The content, challenges and values that form Nordic Vocational Teacher Education

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Abstract

This article depicts four Nordic cases from the field of Vocational Teacher Education. The aim of the article is to compare statements, challenges and values that form vocational teacher programmes in the Nordic countries. Moreover, the aim of this article is to study common threads, contents, professional progress follow-up and learning examination practices in the Nordic vocation-

al teacher programmes. In this article, we describe one national example from each country. The examples come from Malmö University of Educational Sciences in Sweden, Metropolitan University College in Denmark, Olso Metropolitan University in Norway and Haaga-Helia School of Vocational Teacher Education in Finland. The article is a result of desk-analysis, interviews and collaborative writing. The findings indicate that the four countries and examples have a lot

in common, but also differences e.g. related to strategies, values and practices. While an academic / scientific orientation have been chosen in Sweden, Norway and Denmark, competences form the basis for vocational teacher education in Finland. In conclusions

we present an overview of the programmes and discuss the position of VET more generally in these countries and how it challenges vocational teacher education.

Key words: Nordic VET teacher education, comparison, challenges, values

Introduction

A

t Malmö teacher education, an analysis of the vocational teacher program was implemented in 2017. The questions at fore were: what is the content of the program,

which is the common thread in the education, how is the professional progress followed up, and how is learning examined. These questions are well in line with the concept of constructive alignment. Constructive alignment (Biggs 2014) is an outcomes-based approach to teaching in which the learning outcomes that students are intended to achieve are defined before teaching takes place. Teaching and assessment methods are then designed to best achieve those outcomes and to assess the standard at which they have been achieved.

In this article we embed the above questions into the overall analysis when we compare the vocational teacher education programmes in the Nordic countries. We also look at the statements, challenges and values that form Nordic Vocational Teacher Education.

Metropolitan University College (Metropol) states in their homepages (Teacher Education, 2018) that they are not offering a one-size-fits-all teacher education, even though 50 % of the studies

are compulsory for all but give their students the choice to create a unique education profile, via their academic choice and individual combination of modules. Furthermore, Metropol state that in order to become a professional teacher, a great amount of personal integrity, as well as desire to actively participate in the development of a democratic society is required.

At Haaga-Helia in Finland the education is competence based, one year at length in which multidisciplinary peer groups, own professional environment, and the personalization of studies play a vital role. Learning, tutoring and assessment are core themes of the programme. Equally important themes are ethics, democracy and human rights, the teacher as an influencer in the society, entrepreneurship in teacher's work and in students' future career, and the changes digitalization brings to teachers' work. (Vocational Teacher Development Programme.)

In Norway, at OsloMet (former Högskolan i Oslo og Akershus), research and development is rooted in learning within educational institutions and in the work place. In their implementation work technology and learning, professional knowledge, experience-based competence development, and collaboration between school and working life is stressed at their vocational teacher education. At Malmö vocational teacher education values, leadership, conflict management, assessment, curriculum theory and didactics are at fore in the program.

The methods for collecting data for the article were: desk-analysis, descriptions (Malmö university and Haaga-Helia), and interviews with professionals at OsloMet and Metropol (i.e. Henrik Hersom Jensen from Metropol and Halvor Spetalen from OsloMet). The interviews were conducted in November 2017.

In particular, materials describing the study programmes were analysed (Teacher Education 2018. Vocational Teacher Development Programme, Handbook 2017-2018; Yrkeslärarutbildning 2018).

Vocational teacher education in Finland

n Finland, Vocational Teacher Education is currently provided through ▲ five Universities of Applied Sciences (UAS). In contrast, comprehensive education teachers are prepared in the various universities Colleges of Education. The Vocational Teacher programs entrance requirements demand at least Bachelor or Master level education completed in their specialty (with some exceptions), and at least 3-5 years of working experience (depending on the discipline/field to be taught). Vocational Teacher Education (Professional Teacher Education) provides the pedagogical qualification for teaching your specific subject in a vocational education and training (VET) institute or UAS in Finland and it takes from one year to one to one and a half year to complete. To teach in a university of applied sciences a Master degree is required.

