

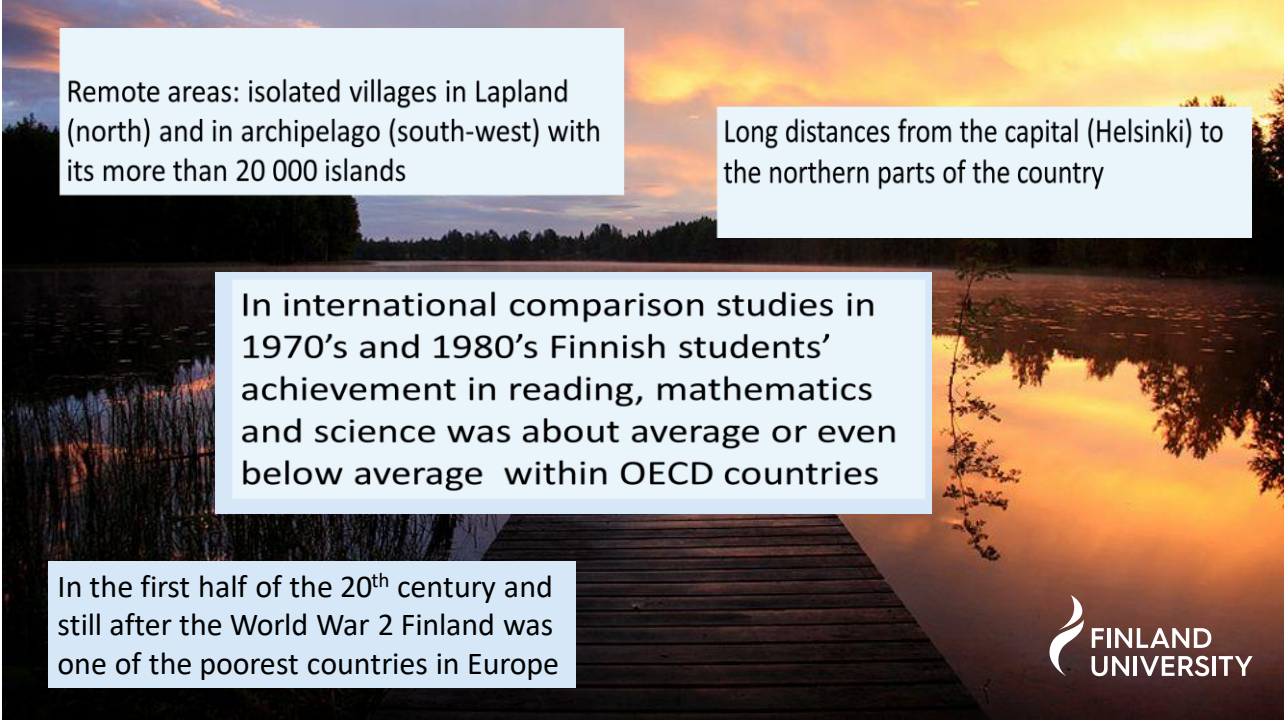


# Teacher Education is a Key Element for Successful Educational System

**Minna Mäkihonko**



# BACKGROUND FACTS OF FINLAND AND FINNISH EDUCATION SYSTEM



Remote areas: isolated villages in Lapland (north) and in archipelago (south-west) with its more than 20 000 islands

Long distances from the capital (Helsinki) to the northern parts of the country

In international comparison studies in 1970's and 1980's Finnish students' achievement in reading, mathematics and science was about average or even below average within OECD countries

In the first half of the 20<sup>th</sup> century and still after the World War 2 Finland was one of the poorest countries in Europe

**Continues development 1980 —→**

- **Strong emphasis on pedagogical quality, deep learning and self-regulation skills**
- **Research -evidence based development**

**Big educational reforms in 1970's**

- **9-year join comprehensive school for all students**
- **Strong emphasis on educational equity**
- **New university based teacher education**
- **Master degree for all teachers since 1979**

