

HETA RINTALA

Work-Based Learning in Vocational Education and Training

Varied Communities, Fields and Learning Pathways

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ACADEMIC DISSERTATION

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ACADEMIC DISSERTATION

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ABSTRACT

There is currently a strong focus on work-based learning (WBL) in vocational education. This doctoral dissertation investigates work-based learning, particularly apprenticeship training in Finland, and provides knowledge and understanding of workplace learning (WPL) in vocational education and training (VET). The dissertation includes four publications in total, of which publications I and II are literature reviews, and publications III and IV are studies based on empirical interview data. Interviews ($N = 73$) were collected in 2015 and 2017. The first dataset ($n = 40$) consisted of interviews with apprentices and members of their work communities in 10 workplaces. The second dataset ($n = 33$) covered interviews with both apprentices and students in school-based VET who were participating in on-the-job learning periods. The findings of the studies were based on a qualitative synthesis of previous research and qualitative and thematic analysis of interview data.

School-based VET has been the dominant model of education in the Finnish VET system. This research highlights that apprenticeship, as an institution, has been supported by a clear and legal framework, but the goals and the target group have not always been clear. According to the experiences of the participants, apprenticeship training was a demanding work-based pathway; moreover, its educational meaning was not always recognised by the actors, including apprentices, trainers or employers. Employers also expected apprentices to quickly become productive workers. However, full participation was not always possible due to productive, financial or safety reasons.

The empirical studies investigated more closely three fields of VET – social and health care, business and administration and technology – and two learning pathways in VET – learners as apprentices in work and learners in school-based VET. Learners revealed differing experiences in both the field of work and in the learning pathways. For example, in the social and health care field, learners more quickly progressed to more independent and responsible tasks than they did in the technology field. As regards the learning pathways, while their roles could be more autonomous, for apprentices, the transition to responsible tasks could come too quickly. In contrast, students in school-based VET gradually moved to more demanding tasks and environments and were supported by the school and the work community. However,

learners were in some cases ‘relegated’ to tasks more assistive in nature as a result of being positioned lower in the hierarchy. Despite the differences among the fields and between the learning pathways, it is suggested that learning environments provided by the various work communities can be developed by promoting learners’ opportunities to participate, receive guidance and feel a sense of belonging.

The summary of the four publications, led to the conclusion that WBL in VET is related to multiple aspects at the micro, meso and macro levels. Learners and their characteristics and behaviours are central to WBL. Overall, to fully benefit from learning opportunities at work mean having a self-directed approach. Also, there is a need to consider the context, including various communities and organisations that participate in VET and the role of education within learning at work. More widely, developments related to the VET system and society cannot be overlooked.

Keywords: work-based learning, vocational education and training, apprenticeship, workplace learning, education system

TIIVISTELMÄ

Työelämälähtöinen oppiminen on tällä hetkellä keskeinen osa ammatillista koulutusta. Tämä väitöskirjatutkimus tarkastelee työelämälähtöistä oppimista, erityisesti oppisopimuskoulutusta, Suomessa sekä tuottaa tietoa ja ymmärrystä työelämässä oppimisesta ammatillisessa koulutuksessa. Väitöskirjatutkimus koostuu yhteensä neljästä osajulkaisusta, joista julkaisut I ja II ovat kirjallisuuskatsauksia ja III ja IV empiirisiin haastatteluaineistoihin perustuvia tutkimuksia. Haastattelut ($N = 73$) kerättiin vuosina 2015 ja 2017. Ensimmäinen haastatteluaineisto ($n = 40$) koostui oppisopimusopiskelijoiden ja heidän työyhteisöidensä jäsenten haastatteluista kymmenellä eri työpaikalla. Toinen haastatteluaineisto ($n = 33$) kattoi sekä oppisopimusopiskelijoita että oppilaitosmuotoisessa ammatillisessa koulutuksessa työssäoppimiseen osallistuneita opiskelijoita. Tutkimusten tulokset perustuivat laadulliseen synteisiin aiemmista tutkimuksista sekä haastatteluaineistojen laadulliseen temaattiseen analyysiin.

Oppilaitosmuotoinen ammatillinen koulutus on ollut Suomen ammatillisen koulutuksen järjestelmässä hallitseva koulutusmuoto. Tutkimus korostaa, että oppisopimuskoulutus instituutiona on perustunut selkeään lailliseen viitekehykseen, mutta sen tavoitteet ja kohderyhmät eivät aina ole olleet selkeitä. Tutkimukseen osallistuneet kokivat oppisopimuskoulutuksen vaativana työelämälähtöisenä koulutusmuotona, jonka koulutuksellista merkitystä eri toimijat, kuten oppisopimusopiskelijat, työpaikkakouluttajat tai työnantajat, eivät aina tunnistaneet. Työnantajat myös odottivat oppisopimusopiskelijoiden toimivan nopeasti tuottavina työntekijöinä. Täysi osallistuminen ei kuitenkaan aina ollut mahdollista tuotannollisista, taloudellisista tai turvallisuussyistä.

