They even felt the work to be challenging and interesting, since in subject groups they were able to plan their courses and make new courses. They were also able to plan courses that had no text books that would guide the progress of students. Teachers “were able to plan the content of the whole course by themselves.” [Laurila] Curriculum work was also seen as a way to develop one's own work, especially for those with a longer career.

“Since I have been here a long time I felt it more as a reminder that things can also be done differently. What can be stressed and what can be left out and how things can be carried forward together and what is our shared interest. And from the personal point of view, to show that I can also renew and not get into a rut.” [Metsälä]

It took quite some time before teachers realized that they have the freedom to plan their own courses. At the beginning they more or less followed old procedures. Eventually, teachers realized that curriculum development is an ongoing process. And now the curriculum is living all the time so that teachers “are constantly bringing new ideas and making new courses”. [Laurila] Doing it in the old way was a frustrating process. In the new setting, the curriculum started to have a real meaning for teachers.

Naturally, there were also some differences among teachers in how they viewed the curriculum. Some of the teachers “never bother to read it through or think what it means”. [Laurila] Some of the teachers, after writing and reading the curriculum, started seeing students “as more comprehensive” by emphasizing things that are set as goals in the curriculum. And “somehow these things are also thought over in instruction” [Laurila].

To some extent the interest in the curriculum and its development was associated with the age of the teachers, so that younger teachers expressed somewhat more positive views.

“In the first time, when we revised the curriculum, there was quite a lot of this dismissive attitude. It was said that it’s only a paper. Well, I know that some had a lack of time and lot of work, so in the end the attitude was maybe not so negative. But then there are also some who have taken it as a challenge. But I must say that the attitude varies according to the age of the teacher.” [Ilves]

The argumentation over the content of curriculum and instruction was reversed in many of these schools. It also reinforced and increased the meaningfulness of the curriculum work. Most of the time the argumentation about the curriculum work had the direction that what was written in the curriculum must become materialized in the daily teaching work. Many of the interviewees turned things the other way around, so that teachers documented in the curriculum their teaching work and practices.

“Since I have long experience, I would say that they come out of my teaching profession. [...] I am, at least, very aware of the excesses. I mean, writing things that I know are nonsense. The things written down in the curriculum must be realistic. One must bear in mind the environment one is working in. One must take into account the capacity of the children. If the student body radically changes after two years we must adjust our curriculum to these changes. So I would see it like this. And not so that we first write something and then try to apply it. It doesn’t work. Then it’s only a written word on the bookshelf and not included in the actual work.” [Ilves]

However, some teachers felt constrained by the text books in the same as in the previous group and the thought that books mainly steer the process of writing the curriculum at the school, since the instructions follow the books. The content in each subject and course is therefore very much dependent on the content of the books. (These, in turn, follow the content of the national core curriculum). Therefore, the curriculum “was some kind of nonsense all together” [Ennala]. According to this view, its credibility suffered because when books were published their content did not exactly follow the core curriculum.

### **7.3 Mixed views**

In this category, views were divided. In some cases the curriculum was considered an administrative document with little relevance for everyday work. However, changing views were also present largely because of the successful process of updating the curriculum. People were usually content with the process of preparing and updating the curriculum because they felt their views were listened to and they had the possibility to influence the content.

With the former school curriculum the respondents had the view that it was most likely written “because it had to be done and it was done with the minimum effort” [Annala]. Teachers also expressed views that the curriculum work was “let’s say, the nonsense of the school department” [Annala]. The curriculum itself was considered “rather as a paper”. The main benefit of it was that maybe “you check out at the beginning of each period what has been written down.” In that way it affects as an ulterior motive the goals in each course and serves as “a

whip against teachers' backs". Teachers also felt that "most likely not all teachers have internalized or even read the curriculum." [Kontio]

During the past years, views had started to change so that "teachers were developing the curriculum together" and they had realized "that curriculum work is actually school and job development. And with the curriculum work they have the keys to that." [Annala] Practical views were also expressed according to which the significance of the curriculum depended on the content being written realistically and so that it would be possible to implement.

"It makes sense if it's made this way. In other words, if it is simple enough. And so that only those things are included that can be implemented." [Kontio]

Despite some negative views, respondents also commented that the curriculum had begun to 'live', so that its content was annually checked and revised if necessary. For example, the course offerings were checked and courses that did not attract students were removed. This change was new compared to earlier practices.

In this group, teachers seemed to be happy with the process of revising the curriculum. They were involved throughout, "each, more or less, naturally according to their own interests, but all were involved" [Kontio]. They also had a possibility to influence the content of the curriculum. The basic rule was that the general part was thoroughly discussed and changes were made if necessary. In at least one school there was also a student member taking part in the discussions.

