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Teacher's experiences under the vocational education and training reform in Finland. Possibilities of digital learning environments and tools among immigrant students



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Omnia is a multisector education provider and regional development center, which offers innovative learning environments and beneficial partnerships both in national and international education development projects

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Topic: *Invisibility and Discrimination. Expectations and Experiences of Skilled Migrant Women in the Finnish Labor Market*

Thesis is part of the **project WeAll**. The WeAll Consortium brings together a multidisciplinary research team based at the University of Helsinki, Hanken School of Economics, and Jyväskylä University School of Business and Economics.

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More info: weallfinland.fi/en

Introduction

This paper addresses the ways in which teachers experience their work under the vocational education and training reform in Finland. New technologies can offer successes, but also challenges and face resistance among teachers.



- This survey was done during autumn 2017 as a part of development programmes funded by Ministry of Education and Culture.

1) Project TYKKI

- developed working life competence of teachers
- prepared teachers for the vocational education and training reform

2) Project MAHTAVA

- was targeted to refugees
 - sought to create long-lasting models for the employment of especially through apprenticeship training and on-the-job learning
- The qualitative study examines a group of teachers working at one of the biggest vocational schools of Finland (from 17 000 students fifth are immigrants).

Background 1: Finland

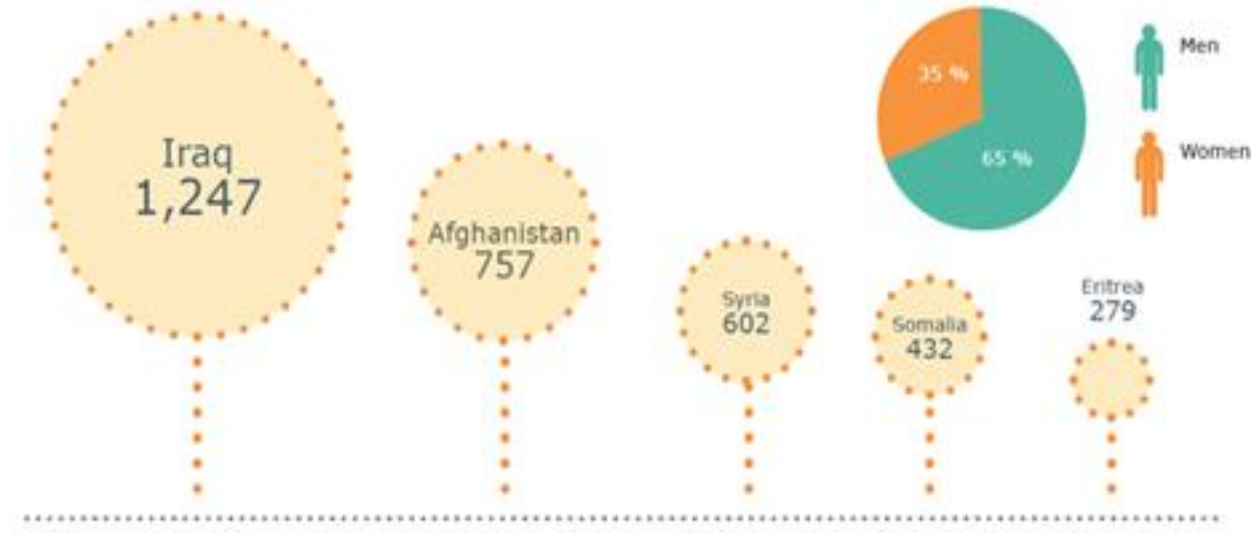
- There is an increasing number of immigrants in Finland and a need to speed up integration processes into labor market.
- Finland is a bilingual country, 88 % speak Finnish and 5,3 % Swedish (0,04 % Sámi).
- Currently, about 6 % of the Finnish population (5,5 million) are foreign nationals
 - 1) Russian speakers (72 000)
 - 2) Estonian speakers (50 000)
 - 3) Somali speakers (16 000)
- At the same time, big generation is approaching the age of retirement.
- Increased immigration has increased the need for degree assimilation, recognizing expertise as well as preparatory and vocational training in Finland.

Background 2: Year 2015

- In 2015 protracted international conflicts and wars in Europe resulted in an increased number of asylum seekers.
- Finland received 32,746 asylum applicants, which is about 10 times the figure in 2013 and 2014.

www.migri.fi

NATIONALITIES OF ASYLUM SEEKERS,
TOP 5 GROUPS IN 2016



Background 3: VET in Finland

- is designed both for young people without upper secondary qualifications and for adults already in work life
- is organized mainly in institutions (on-the-job learning included) or as apprenticeship training and provides skills for both life and work
- vocational qualifications can be completed in school-based VET or as competence-based qualifications.
- vocational qualification gives general eligibility for university of applied science and university studies.

