# The Finnish miracle of PISA: historical and sociological remarks on teaching and teacher education

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One of the recent tributes to the success of Finnish schooling was the PISA 2000 project report. As befits the field of education, the explanations are primarily pedagogical, referring especially to the excellent teachers and high-quality teacher education. Without underrating the explanatory power of these statements, this paper presents some of the social, cultural and historical factors behind the pedagogical success of the Finnish comprehensive school. From the perspectives of history and the sociology of education, it also sheds light on some ironic paradoxes and dilemmas that may be concealed by the success. The focus is on the problematic nature of international comparative surveys based on school performance indicators. The question is whether they really make it possible to understand schooling in different countries, or whether they are just part of processes of 'international spectacle' and 'mutual accountability'.

The Swedish sociologist of education Donald Broady opens his book *Den Dolda läroplanen* [The hidden curriculum] (Broady, 1987) as follows:

A professional disease among teachers is the tendency to individualize and psychologise problems. In other words, they look for reasons first of all in their own (or their pupils' or principal's) personalities, and are thereby blind to the factors that define and limit the action possibilities of teachers (and pupils). (p. 11; quotation translated by the present author)

Presumably, other professionals working in the field of education are not strongly differentiated from teachers here—*mutatis mutandis*—regardless of whether they are politicians, officials or academic researchers, nor is this fallacy limited to explanations of problems (cf. Collins, 1990). In accounting for success in education, we tend to look to individuals, their psychologies and pedagogies, rather than to phenomena characterized as social, cultural, institutional or historical.

This bias has assumed new significance in the past decade, when politicians have been using international educational indicators as the basis of the common language

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of global benchmarking. As Nóvoa and Yariv-Mashal (2003) critically note, comparative educational studies are often turned into a political tool for creating educational policy or a mode of governance, rather than remaining in the research realm of intellectual inquiry. The publicity and effects of the OECD-led PISA assessment of political debate was a perfect example of this. It is symptomatic of the problem that scholarly discussion has been most vivid in so-called 'hero and villain' countries (see special issues of *Zeitschrifr fur Pedagogik*, vol. 49, 2003, and the *Scandinavian Journal of Educational Research*, vol. 48, 2004). It is more than evident that, in the era of the internationalization of educational policies, burning problems of comparability incorporate the political and epistemological dimensions alongside more familiar methodological questions (cf. Popkewitz, 1999; Prais, 2003; Goldstein, 2004).

Finland has recently been basking in educational glory due to the results of various comparative studies of educational attainments in its comprehensive schools. The recent PISA 2000 project in particular turned Finnish comprehensive schooling into a success story (OECD, 2001). This was an OECD-led project investigating 15-year-old students in 32 countries, one of the findings being that Finnish students were among the best in terms of reading, mathematical and scientific literacy. It is essential to note that PISA 2000 was not a conventional school achievement testing: 'In all cycles, the domains of reading, mathematical and scientific literacy are covered not merely in terms of mastery of the school curriculum, but in terms of important knowledge and skills needed in adult life' (http://www.pisa.oecd.org/).

It was also noted that the scores showing variations in student and school performance in Finland were among the lowest in the PISA countries. It has been concluded that the Finnish comprehensive school has managed to combine highquality performance with a high level of equality in educational outcomes. According to the first indications of the ensuing PISA 2003 assessment (OECD, 2004a, b), the triumphal march of the Finnish comprehensive schooling continues.

Explanations of, and the underlying reasons for, the Finnish success in international comparative assessments have been eagerly sought ever since. According to public discussion, it is unequivocally attributable to the excellent Finnish teachers and high-quality Finnish teacher education. These explanations have dominated the discussion in the educational field too, regardless of the more timorous and extensive explication articulated by the leading researchers in the Finnish PISA team, Jouni Välijärvi and Pirjo Linnakylä. In their booklet entitled *The Finnish success in PISA and some reasons behind it*, they conclude:

Finland's high achievement seems to be attributable to a whole network of interrelated factors, in which students' own areas of interest and leisure activities, the learning opportunities provided by schools, parental support and involvement as well as social and cultural contexts of learning and of the entire education system combine with each other. (Välijärvi *et al.*, 2002, p. 46; see also Lie *et al.*, 2003)

Without discounting the relevance of school-, teacher- and home-based activities in contributing to learning, I will focus in this paper on a few socio-historical factors that have been totally neglected in the discussion in Finland. Quite simply, it is reasonable to suppose that schooling is not confined to pedagogy, didactics or subject matter, and that it also, even mainly, incorporates social, cultural, institutional and historical issues. This view supports the argument of Nóvoa and Yari-Mashal (2003) that a comparative study in education purporting to be something more than a mode of educational governance should be a historical journey. By way of conclusion, I will present two paradoxes that could be considered meaningful and important in attempts to understand Finnish comprehensive schooling today and in the near future.

# An authoritarian, obedient and collectivist mentality

To start with, some very general aspects of Finnish history might prove essential in understanding Finnish schooling. It could be said, even at the risk of accusations of speculation, that Finnish culture still incorporates a meaningful element of the authoritarian, obedient and collectivist mentality, with its pros and cons.