Teacher educators and principal lecturers in the schools of vocational teacher educational programs, mostly hold a licentiate or doctoral degree. Educators and teacher-students originate from different vocational sectors and are mixed in the vocational teacher education. One of the key features is that the teacher-students learn from one another.

Yrjö Engeström's (1970) ideas of Finnish pedagogy influenced the teacher education curriculum in the 1980's. Teacher education was then reformed to be more student-centered, methods and education became more connected to the workplace and community citizenship (pp. 224-259). The teacher educators and teacher students use student-centered and peergroup methods and apply versatile learning environments, in collaboration with other teachers and the workplace (Committee Report, 2005). The learning process is field-based, completely personalized, following competences and workplace needs (Isacsson, 2013).

The extent of teacher education is defined as 60 ects (European Credit Transfer and Accumulation System) on graduate level. Also, the curriculum changed from a subject-based to competence-based curriculum (Laukia, 2013, p. 33). The teacher education program is a professional developmental program for the teacher students, but it is also a social process in which teacher-students develop their co-operative skills with other teachers, specialists such as student counselors, special needs teachers and the workplace.

In Finland in 2014, only 20% of those that applied to vocational teacher education programs were admitted, while only 78% of Secondary Vocational Teachers were fully qualified in 2013 (Teachers and Education Staff).

THE TEACHER AS AN ETHICAL DEVELOPER (15 ects)

Personal development plan (PDP) and peer group activities, 5 ects Career counselling, 5 ects Learning at work, 5 ects

THE TUTOR (35 ects)

Teaching and learning, 5 ects

Observing teaching and tutoring in different contexts, 5 ects

Teaching and tutoring in vocational institutions and in workplaces, 20 ects

Competence assessment, 5 ects

THE TEACHER AS AN ACTIVE CITIZEN (10 ects)

Education, society and culture, 5 ects
Vocational education in transformation, 5 ects

Vocational teacher education at Haaga-Helia School of vocational teacher education. Finland

The vocational teacher education programme at Haaga-Helia is a competence-based development programme. Studies are tied to the practical work of vocational teachers, and to the competences, required in the society and the world of work. Vocational and professional education form the theoretical basis for the development programme. Key themes include vocational learning, teaching and tutoring, professional growth as a lifelong process, and work-based social development as a member of a workplace community, an entrepreneur, a professional and a member of society. (Vocational Teacher Development Programme.)

Personalized studies at Haaga-Helia School of vocational teacher education (HHSVTE)

he personal development plan (PDP) that is drafted and negotiated between the teacher stu-

dent and counsellor, form the basis of the vocational teacher education studies at HHSVTE. The PDP's are individual, and all look different, and they are constructed and refined throughout the studies. The plan accounts earlier acquired competences and pedagogical and professional development needs, along with the workplace, communities and network needs. The PDP is an ongoing process that is updated and put into practices throughout the course of the teacher studies. There are at least three in-depth guidance sessions held during the programme between the teacher-student and the teacher educator.

In the beginning of the studies, the teacher-students form teams of 3-6 people in which they study, complete, and share joint assignments. As part of the teaching practice, every teacher student follows and observers the teaching of his or her peers for about 25 hours. Peer group mentoring within the teams is a central feature of the teaching practice. Every teacher-student practice teaching at least for about 20 hours within the programme depending on experience and needs. If the teacher

student has little experience in teaching, focus on teaching and pedagogical methods is emphasized. If the teacher-student is an experienced teacher, another personal/professional competence need is emphasized.

All student teachers share their skills and learning during common contact days, within peer groups and in online interactions, including social media. The studies are structured so that contact days and peer group activities form a one-year group process.

According to my interpretation and experience (Isacsson, 2013) there are three aspects that make the HHSVTE curriculum and implementations extraordinary. Firstly, the individual teacher students' own competences, working life contexts and professional needs that they bring along with them to the studies that form a base and allow individual study implementations. Secondly, the multidisciplinary character of the studies, with the distinct purpose of sharing and creating multidisciplinary competences. Thirdly, the teacher students are treated as subjects and collaborative actors, i.e. as active producers of their own learning. Learning occurs individually, in small groups, through reading circles, in individual trainer student discussions and in reflective social environments. The outcome of the studies is a professional portfolio and a vocational teacher qualification, with a strong ethical approach, in addition to an inquiry-based development orientation.