Empiiriset tutkimukset tarkastelivat erityisesti kolmea ammatillisen koulutuksen alaa: sosiaali- ja terveystaloutta, kaupan ja hallinnon alaa sekä tekniikan alaa sekä kahta ammatillisen koulutuksen oppimispolkua: oppisopimusopiskelijoita ja oppilaitosmuotoisen ammatillisen koulutuksen opiskelijoita. Näiden oppijoiden kokemusten perusteella alojen ja oppimispolkujen välillä oli selkeitä eroja. Sosiaali- ja terveysala esimerkiksi näyttäytyi alana, jossa oppijat etenivät nopeasti itsenäisempiin ja vastuullisempiin tehtäviin kuin tekniikan alalla. Oppimispolkua tarkasteltaessa oppisopimusopiskelijat kokivat usein toimivansa itsenäisessä roolissa,

mutta toisinaan siirtymä vastuullisiin tehtäviin koettiin myös liian nopeana. Oppilaitosmuotoisen ammatillisen koulutuksen opiskelijat siirtyivät vähitellen oppilaitoksen ja työyhteisön tuella haastavampiin tehtäviin ja ympäristöihin. Joissakin tapauksissa oppijat kuitenkin sijoitettiin työpaikan hierarkiassa alemmaksi ja avustaviin tehtäviin. Ala- ja oppimispolkukohtaisista eroista huolimatta tutkimuksessa esitetään, että eri yhteisöjen tarjoamia oppimisympäristöjä voidaan kehittää edistämällä oppijoiden mahdollisuuksia osallistua, saada ohjausta sekä kokea osallisuutta.

Neljän julkaisun yhteenvetona voitiin todeta, että työelämälähtöinen koulutus ammatillisessa koulutuksessa liittyy useisiin mikro-, meso- ja makrotason seikkoihin. Oppijat ja heidän ominaisuutensa sekä käytöksensä ovat työelämälähtöisen oppimisen keskiössä. Oppimismahdollisuuksien hyödyntämisen koettiin usein edellyttävän itseohjautuvuutta. Samalla huomiota tulee kiinnittää myös laajempaan kontekstiin, erilaisiin yhteisöihin ja organisaatioihin, jotka osallistuvat ammatilliseen koulutukseen sekä koulutuksen ja oppilaitoksen rooliin suhteessa työelämässä oppimiseen. Lisäksi ammatillisen koulutuksen järjestelmään ja yhteiskuntaan liittyviä kehityskulkuja ei voida jättää huomiotta.

Avainsanat: työelämälähtöinen oppiminen, ammatillinen koulutus, oppisopimuskoulutus, työelämässä oppiminen, koulutusjärjestelmä

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ABBREVIATIONS

CME	Coordinated market economy
CoP	Community of practice
HE	Higher education
LME	Liberal market economy
LPP	Legitimate peripheral participation
RQ	Research question
TA	Thematic analysis
UAS	University of applied sciences
VET	Vocational education and training
VoC	Varieties of capitalism
WBL	Work-based learning
WPL	Workplace learning

ORIGINAL PUBLICATIONS

Publication I Rintala, H., Nokelainen, P., & Pylväs, L. (2017). Katsaus oppisopimuskoulutukseen instituutiona Saksassa, Englannissa ja Suomessa [A review on apprenticeship as an institution in Germany, England and Finland]. *Kasvatus*, 48(2), 128–140.

Rintala designed the literature review, carried it out and wrote the manuscript. Nokelainen and Pylväs contributed to the revision of the manuscript.

Publication II Rintala, H., Mikkonen, S., Pylväs, L., Nokelainen, P., & Postareff, L. (2015). Työpaikalla tapahtuvaa oppimista ja ohjausta edistävät ja estävät tekijät [Promoting and hindering factors of workplace learning and guidance]. *Ammattikasvatuksen aikakauskirja*, 17(4), 9–21.

Rintala, Mikkonen and Nokelainen developed the idea for the literature review. Mikkonen and Rintala collected and analysed the data. Rintala wrote the first draft of the manuscript. The co-authors contributed by providing comments and modifications.

Publication III Rintala, H., Pylväs L., & Nokelainen, P. (2017). Oppisopimusopiskelijan osallisuus työyhteisössä [Apprentice's sense of belonging to a work community]. In A. Toom, M. Rautiainen, & J. Tähtinen (Eds.), *Toiveet ja todellisuus: Kasvatus osallisuutta ja oppimista rakentamassa* (pp. 317–334). Turku: Suomen kasvatustieteellinen seura.

Rintala participated in designing the research and collected half of the interview data. Rintala chose the focus of the chapter, analysed the data and wrote the manuscript. Nokelainen and Pylväs contributed by providing comments and modifications.

Publication IV Rintala, H., & Nokelainen, P. (2019). Vocational education and learners' experienced workplace curriculum. *Vocations and Learning*. <https://doi.org/10.1007/s12186-019-09229-w>

Rintala participated in designing the research, analysed the interview data and wrote the manuscript. Nokelainen contributed by providing comments and modifications.

