Basic Education Reform in Finland – How to develop the top ranked education system?

Building Blocks for Education: Whole System Reform
September 13–14, 2010 • Toronto, Canada

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Director-General
Finnish National Board of Education
Finland is a pretty great place to be —the best, actually

(Newsweek - 16 Aug, 2010)
Best education in the world – even better than possible…

1. Finland
2. Canada
2. Korea
4. Singapore
5. Japan
6. Switzerland
7. Estonia
8. Great Britain
19. Sweden
26. U.S.A.

Source: Newsweek (Aug. 2010)
"Finland's schoolkids enjoy a laid-back and inclusive learning environment where shoes are optional, all teachers have master's degrees, and extra help is the norm: every year about one in three students gets individual time with a tutor" (Newsweek)
Finland: A Small Nordic Welfare State

History
Over 600 years a part of Sweden, and 100 years part of Russia
Independence in 1917, Member of the European Union 1995

Geography
304,000 km², 188,000 lakes, 76,000 islands

Population
5.33 million, Finnish and Swedish as official national languages

Religion
Lutheran (79.7%), Orthodox (1.1%), others (1.3%), no religious affiliation (17.7%)

Income
GDP (PPP) per capita $33,556

Society
Traditionally homogenous, isolated and closed
Even income distribution, low class distinctions
Large public sector providing extensive safety nets

Culture
Straight-forward, no-nonsense, adaptive culture
Trusting and co-operative, high cohesiveness and morals
Tendency for consensus-driven decision making
Two strong sectors of industries
Extensive public & nascent private services

- The world’s most forest-dependent country (pulp, paper, other wood products, machinery, chemicals, consulting)

- The world’s most ICT-dependent country (especially communications equipment but also ICT at large)

- Both industries in turmoil - major industrial transformation ahead

- Despite considerable progress, Finland still has underdeveloped private services
More Finnish schools in headlines

**Why do Finland's schools get the best results?**
BBC News - 7 Apr, 2010

**Why Finland is best for education?**
Times Online – 8 Aug, 2009

**Top of the class**
The Economist – 26 June, 2008

**What Makes Finnish Kids So Smart?**

**Focus on Schools Helps Finns Build a Showcase Nation**
Washington Post - 24 May, 2005
### Three best performing countries in PISA 2000-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>MATH</th>
<th>2003</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000*</td>
<td>Finland 544</td>
<td>Hong Kong (China) 550</td>
<td>Taipei (China) 549</td>
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<td></td>
<td>Finland 546</td>
<td>Korea 542</td>
<td>Hong Kong/Korea 547</td>
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<td></td>
<td>Finland 538</td>
<td>Korea 538</td>
<td>Canada 534</td>
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</table>

### Reading

<table>
<thead>
<tr>
<th>Year</th>
<th>MATH</th>
<th>2003</th>
<th>2006</th>
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</thead>
<tbody>
<tr>
<td>2000*</td>
<td>Finland 546</td>
<td>Finland 543</td>
<td>Korea 556</td>
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<tr>
<td></td>
<td>Canada 534</td>
<td>Korea 534</td>
<td>Finland 547</td>
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<tr>
<td></td>
<td>New Zealand 529</td>
<td>Canada 528</td>
<td>Hong Kong 536</td>
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### Science

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<th>Year</th>
<th>MATH</th>
<th>2003</th>
<th>2006</th>
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<tbody>
<tr>
<td>2000*</td>
<td>Finland/Japan 548</td>
<td>Finland 563</td>
<td>Finland 563</td>
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<td></td>
<td>Japan 550</td>
<td>Hong Kong 539</td>
<td>Hong Kong 542</td>
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<tr>
<td></td>
<td>Finland 538</td>
<td>Korea 538</td>
<td>Canada 534</td>
</tr>
</tbody>
</table>

* In 2000, Finland ranked 4th in math with 536
School-level variance and explained variance in science performance, by country

Less than 10% of the variation in student performance was explained by the student background in Finland.

Less than 5% of the overall performance variation among OECD countries lay between schools.

Source: Pisa 2006, Science Competencies for Tomorrow’s World

For education and learning
Student performance on the science scale and spending per student

Source: OECD PISA database 2006, Tables 2.1c and 2.6
Compulsory education starts late (age 7) and the school days are relatively short, which leads to the lowest instruction time within the OECD.

<table>
<thead>
<tr>
<th>Age 7-8</th>
<th>Age 9-11</th>
<th>Age 12-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>608</td>
<td>683</td>
</tr>
<tr>
<td>OECD average</td>
<td>796</td>
<td>839</td>
</tr>
</tbody>
</table>

Source: OECD Education at a Glance 2008
Participation in early childhood education
Day care and pre-school
Source: Stakes

% Children in ECED (municipal and private services)

Age of child

Day care
Pre-school

For education and learning
Core contents in pre-school education

- Play
- Language and interaction
- Mathematics
- Ethics and way of thinking
- Environment and natural history
- Health
- Physical and motoric development
- Arts and culture
Enrolment rates among 20-29 year-olds of the population aged 20 to 29 in 2008

