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The Finnish comprehensive school system as a model of developing education

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The OECD PISA Studies

- OECD has implemented six times in the 2000s PISA-studies that measure the knowledge and capabilities of 15-years old students in reading, math and natural scientific knowledge. 65 countries participated in the 2009 study.
- The goal of PISA is to measure students' capability interpret and utilize knowledge in the real life like situations
- The results of the Finnish students have been at the top in all the PISA studies. That is why the interest in the Finnish model of education has raised.

Distribution of expertise in natural scientific knowledge of the 15-year old students in Finland and in OECD average,

PISA 2006

Level of natural scientific expertise	Finland	OECD Average
6 and 5 Excellent	20,9	9,0
4 Good	32,2	20,3
3 Satisfactory	29,1	27,4
2 Passable	13,6	24,0
1 Weak or under	4,1	19,3
Total	100,0	100,0

The Finnish model as an alternative to the dominant model of school development

- The prevailing international model of school development is based on 1) **choice**, 2) **competition** and 3) **centralized test-based accountability**
- In the Finnish system no one of these principles is visible.
- Paradox: Finland has been competitive in PISA comparisons by avoiding competition

My conclusion

- The PISA results show that a public educational system inspired by educational equality is able to produce both excellence and equality with moderate costs.
- Public total spending on education 2004 percentage of GPD (OECD): Denmark 7,1%, Finland 5,8%, France 5.6 % and, UK 7,3 %

The emergence of the Finnish comprehensive school and the political ideal of equality

- The School System Act in 1968. The dual track school was replaced by the *Comprehensive school* in which the whole cohort of pupils was educated for nine years. It was expected to secure equal opportunity for further studies for the whole age cohort. The reform was realized in the 1970s.
- The goal was “*to provide all citizens with equal opportunities to receive a high-quality, free of charge education, regardless of age, domicile, economic situation, gender or mother tongue.*”

Education as a basic civic and social right (Finnish constitution 2000)

Section 16 - Educational rights

- Everyone has the right to basic education free of charge. Provisions on the duty to receive education are laid down by an Act.
- The public authorities shall, as provided in more detail by an Act, guarantee for everyone equal opportunity to receive other educational services in accordance with their ability and special needs, as well as the opportunity to develop themselves without being prevented by economic hardship.

The explanations for the success of of the Finnish students in PISA tests

- 1) The popularity and esteem enjoyed by the teaching profession as well as the university-level education of teachers
- 2) The decentralized, trust-based governance of the comprehensive school system
- 3) Special education systems based on the early recognition of learning difficulties
- 4) Learning within school community and between schools
- 5) Support on local experimentation and institutional learning
- 6) The contribution of other capability-cultivating institutions of the welfare state

Popularity and esteem of the teaching profession and university–level education of teachers

- Teacher studies (applied education) is by far the most popular career among university entrance examinees in the universities
- Teacher Education Act 1971: Master of Science Degree. Special education teachers: one year extra studies. Yearly obligatory further education system.
- In further education days (3 days a year) the newest research results, diagnostic methods, and accounts of the new pedagogical solutions are transmitted to teachers.

The decentralizing of curriculum and school governance in the 1980s and in the 1990s

- 1994 curriculum framework. The municipalities and schools are required to do their own curricula.
- “Research results show that the personal participation of teachers in designing the curriculum is a precondition for real change in the internal life of a school. Teachers feel that curricula designed by others are extraneous and they are not committed to implementing them.”
- No national tests. Formative evaluation in schools in order to develop the teaching and to help students and inform parents. The residual forms of inspection were eliminated.

The Finnish way of school governance Aho & al., (2006) A shift from a culture of control to a culture of trust

- “Decentralization and increased local autonomy have not only enabled schools to have more freedom to establish optimal teaching methods and learning environments. They have also given them true leadership and responsibility in education development and school improvement.”