Vocational Teacher Education at Metropolitan University College, Denmark

In Denmark the diploma based vocational teacher education programme consists of one full year, or three years of part time studies. The diploma gives qualification to teach in vocational institutions within your field or specialty. It is, however, very rare to do the programme in one year. A VET teacher in Denmark can be employed without pedagogical competence but must apply to a teacher training programme after maximum two years of VET-teaching. The teacher students must complete their studies at the latest six years after employment.

The vocational teacher education in Denmark is academic to its character. The challenge is that some who enrol to the program have a degree from higher education and others only professional experience. There are 5/6 colleges similar to Metropolitan University College (Metropolitan) that offer vocational teacher education in Denmark. Everyone who works as a VET teacher is accepted to the diploma program provided their employer, the VET school, is committed to it.

At Metropolitan University College the educational program is offered through six modules, out of which three are compulsory to all, and three are optional. A full diploma consists of 60 ects.

The graduation project is compulsory and worth 15 ects. It is a thesis in which the student selects the theme herself. The project typically relates to one's own context and VET program, in which the teacher student reflects on her own context and pedagogical approach through scientific and pedagogical theory.

Table 2. Metropolitan University College vocational teacher programme

I Compulsory modules are:

- 1. Teaching and learning (10 ects)
- 2. Educational planning and didactics (10 ects)
- 3. Scientific theory (pedagogy) (5 ects)

II The elective /free-of-choice modules (out of which the teacher student selects two) are:

- 1. Pedagogical development (10 ects)
- reflection of student's own pedagogical and didactic development
- 2. Students' participation in VET (10 ects)
- students as learners (student centric methods, student perspective)
- 3. Digital Technology (10 ects)
- testing and application of pedagogical technology or
- 4. Practice related teaching (10 ects).

III Graduation project

in which student reflects on her own teaching, pedagogy and didactics through scientific theory (15 ects).

The outcome and goal of Metropolitan VET teacher education is: social, active teachers, with a counselling and ethical approach, who continuously develop their own skills. The professional progress and learning is examined through self-assessment and log. The diploma based education is not a one size fits all program, but every teacher student creates her own educational profile through an individual combination of free-choice modules and graduation projects.

Vocational teacher education at Oslo Metropolitan University, Norway

In Norway there are two options for those who wish to become a vocational teacher. On the one hand, there is a one year programme worth 60 ects credit option (two institutions in Norway offer this option), and on the other hand a 3-year long Bachelor level, vocational teacher education programme that is offered in 20 towns. The one-year program is a pedagogical programme based on a

professional bachelor degree whereas the three-year program gives you a professional vocational teacher degree in which the vocational studies are embedded with pedagogical studies. Everyone that fulfils the basic criteria is admitted and there is no entrance exams or tests. The programs give you eligibility to work as a VET teacher in your field /specialty on upper secondary level.

At OsloMet, the one-year program is a practical pedagogical educational program that focus on general vocational pedagogical and didactical competences. The teacher students' vocational and teaching experiences form the base for learning processes. The studies require that the students are active participants and contribute with reflections and experiences on teaching and guidance. It is compulsory to participate in the common seminars.

The three-year program that is offered within educational fields, such as electronics, health, service, food and restaurant, construction, technique and indus-

trial processes, design and craft, emphasize both general competences as well as in depth vocational competences. The one-year program consists of 60 days of practice in a vocational school, whereas the three-year program is based on practice at school (60 days) as well as in the vocation (70 days). The bachelor program for professional VET teachers in construction consist of 60 ects in profession and 120 ects in specialty. The studies are concentrated on managing study processes with a focus on pedagogical, professional didactics

The studies are built upon traditions in which praxis-, problem-, experience-orientations are central integrating reflection, analysis, group and individual working methods, in addition to multi-disciplinary working methods. The competences and learning, as well as professional development is assessed through diaries, and tests that can be project-, home-, or school-based, oral or written depending on the topic, task at hand or goals. According to some follow-up studies most of the students who graduate as vocational teacher from OsloMet acquire a job as vocational teacher. The teacher program qualifies to enter a master program in vocational education, but very few apply directly after graduation, if at all.