1 INTRODUCTION

1.1 Background and motivation

It is widely recognised that there is a need for continuous learning in the knowledge economy. In this process, education, training and workplace learning have become important (e.g. Kyndt & Beusaert, 2017; Norén Creutz & Wiklund, 2014). However, simultaneously, the focus on knowledge economy development and higher education (HE) has put vocational education and training (VET) and intermediate level skills under pressure (Baethge & Wolter, 2015; Fuller & Unwin, 2016; Pattayanunt, 2009). Nevertheless, it seems that VET often provides a smooth entry into the labour market, although its advantages may diminish over time (Forster, Bol, & van de Werfhorst, 2016; Hampf & Woessmann, 2017; Hanushek et al., 2017). Furthermore, VET is expected to promote lifelong or continuous learning throughout one's career and life (Ministry of Education and Culture, 2019b).

In VET, there is currently a strong policy focus on *work-based learning* (WBL) as an educational strategy or approach. According to the European Commission (2013, pp. 5–6), WBL covers both apprenticeships (alternance schemes) and school-based VET, including on-the-job training periods (internships, work placements, traineeships), but it also covers WBL integrated into school-based programmes (e.g. labs, workshops, kitchens, practice firms and project assignments). UNESCO's Inter-Agency Group on Technical and Vocational Education and Training (2017) has a narrower approach to WBL as it 'refers to all forms of learning that takes place in a real work environment', including, most commonly, apprenticeships, traineeships and on-the-job training. Similarly, the Organisation for Economic Co-operation and Development (OECD) emphasises that WBL is an element of education that may cover formal, informal or non-formal learning as long as it takes place in a real work environment (Musset, 2019). Regardless of the popularity of the term WBL, it seems to lack a clear definition (Bahl et al., 2019). Sometimes the terms *work-based learning* and *workplace learning* (WPL) are used side by side or even interchangeably (Streumer & Kho, 2006, p. 4). In a similar manner, WPL seems to be a fuzzy concept by nature, and defining it has proven to be difficult (Streumer &

Kho, 2006; Zhao & Ko, 2018). Evans, Guile and Harris (2013, p. 153) have taken a broad and an inclusive approach to WBL, considering it as 'learning at work, for work and through work', based on purposeful activity. Here, purpose is dependent on the context of work and may cover, for example, socialisation processes, improving practices, development of vocational identity or achievement of qualifications (Evans et al., 2013). In this dissertation, WBL refers to an educational approach and a model of education between education and work, thus including both apprenticeship training and school-based VET with on-the-job learning periods, whereas WPL more specifically refers to practices taking place in real work environments or settings.

This dissertation investigates aspects related to WBL in VET, especially by focusing on apprenticeship training in Finland (publications I, III and IV). At the policy level, apprenticeships, as part of WBL, have been promoted and recommended since, by providing experience and the skills that employers need, they are considered to ease the transition from education and training to work, as well as support adults' employability and career development (European Commission, 2015; European Council, 2018). In the Finnish VET system, apprenticeships and school-based VET have offered parallel routes to vocational qualifications. However, compared to some other countries with well-established apprenticeship systems, apprenticeship training has been an educational pathway mainly for adults (Kivinen & Peltomäki, 1999; Mazenod, 2016; Stenström & Virolainen, 2018). In the past decades, it has mainly filled gaps in the VET system and acted as part of labour and employment policy (Kivinen & Peltomäki, 1999). The historical decline of apprenticeship training in Finland is due to multiple reasons as summarised by Stenström and Virolainen (2018, p. 38). They outlined how the traditional guilds were abolished in 1868, and their duties in supervising apprenticeship training were given to societies for merchants and handicrafts. However, these societies failed to form a new system. Furthermore, industrialisation increased the demand for vocational skills, and the liberation of occupations in 1879 provided opportunities for choosing a career. In addition, vocational and industrial schools began to attract students, and education policy developments promoted equal educational opportunities and the centralisation of schooling. Consequently, the responsibility for training was left to the state and municipalities (Stenström & Virolainen, 2018). These historical developments of the Finnish VET system have been discussed in various studies (e.g. Heikkinen, 1995; Kivinen & Peltomäki, 1999; Klemelä, 1999; Laukia, 2013; Numminen, 2000).

In the school-based VET system, there has again been a growing emphasis on providing students with WBL experiences since the 1990s (Virolainen & Persson Thunqvist, 2017). Virtanen (2013, pp. 21–24) concluded that this development was not due to research or transferring practices from other educational systems, rather it was based on wider developments. According to Virtanen (2013, pp. 21–24), these developments were related to new skills requirements and to recognising the gap between school and work, which called for co-operation and local, decentralised practices. Furthermore, in relation to teaching and learning, the importance of lifelong learning and informal learning were recognised and promoted internationally, and new ideas were adopted, emphasising an individual-centred and self-directed approach to learning (Virtanen, 2013, p. 24). Currently, school-based VET as a learning pathway may also include an extensive amount of learning in real work environments via training agreements (*koulutussopimus*) as there is no minimum or maximum time set for WPL.