"That's the principle. The content of the general part is agreed together. It is talked through together and changes are made if necessary, sometimes in a very detailed manner by changing the words. [So content is discussed.] Yes, especially the educational goals and general trends and emphases." [Kontio]

"Everyone was taking part really well and with the attitude that we will really think over this thing. And we generated goals and pondered. Some matters were discussed much and some less. But it was completed together." [Kontio]

## 8. Interrelationship between the categories

It is apparent from the preceding descriptions that the different categories are at least to some extent interrelated or correlated. If there are problems in e.g. staff relations, processes involving interaction between staff members such as participation in decision making and curriculum work may be difficult to carry out. Table 2 describes the interrelationships between the different categories by showing the category of each school within the themes.

As expected, schools with professional staff relations usually have school governance and management practices that enable teachers to become involved in school matters and decision making so that they are satisfied with the situation. If there were problems in staff relations, the governance and management of the school was also more centralized in nature and there was dissatisfaction among teachers concerning their role in school decision making.

A less systematic connection existed between how the students were viewed and the rest of the themes. In schools with caring and respecting views of the students, staff relations were characterized as either professional or friendly. However, the three schools with hesitant views more often did not share any similar patterns. Some had tense staff relations but others very friendly relations. The school governance and management practices and views concerning the curriculum work were also different.

Based on the categories, case schools can be further grouped into four groups. The first group is formed by Ennala and Metsälä Schools. These were characterised by attentive views about the students, friendly or professional staff relations, communicative governance and management, and curriculum development that was considered productive and as a tool for work and school development.

Annala and Ilves Schools had a very similar categorization based on the themes. Staff members had respecting views about the students, staff relations were professional and there was a mutual exchange of ideas in the decision making of the school. The views about the curriculum somewhat diverged so that they were either developing or the curriculum was already considered as a development tool. Laurila and Talvio Schools were slightly different from Annala and Ilves Schools. The views about the students were educating, i.e. more formal. In Talvio School the school curriculum was considered more as an administrative task.

Three of the schools with hesitant views about the students had mixed results concerning their staff relations, governance and management practices, and views about the curriculum. Two of them (Kontio and Maijala Schools) also had

tense staff relations, but the views and practices differed in school governance and curriculum work. Staff members had a hesitant view about the students but the relations between staff members were very good and management practices supported teachers' initiative and participation in decision making. The possibilities offered by the school curriculum were seen as limited, but the process of preparing and revising it was considered very fruitful.

*Table 2 Placement of schools into categories and formation of groups (Gr 1-4)*

	<u>Annala</u>	<u>Ennala</u>	<u>Ilves</u>	<u>Kontio</u>	<u>Kalervo</u>	<u>Laurila</u>	<u>Metsälä</u>	<u>Maijala</u>	<u>Talvio</u>
<b>Views about the students</b>									
Attentive		Gr 1					Gr 1		
Respecting	Gr 2		Gr 2						
Educating						Gr 3			Gr 3
Frustrated				Gr 4	Gr 4			Gr 4	
<b>Staff relations</b>									
Tense				Gr 4				Gr 4	
Professional	Gr 2		Gr 2			Gr 3	Gr 1		Gr 3
Friendly		Gr 1			Gr 4				
<b>Governance and management</b>									
Centralized								Gr 4	
Participative	Gr 2	Gr 1	Gr 2	Gr 4		Gr 3	Gr 1		Gr 3
Equal					Gr 4				
<b>Views about the curriculum</b>									
Administrative tool					Gr 4			Gr 4	Gr 3
Mixed views	Gr 2			Gr 4					
Tool for work and school development		Gr 1	Gr 2			Gr 3	Gr 1		

## 9. Categories, groups and inefficiency

Finally, the question of whether the findings concerning case schools are related to their inefficiency scores is discussed. The relationship between the previously-described groups and inefficiency is depicted by calculating the average inefficiency of the schools in each group (see Table 3).<sup>16</sup> It must, however, be noted that the following results are only tentative because of the low number of cases. For the same reason, no statistical tests for significance are performed.

As shown in Table 3, groups 1 and 2 had a lower average inefficiency than groups 3 and 4. In the first group, the GPA and motivation of students ranged from lower than average to average. Heterogeneity in skills of the students was usually quite close to the national average. The views of the staff members concerning the students were attentive, so that interviewees emphasized the commitment to give every student a chance to matriculate. Extra attention was especially devoted to the low-achieving students and teachers were also proud when these students succeeded.

In group 2 the students were usually motivated and in some cases highly motivated, and interviewees took a trusting views towards them. These views stressed the students' own responsibility for the school work. Low motivation and performance was uncommon and it was treated more as identity searching which did not require any major measures by the teachers. Respondents were generally confident that students would cope with their problems by themselves. The attention of the teachers was more on promoting the high performance of students.