Education system in Finland:

- www.minedu.fi/en

**Background
4: Vocational
education and
training reform in
Finland
1/1 2018**

Main objectives

- better response to the changes occurring in working life
- close cooperation with working life
- the job description of teachers will change comprehensively
- the number of qualifications will decrease from the current 360 to 150
- personal study paths for students
- customer-oriented mindset
- learning at the workplace will increase
- digital learning environments and tools in pedagogy will have a larger role

Interviews

- qualitative study
- analyzes experiences of teacher's working in the field of vocational education
- the main data consists eight interviews
- the semi-structured theme interviews were done during fall 2017
- method for analyzing the data is content analysis
- all of the participants are women and between ages 30-55

The research questions was: How did the teachers feel about the new requirements?

The answers were roughly divided into three themes:

I Changing roles

II New teaching environments and cooperation with companies

III Digital learning environments and tools

**Theoretical
framework:
Albert Bandura's
concept of self-efficacy**

The concept of self-efficacy

- determines how a person feels, thinks, acts and motivates oneself during a time of change
- is not static but changes according to the situation
- can be strong or weak
- can be developed
- It refers to an individual's belief in and conception of their own abilities, including coping with change
- Personal attitudes, perceived efficacy, competences and ability play a central role, as well as the desire to absorb new information and to creatively adapt what they have learned.
- A strong feeling of self-efficacy affects an individual's well-being and ability to cope in many ways; for instance, whether they see change as a positive challenge or as something threatening.
- People, who doubt their capabilities shy away from difficult tasks which they view as personal threats.

(Bandura 1994)

Beliefs about self- efficacy can be developed

- 1) The most effective way of creating a strong sense of efficacy is through **mastery experiences**. Successes build a robust belief in one's personal efficacy.
- 2) The second way of creating and strengthening self-beliefs of efficacy is through the vicarious experiences provided by **social models**. Seeing people similar to oneself succeed by sustained effort raises observe's beliefs that they too possess the capabilities master comparabel activies to succeed.
- 3) **Social persuasion** is a third way of strengthening people's beliefs that they have what it takes to succeed.
- 4) The fourth way of modifying self-beliefs of efficacy is to **reduce people's stress-reactions**.

I Changing roles of teachers

- The job description of a teacher will change comprehensively, e.g. taking on multiple roles (Tapani, 2013)
- New comprehensive teaching role can be very demanding for individual teachers who were accustomed to the more traditional way of teaching. (Eskola-Kronqvist ym. 2015, 9).
- A teacher will need to be able to guide each student individually and to adopt new ways to teach (co-teaching).
- The importance of cooperation with companies, other teachers, workplace counsellors and companies is more important.
- Digital learning environments and tools offer great opportunities, but there is a need of tech skills and motivation to use them at everyday work.

II New learning environments and collaboration with worklife

New environments

- classrooms
- multipurpose environments
- department stores or museums
- workplaces
- digital environments
- Virtual Reality

Cooperation with companies

- multiprofessional teams
 - companies
 - work life councillors
 - language teachers

Important competences

- communication skills
- networking skills
- digital skill
- customer-oriented attitude

Diversity of the students 1

- It is important to understand the learners diversity and recognize learner differences.
- Students with a special needs (e.g. learning difficulties, ADD, ADHD..) need to be recognized and supported.
- In case of students with a foreign background, cooperation with Finnish as a second language teachers also needs to be taken into account.
- Generally Finnish language has a very important role in vocational education as well as in labor market.
- The ability to communicate in the most common language of the country is, in many cases, a key factor in finding a job (Ahmad 2005, 84).

Diversity of the students 2: Finnish as a second language

- Learning a professional vocabulary can begin at work with help of Social media (e.g. Facebook, WhatsApp).
- In vocational education and apprenticeship, the theoretical studies must be done in Finnish or Swedish. Especially in the apprenticeship training there is a need for fast learning of Finnish language
- According to Finnish researcher and teacher Inkeri Jääskeläinen **the dual learning-method** is effective especially with immigrant students with a low Finnish language skills. The main idea of this method is that one of teachers concentrates to vocabulary and reading, while the other teacher focuses to help students to understand the structures behind the texts. It has been tested successfully with apprenticeship students.

(Jääskeläinen 2017, 43-45)

Diversity of the students 3: Illiteracy can correlate with weak digital skills

- Level of Finnish language / learning readiness can be very variable.
- In the worst case a student has learnt to read or/and write after arriving to Finland.
- Approximately 7–8 percentage of refugees living in Finland are illiterate (Merisalo 2016: 104).
- Women who have moved to Finland from the poorest areas of the world are often in the weakest position in the labor market.
- Partial or no reading and writing skills reduces employment as well as opportunities to study at the vocational school.
- Illiteracy can correlate with weak digital skills.
- In the other hand, one of the Finnish as a second language teachers mentioned, that she has used successfully social media (WhatsApp and Facebook) with adult students with a weak digital skills (TEA 3).

Diversity of students 4: Students with refugee background may need extra support

- high stress level > low ability to take a new information
- exams and language tests
- memory function
- learning the language
- the symptoms of post-traumatic stress may not be activated until long after the experience of trauma
- Importance of recognizing the student's symptoms and to intervene in order to avoid over diagnosing
- One of the interviewed pointed out, that a teacher can not be a trauma therapist, but it is necessary to recognize the symptoms and give a guidance forward.

TEA 1: “A teacher needs to have their heart in the right place, they need to be able to tell if that person is doing well or not.”