Due to its geographical and geopolitical location, Finland has always been a border country between the west and the east. It is also hard to overestimate the fact that the birth of the Finnish nation state was realized under the Russian Empire during the nineteenth century. It is not an overstatement to say that eastern elements are evident in Finland everywhere and in every way, from its administrative traditions to its genetic heredity. The fact that Finnish Social Democracy retains some eastern authoritarian, or even totalitarian, flavour, compared with versions in other Nordic countries, is just one indication. At least heuristically, there is nothing strange in finding Finland together with nations such as Korea and Japan in some international comparisons (cf. e.g., Lakaniemi *et al.*, 1995; Siikala, 2002).

Another historical fact that makes Finland different from its Nordic neighbours is that it went through wars, including one of the bloodiest civil wars in modern European history. Linked to the Russian revolutionary movements and the First World War, Finland declared independence in 1917. After turbulent political controversies, the radical left achieved the ascendancy in the Finnish Social Democratic Party, and in January 1918, the 'Reds' took over power in Helsinki and southern Finland. The country was divided into 'White' and 'Red' camps. After three months of battles the Reds were beaten, and the 'White General' Mannerheim rode to Helsinki, accompanied with German troups. The Civil War killed nearly 40,000 from a nation of less than 3 million inhabitants. Three quarters of the deaths were Reds; three quarters of the killed Reds died not in battle but in prison camps and by executions and murders. This is still a 'collective trauma' (Ylikangas, 1993, p. 521) to be overcome, and only recently there have been proposals to establish a Truth Commission for working it through. After only two decades, the nation was able, however, to create an amazing front in the 'Winter War' (1939-40) against the Soviet offensive. From a psycho-historical perspective, the peculiarities of the Finnish drift to social consensus might be understood by delving into these two aspects: the sense of being a border country, and carrying the trauma of civil war ( and the celebrated consensus during the Winter War) in the collective mentality. (cf. e.g. Alapuro, 1988; Klinge, 1997; Vehviläinen, 2002).

The third social fact not to be underestimated in the dialogue on schooling in Finland is that the country belongs to the group of European nations that have most recently left behind their agrarian society and life style. The process of industrialization and urbanization was quite sluggish until the Second World War, compared with Central Europe and the other Nordic countries. In 1945, 70% of the Finnish population lived in rural areas, and nearly 60% were employed in agriculture and forestry. Following the great migration in the 1960s, by 1970 half lived in the cities and 32% were employed in industry and construction (cf. e.g. Alapuro *et al.*, 1987).

This is the other side of the coin. The late process of industrialization and the simultaneous growth of the service sector brought an exceptionally rapid structural change in society. The transitions from an agricultural to an industrial society, and further to a post-industrial society, have taken place within such a short period of time that one could almost say that these societies currently co-exist in a very special way in the country. The Finnish welfare state might be seen as a product of these historical disturbances; on the one hand industrial and individualist, on the other, agrarian and collectivist.

With education, too, the Finnish case could be seen as an accelerated, compressed version of the global process of mass schooling (see e.g., Meyer *et al.*, 1992; Simola, 1993). Finland was among the last to establish compulsory education in 1921. The comprehensive school system was developed only in the 1970s, but at the same time it was implemented very rapidly and systematically, even in a rather totalitarian way. All this is witness to the fact that the Finnish success story in education is historically very recent. Whereas almost 70% of the younger generation now aims to obtain a higher education degree, among their grandparents about the same proportion received the full elementary school certificate.

It is not possible here to go further into the cultural and mental differences between Finnish, Nordic and European people. It is enough, and necessary, to say that there is something archaic, something authoritarian, possibly even something eastern, in the Finnish culture and mentality. There is also something collective that, in a distinctive way, permeates the Finnish schooling culture.

#### The relatively high status of teachers

The second point of interest is that teachers in comprehensive schools enjoy a higher status in Finland than in most other advanced liberal countries. What is even more rare, people at both the lower and higher ends of the social spectrum seem to appreciate and respect the teacher's work.

Hannu Räty, a Finnish researcher, launched a survey-based research project in 1995 on parents' attitudes towards comprehensive school (Räty *et al.*, 1995), the results of which showed that parents of comprehensive school pupils were quite satisfied with the school. The respondents were most satisfied with the teaching (86%), co-operation (74%) and assessment (71%), but issues to do with equality and representation were also assessed positively by more than 60% of them. Even on the subject of individuality, where attitudes were most negative, there were more satisfied (48%) than dissatisfied (28%) parents.

This conclusion was supported in a Nordic comparative study of a few years ago, *Nordisk skolbarometer* (Anon, 2001). Respondents comprising a sample of the overall population and of parents with school pupils in the Nordic countries were asked what they thought about contemporary schooling. The Finns were clearly most satisfied with their schools, especially with how they had been able to provide their offspring with knowledge and skills in different school subjects. They were not in agreement with their Nordic neighbours that the knowledge requirements in school were too low, for example.

The Finnish study referred to above (Räty *et al.*, 1995) showed that Finnish parents did feel strongly about equality and equity, and did not support the tenets of marketoriented schooling or the ideology of competition and giftedness. On the contrary, they were worried about the inequality of educational opportunities. It is symptomatic and significant, however, that parents from the upper-level employee strata were more apt to criticize the school system for overlooking differences in giftedness, while working-class parents' attitudes towards the school system were generally more favourable.

A clear symptom of the relatively high image of schooling may be seen in the popularity of the teaching profession among Finnish students. Even though, as in other countries, there is also a lack of applicants for teacher training in certain subjects (especially those of mathematics and natural sciences), teaching has retained year after year its position as one of the most popular careers in terms of university entrance examinations (see, e.g. Jussila & Saari, 2000; Kansanen, 2003). According to a recent survey among the candidates for the matriculation examination (i.e. final graders in upper secondary school), teaching was clearly the number one career choice and overtook such traditional favourites as physician, lawyer, psychologist, engineer or journalist (*Helsingin Sanomat*, 11 February, 2004).