Source: Education at a Glance 2010
Projected growth of the tertiary educational attainment of 25-64 population

Source: OECD Higher education to 2030, vol. 1: Demography
The Finnish basic education as we want to see it

**Learning culture**

- High standards for all
  - Encouraging, enabling

**Professionalism of teachers**

- Empowerment of teaching profession
- High quality of teacher education

**Supportive ethos**

- Early intervention
- Individual approach
- Active role of student

**Ethos of trust**

**Education system:**
comprehensive, non-selective, central steering, local implementation and innovation

For education and learning
Success factors

• High academic achievement
• Equality-based policies, services for all, broad educational and social mission
• Balance of central authority with local control
• Mutual trust as glue
• High value placed on education – teachers as valued experts
• High level of teacher preparation
• Individual support – multilayered approach to respond to signs that students are falling behind
• Demonstrated willingness and ability to change – reforms step by step
Reforms in Finnish Basic Education

• Divided parallel education system with consequent achievement gap until 1970
  1. A long heated debate preceded the 1968 Act on Basic Education Reform
  2. National implementation of comprehensive school reform from North to South 1972-1976

• 1970 first national curriculum – strongly centralised

• Teacher education to universities in mid-1970s – research-based teacher education

• Higher standards for all – ability grouping discontinued in 1985 curricular reform – individualisation

• Decentralisation of steering powers esp. during 1990s
  1. Very large autonomy of local authorities (330 municipalities) from 1990s – local authority rights in the Constitution
  2. Abolition of inspection of schools and textbooks
  3. No earmarks on state financial grants to municipalities as education providers
  4. Autonomy to organise schools and education process
  5. Total reform of educational legislation 1999 – emphasis on goals, pupils rights and duties – lean on administration
  6. Evaluation emphasised: thematic reviews and learning outcomes from sample-based tests

• National Core Curriculum reformed 1985, 1994 and 2004

• Recent emphasis on developing quality of basic education

• Reform of early intervention strategies 2010
  1. More structured and better planned support for those falling behind

• Proposal for the Reform of Finnish Basic Education 2020
Teachers as valued experts
A virtuous circle surrounding teaching

- High quality and status of teachers
- Teacher profession popular, highly competed entrance
- Prestige without high salaries
- Teachers active in the development of education
- Teachers supported – capacity building
- High status and good working conditions create large pool of applicants leading to
  - selective and intensive teacher preparation programs
  - success in early years of teaching
  - relative stability of teacher work force
  - success with students
Finnish teachers are supportive

- Teachers act respectfully towards their students
- Teachers want to support individually their students
- Teachers prefer goals like learning to learn, problem solving, thinking abilities, responsibility and cooperation

National evaluation of comprehensive school pedagogy and teachers preferences in instruction 2008 (National Council for Evaluation in Education in Finland).
Learning environments –
possibility to innovation, individualised attention, stability

Relatively small class sizes
• individualised attention, better performance, conditions for individual monitoring and correction of students’ performance

Relatively small school sizes
• personnel come to know students and monitor progress and behavior

Stability of teachers and students
• not big differences among schools
• families respect the student’s need for stability
Do we notice and care about non-conforming students?

Do we enable teachers and students to flourish?
• Individual aspirations
• Engaging students (book learning vs. experiential learning)
• Technology use
• Integration of the arts

Do we highlight higher-order skills, skills needed for future lives?
• 21st Century Skills – Citizen Skills
• Innovation and entrepreneurial spirit and skills
• Empathy and understanding of other cultures

Early warning signals about growing differences between schools in learning outcomes?
Agenda for change

- Highlight 21st Century Skills – Citizen skills
- Multidisciplinary subject-groups
- Increase of the Arts and PE
- More diversified language program
- Increase of the minimum instruction time
- More individual freedom to choose between subjects and multidisciplinary subject-groups
Directions for change – marrying the past and the future

Equal access to education

Current social contract
Public trust

Schools for acquisition of academic skills

Capacity building of teachers (individual)

Opportunity to develop individual talents and aspirations

Include voices of all stakeholders

Schools as agents of change

Collective capacity building of teachers, principals, administrators

Increase strategic capacity for change at all levels

Data and evidence to inform and steer the change

From decentralisation to two-way partnership
Critical questions – Can we effectively lead a systemic change for better learning in future?

- Attractive mission and ambitious goals - high standards and expectations for all?
- Strategic capacity?
- Right policy instruments?
- Collective and individual capacity of teachers?
- Financial requirements and incentives?
- Data and evidence to inform us about developments and effects on teaching and learning?
- Possibilities for intervention if not adequate success?
The four objectives for the reform of the Finnish basic education 2020

1. Clarify and enhance the mission and integrity
2. Ensure the high level knowledge and skills
3. Strengthen the individual support and guidance
4. Clarify the principles of providing basic education
Clarify and enhance the mission and integrity of Basic education

- Higher-order skills
- More focused subject content – Integration
- Broad Curriculum with
  1. subjects grouped into multidisciplinary subject groups
  2. defined goals for Citizen skills
- Citizen skills
  1. 21st Century Skills needed in the society and individual futures
  2. highlight deeper learning goals and high-order skills
  3. tools which support deeper learning and applied knowledge
CITIZEN SKILLS
What innovations are needed in ...