*Table 3*                      *Average inefficiency in different groups*

	Random effects	Fixed effects
Group 1 (n = 2)	0.04	0.11
Group 2 (n = 2)	0.03	0.14
Group 3 (n = 2)	0.10	0.17
Group 4 (n = 3)	0.16	0.24

Staff relations in both groups were open and smooth and they were characterized as professional. There was a sense of collegiality involved. The discussion

<sup>16</sup> The average inefficiency in each category is depicted in Appendix 2.

culture was open and it focused on school work. Staff members were also able to settle disputes without long-lasting consequences. There were no cliques and teachers discussed and exchanged ideas and information about, for instance, instruction and the problems of students. Teacher independence was also emphasized so that everyone was comfortable doing their tasks without the feeling that someone was breathing down their neck.

Governance and management of the schools was participative. Cooperation between the principal and vice-principal was good. The roles in the school were clear and accepted by the staff members. The principal had the leading role and was assisted by the vice-principal. The tasks of the vice-principals varied to some extent from school to school. There were one or more groups (management or subject groups) assisting school management in matters requiring more extensive preparation. Teachers participated into decision making and felt that their views and suggestions were taken into account in all important matters. In their instruction and classroom work, teachers were very independent.

The school curriculum and curriculum work was perhaps earlier seen more as an administrative task with only limited relevance to everyday school work. This view, however, had been changing as interviewees realized that the curriculum was actually living. The curriculum was updated regularly and during this work it was to a growing extent seen as a tool that could also be used in developing one's own work. Teachers had realized that they were able to influence the content of courses and school matters through the curriculum. The curriculum work in these schools had mostly been participative and in some schools also created lively discussions about the ultimate goals of the instruction and school work. The process of writing and renewing the curriculum was also described as one way to exchange ideas and increase the mutual understanding and internal cohesion among staff members.

The average efficiency was lower in two groups (Group 3 and 4). Schools in group 3 were in most ways similar to schools in groups 1 and 2. The most notable difference was in views about the students, which were characterized as educating, emphasizing the students' own responsibilities. Low-achieving students were seen in a conflicting light in the sense they were understood, but there were also views that students were mostly looking for child minding and that their place was not in upper secondary school. Some attention was paid to these students, but the approach was such that the students' own initiative was stressed.

The least efficient schools (Group 4) in this study had in most cases a larger share of low-performing students than the other case schools. This fact was also reflected in respondents' views about the students. They were to some extent frustrated and hesitant. Students were characterized with terms such as underperformance. Teachers also had the view that the students were mainly passing time in school. Disappointment and in some cases also some caring



reactions were noted. In some of the schools with many low performers, teachers felt that the absence of role models further lowered the standards of the students. Large skill differences were also found problematic for instruction.

In addition to problems with the students, in two of the schools there were problems in staff relations that affected the job satisfaction of staff members. Staff members openly admitted that the situation could be better and that there were problems among some of the staff members. The discussion culture of the schools suffered because of these problems and people were not able to express their views openly. Because of personal problems and disputes the cooperation was limited to school matters. Even though teachers emphasized that the relations between teachers and students were good, the unsatisfactory situation between the staff members created friction and discontent.

Problems in staff relations also had consequences for the governance and management of the schools, especially if they were severe. Governance and management was hierarchical so that most of the tasks were centralized to the principal and teachers felt rather constrained. The vice-principal's role was limited and the development of school matters was placed in the hands of a few. Teachers lacked the possibilities to have an influence when it came to the development of matters concerning the whole school. The lack of an open culture of discussion between the teachers and problems in staff relations also complicated the matter. As for the teachers' own classroom work, the situation was considered good and they had quite free hands and the support of the principal.

In this group, the relevance of the school curriculum and the curriculum work to the practical work done in the school was more often questioned. Probably because of these views and problems in staff relations, the process of preparing the curriculum was mostly experienced as problematic and there was dissatisfaction concerning the final outcome.

In Group 4, one school was an exception to the above descriptions in terms of staff relations and governance and management. Staff relations were characterized as friendly. Teachers openly discussed the students and difficult classroom situations. Staff members were very satisfied with the situation and they praised the climate and the discussion culture.

The friendly relations were accompanied by open and equal governance and management. The difference in having open and participative governance and management was small, but the principal's attitude of being one of the others made the difference from the other groups. In this setting, teachers' opinions and ideas were carefully listened to and their contribution was considered very important. Teachers were very content with the open style and there was a constant dialog between the staff members and the principal.