TEA 4: “If the mind is broken, you can not expect similar level of learning outcomes than with a healthy individual.”

III Digital environments and tools

The utilization of digital learning environments and tools requires resources

- 1) physical opportunities
- 2) know-how
- 3) motivation

(Merisalo 2016)

- **Skype, social media: Facebook, WhatsApp**
 - ! Finnish as a second language training
 - **mobile applications**
 - significant part of daily lives
 - connecting people: teacher - workplace - students
 - possibility to share pictures and videos
 - useful in the evaluation and self-assessment
- Challenges:**
- lack of computers, laptops or smartphones at home
 - adults with small children do not necessary have time or possibilities to study at the library after school day
 - starting level varies a lot
 - "digniquets" can have lack of some basic skills (Word, Excel)
-

**Best practises 1:
Project MAHTAVA**

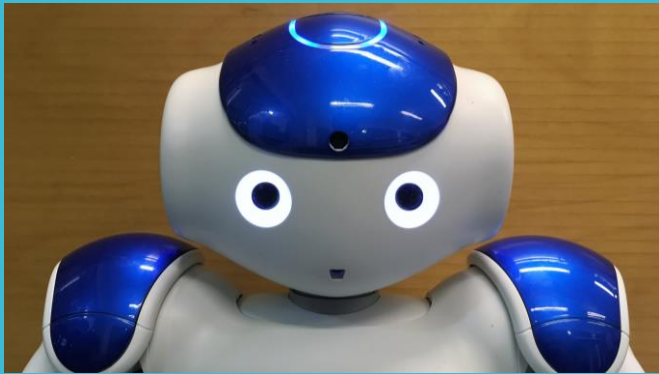
1) videos spoken with simple Finnish (barber)

<http://www.variaprojektit.fi/maahanmuuttajalle/mahtava/2017/06/20/mahtava-hankkeen-videomateriaalia/>

2) ThingLink platform (care sector)

<https://www.thinglink.com/scene/990520927454232579>

Best practices 2: Robot-assisted teaching



- Robot-assisted teaching has been tested successfully by a Finnish as a second language teacher **Johanna Hemminki** (2017).
- Pedagogical background of this survey is based on Charles Arthur Curran's Community Language Learning method (CLL) and its Finnish application called "*Toisto*" ("*Repeat*").
- The goal of *Toisto* is to learn work life language in a practical way.
- Limiting the amount of language material is one the principles of the method.
- The robot-assisted session can increase the students feeling of autonomy.



- Robots can support self-paced and self-guided learning and that way help differentiate teaching in heterogeneous groups.
- The social robot can help students in their own pace with the help of pictures, gestures and repetition.
- It is able to customize the content suitable for each learners' level.
- The pedagogical content of the robot is based on real-life communicational situations, not only language but cultural habits and customs.
- The robot-assisted teaching can be useful with the students who have a refugee background.

(Hemminki 2017)

Findings and discussion 1: Challenges

- Teachers have to take a notice the variable levels of students and guarantee pedagogically diverse learning opportunities.
- It is also important to recognize learner differences.
- Students with a special needs (e.g. learning difficulties, ADD, ADHD..) need to be recognized and supported.
- Students with a foreign background can have variable level of Finnish language / learning readiness.
- Students with a refugee background can suffer from post-traumatic stress, which can cause low ability to take a new information and frustration.
- Teachers can have a skills gap both in technology and its pedagogical use.
- Nearly all teachers were hoping for more guidance from their management as well as training and resources for using the new equipment and tools.
- Digital skills of students can be variable.
- “Digital natives” can have lack of basic skills (Word, Excel).

Findings and discussion 2: Self-efficacy

- Beliefs in personal efficacy affect level of motivation, quality of functioning and vulnerability to stress.
- Unrealistic requirements can decrease the feeling of self-efficacy causing anxiety, uncertainty and lead to sick leaves.
- Nearly all participants mentioned factors slowing down the absorption of new information, such as continuous haste and temporary employment contracts causing uncertainty.
- The stronger was the teachers experience of self-efficacy, the more likely she had a positive approach to challenges regarding change.
- Strong commitment to reform is important.

Suggestions

Organizations

- can enhance teachers' experience of self-efficacy by offering concrete support (through appraisals and additional training)
- ..using of training change agents / tutor teachers to offer information and peer support will help teachers to adapt new skills
- dedicate enough resources (financial, personnel, equipment) and support teachers through the change phase

Organizations should encourage teachers..

- to use and experiment digital technologies in daily professional practice and teaching
- network and share innovations and best practices nationally as well as internationally

- To achieve all this requires the organization to implement an operational policy centered on openness, listening and involvement.

Future development

- Web content accessibility for all user groups.
- Development of e-books and online materials for students with a foreign background (using a simple Finnish language).

Great opportunities:

- Virtual Reality (VR)
- ThingLink platforms
- robot-assisted teaching
- gamification
- artificial intelligence (AI)

Thank you!

Education system in Finland:

- www.minedu.fi/en

Interactive Technology in Education Conference

April 2018: <https://www.itk.fi/en/>

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