PEDAGOGY
Objectives and content of multi-disciplinary subject groups

Thinking skills
Ways of working and interaction
Crafts and expressive skills
Participation and initiative
Self-awareness and personal responsibility

LEADERSHIP
Operational culture at school
<table>
<thead>
<tr>
<th>CITIZEN SKILLS</th>
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<tbody>
<tr>
<td>Thinking skills</td>
<td>• Problem-solving, reasoning and argumentation</td>
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<td></td>
<td>• Critical, analytical and systemic thinking</td>
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<td></td>
<td>• Creative and innovative thinking</td>
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<tr>
<td>Ways of working and interaction</td>
<td>• Acquisition of information, analysis and use</td>
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<td>• Skills to communicate, collaborate and negotiate</td>
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<td>• Ability to work independently</td>
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<td>• Time management and flexibility</td>
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<td>• Entrepreneurship and ability to react to change</td>
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<td></td>
<td>• ICT and other technology skills</td>
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<td></td>
<td>• Learning skills</td>
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<tr>
<td>Crafts and expressive skills</td>
<td>• Coordination of body and hand</td>
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<td>• Skills and courage of expression</td>
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<td></td>
<td>• Planning and production skills</td>
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<td></td>
<td>• Creativity and curiosity</td>
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<td>Participation and initiative</td>
<td>• Perception of community and society</td>
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<td>• Initiative and leadership skills</td>
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<td>• Ability to be constructive</td>
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<td>• Acceptance of diversity and difference in perspectives</td>
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<td>• Media skills</td>
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<td>• Ability to think long-term and construct the future</td>
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<tr>
<td>Self-awareness and personal</td>
<td>• Self-awareness and reflection</td>
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<tr>
<td>responsibility</td>
<td>• Looking after health and security</td>
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<td></td>
<td>• Ability to act in an ethical, responsible way and as a member of a community</td>
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<td></td>
<td>• Good manners and empathy</td>
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High standards and expectations for all – high level of knowledge and skills

- Higher skills and competences as the most important resource in society
- Demanding objectives and expectations – more focused content
- Integration – multidisciplinary subject groups and citizen skills
- Individual’s more diversified development
- More versatile learning methods and environments
- Creativity and innovation
Strengthen individual support and guidance

- Instruction based on the knowledge and skills of an individual pupil
- Pupils’ individual growth and diversified development better regarded
- Enhanced motivation by increased opportunities to choose subjects and learning content
- Increased support – better planned and multi-layered support to respond to signs that pupils are falling behind
- Strengthened home-school cooperation
<table>
<thead>
<tr>
<th>Multi-disciplinary subject groups</th>
<th>Subjects</th>
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<tbody>
<tr>
<td>Language and interaction</td>
<td>Mother tongue and literature</td>
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<td></td>
<td>Second national language</td>
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<td></td>
<td>Foreign languages</td>
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<tr>
<td>Mathematics</td>
<td>Mathematics</td>
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<tr>
<td>Environment, science and technology</td>
<td>Biology</td>
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<td>Geography</td>
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<td>Physics</td>
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<td>Chemistry</td>
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<tr>
<td>Individual, enterprise and society</td>
<td>Religion/Ethics</td>
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<td>Ethics</td>
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<td>History</td>
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<td></td>
<td>Social studies</td>
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<td></td>
<td>Educational and vocational guidance</td>
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<tr>
<td>Arts and crafts</td>
<td>Visual arts</td>
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<td>Music</td>
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<td></td>
<td>Crafts</td>
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<td>Drama</td>
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<tr>
<td>Health and personal functionality</td>
<td>Physical education</td>
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<td>Health education</td>
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<td></td>
<td>Home economics</td>
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Process of implementing proposal for the renewal of basic education

- Parliamentary committee proposal 6/2010
- Circulation of the proposal for comments 6-9/2010
- Legislative proposal and decree 1/2011

- The Government Programme and Development Plan for education and research for 2012–2017
- FNBE Operational and Financial Plan 2009 – 2012, strategical aims and goals 2020
STRATEGY
Common objectives
Shared purpose

Leadership

Legislation

Providers
Provision of services

Finance

Monitoring and evaluation

Teachers

Core Curriculum

Learning environments
ICT in education materials
Leadership matters – Teachers do it

- Students
- Teachers
- Schools
- Local education providers
  - LOCAL CURRICULUM
- Finnish National Board of Education
  - NATIONAL CORE CURRICULUM
- LEGISLATION AND STRATEGIES
To reach the goals set for the renewal, we need to have a...

- Shared vision of the direction and mission
- Full commitment in all levels
- Future orientated and evidence-based process of change and development of education
- Focused leadership
- New ways to work together and communicate
The BIG idea

From good to great:

The Finnish school system will be great when every student and stakeholder says…

“I love school **AND** I am doing well in school”

“Schools put 21st Century Skills in the spotlight”

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PISA

Engagement
Let’s dive in!