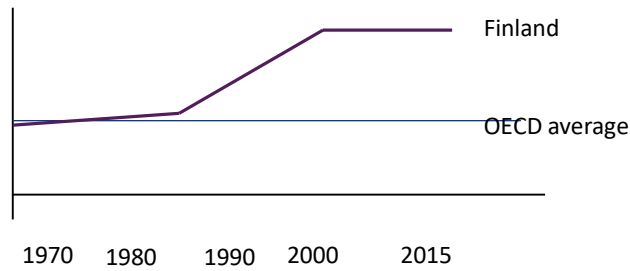


**How the reform influenced the education system?**

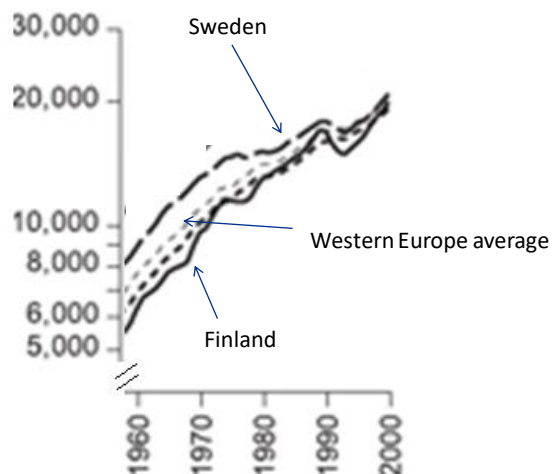


## Dramatic change in the achievement in international comparison studies

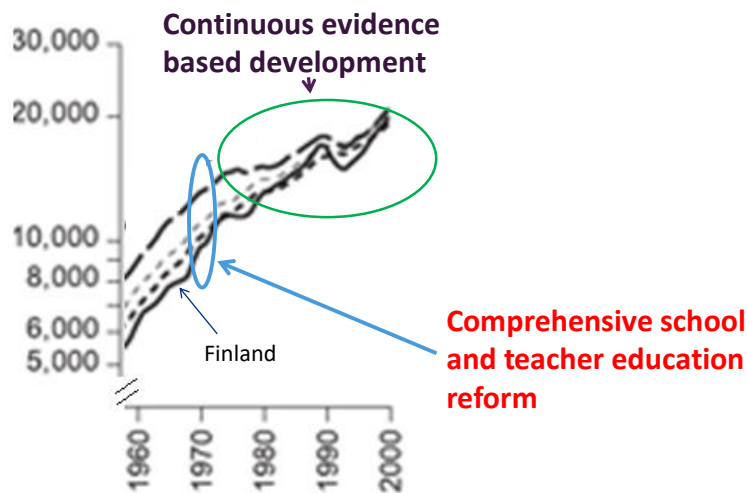
(IEA, SIMSS, TIMSS, PISA etc.)



## Gross Domestic Product per Capita of Finland and European Countries



## Gross Domestic Product per Capita of Finland and European Countries



## What is the impact of teacher education?

Large studies in many countries have shown that just increasing the number of teacher certificates does not necessarily have a big impact on teaching quality and students learning.

(For example the 2018 World Bank statistics of Caribbean and Latin America).

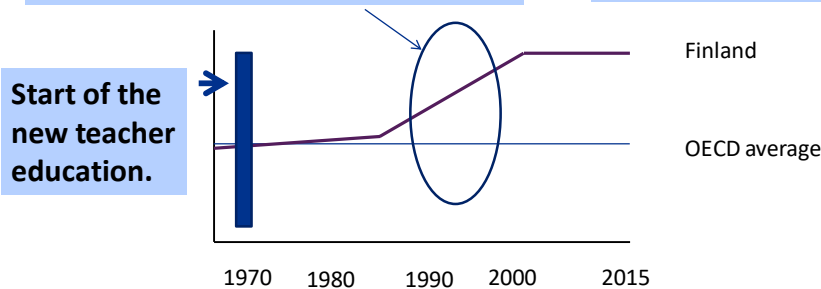
It is the **quality** of teacher education which matters!



## High quality teacher education makes a difference

Teachers graduated from the new high quality teacher programs became the majority of teaching staff in schools in 1990's.

Practically all teachers in Finland had a teacher certificate already before 1970's but there was a need for quality improvement.



## Key principles of the high quality teacher education

1. Focus on adaptive expertise.

2. Focus on pedagogical knowledge and scientific evidence.

5. Focus on ethical professionalism expertise.

3. Focus on content knowledge and pedagogical content knowledge.

4. Focus on deliberate practice.

### 1. Focus on adaptive expertise

#### Preparing teacher students for the changing world:

- From routine practice towards adaptive and flexible skills enabling clever activities in novel situations.
- From static profession to continuous self directed and collaborative development of teaching expertise.

## 2. Focus on pedagogical knowledge and scientific evidence

Student centered teaching in a responsible way is demanding

- Knowledge base for understanding students' motives, prior knowledge, and learning processes
- Knowledge base needed in organizing learning environments and in guiding students learning processes

Deep pedagogical and educational psychology knowledge about students and learning environments is a necessary basis for high quality teaching.

Understanding the role of scientific evidence and skills to find and make use of evidence in teacher's work.

This enables continuous professional development.



## 3. Focus on content knowledge and pedagogical content knowledge

Teachers need deep understanding of the **content knowledge**. They should be able to support students in approaching the content knowledge from different viewpoints and in building connections between concepts.

Content knowledge or general pedagogical knowledge is not enough. Teachers should also have **pedagogical content knowledge**, which makes it possible to understand:

- What prior knowledge students need for construction the new concepts?
- What is specific for learning certain concepts and skills?
- How prior knowledge and everyday beliefs can hinder learning of new concepts and skills?



## 4. Focus on deliberate practice

Just practice in a classroom is not enough for high quality teacher education.

What is needed for the development of adaptive expertise in teaching is deliberate practice:

- Students own engagement in developing continuously better skills to understand students and organize teaching.
- High quality guidance and detailed feedback from an experienced teacher or teacher educator = mentored teaching practice.
- Systematic focusing on the different aspects of the professional skills and continuous self reflection and evaluation of own progress and weaknesses.



## 5. Focus on ethical professionalism

Teacher profession is not only a collection of skills needed in classroom teaching but teachers have many other responsibilities in supporting the students' personal development and also the local civil society.

Teacher students have to learn what is the role of schools and teachers in society and what are the ethical requirements of teacher profession.



## Composition of Teacher Pedagogical Studies in Teacher Education Curriculum

- 1/3 education theory + 1/3 subject specific pedagogy + 1/3 mentored teaching practice
- Development of **professional identity**
- Student centered approach
- **Evidence-based** teaching practices
- Subject specific pedagogy
- Addressing the **diversity** in classrooms
- Supporting students' wellbeing and **motivation**
- **Mentored** teaching practice: 4 periods: 3 periods at **teacher training school** and 1 at the partner school



Thank you for your attention!

Minna Mäkihonko, PhD  
Senior University Lecturer/Senior Adviser  
for Teacher Education and Special  
Needs/Inclusive Education