This dissertation highlights the understanding of WPL as part of VET. In the Finnish context, studies on WPL in VET have focused on school-based VET students' on-the-job learning periods (e.g. Metso, 2014b; Metso & Kianto, 2014; Virtanen & Tynjälä, 2008; Virtanen, Tynjälä, & Collin, 2009; Virtanen, Tynjälä, & Eteläpelto, 2014a, 2014b), whereas apprenticeship training and its opportunities have been less studied (e.g. Irjala, 2017; Leino, 2011; Mazonod, 2016; Norontaus, 2016). Thus far, there has been little discussion about WPL in both school-based VET and apprenticeship training in the Finnish context. However, previous quantitative studies related to VET students' workplace learning (Virtanen & Tynjälä, 2008; Virtanen et al., 2014a, 2014b) have suggested that various vocational fields have widely differing WPL practices. This dissertation adopts a qualitative approach to further explore these differences.

Interest in WPL and its research has increased in recent decades, alongside developments in working life, and currently, the research field is broad and diverse (Manuti et al., 2015; Tynjälä, 2013). A central debate in the field has been related to the nature of WPL. Studies depicting and characterising learning processes and activities have often considered WPL as *informal* (Marsick & Watkins, 1990; Tynjälä, 2013). Informal learning, referring to spontaneous and unplanned learning in work contexts, has been widely studied in relation to human resource development as it has been considered as an important means by which employees update their knowledge and skills and adapt to changing situations (e.g. Lohman, 2005; Messmann, Segers, & Dochy, 2018; Noe, Tews, & Marand, 2013; Rintala, Nokelainen, & Pylväs, 2019). In contrast, *formal* learning is usually characterised by a

framework, the presence of a designated teacher or trainer, the award of qualification or credits and specified outcomes (Eraut, 2000). Thus, WPL as part of VET should be structured and developed to be goal-oriented, guided and assessed (Virtanen et al., 2009). In addition, Billett (2002) suggested that WPL is never informal as it is dependent on the organisations and communities' formalised structures related to learning opportunities and work as a social practice. Recently, new approaches to WPL have emphasised its complexity and dynamic nature, and it has been concluded that, in most contexts or situations, learning is characterised by elements and activities of both informal and formal learning (Manuti et al., 2015; Marsick et al., 2017). This dissertation investigates these contexts and practices related to workplace learning in various communities, vocational fields and learning pathways. Here, WPL is approached through a socio-cultural perspective and the concepts of participation, guidance and a sense of belonging (publications II, III and IV). Here, *participation* refers to the extent to which learners are allowed to participate or they choose to participate and engage in the work community, *guidance* refers widely to all the support learners receive from the work community and *sense of belonging* refers to the learner's feelings of being safe, accepted and valued in the community.

Usually, vocational education and curricula aim to build meaningful relations among knowledge, skills and attitudes acquired in both workplaces and vocational schools (Schaap, Baartman, & de Bruijn, 2012). However, learning experiences may be more guided by the workplace goals than the educational goals stated in official documents (Fjellström & Kristmansson, 2016). Thus, bringing together these different types of knowledge, values and logics remains the central challenge of WBL (Evans et al., 2013). It seems that often WBL is understood as having an emphasis on 'work-based' rather than 'learning' (Burke et al., 2009). Transitions between school and work, among different social practices or settings, have been considered to require learning processes described as transfer (Eraut, 2004b), boundary crossing (Akkerman & Bruining, 2016; Tuomi-Gröhn & Engeström, 2003) or recontextualization (Evans et al., 2013, p. 156). Furthermore, the concept of *connectivity* (Griffiths & Guile, 2003; Guile & Griffiths, 2001) has been used to investigate the educational practices and pedagogic approaches to supporting learners to relate their cognitive development to development taking place in and between different contexts. The ideal model, i.e. a connective model, highlights that learning is related to the access to various contexts and people, the opportunities to participate in communities of practice and the possibilities of creating new knowledge and practices (Griffiths & Guile, 2003).

1.2 Research objectives and questions

This article-based doctoral dissertation consists of four publications and is supplemented with a summary that synthesises the findings described in the publications. This dissertation firstly aims to investigate various aspects related to WBL in VET by focusing specifically on apprenticeship training. In order to reach the first aim, the first objective was to understand VET systems and to characterise apprenticeship training in Finland as an institution at the macro level and to compare it with an international setting based on previous research. Thus, publication I summarised the previous literature on apprenticeship training in Finland and compared it with apprenticeship in Germany and England. The literature review (publication I) confirmed that apprenticeship training has not been extensively studied in the Finnish context.