Finnish teachers apparently enjoy the trust of the general public and also of the political and even economic elite, which is rare in many countries. The leading business magazine in Finland, *Talouselämä* published a cover-page article on comprehensive schools in 2001 advocating the need for more resources to protect the Finnish school system from serious deterioration in quality (*Talouselämä*, 3, 2001). Similarly, one of the leading periodicals in Finland, *Suomen Kuvalehti* made clear in its coverpage article entitled *On the strong pupil's terms* that recent market and competition oriented school reforms had meant 'increasing differences, leaving the weak in the shadow of and in competition with the well-off' (*Suomen Kuvalehti*, 34, 2001). In all probability, this would be impossible in Sweden, for example. Although The Confederation of Finnish Industry and Employers (TT) spearheaded the Finnish neo-liberalist education policy (see Ahonen & Rantala, 2001), it has lacked the strictness and aggressiveness of its sister organization in Sweden.

#### Identification with the upper social strata

Teachers at Finnish comprehensive schools identify with the upper social strata, and their political opinions are rather conservative.

The path of the Finnish teacher towards acceptance by both the common people and the elite is a long one. As long as they have existed as a body, Finnish teachers have been fighting a 'middle-class war on two fronts' (Rinne, 1988, p. 440). On the one hand they have been struggling to convince the general public of the wisdom of bringing their children to school and leaving them there, and to gain the trust of parents that they will take care of their offspring. On the other hand, it has been necessary to convince the establishment of the usefulness and productivity of compulsory schooling.

There have been victories and defeats on both of these fronts. The land-owning peasantry in four out of every five municipalities was initially against schooling, but by the early twentieth century, which was very late in the European and Nordic contexts, almost every municipality finally had a school (Kivirauma & Jauhiainen, 1996). The country soon descended into civil war, in 1918, which brought defeat on both fronts. Elementary-school teachers mainly sided with the Whites, even though some leaders of the Reds had different expectations due to the poor economic and legal position of teachers. During the bloody showdown that followed, only 92 teachers in the whole country were charged with cooperation with the Reds, eight of whom were executed and ten cleared (Rantala, 2002, pp. 17–19).

Following the civil war, at least some of the people broke away from the universalistic idea of civilization, and at least some of the teachers adopted the ancient idea that the common people were an immoral mass that had to be civilized through missionary schooling. On the other hand, the elite lost faith in the outcome of mass schooling and in people who, in spite of the economic investments made in education, were not civilized enough to resist the message of the political agitators (Rinne, 1988, p. 440).

It was only after the Second World War that the nation state again began to invest in the teaching of its people, when teachers and ordinary people had once again proved to be worthy of the nation's trust. It is significant that radical labour-union politics, not to mention the extreme Left, have been virtually non-existent in the Finnish teaching profession, which is a point on which the teachers differ from their colleagues in various countries.

An essential element in the upward movement of Finnish teachers was their exceptionally persistent striving for professionalism. As early as 1890, primary school teachers were claiming that their extension training should be organized at university level. According to a Finnish School historian (Halila, 1950, p. 296), before the Second World War there were more primary school teachers with an upper-second-ary school certificate (the matriculation examination) in Finland than in any other country. A significant breakthrough in raising the status and prestige of teaching was the establishment of the University College of Education in Jyväskylä in the 1930s, followed after the war by the establishment of three teacher-training colleges in bigger cities. These were the first institutions that offered graduate-based training for primary school teachers, and this clearly ranked above the teacher-training seminars in the educational hierarchy. Starting in the late 1950s, the teachers' union actively demanded that the training of primary school teachers should be at the same level as that of grammar school teachers, i.e. university level.

The focal period here is the 1970s, when three key reforms were carried out. The first was the Comprehensive School Reform (1972-1977), whereby the dual-track school system of eight-year compulsory school and parallel grammar school was replaced with the single, mixed-ability comprehensive school in which the whole cohort of pupils was educated for nine years. Secondly, the Teacher Education Reform was put into practice during 1973–1979, and it radically changed the training of primary school teachers (those who teach at the lower level in the comprehensive school, from grades one to six). The responsibility for their training was removed from the teacher-training colleges and small-town 'teacher preparation seminaries' to the brand-new university faculties of education established as part of the reform. The training of primary school teachers was raised to the Master's degree level in 1979, which dramatically up-graded the role of educational studies in teacher training and led to the rapid adoption of education as an academic discipline. All this stemmed, at least in part, from the third reform, the General Syllabus and Degree Reform in Higher Education (1977–1980), which abolished the Bachelor's degree. This was brought back only in 1994, and is now being strengthened through the so-called Bologna Process (e.g., Simola, 1993; Webb et al., 2004).