The headmaster and director of the mathematics-natural science track at Olari School in the city of Espoo

“A great deal of confidence is placed in teachers [in Finland]. A great deal of power, responsibility and freedom is given to them, and they deserve it. No ponderous control mechanisms are needed. In many countries inspections and constant testing form a barrier to creativity and misdirect the teacher’s energy. In Finland the teachers plan their teaching, from the curriculum design to the individual lessons. (...) Subject teachers in Finland follow the same curriculum as university students who are majoring in the subject. The teacher’s network therefore includes people who are active in their areas of research, and new achievements in science trickle down to schools through unofficial channels.”

The test results are and should not be used for the comparison of schools

- In a recent study (2012) 93% of both rectors and teachers of comprehensive schools resisted the publication of rankings lists of schools because it would accelerate the division of schools into good and bads. Almost as many agreed that they would increase teaching for testing and would be detrimental for the development of teaching.

Special education system: support to overcome of any kind of leaning difficulties as a politics of inclusion

- Special education used to be diagnosis and direction of “deviant” or “exceptional” children to special classes – a psycho-medical approach dominated
- In the 1970s the understanding of specific learning difficulties (reading and writing difficulties, dyslexia) increased and a part-time special education in small groups to overcome them was developed. The training of “classless” special education teachers started in 1972
- The pedagogical principle of “overcoming the learning difficulties” (of achieving the curriculum goals) was formulated

The principle of early recognition of learning difficulties and immediate provision of support

A core principle of the Finnish special education system in the 1990s became *early identification of learning difficulties and immediate provision of sufficient support* to meet the school's learning objectives while allowing the student to remain in class with his/her peers. The intervention in first grades prevents the accumulation of learning difficulties during the school career.

While some 5 percent of students received special education in 1970, by 2010 approximately 30 percent of all Finnish comprehensive school students receive at least some special education; most of them part-time assistance for minor learning difficulties. This is the highest figure among the OECD countries.

The provision of diagnostic and remedial tools

- The core principle (early recognition and immediate support) would be futile unless relevant tools recognizing the learning problems and intervening were not available
- The use diagnostic and pedagogical tools constitutes a backbone of the expertise of the special education teachers. Variety of toolsets used for different problems, age-groups and subjects has been developed by psychologists, logopedists and special education teachers. These means are complementary.

Providers of diagnostic tool-packages and teaching materials used by special education teachers in the municipality of Espoo

Type of Organization	N	Name of Organization
University Research Institutes	2	Niilo Mäki Institute (NMI), University of Jyväskylä and Centre for Learning Research (CLR), University of Turku
Small firms specialized in tools of special education	3	CognAid, Scribeo, Opperi
Professional and civic associations and the firms owned by these	3	The Finnish Union of Speech Therapists (owns Early Learning), The Finnish Reading Association, The Finnish Psychological Association (owns Psykologien Kustannus Oy)
Publishing houses	3	Otava, WSOY, W&G, PS-kustannus
Hybrids	1	Mathland –municipalities in collaboration with Opperi

Example of research-based tool. Graphogame for the prevention of dyslexia

- A research group from Niilo Mäki Institute in the University of Jyväskylä found in a longitudinal study of Dyslexia that the difficulty of connecting sounds and letters by young children is a strong predictor of dyslexia. The group developed a training tool, **Ekapeli** (Graphogame), based on this findings. It is freely available in the Internet and loadable to mobile phones.

The uses of Graphogame

“The game is available via the Internet to children who have parental permission. (...) We have recommended kindergartens where all children in Finland have their pre-school year before school that the game should be used during the last two months (April-May) and preferably with massed practice. This means short 5-15 minute periods several times per days for as long as children have learned letter-sound connection (...). Today, more than 50.000 children in Finland have tried the game and very few have failed to benefit.” (Lyytinen et al. 2009, 672)

Student welfare group (SWG) and collaboration between schools

- SW group is comprised of a rector, a class teacher, a special education teacher, a school nurse, a school curator, a school psychologist. It regularly review the situation in classes , discuss the problems of learning and conduct of individual students and looks for solutions
- Regional groups of special education teachers (for support and learning)
- “Fair of good practices” 20 schools present their pedagogical solutions, tools and innovations to all teachers of the municipality