The second aim of this dissertation was to further investigate and to better understand WPL in VET. In order to reach the second aim, the focus of the study was shifted towards the meso and micro levels and the context of WPL in VET. The second objective was to identify factors that shape WPL and guidance by investigating previous empirical studies in the VET context. Publication II emphasised the role of the work community, relationships and educational practices. In addition, the literature review suggested that field- or occupation-related differences could be further studied. In the Finnish context, recent studies on WPL in VET have mainly employed quantitative approaches and focused on school-based VET students' on-the-job learning periods (Metso, 2014b; Metso & Kianto, 2014; Virtanen & Tynjälä, 2008; Virtanen et al., 2009, 2014a, 2014b). Based on these previous findings, the third objective was to deepen the understanding of differences between vocational fields and to investigate apprenticeship training and apprentices' experiences. Therefore, publication III focused on apprentices' participation and sense of belonging to a work community. The fourth objective was to further investigate the revealed differences in various vocational fields, and to expand the investigation to cover both apprenticeship training and school-based VET. Thus, the perspective of the school-based VET pathway was added to the study in order to promote understanding of various learning pathways in the VET system. Publication IV focused on both apprentices' and school-based VET students' experiences of WPL as part of VET. The research questions (*RQs*) of the publications are listed in Table 1.

Table 1. Overview of the research questions

Original publications					
I	<i>RQ1.</i> What kind of institution is apprenticeship in Germany, England and Finland? <i>RQ2.</i> What kind of challenges and trends affect apprenticeship training?				
II	<i>RQ.</i> Which factors promote or hinder guidance and workplace learning?				
III	<i>RQ1.</i> How do apprentices describe their participation and sense of belonging in workplaces and at school? <i>RQ2.</i> What kinds of challenges are related to apprentices' participation and sense of belonging to a work community?				
IV	<i>RQ.</i> How do learners experience workplace learning on various learning pathways?				
Dissertation summary		I	II	III	IV
<i>RQ1.</i> How does apprenticeship manifest itself as an institution and a work-based learning pathway in VET?		x		x	x
<i>RQ2.</i> How do the apprentices' experiences of workplace learning compare with those of school-based VET students in various vocational fields?				x	x
<i>RQ3.</i> What micro, meso and macro level aspects are related to work-based learning in VET?		x	x	x	x

This dissertation summary sets out to answer the three research questions presented in Table 1 and below. RQ1 is answered based on a literature review (publication I) and supplemented by experiences and views on apprenticeship training (publications III and IV). RQ2 focuses on the analysis and synthesis of the empirical interview data in various vocational fields and in the context of apprenticeship training and school-based VET (publications III and IV). The answer to RQ3 builds on all the original publications: the synthesis of previous studies (publications I and II) and themes found in empirical studies (publications III and IV).

RQ1. How does apprenticeship manifest itself as an institution and a work-based learning pathway in VET?

RQ2. How do the apprentices' experiences of workplace learning compare with those of school-based VET students in various vocational fields?

RQ3. What micro, meso and macro level aspects are related to work-based learning in VET?

2 THEORETICAL BACKGROUND

2.1 Characterising VET systems and institutions

This section compares the Finnish VET system with other systems in order to clarify various developments and determine why school-based VET has been preferred in Finland. In comparative research of VET systems, various kinds of typologies are often used (see e.g. Deissinger, 2019; Pilz, 2016). However, it should be noted that typologies are always rather idealistic, and they tend to provide a static reproduction of structures or they do not fully characterise national systems that are path-dependent, but constantly changing (Walther, 2006). However, they may provide an interpretative background to recognise similarities and differences in versatile contexts.

One of the early typologies (Greinert, 1988) found three basic models of VET (*market*, *school-based* and *dual*) by focusing on institutional responsibilities, co-operative structures and the role of the state. Later, others similarly investigated variations of skill formation with policy areas at the macro level (Busemeyer & Schlicht-Schmälzle, 2014; Busemeyer & Trampusch, 2012). For example, Busemeyer and Schlicht-Schmälzle (2014) distinguished among four ideal types of skill regimes combining high and low values of employer involvement and public commitment. According to their model, individual employers are given autonomy in *employer-dominated systems*, where public commitment to VET is weak. *Collective systems* involve state actors as moderators, whereas intermediary organisations, such as employer and employee organisations, participate in the governance of VET, and employers can affect the content of training. The *residual type* has both low public commitment and little employer involvement. Based on an expert survey, Busemeyer and Schlicht-Schmälzle (2014) put Finland in the *statist* category. This kind of *statist system* integrates VET into the secondary school system, and public commitment is strong, while employer involvement is weak. However, it should be noted that, in the case of Finland, only one expert opinion has been given (Busemeyer & Schlicht-Schmälzle, 2014).

Regarding youth in particular, Walther (2006) studied transition regimes to work and adulthood. These transitions were found to be characterised by a complex

system of socio-economic structures, institutional arrangements and cultural patterns (Walther, 2006). Eventually, Walther (2006) recognised four transition regimes. The *universalistic transition regime*, which is found in Nordic countries, is based on a comprehensive school system, and focusing on the issue of training, it is flexible enough to allow individual learning and training plans. The *liberal transition regime*, predominant in the UK, aims to support labour-market entrance and education, and training is often short-term and may often lack reliable standards. In contrast, the *employment-centred transition regime* found in continental countries, such as Germany, emphasises vocational training that is relatively standardised. Finally, in the *sub-protective transition regime* found primarily in southern European countries, vocational training is weakly developed and largely provided by the schools, while the involvement of companies is very limited. In a similar manner, Niemeyer (2007) suggested that the *Scandinavian welfare system* promotes school-based VET as social security, as well as integration and personal development, which are considered to be young citizens' rights. In contrast to this, an *employment-based welfare system* supports a dual system of VET, while a *liberal welfare system* is related to the market-dependent model of VET and aims to improve employability.