It is no wonder, then, that the teachers' middle-class war on both fronts ended in a triumph for popular schooling. Risto Rinne sums it up:

Popular teachers came to be very highly trained. Except for during the transition period, the relationship between the State and the teachers' union (OAJ) developed well, especially in international comparison. Strike activities have been scarce, and the Comprehensive School Reform increased the teacher's status in society and influence on education policy. More than ever, teachers became a trustworthy ally of the state, members of the cultural and economic elite. What is more, people have been awakened to the fact that it is only through education that it is possible to climb the social ladder, or even to keep up one's position. Teachers have become judges in terms of determining the directions of our children's future. This right has been handed over to them by the state from above and by parents from below. (Rinne, 1988, p. 440; quotation translated by the present author)

In this continuing and successful social advancement, it is no surprise that teachers in Finnish comprehensive schools prefer to identify themselves with the upper middle class. Hannu Räty (Räty *et al.*, 1997), whose survey on parents is referred to above, administered the same questionnaire to teachers in 1997. They clearly shared the opinions of those in the upper-level employee strata on education policy, being more favourable towards a market-oriented and competitive school policy than parents in general. A third of them approved of the statement: 'The pursuit of equality is no longer a response to the challenges of today', and also supported the establishment of more private schools and special schools for gifted pupils.

# Pedagogical conservatism

Teachers at Finnish comprehensive schools also appear to be pedagogically conservative and somewhat reserved or remote in their relations with pupils and their families. There is a lack of strong empirical evidence to back up this statement, but what little there is offers some support.

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The results of a British report from 1996 (Norris *et al.*, 1996) were interesting here. The Finnish National Board of Education had commissioned an experienced research team from East Anglia University in the UK to find out how the great comprehensive school curriculum reform had been implemented in Finland. The team visited, observed and interviewed principals, teachers and students in 50 lower-level and upper-level comprehensive schools that were selected as being pilot schools or otherwise interested in curriculum reform. These establishments clearly represented so-called good and innovative schools in Finland.

The report was a scandal and a disappointment to its subscribers in that it showed how poorly the curriculum reform was being realized at the school level. It could be said, however, that the most interesting notions and observations concerned the pedagogical practices of Finnish comprehensive schools. The British group reported:

whole classes following line by line what is written in the textbook, at a pace determined by the teacher. Rows and rows of children all doing the same thing in the same way whether it be art, mathematics or geography. We have moved from school to school and seen almost identical lessons, you could have swapped the teachers over and the children would never have noticed the difference. (Norris *et al.*, 1996, p. 29)

in both the lower and upper comprehensive school, we did not see much evidence of, for example, student-centred learning or independent learning. (Norris *et al.*, 1996, p. 85)

In the eyes of the researchers, Finnish school teaching and learning seemed to be very traditional, mainly involving frontal teaching of the whole group of students. Observations of individualized and student-centred forms of instruction were scarce. Given the enormous similarity between the schools, the observers were convinced of the high level of pedagogical discipline and order.

This testimony of the British evaluation group is in strong contrast with some empirical findings from Sweden, for example. Lindblad (2001, p. 56) described changes in organization and interaction patterns in Swedish classrooms in the 1970s and 1990s as follows (see Table 1).

There is some empirical evidence at the school level of a difference between individualization in instruction and learning in Finland and Sweden. In a study involving interviews with teachers from 15 Finnish comprehensive schools (Simola & Hakala, 2001; Simola, 2002), two of the schools appeared to apply a somewhat individualizing approach, and another, the Ilola School, is widely known for its promotion of *eget arbete* [individual work (IW)]. This school has been struggling for more than a decade

Aspects	1973	1995
Organization	Lesson organized around teacher in front of whole class	Short introduction by teacher then students work individually or in groups
Interaction	Teacher tells or teacher asks— student responds—teacher evaluates	Short teacher instruction in combination with walking around and helping. Considerable student-student interaction

Table 1. Comparisons of teaching in grade 8 at comprehensive school, 1973 and 1995

to promote IW, but according to the principal it has not been supported. After a twelve-year fight, he appears to be quite pessimistic, even concerning the capacity of the teachers in his own school to internalize and develop it. He concluded that Finnish teachers will not give up their traditional 'teaching ex cathedra' as long as they do not have to. Although there are more and more parents and children who do not accept 'behaviouristic teaching' and wish for individual treatment, the great majority still believes in and complies with it. It is an apparent contradiction, but in the view of the principal it is straightforward: 'For me this [IW] is a very simple thing, actually. It's not even a question of resources, but just a case of turning things around, starting to see things from a different point of view'.

The approach is apparently more common and popular in Sweden than in Finland. Österlind (1998) claims in her dissertation:

[I]n Sweden the method of organizing students' work, called 'their own work' [*eget arbete*], is gaining ground. It differs from traditional classroom organization in that pupils are allowed a measure of freedom to decide for themselves when to work on the different subjects, for example. In order to check the results and get an overview, many teachers combine this individualized teaching with diaries or 'planning books', in other words, small books in which the pupils write down their weekly work. The diary makes it possible for the teacher to control the pace by asking the pupil either to slow down or to work harder. It is an important aspect of individualized teaching; the teachers still know 'where they are'. (Österlind, 1998; p. 139)

It appears from an interview study of Nordic teachers (Simola, 2002) that Finnish teachers differ from their Nordic colleagues in their relations with pupils and their families. While other Nordic teachers almost unanimously emphasized intimate, personal and confidential relations, Finnish teachers spoke to their pupils mostly as adult models and keepers of order and safety in the classroom. Rather than encouraging intimacy, some experienced Finnish teachers emphasized how important it was to keep a certain professional distance from their pupils and their homes and problems. This kind of top-down distance contradicts the rather strong emphasis on the ethos of caring, which is apparently mainly present among special teachers and classroom teachers.

# **Relative work satisfaction**

The fifth and final statement under consideration here is that the teachers in Finnish comprehensive schools seem to be relatively satisfied and committed to their work.