Vocational teacher education at Malmö University of Education Sciences. Sweden

igher Education Diploma in Vocational Education at Malmö University in Sweden started in the early 1980s and it has had different admission requirements, diploma, length and credits over the years. Since 2012 it includes the vocational education 90 credits during two years studies. 60 credits in-

clude six courses in education sciences at part-time (75 %) blended distance, integrated with 30 credits in vocational teacher training at full-time (100 %) at a partner school or within the students' own teaching position as non-qualified teachers.

Admission to the vocational education programme requires qualified and relevant professional, validated skills and is assessed in two steps. Entrance to vocational teacher education demands documented experience. These documents attached to the application consist of certificates/grades from education programs or other professional skills relevant to the vocational subjects.

The vocational teacher-students are studying to become authorised vocational teachers related to their own subjects and profession in any of the 12 upper secondary school vocational programs in Sweden. Approximately two-thirds of the teacher students at Malmö University are working as vocational teachers without formal pedagogical qualification. All of them had been working for several years in their occupations, and only a few of them have previously studied at university. As professionals, they usually place priority on their occupation. Therefore, their academic studies have been perceived challenging for teacher students with new theoretical and practical requirements on teaching and pupils learning.

What is the content of vocational teacher programme at Malmö University?

All course content in Vocational Education programme constitutes strong links between vocational teacher training and education sciences.

The courses in educational sciences (60 ects) have learning goals related to social relations, conflict management, teacher leadership, schools' value base, learning and development, curriculum theory, didactics, assessment and special needs education. In the final course, the teacher students write a 12-credits school development project in their vocational subject.

The course in vocational teacher training (30 credits) includes four courses distributed over 20 weeks during four semesters. They have four learning goals in progression between the courses. The first goal is linked to the development area of analysis and reflectivity. The second goal is linked to the development area of subject knowledge and didactic skills. The third goal is linked to development area of communicative and democratic leadership. The fourth goal includes complexity of teaching and involves students to do a self-assessment related to their professional development with a view to future vocational teaching.

Which is the common thread in the education in Malmö?

₹he overall goal in the Vocational 📝 Teacher Education programme is to have a strong link between the vocational practice and the ability in academic literacy, i.e. to read, write and speak with a critical, scientific approach aligned to the courses learning goals for the benefit of teacher students learning and development. The thread read includes: a) To understand and critically read academic texts and literature in different genres. b) Be able to use abstract subject and occupational texts and concepts in relation to a specific vocational language. c) Be able to put these texts in relation to other people's texts and arguments based on evi-

dence and critical approach.

The thread write includes: a) Planning the teacher students' writings by considering relevant ideas and experiences, connected to relevant substance, and changing and organizing content according to purpose and recipient. b) Transforming text based ideas, concepts and other descriptions into a scientific narrative text / story on the standards of sources and references. c) Reflecting and critically review texts and revise their own text into a meaningful text/story.

The thread *speak* includes: a) to present, argue and motivate in a logically and clearly targeted way. b) Be able to ask authentic and open questions that stimulate thinking and different problem solving. c) To explore questions based on research findings, as well as more everyday views, opinions and ideas based on claims, warrant, rebuttal and/or support from other sources.

How is the professional progress evaluated and how is learning examined in Malmö?

he teacher students participate actively at blended distance learning courses both individually and in groups. The courses they attend have different course assignments, peer assessments and more traditional examinations. Teacher students peer learning activities make use of digital tools that have been investigated in several studies (Amhag, 2013).

The blended distance approach starts every course. It consists of two or three days at the university including a review of course contents, lectures and assignments. These days are followed-up with

lectures at the university and/or online webinars, face to face (F2F) and textual chat communications. These chats can be based on e.g. teacher trainers recorded flipped classroom videos with pre-defined goals and questions from the course literature. The teacher students also discuss theoretical concepts from the course literature and sharing experiences between teaching practices and professions, as well as tutoring and scaffolding in the course assignments. Some of the online webinars are available for students to attend as per their own needs and preferences through flexible drop-in. A majority of the online webinars are recorded and made available in the teacher students' learning management system (LMS) to provide the opportunity to take a step back, reflect, self-assess, and compare various contributions. Moreover, the students' are providing peer feedback on fellow students' text in the LMS before the examinations.