Hall and Soskice (2001) explained VET through the varieties of capitalism (VoC) approach. In relation to VET, a central issue is that workplaces need to equip the workforce with suitable skills, while employees must decide how much to invest and in which skills (Hall & Soskice, 2001, p. 7). Instead of focusing on separate entities, such as VET and companies, the approach pays attention to institutional complementarities and tendencies towards the development of complementary practices (Hall & Soskice, 2001, p. 18). Therefore, according to Hall and Soskice (2001), political economies can be divided into coordinated market and liberal market economies. *Coordinated market economies* (CMEs) typically underline industry-specific or work-specific skills. This could be problematic for learners or employees, but, for example, in Germany, employer associations and trade unions supervise training, and by negotiating training protocols, they ensure that training fits both employers and learners' needs in securing employment. In contrast, *liberal market economies* (LMEs) focus on institution-based VET and general skills as firms tend to avoid investing in apprenticeship training in fear of poaching, but learners also benefit from general skills in a fluid labour market. Busemeyer and Jensen (2012) argued that, when social protection is lacking, it becomes riskier to opt for specific training, and thus, learners as (future) workers will favour general training that allows easier shifts from one industry or field to another in case of unemployment. In this division, Finland has been considered as a CME (Hall & Soskice, 2001, p. 21).

However, Finland's location on the CME and LME spectrum has been questioned: Schneider and Paunescu (2012) suggested that Finland has moved from the CME model closer to the LME model favouring general skills.

In general, VET systems are not static as they are shaped by institutional changes, reform policies and Europeanisation (Trampusch, 2009). Ante (2016, p. 197, 224) suggested that the instruments and principles developed in relation to the Copenhagen process, starting in 2002, seem to be biased towards policies in LMEs. In the current European model of skill formation, the focus seems to be less on citizens than on future employees as the goal is to prepare employable individuals who are capable of steering their own learning and careers during changes and transformations (Powell, Bernhard, & Graf, 2012). Although institutions resist change (Scott, 2014), it seems highly probable that similar developments are also taking place in Finland. Based on Scott's (2014) typology, *institutions* consists of three elements: the *regulative* element refers to coercive mechanisms, such as policies, laws, rules and incentives; the *normative* element emphasises goals, values and practices in order to realise these; and the *cultural-cognitive* element highlights socially shared conceptions that shape social action which is taken for granted. In practice, disentangling normative and cultural-cognitive elements is often difficult (Graf, 2013, p. 28). This dissertation considers the VET system, along with its apprenticeship training, as an institution (publication I).

2.2 Understanding workplace learning in VET

This section provides an overview of the theoretical frameworks and the knowledge base used in this dissertation in relation to WPL in VET. Here, the focus is on *workplace* learning since, in learning research, WPL is considered as a research field including versatile theories and lines of research (Hager, 2013; Tynjälä, 2013). Although *work-based* learning could be widely understood as learning at work, for work and through work (Evans et al., 2013), it is rather considered here as a strategy including various models of education, such as apprenticeship training or on-the-job learning included in school-based VET. However, both of these models of education include workplace experiences that emphasise the importance of WPL as part of VET. Here, WPL is viewed through a socio-cultural perspective. Hager (2013) reviewed theories related to WPL and underlined three central ideas in relation to socio-cultural theories. First of all, these theories emphasise the social aspects of learning, but usually both individual and social learning are considered important.

Second, learning is not considered as a product, rather as an ongoing process of participation in suitable activities (see also Sfard, 1998). Third, socio-cultural theories emphasise contextuality, and thus, WPL and performance are shaped by social, organisational, cultural and other contextual factors (Hager, 2013).

According to Smith (2018, p. 76), learning as social practice was conceptualised in the seminal works of Vygotsky (1978) and Lave and Wenger (1991). Vygotsky (1978, p. 86) acknowledged the importance of social development and considered the zone of proximal development as a learning space based on individual problem-solving and on potential development under the guidance and direction of more experienced others. Lave and Wenger's (1991) situated learning theory described the process of learning through *legitimate peripheral participation* (LPP), that learning must be situated in authentic, real-life contexts where learners or newcomers are allowed to interact with experts and, eventually, the learner may become a full participant and an expert by actively participating in a *community of practice* (CoP). Thus, they considered learning as social and embedded in everyday activity, context and culture. Furthermore, they characterised learning progressive in relation to participation and the development of a person's identity when becoming a practitioner. Instead of emphasising the socialisation processes, Brown and Duguid (1991) stressed the interconnectedness of working, learning and innovating through actual practices. They noted that, in order to foster learning, these practices should be recognised and legitimised, instead of relying only on formal manuals of work or formal groups to carry out training. Furthermore, they emphasised granting both legitimacy and peripherality for learners, for example, through access to informal or formal meetings and opportunities for observing more experienced others in order to avoid physical or social isolation of learners.