An unexpected result of the above-mentioned studies (Simola & Hakala, 2001; Simola, 2002), for which more than 50 Finnish teachers were interviewed, was that the teachers appeared rather content with the educational reforms of the 1990s. Almost all of them saw the decade as one of progress in various senses. They offered positive comments on the aims of the recent reforms, such as increasing school-based decision-making, encouraging cooperation between teachers and other specialists, and emphasizing the individual needs and interests of students. Their positive basic stance became even clearer in the light of interviews conducted with teachers in the ten other European countries involved in these research projects (Popkewitz & Lindblad, 2001).

Some Finnish studies do support this impression of relative satisfaction and commitment. According to a survey study focusing on teacher stress, 'many teachers are really satisfied with their work and committed to it. They see their work as rewarding, the working atmosphere as being good, and the social support in their work place as positive, too' (Santavirta *et al.*, 2001). Eighty percent of the respondents agreed with the two statements: 'This work is rewarding and I do it because I like it', and 'I am very committed to my current work'.

In the light of many other studies, such an extent of work satisfaction seems strange because, according to general opinion, teachers are pushed hard in their work. Various studies show evidence of increasing levels of stress among Finnish teachers (e.g., Salo & Kinnunen, 1993; Viinamäki, 1997). One could say that in virtually all of the recent interview studies that have been conducted, teachers complain about increasing stress, more difficult students, and a growing workload (see, e.g., Simola & Hakala, 2001; Virta & Kurikka, 2001; Simola, 2002; Syrjäläinen, 2002).

There was something curious in the Finnish education policy of the 1990s that might explain this co-existence of relative satisfaction and increasing stress. Since the early 1990s, state educational discourse has focused on evaluation as the most essential tool of quality development. Whereas it had previously been believed that the goals of education could be reached by sticking to strict norms, the conviction in the 1990s was that their attainment required the setting of national core targets and the evaluation of achievements in the light of subsequent results. In this rhetoric, the Finnish 'Planning State' became the 'Evaluative State', attempting to practice educational policy through government by results. According to the Secretary General of the Ministry of Education, evaluation was seen as a pivotal element in the new steering system since it 'replaces the tasks of the old normative steering, control and inspection system' (Hirvi, 1996, p.93) (cf. Rinne *et al.*, 2002; Simola *et al.*, 2002).

A discourse of evaluation prevailed on the school level during the 1990s, but without the evaluation in practice. Despite the rhetoric, there has been virtually no formal control system governing the work of schools since the changes that were implemented in the early part of the decade. Narrative referring to the lack of any kind of evaluation, assessment or control was quite strong among the above-mentioned interviewees on the school level (Simola & Hakala, 2001):

Nobody organizes the evaluation of our teaching here, I have never met anyone here who has evaluated our standards of teaching.

It has changed during this ten-year period. Things have become more independent; the functioning of schools has become notably more independent than before. There isn't any inspection or control. We think there isn't any. (p. 115)

Supervision of the work done in the schools and the results achieved is minimal by international standards. All traditional forms of control over the teacher's work had, for all practical purposes, disappeared by the beginning of the 1990s. The school inspectorate, a detailed national curriculum, officially approved teaching materials,

weekly timetables based on subjects taught and a class diary in which the teacher had to record what was taught each hour—all these traditional mechanisms were abandoned. Finland has never had a tradition of nationwide standardized testing at the comprehensive school level. It was not until 1999 that the obligation to practice evaluation was formalized and the first surrogate control mechanism, the standard scale for giving marks on the comprehensive school graduation certificate (Opetushallitus, 1999), was introduced.

## No longer a miracle

In summary of the socio-historical points made above, first, a somehow archaic, authoritarian but also collective culture prevails, secondly there is some social trust and appreciation of teachers, third, there is a tendency towards political and pedagogical conservativeness among teachers, and finally, teachers are relatively satisfied with and committed to their teaching.

It might be worth combining these explanatory elements with some other rather well-known facts, rarely mentioned though. Again for historical reasons, there is a certain cultural homogeneity among pupils in most Finnish classrooms. This came to light in the PISA 2000 project in the proportion of non-native students in Finland, which was only one fifth of the OECD average (OECD, 2001).

Moreover, a well-organized and effective special education system, run by university-trained teachers, used to ensure a certain level of homogeneity by moving the most 'difficult' pupils out of the classroom into special educational units or clinics. It is only in the last five years or so that the policy has gradually begun to shift towards full inclusion where the pupils with special status are, as far as possible, integrated into 'normal' classrooms. The share of the pupils diagnosed as needing special education (i.e. having a status of special pupil) doubled during the last ten years (in 1995, 2.9%; in 2003, 6.2% of the cohort). What is notable here, however, is that while in 1995 nearly all of these 17,000 pupils were taught in full-time special education, in 2003 this share was only 60% (22,000 pupils); 40% of the special education pupils were integrated completely or partly in ordinary classroom teaching. During the same period, the share of the pupils taking advantage of part-time special education increased from about 15% to 20% of the cohort (Tilastokeskus, 2004). It is from the strong ethos of equality and the very idea of comprehensive schooling where comes the other side of this effectiveness: the strong dedication to the idea of 'no child left behind', found especially in primary and special education. (see e.g., Kivirauma, 2001; Simola & Hakala, 2001). It is fair to say that the extent of student homogeneity and the strong special education system have the effect of unifying and harmonizing the groups taught by the classroom teacher.