The blended distance teacher training course offer the teacher students the possibilities to work at their own speed (Amhag, 2016). In their LMS, they can download different course documents, literature and instructions, as well as folders where they can post their written papers and reflections during vocational training as a kind of a portfolio (Amhag, 2017). The teaching time is used more efficiently and creatively and the teacher students' interest and involvement increase, contributing to better learning outcomes and development, and the use of mobile technologies provide increased flexibility. The homework on course literature and teacher trainer recorded flipped classroom videos before scheduled lectures at the university or online webinars F2F provide teacher trainers with better insight into teacher students' reading and writing abilities, as well as different learning styles.

Teacher educators are examining and assessing the learning outcomes by both compulsory written papers and oral presentations at the university or online webinars F2F. Moreover, at the end of the course, there is a compulsory oral and written examination on a specific course content at the university. The course is formative evaluated in the middle of the course in conjunction during one lecture or online webinars E2E. At the end of the course, the teacher students will be assessed both verbally and online if and how they have achieved their learning objectives in relation to objectives, about the learning activities and their own participations, individually and collectively, as well as about the examinations.

Review of the vocational education at Malmö University

uring the spring of 2017 a major review of the vocational teacher education was implemented. The overarching aim of the review was to analyse how constructive alignment and progression was implemented in the programme over four semesters. The review resulted in the following concrete action orders. Firstly, all Diploma goals in the national vocational education in the Higher Education Ordinance (Högskoleförordningen 1993) have to be included in the local syllabi. Deficiencies were identified and the local syllabi was revised in order to cover all goals found in the Higher Education Ordinance. Secondly, key concepts in the Higher Education Ordinance such as critical thinking, ability to work independently, profoundness, quantitative and qualitative research methods, theory of science, gender equality, empathetic competence were inserted in the local syllabi. Thirdly, a critical overview of the teaching and learning methods was realized.

Results and impact of vocational teacher education

n the following we attempt to synthetize the findings from our study of the four examples (see also Table 3).

Both in Norway, Denmark and Sweden there are efforts to academize VET teacher education, in an effort to upgrade VET teacher quality, status and attractivity (author's interpretation). The challenges when introducing academic studies for Discussion practitioners, who do not have prior experience of university studies, have been challenging in both Sweden and Denmark. Peer learning is stressed in Sweden and Finland while working life and er education programmes with the logic

competences are at fore in Norway and Finland. Some Nordic countries, such as Sweden and Norway use both formative and summative methods, others only formative. Flexibility and individual study paths are emphasized both in Denmark and Finland. At the same time active participation, and sharing is stressed. Ethics, democratic leadership and active citizenship are emphasized in Finland, Sweden and Denmark.

In the following we will present a more general analysis considering future ▲ needs for developing vocational teach-

	SWEDEN	FINLAND	NORWAY	DENMARK
Entry require- ments	Qualified professional Certificate	Bachelor/master 3-5 years work-e	No entry exam Basic criteria	Motivational letter Ac. transcript, work-e
Common thread	To plan, transform Present, Reflect Inquire, Understand Argue, Peer learning	PDP (personalized) Peer-group Teacher training Working life level.	Experience and practice Teacher training Vocational pedagogy Professional didactics	Academic Individual educational profile Personal integrity Counceling
Content	Education science linked with teaching Didactics Democratic leadership Professional development	Pedagogy Working life Competence Counseling Ethics, democracy	Competences Professional knowledge Work technology Working life Research methods	Teaching and learning Scientific theory Educational planning Didactics Active participation/ citizenship
Progress follow-up	Reflection, self-ass. Peer assessment Active participation Sharing	Reflection, self-ass. Peer assessment PD talks (3) Sharing	Reflection Contribution Active participation Sharing	Graduation project Reflection on own teaching pedagogy and didactics by scientific theory
Assessment	Formative and summative assessment Webinars, written and oral presentations	Formative Portfolio Written papers	Projects Diaries Home or school based tests	Self-assessment Log

Note: work-e= work experience, Ac. transcript= academic transcript, PD=professional development

that what is relevant in the future of VET is also relevant for future vocational teachers. According to the OECD (2017), upper secondary education aims to prepare students to enter further levels of education or the labor market, and to become engaged citizens. In many countries, this level of education is not compulsory and can last from two to five years. It is crucial, to provide education of good quality that meets the needs of society and the economy. Graduating from upper secondary education has become increasingly important in all countries, as the skills needed in the labor market are becoming more knowledge-based, and workers are progressively required to adapt to the uncertainties of a rapidly changing global economy. (OECD, 2017.)