In contrast to other learning theories, the model of situated learning concentrates on social relationships and interaction instead of focusing solely on the individual and mechanistic acquisition of knowledge (e.g. Hager, 2013). Wenger (1998) defined CoPs as consisting of three interrelated dimensions: mutual engagement, a shared repertoire in the form of common resources and jargon and a joint enterprise towards common goals. According to Li et al.'s (2009) review, the key characteristics of CoPs include supporting formal and informal interaction between novices and experts, emphasising learning and knowledge sharing and fostering the sense of belonging among members of the CoP. Regarding learning opportunities, each CoP develops its own practice, and the boundaries of CoPs offer new insights by providing an opportunity to reflect on how the practices are relevant to each other (Wenger, 1998).

However, it should be noted that the concept of the CoP and situated learning theory have also been criticized. It seems that the concept of the CoP has been vaguely defined and changed in meaning to highlight knowledge management (Cox, 2005; Li et al., 2009; Wenger, McDermott, & Snyder, 2002). Fuller et al. (2005) argued that the work of Lave and Wenger (1991) has helped to understand the nature of WPL as a social activity, but with certain limitations. These limitations include that LPP is best suited to describe learning processes of novices or people who have recently entered the community. Similarly, Engeström (2007) pointed out that the strength of situated learning theory lies in describing apprenticeship; however, this appears as traditional and prototypical, hence making the notion of the CoP limited in more modern settings and organisations characterised by rationalized mass production, networks or partnerships. Fuller et al. (2005) also noted that the theory does not fully acknowledge the learner's skills, attitudes and understandings at the moment of joining the community and that the importance of reciprocal learning between novices and experts, as well as teaching and guiding others and formal education, should be acknowledged. They also emphasised that social structures are related to the organisation of work and power, and thus, CoPs should not simply be expected to be welcoming to newcomers. Also, Contu and Wilmott (2003) argued that no consensus should be assumed in CoPs, but rather relations of power, contradictions and conflicts should be recognised.

Acknowledging these limitations and based on this background, this dissertation aims to focus on learners' participation, guidance and sense of belonging to communities (publications II, III and IV). WPL is considered here as a pathway of activities towards full and effective work performance and participation, following the ideas of Lave and Wenger (1991). In workplaces, the sequencing of activities often includes a movement from activities with low accountability levels, error costs and standing to tasks of higher accountability and standing (Billett, 2006), thus following the logic of increasing economic impact (Gherardi, Nicolini, & Odella, 1998). For example, Chan (2013) showed that apprentices' entry process may include participation in supportive or ancillary tasks, this being described as proximal participation. In contrast, Reegård (2015) examined apprentices in the retail sector and noticed that they were given a great deal of autonomy and responsibility from early on. However, Fjellström and Kristmansson (2016) compared construction worker and shop salesperson apprentices and found that specifically apprentices in construction work often performed complex tasks with high accountability, thus suggesting differences between the vocational fields. Furthermore, Grytnes et al. (2018) found that learners' employment status during WPL and connectivity varied

in the construction sector in Danish and Swedish VET systems. They concluded that Danish employed apprentices highlighted the role of the supervisors and considered safety as an expense and an ideal compared to practice, whereas Swedish students were novices for a longer time, while having a right to voice concerns about safety and teachers acting as their advocates, thus underlining the importance of the learner's status as a student or an employee.

The progression in activities may be promoted by guidance and support (Billett, 2002, 2006; Swager et al., 2015). Swager et al. (2015) underlined interaction and argued that guidance widely includes psychosocial support, structure-providing interventions (matching learners and trainers, as well as organising assessments) and didactical interventions to promote educational goals via goal setting, selecting and sequencing tasks and providing support. Metso (2014a) found that VET students appreciated a highly innovative climate supporting the development of their own ideas, attempting new ways of working and guidance from and interactions with more experienced workers. Similarly, Conway and Foskey (2015) highlighted the importance of mentoring, positive feedback, encouragement and support. Virtanen et al. (2014a) also emphasised the social environment, including individual guidance at work and educational practices. Nevertheless, support and guidance may be realised in varying ways. For example, Reegård (2015) found that managers had no plan for organizing training for retail apprentices and this approach implied minimal instruction and guidance. On the whole, previous research in relation to WPL, in general, has often highlighted job- and task-related characteristics, such as the complexity and variety of tasks, and relational characteristics, such as social support, interaction and feedback (e.g. Coetzer, 2007; Harteis et al., 2015; Nikolova et al., 2014). For example, Fuller and Unwin (2003) developed an expansive-restrictive continuum to describe companies' approaches to providing learning opportunities, focusing on participation, personal development and institutional arrangements. Expansive opportunities included, for example, participation in multiple CoPs, support for apprentices' status as learners and opportunities for boundary crossing, whereas restrictive workplaces provided limited and narrow access to learning and development (Fuller & Unwin, 2003). However, considering workplaces as learning environments emphasises learning opportunities and does not always elaborate on the learner's role in this process.