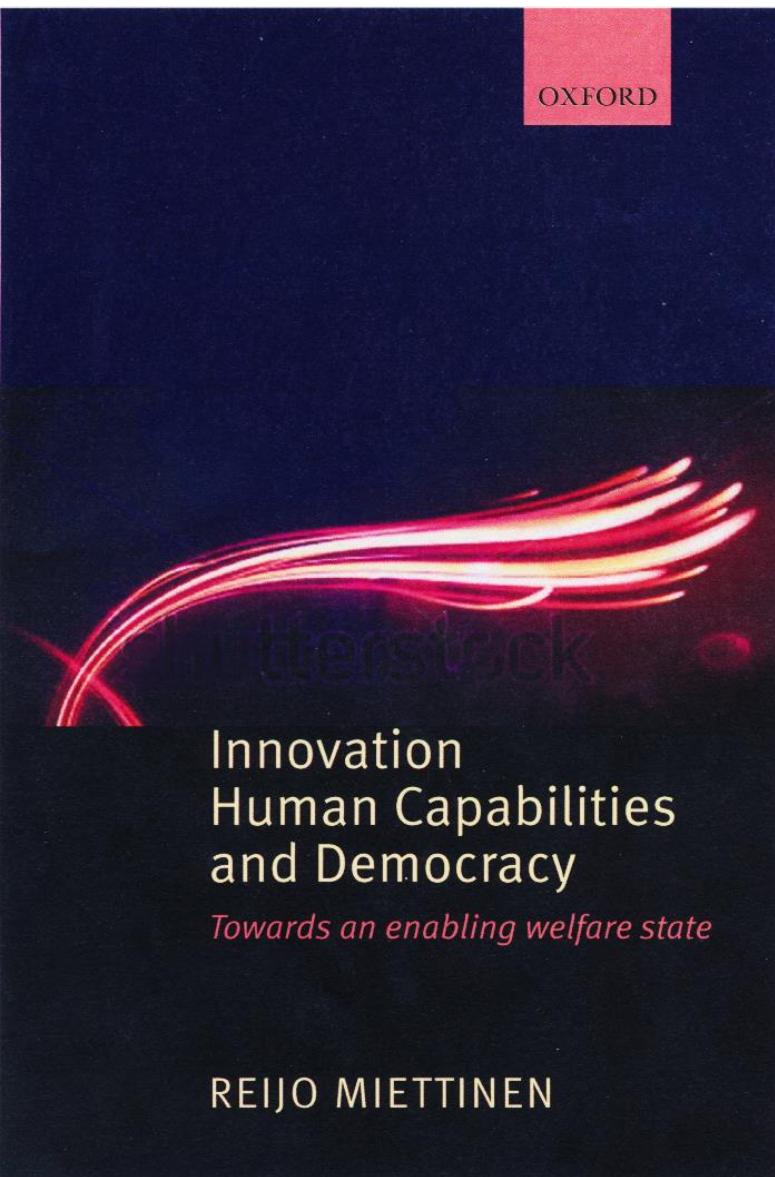
Several other capability cultivating institutions contribute to the development and learning of the children

- In Nordic Welfare state there is high-level of income taxation. Budget are used to provide universal public services (education, health, social services, cultural services).
- Child and maternity (family) clinics
- Kindergartens (with preschool education)
- Public library system
- Music school system

Governing by supporting local experimentation and institutional learning: Reading enthusiasm program

- The Ministry of Education and culture because concerned about the diminishing reading of books among school children.
- A 3-year project was established coordinated by University Oulu. The school-library pairs applied funding for develop practices for increasing increase the reading among the students.
- 100 hundred applied 32 pairs were given funding for development projects. Relevant knowledge of the development of literacy and reading activity of children in Finland is provided. The solutions and models developed will be effectively distributed so that other schools can adopt aspects of the practices developed (to construct their own that fits their local circumstances)

A full analysis is available in



Miettinen, R. "Innovation, Human Capabilities and Democracy: Towards of an Enabling Welfare State". Oxford University Press 2013)

Sabel, C. & Saxenian, A-L. & Miettinen, R & Cristensen, P.H. & Hautamäki, J. (2011), Individualized service production in the new welfare state: Lessons from the special education in Finland. Sitra Studies 62. Helsinki: Sitra. (Available in Internet, see Sitra)