It is apparent that some essential aspects of 'the network of interrelated factors', referred to above by researchers in the Finnish PISA team, are present. In any case, the Finnish 'miracle of PISA' no longer appears to be a miracle. To put it simply, it is still possible to teach in the traditional way in Finland because teachers believe in their traditional role and pupils accept their traditional position. Teachers' beliefs are

supported by social trust and their professional academic status, while pupils' approval is supported by the authoritarian culture and mentality of obedience. The Finnish 'secret' of top-ranking may therefore be seen as the curious contingency of traditional and post-traditional tendencies in the context of the modern welfare state and its comprehensive schooling.

It is tempting to think that at least some of the authority of Finnish teachers is based on their relatively strong professional identity, which enables them to season their traditional teaching with the spice of progress. It is also tempting to think that at least some of the obedience of Finnish students stems from the natural acceptance of authority, and the ethos of respect for teachers. Some of the observations of the British evaluation group referred to above appear to support this positive interpretation:

Without exception the schools appeared as calm, secure places for pupils to work. Finnish pupils seemed generally well behaved; problems of order and discipline were few and confined to individuals or small groups. (...) There appeared to be concern for others, and respect for property. Teachers' relationships with pupils generally demonstrated caring and mutual respect, and there was little sense of teachers needing to exercise strict discipline or authority. (Norris *et al.*, 1996, p. 39)

These [observation] examples were deliberately drawn from the whole range of schools, and include examples of teaching in both upper and lower comprehensives. No doubt some of them reflected high-quality teaching and considerable professional skill within the formal whole-class instructional tradition, and there is little doubt that in the best cases, the pupils enjoyed the lessons enormously and probably learned a lot. (Norris *et al.*, 1996, p. 62)

# **Paradoxical conclusions**

In conclusion, two paradoxes are identifiable in the success story of Finnish schooling. First, the model pupil depicted in the strongly future-oriented PISA 2000 study seems to lean largely on the past, or at least the passing world, on the agrarian and pre-industrialized society, on the ethos of obedience and subjection that may be at its strongest in Finland among late modern European societies. This paradox leads to the question of what will happen to teaching and learning in Finnish schools when teachers no longer believe in their traditional mission to be model citizens and transmitters of knowledge, but rather see themselves as facilitators, tutors and mentors. What will happen to teaching and learning in Finnish schools when the pupils no longer accept their position as pupils, but rather 'climb the walls', as one urban primary-school principal put it?

The second paradox is that the politically and pedagogically progressive comprehensive school reform is apparently being implemented in Finland by politically and pedagogically rather conservative teachers. What is more, the outcomes seem to match the aims better than in a few other countries. This paradox raises the question of whether it is possible to move easily from the older authoritarian to an updated neo-authoritarian pedagogy. Given the lack of a real tradition of pupil-centred teaching legitimized by social policy, it might be rather easy to adopt the new economically legitimized pedagogy. Its pivotal elements are dense and clear: distinctive and discriminative competition, popular constructivist shifting of the responsibility for learning to the pupil, and all-pervasive assessment and self-evaluation.

From the perspective of this Finnish 'historical journey', following the recommendation of Nóvoa and Yariv-Mashal (2003), how do these PISA-type comparative assessments appear? Technically well executed, they undoubtedly gather together interesting information on different educational systems (see e.g., Mulford, 2002), and their database will facilitate further sophisticated and fruitful analysis (see e.g., Allmendinger & Leibfried, 2003; Nash, 2003; Gorard & Smith, 2004). The ranking and benchmarking indicators and their combinations might indeed tell us something about 'how far students near the end of compulsory education have acquired some of the knowledge and skills that are essential for full participation in society' (What PISA assesses, http://www.pisa.oecd.org/). The case of Finland discussed above demonstrates, however, that this information does not necessarily further understanding of the development and dynamics of a specific educational system. If anything, it appears to contribute to what Nóvoa and Yariv-Mashal (2003) call processes of 'international spectacle' and 'mutual accountability' rather than processes of improvement and development. On this basis it is still easy to agree with Goldstein (2004), an eminent British statistician in education, in his argument against the strict and measurable targetsetting advocated by UNESCO in its ambitious 'Education for All' (EFA) programme:

Each educational system can develop different criteria for assessing quality, enrolment, etc. and instead of monitoring progress towards an essentially artificial set of targets EFA could concentrate the resources that it is able to mobilize towards obtaining the necessary understanding of the dynamics of each system. This would then allow constructive policies to be implemented. The emphasis would be on the local context and culture, within which those with local knowledge can construct their own aims rather than rely upon common yardsticks implemented from a global perspective. (p. 13)

#### References

- Ahonen, S., & Rantala, J. (2001) Nordic lights. Education for nation and civic society in the Nordic countries, 1850–2000 (Helsinki, Finnish Literature Society).
- Alapuro, R. (1988) State and revolution in Finland (Berkeley, CA, University of California Press).
- Alapuro, R., Liikanen, I., Smeds, K. & Stenius, H. (Eds) (1987) Kansa liikkeessä [The nation in movement] (Vaasa, Kirjayhtymä).
- Allmendinger, J. & Leibfried, S. (2003) Education and the welfare state: the four worlds of competence production, *Journal of European Social Policy*, 13(1), 63–81.
- Anon (2001) Nordisk skolbarometer—Attityder till skolan år 2000. TemaNord 2001 [Nordic school barometer—attitudes toward school year 2000] (Köpenhagen, Nordisk Ministerråd).
- Broady, D. (1987) Den dolda läroplanen [The hidden curriculum] (Stockholm, Symposion).
- Collins, R. (1990) Changing conceptions in the sociology of the professions, in: R. Torstendahl & M. Burrage (Eds) *The formation of professions. Knowledge, state and strategy* (London, Sage), 11–23.
- Goldstein, H. (2004) Education for all: the globalization of learning targets, *Comparative Education*, 40(1), 7–14.
- Gorard, S. & Smith, E. (2004) An international comparison of equity in education systems, *Comparative Education*, 40(1), 15–28.
- Halila, A. (1950) Suomen kansakoululaitoksen historia. Neljäs osa. Oppivelvollisuuskoulun alkuvaiheet (1921–1939) [History of Finnish elementary schooling (1921–1939)] (Helsinki, WSOY).