## 10. Conclusions

Studies on the efficiency of schools have traditionally concentrated on determining the efficiency differences with various statistical or non-parametric methods. Seldom has a further step been taken to investigate the organizational or pedagogical characteristics and practices of schools that might produce the efficiency differences. In educational research this kind of approach has been more common in school effectiveness studies. This study analyzed the views of staff members concerning the students, staff relations, school governance and curriculum work in nine case schools that differed in efficiency based on the results of an earlier study. The analysis was based on interviews with principals and teachers.

The findings of this study show that teachers in efficient schools were attentive, implying that they considered every student as important. There was a sense of pride when respondents described how they succeeded with low-performing students. In schools with a high proportion of strongly-performing students, teachers' views were trusting and students were described as being conscientious youngsters. In inefficient schools the views were more frustrated and disappointed. Weaker students were more often seen as those who should not be in an upper secondary school and there was less talk about taking care of all students.

Staff relations in all efficient schools were good and they were characterized as professional in this study. Very good staff relations were not, however, only a hallmark of efficient schools, since in one inefficient school the situation was also very good. In schools with professional staff relations, staff members got along well with each other. There were no major problems and there was a sense of collegiality so that teachers were sharing matters related to instruction and students. Collaboration between the teachers and principal was usually frictionless and staff members were happy with the situation. In inefficient schools, there were more often problems in staff relations and these were openly admitted. These problems also complicated the collaboration between the teachers.

As for school governance and management, in efficient schools the roles of the principal and teachers were clear. The management and decision making was participative so that teachers were satisfied with how their views were taken into account. In inefficient schools, principals were more often isolated and had centralized most of the responsibility and tasks for themselves. Decision making was also centralized so that teachers were discontent with their possibilities to influence school matters.

The school curriculum and curriculum development were more often seen as way to develop the school and one's own work in efficient schools. In inefficient schools they were considered more as an administrative measure with a little relevance to everyday work. The process of writing the curriculum was also considered problematic, either because of the passiveness of teachers, the lack of a culture of discussion and problems in staff relations. Teachers were also more often discontent with the final outcome.

In addition to the above-mentioned topics, the interview data contained information on evaluation and monitoring practices of schools, staff development, and parent-school relations. These practices were very similar in every school and they were therefore not analysed any further in this paper. Monitoring of student performance was usually conducted after every period in staff meetings. Students with problems were identified and discussed. It was admitted in almost every school that they had some problems in keeping a record of every student. The system with no fixed classes provided an opportunity for some students to fall behind without teachers noticing it early enough. Staff development was usually based on individual interests and there were very few school-wide development programs. Teachers mainly attended courses a few days a year that were related to their own subject. Parent-school relations were considered mostly as of minor importance, since students were on their way to independence. Teachers and principals rather emphasized the importance of discussing all important matters directly with the students.

Many of the findings of this study related to staff relations, school governance and management and curriculum work are similar to earlier school effectiveness studies (Teddlie and Reynolds, 2000; Sammons, 1999; Sammons *et al.*, 1998). Views concerning students have not usually been addressed and the analysis of this study showed that they differed between the schools and they are important to take into consideration. The study also showed that some of the findings of school effectiveness studies related to evaluation and monitoring practices, staff development and parent-school relations didn't apply to Finnish upper secondary schools or at least to case schools of this study.

As for the method used for efficiency measurement, the inefficiency scores based on stochastic frontier analysis most likely captured some more permanent characteristics from the schools that were not included in the first stage models. Hence, it provides a promising instrument to use in efficiency evaluation of schools. To gain more certainty on this matter, a large survey data would be needed that would enable the statistical testing of the case study results.

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## Appendices

*Appendix 1*      *Average inefficiency of Finnish upper secondary schools in 2000–2004*

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	Random effects	Fixed effects
Mean	0.064	0.154
Standard deviation	0.041	0.046
Min.	0.002	0.000
Max.	0.250	0.295

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*Appendix 2      Inefficiency and views concerning the students, staff relations, school governance and management and curriculum work*

	Random effects	Fixed effects
<b>Views about the students</b>		
Attentive (n = 2)	0.035	0.141
Trusting (n = 2)	0.042	0.109
Educating (n = 2)	0.100	0.175
Frustrated (n =3)	0.163	0.239
<b>Staff relations</b>		
Tense (n = 2)	0.144	0.223
Professional (n = 5)	0.066	0.147
Friendly (n = 2)	0.113	0.193
<b>School governance and management</b>		
Hierarchical (n = 1)	0.134	0.214
Participative (n = 7)	0.073	0.154
Equal (n = 1)	0.202	0.272
<b>Views about the curriculum and curriculum work</b>		
Administrative tool (n = 3)	0.167	0.239
Mixed views (n = 2)	0.092	0.167
Tool for school development (n = 4)	0.040	0.129



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