The challenges regarding professional future needs and skill requirements in the Nordic countries, are highly relevant also for the schools of vocational teacher education, i.e. how to develop vocational teacher education in order to enhance employability, continuous knowledge development and active citizenship. These are difficult tasks to be met, but it seems that the Nordic vocational teacher educations all embed future competences, diversity, and lifelong learning in their programmes involving continuous development and professional growth. Furthermore, ongoing transversal/emotional skill self- and peer- assessment practices (Isacsson, 2017) as well as practices to combine theory and practice are on the teacher education programmes' agenda.

Finland's VET education has been successful in creating an educational system with no dead ends. Despite this fact in Finland only 41 % completed tertiary (higher education) education in 2016 according to OECD (2017) indicators,

whereas the corresponding percentage in 2005 was 38 %. In Denmark the respective shares were 29 % in 2000, 40 % in 2005, and 46 % in 2016. Norway's equivalent figures were 41 % in 2005 and 49 % in 2016. Sweden has raised its figures from 37 % in 2005, to 47 % in 2016. In contrast to the other countries Finland is lagging behind despite the efforts put in upper secondary graduates' eligibility for tertiary education. In Finland, however, 49 % of the 25-34 years old have completed diplomas from upper secondary education, whereas in Denmark the respective percentage was 38 %, in Sweden 36 %, and in Norway 33 % (OECD, 2017). According to OECD (2017) the unemployment rates correlate directly with the educational background, i.e. the higher the educational level, the lower the unemployment rates. Hence, from a political point of view stressing higher education and continuous competence development seems relevant.

In Finland the increased popularity of VET together with the changing working life and competence requirements create new demands on VET (Laukia, 2013). This has been taken in consideration by the vocational teacher education by stressing personalization, competences, multi-disciplinarity, working life needs and peer group mentoring. Moreover, this has meant giving emphasis to, pedagogical methods, ethics, values, and continuous personal, professional and working life development. In Sweden, the interest on the part of trade and industry in being involved in defining employability in relation to education and competence requirements has increased (Olofsson & Persson Thunqvist, 2014). In the Malmö vocational teacher programme the learning outcomes will be at fore in the future, perhaps better reflecting working life competence requirements. In Denmark the dual system supports the transition of the student of the labor market, but at the same time diverts them from progression to the tertiary level (Shavit & Muller, 2000). The Danish VET is quite successful at providing employment, but has failed to develop access to higher education (Jørgensen, 2014), nowadays though offering an eux-programme that entitle vocational students access to higher education. According to the latest 2017 OECD (2017) indicators report, however, Denmark has overall performed well in this respect, as completed tertiary education has risen from 29 % in 2000 to 46 % in 2016.

In Norway offering an easy transition both to the labor market and to higher education is strongly linked to the question of prestige and vice versa. Prestige is also connected to the question of inclusion. Simultaneously strengthening the conditions for completion among weak learners and the prestige of VET among strong learners has traditionally been seen as a main challenge for VET systems based on apprenticeship (Lutz, 1994). This is a common challenge for all countries that cannot be solved, at least not with traditional school-based methods. The vocational teacher students and trainers should be aware of these challenges, and encourage teacher students to develop methods, networks, projects and models to prevent drop-outs.

References

Amhag, L. (2013). Creativity in and between collaborative peer assessment processes in higher distance education. *Creative Education*, 4(7A2), 94-104. (Special Issue on Higher Education). Retrieved from http://www.scirp.org/Journal/ce/

Amhag, L. (2016). Mobile technologies for student centered learning in a distance higher educa-

tion program. In J. Holland (Ed.), Wearable Technology and Mobile Innovations for Next-Generation Education (pp. 184-199). Hershey PA: IGI Global.