- Hirvi, V. (1996) Koulutuksen rytminvaihdos. 1990-luvun koulutuspolitiikka Suomessa [Changing pace of education. Education policy of the1990s in Finland] (Helsinki, Otava).
- Jussila, J. & Saari, S. (Eds) (2000) Teacher education as a future-moulding factor. International evaluation of teacher education in Finnish universities. Publications of the Finnish Higher Education Evaluation Council 9. Available online at: http://www.minedu.fi/minedu/education/finheec/ finheec.html (accessed 20 November 2004)
- Kansanen, P. (2003) Teacher education in Finland: current models and new developments, in:
  B. Moon, L. Vlãsceanu, & C. Barrows (Eds) *Institutional approaches to teacher education within higher education in Europe: current models and new developments* (Bucharest, Unesco-Cepes), 85–108.
- Kivirauma, J. (2001) Erityisopetuksen historialliset kehityslinjat Suomessa [The historical lines of development in Finnish special education], in: M. Jahnukainen (Ed.) Lasten erityishuolto ja opetus Suomessa [Special education in Finland] (Helsinki, Lastensuojelun keskusliitto), 23–33.
- Kivirauma, J. & Jauhiainen, A. (1996) Ensimmäisten kansakoulujen perustaminen sivistyneistön suurena projektina [Establishment of the first elementary schools as the great project of the elite], *The Finnish Journal of Education Kasvatus*, 27(2), 153–163.
- Klinge, M. (1997) A brief history of Finland (Helsinki, Otava).
- Lakaniemi, I., Rotkirch, A. & Stenius, H. (Eds) (1995) 'Liberalism': seminars on historical and political keywords in Northern Europe (Helsinki, University of Helsinki).
- Lie, S., Linnakylä, P. & Roe, A. (2003) Northern lights on PISA: unity and diversity in the Nordic countries in PISA 2000 (Oslo, University of Oslo).
- Lindblad, S. (2001) Koulutus ja sen muuttuvat merkitykset pohjoismaisessa hyvinvointivaltiossa [Education and its changing meanings in the Nordic welfare state], in: A. Jauhiainen, R. Rinne & J. Tähtinen (Eds) Koulutuspolitiikka Suomessa ja ylikansalliset mallit [Finnish education policy and supranational models] (Turku, Suomen kasvatustieteellinen seura. Kasvatusalan tutkimuksia 1), 45–72.
- Meyer, J. W., Ramirez, F. O. & Soysal, Y. N. (1992) World expansion of mass education, 1870–1980 Sociology of Education, 65(2), 128–149.
- Mulford, B. (2002) Sorting the wheat from the chaff—knowledge and skills for life: first results from OECD's PISA 2000, *European Journal of Education*, 37(2), 211–221.
- Nash, R. (2003) Is the school composition effect real? A discussion with evidence from the UK PISA data, *School Effectiveness and School Improvement*, 14(4), 441–457.
- Norris, N., Asplund, R., MacDonald, B., Schostak, J. & Zamorski, B. (1996) An independent evaluation of comprehensive curriculum reform in Finland (Helsinki, National Board of Education).
- Nóvoa, A. & Yariv-Mashal, T. (2003) Comparative research in education: a mode of governance or a historical journey? *Comparative Education*, 39(4), 423–439.
- OECD (2001) Knowledge and skills for life: first results from PISA 2000. Available online at: http:// www.pisa.oecd.org/.
- OECD (2004a) Learning for tomorrow's world: first results from PISA 2003. Available online at: http://www.pisa.oecd.org/.
- OECD (2004b) Problem solving for tomorrow's world. First measures of cross-curricular competencies from PISA 2003. Available online at: http://www.pisa.oecd.org/(accessed 21 December 2004)
- Opetushallitus (1999) Perusopetuksen päättöarvioinnin kriteerit. Arvosanan hyvä (8) kriteerit yhteisissä oppiaineissa [The criteria for graduating evaluation in the basic education. The criteria of the mark 'good' (8) in the common teaching subjects] (Helsinki, Opetushallitus).
- Österlind, E. (1998) *Disciplinering via frihet: elevers planering av sitt eget arbete* [Discipline through freedom] (Uppsala, Acta Universitatis Upsaliensis 75).
- Popkewitz, T. S. (1999) A social epistemology of educational research, in: T. S. Popkewitz & L. Fendler (Eds) *Critical theories in education: changing terrains of knowledge and politics* (New York, Routledge), 17–42.
- Popkewitz, T. S. & Lindblad, S. (Eds) (2001) Listening to education actors on governance and social integration and exclusion: a report from the EGSIE project (Uppsala, Uppsala University).