Amhag, L. (2017). Mobile-Assisted Seamless Learning Activities in Higher Distance Education. *International Journal of Higher Education, 6*(3), 70-81. Retrieved from http://ijhe.sciedupress.com

Kandlbinder, P. (2014). Constructive Alignment in University Teaching. *HERDSA Review of Higher Education*, 36(3), 5-6.

Committee Report. (2005). Report of the committee on transition from basic to secondary education and training. Helsinki: Finland Ministry of Education.

Elmgren, M., & Henriksson A.-S. (2014). *Academic Teaching*. Lund, Studentlitteratur.

Engeström, Y. (1970). Education class society- introduction to educational problems- The Capitalist society [Koulutus luokkayhteiskunnassa- johdatus kapitalistisen yhteiskunnan koulutusongelmiin]. Jyväskylä: Gummerus pp. 224-259

European Credit Transfer and Accumulation System. Retrived from https://en.wikipedia.org/wiki/European_Credit_Transfer_and_Accumulation_System

Högskoleförordningen. (1993:100). Yrkeslärarexamen [Diploma in vocational education]. SFS 2017:947. Retrieved from http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/hogskoleforordning-1993100_sfs-1993-100

Isacsson, A. (2013). Haaga-Helia's Vocational Teacher curriculum process expressed through teacher student experiences. In: *Practical skills, education and development – Vocational education and training in Finland.* Vantaa: Haaga-Helia. Retrieved from http://scholar.google.fi/citations'view_op=view_citation&hl=fi&user=SiwVSPoAAAAJ&citation_for_view=SiwVSPoAAAAJ:ufrVoPGSRksC

Isacsson, A. (2017). When IQ is simply not enough. Retrieved from https://esignals.haaga-helia.fi/kategoria/aihepiirit/pedagogiikka/

Jørgensen, C. H. (2014). Vejen videre: – hvor går eleverne hen efter afsluttet uddannelse?. In T. Størner, & K. H. Sørensen (Eds.), *Elever i erhvervsuddannelserne* (pp. 159–177). København: Munksgaard.

Laukia, J. (2013). Teacher education in the area of vocational education and training - the Finnish perspective. In K. Aaltonen, A. Isacsson, J. Laukia, & L. Vanhanen-Nuutinen (Eds.), *Practical skills, education, and development; Vocational education and training in Finland* (pp. 29–40). Helsinki: Haaga-Helia University of Applied Science.

Lutz, B. (1994). The difficult rediscovery of 'professionalism'. In Apprenticeship: *Which Way Forward?* (pp. 19-28). Paris: OECD.

Teacher Education 2018. Retrieved from https://www.phmetropol.dk/english/study+programmes/education

Teachers and Education Staff. 2014. Retrieved from https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Finland:Teachers_and_Education Staff

OECD. (2017). Education at glance 2017: OECD Indicators. Paris: OECD Publishing. Retrieved from https://www.hm.ee/sites/default/files/eag2017_eng.pd.

Olofsson, J. & Persson Thunqvist, D. (2014). The Swedish Model of Vocational Education and Training: Establishment, recent changes and future challenges. Roskilde: Department of Psychology and Education Studies. Rapport 455. Retrieved from www. skolverket.se

Shavit, Y. & Muller, W. (2000). Vocational Secondary Education. *European Societies*, *2*(1), 29-50. Retrieved from https://doi.org/10.1080/146166900360710

Skolverket (2017). Skolverkets lägesbedömning 2017. [School Administration's Assessment 2017].

Virolainen, M., & Stenström, M.-L. (2014). Finnish vocational education and training in comparison: Strengths and weaknesses. *International Journal for Research in VET*, 1(2), 81-106.

Vocational Teacher Development Programme. Handbook 2017-2018. Retrieved from http://www.haaga-helia.fi/sites/default/files/Kuvat-ja-liitteet/Koulutus/AOKK/60op/2017-2018_development_programme.pdf?userLang=en

Yrkeslärarutbildning. (2018). Malmö Universitet. Retrieved from https://edu.mah.se/sv/Program/LGLYR