- Prais, S. J. (2003) Cautions on OECD's recent educational survey (PISA), Oxford Review of Education, 29(2), 139–163.
- Rantala, J. (2002) Kansakoulunopettajat ja kapina. Vuoden 1918 punaisuusyytökset ja opettajan asema paikallisyhteisössä [Teachers and the revolt] (Helsinki, Suomalaisen Kirjallisuuden Seura).
- Räty, H., Snellman, L., Mäntysaari-Hetekorpi, H. & Vornanen, A. (1995) Vanhempien tyytyväisyys peruskoulun toimintaan ja koulunuudistuksia koskevat asenteet [Parental satisfaction with the comprehensive school and attitudes towards reforms], *The Finnish Journal of Education Kasvatus*, 26(3), 250–260.
- Räty, H., Snellman, L. Kontio, M. & Kähkönen, H. (1997) Opettajat ja peruskoulun uudistaminen [Teachers and reforms of the comprehensive school], *The Finnish Journal of Education Kasvatus*, 28(5), 429–438.
- Rinne, R. (1988) Kansan kasvattajasta opetuksen ammattilaiseksi: suomalaisen kansanopettajan tie [From educator of the people to professional of teaching: the path of the Finnish primary school teacher], *The Finnish Journal of Education Kasvatus*, 19, 430–444.
- Rinne, R., Kivirauma, J. & Simola, H. (2002) Shoots of revisionist education policy or just slow readjustment? The Finnish case of educational reconstruction, *Journal of Education Policy*, 17(6), 643–658.
- Salo, K. & Kinnunen, U. (1993) Opettajien työstressi: Työn, stressin ja terveyden seurantatutkimus 1983-1991 [Teacher stress: a seven year follow-up study of teachers' work, stress and health] (Jyväskylä, Jyväskylän yliopistoin työtutkimusyksikön julkaisuja 7).
- Santavirta, N., Aittola, E., Niskanen, P., Pasanen, I., Tuominen, K. & Solovieva, S. (2001) Nyt riittää. Raportti peruskoulun ja lukion opettajien työympäristöstä, työtyytyväisyydestä ja työssä jaksamisesta [Enough! A report of work environment, satisfaction and stress of comprehensive and upper secondary school teachers) (Helsinki, Helsingin yliopisto).
- Siikala, A. (Ed.) (2002) Myth and mentality: studies in folklore and popular thought (Helsinki, Finnish Literature Society).
- Simola, H. (1993) Educational science, the state and teachers. Forming the corporate regulation of teacher education in Finland, in: T. S. Popkewitz (Ed.) *Changing patterns of power: social regulation and teacher education reform in eight countries* (Albany, NY, State University of New York Press), 161–210.
- Simola, H. (2002) Finnish teachers talking about their changing work, in: K. Klette, I. Carlgren, J. Rasmussen & H. Simola (Eds) Restructuring Nordic teachers: analyses of interviews with Danish, Finnish, Swedish and Norwegian teachers. Report no. 3 (Oslo, University of Oslo), 49-70.
- Simola, H. & Hakala, K. (2001) School professionals talk about educational change—interviews with Finnish school level actors on educational governance and social inclusion/exclusion, in: S. Lindblad & T. Popkewitz S. (Eds) *Listening to education actors on governance and social integration and exclusion* (Uppsala, University of Uppsala), 103–132.
- Simola, H., Rinne, R., & Kivirauma, J. (2002) Abdication of the education state or just shifting responsibilities? The appearance of a new system of reason in constructing educational governance and social exclusion/inclusion in Finland, *Scandinavian Journal of Educational Research*, 46(3), 237–246.
- Syrjäläinen, E. (2002) Eikö opettaja saisi jo opettaa? Koulun kehittämisen paradoksi ja opettajan työuupumus [Couldn't the teacher eventually teach? The paradox of school development and teachers' stress] (Tampere, Tampereen yliopisto).
- Tilastokeskus (2004) *Erityisopetus 2003* [Special Education in 2003]. Available online at: http:// www.stat.fi/til/erop/index.html (accessed 21 December 2004)
- Välijärvi, J., Linnakylä, P., Kupari, P., Reinikainen, P. & Arffman, I. (2002) *The Finnish success in PISA—and some reasons behind it* (Jyväskylä, Koulutuksen tutkimuslaitos).
- Vehviläinen, O. (2002) Finland in the second world war: between Germany and Russia (Basingstoke, Palgrave).

- Viinamäki, T. (1997) Opettajien ja sosiaalityöntekijöiden psyykkinen rasittuneisuus [Psychic distress among teachers and social workers] (Kuopio, Kuopion yliopiston julkaisuja E. Yhteiskuntatieteet 50).
- Virta, A. & Kurikka, T. (2001) Peruskoulu opettajien kokemana, in: E. Olkinuora & E. Mattila (Eds) Miten menee peruskoulussa? Kasvatuksen ja oppimisen edellytysten tarkastelua Turun kouluissa [How does the comprehensive school work, finally?] (Turku, Turun ylioipiston kasvatustieteiden tiedkunnan julkaisuja A: 195), 55–86.
- Webb, R., Vulliamy, G., Hämäläinen, S., Sarja, A., Kimonen, E. & Nevalainen, R. (2004) A comparative analysis of primary teacher professionalism in England and Finland, *Comparative Education*, 40(1), 83–108.
- Ylikangas, H. (1993) *Tie Tampereelle* [The road to Tampere. A documented description of military operations leading to the surrender of Tampere in the Finnish Civil War] (Helsinki, WSOY).