Billett (2001, 2002, 2004) underlined workplaces' readiness to afford learning opportunities and support, but also the individual's engagement in the workplace and learning. Therefore, WPL can be considered as reciprocal *co-participation* between the workplace and the learner (Billett, 2002). Similarly, Wheelahan (2007) argued that

learning needs to be understood as a relational interplay between the social context and the individual. The learner's own abilities, motivation, goals and experiences shape participation and active engagement and, for instance, the ability to demonstrate competence in activities is likely needed for movement to more demanding tasks (Billett, 2006; Tynjälä, 2013). The choice of engaging in social and work practice is also related to agency (Billett, 2002). Agency is often considered as an individual feature or something that individuals do (Goller & Harteis, 2017). Agency may be related to competences, beliefs and personality and, in practice, include choices and actions that aim to take control over one's work environment or individual life (Goller & Harteis, 2017). At the same time, agency and the freedom of the learner are also shaped by the context, for example, by cultural circumstances, social structures, relationships and roles (Eteläpelto et al., 2013; Eteläpelto, 2017; Wheelahan, 2007). For example, learners' engagement and agency can be influenced by providing opportunities to observe others and to receive guidance and by providing them with a legitimate and influential role allowing autonomy and independent work instead of a marginalized position (Bouw, Zitter, & de Bruijn, 2019). This kind of marginalized position may also prevent a sense of belonging that has been proposed as a fundamental driver of individuals' motivation to persist in inter-relationships and activities (Baumeister & Leary, 1995). Sense of belonging or belongingness relates to individuals' experience of feeling secure, accepted, included and valued by a group and being connected with the group, for example, by sharing the professional and/or personal values of the group (Levett-Jones et al., 2009). This sense of belonging is also related to whether the occupation matches expectations and whether workplaces afford learning opportunities and support in order to sustain individuals' engagement and commitment to occupational work (Chan, 2016). Previous studies in the VET context have shown that students are often considered largely responsible for their own learning and, thus, are expected to be self-directed learners able to initiate activities in the workplace in order to develop their skills (Gurtner et al., 2011; Pylväs, Nokelainen, & Rintala, 2018; Reegård, 2015; Savoie-Zajc & Dolbec, 2003; Tanggaard, 2005).

It is generally believed that vocational learning should be enriched by integrating different environments, experiences, practices and types of knowledge (e.g. Aarkrog, 2005; Akkerman & Bakker, 2012; Billett, 2009; Tynjälä, 2013). It has been concluded that WPL provides various skills, including vocational skills, collaboration skills and independence, but may also lead to negative learning outcomes, such as bad practices (Virtanen et al., 2009). Often, the quality of WPL experiences has been considered as an issue, and thus, learning in the workplace benefits from being supplemented

by experiences in school-based education (Aarkrog, 2005; Akkerman & Bakker, 2012; Onstenk & Blokhuis, 2007). The concept of *connectivity* referring to the integration of learning and teaching between different contexts or settings is related to an essential pedagogic approach in VET (Griffiths & Guile, 2003; Guile & Griffiths, 2001; Sappa & Aprea, 2014). The typology of work experience (Griffiths & Guile, 2003; Guile, 2018; Guile & Griffiths, 2001) illustrates the ideas and educational practices related to the purpose of VET learners' work experience, as well as assisting all the involved parties to better understand their role in facilitating learners to make connections among different contexts. For example, the role of education provider may vary from simply preparing and launching learners into work to developing partnerships with workplaces (Guile & Griffiths, 2001, p. 120). It seems that individuals' conceptions of connectivity are highly variable and while some learners consider learning experiences as separate, some may consider them complementary (Sappa & Aprea, 2014). Eventually, learners' readiness to integrate experiences is essential (Billett, 2018), although connectivity or alignment between learning experiences should also be deliberately promoted by stakeholders (Akkerman & Bakker, 2012; Bouw et al., 2019; Wesselink, de Jong, & Biemans, 2010).

3 RESEARCH DESIGNS AND METHODS

3.1 Research context

This dissertation focuses on the Finnish VET system. In comparison to countries that mainly organise VET through apprenticeship training, Finland has primarily promoted state-led, school-based VET. In the Finnish VET system (see e.g. European Centre for the Development of Vocational Training (Cedefop), 2019; Ministry of Education and Culture & Finnish National Agency for Education, 2018), the Government decides on the development of VET, the Parliament decides on the legislation and budget and the Ministry of Education and Culture steers, regulates and finances VET. Moreover, the Ministry of Education and Culture also grants licences to provide VET, and eventually VET providers, usually vocational institutions owned by municipalities or private institutions, have a key role in implementing VET, following the national qualification requirements prepared by the Finnish National Agency for Education. However, this process also requires co-operation with employers, employees and the education sector. Social partners are also involved in the development of qualifications and quality control through working life committees.

In the Finnish VET system, school-based VET and apprenticeship training coexist. In 2017, apprenticeship training had an 18.47% share of all vocational qualifications (Education Statistics Finland, 2018). Next to school-based VET, apprenticeship training has been tightly connected to regular employment because it occurs mainly at the workplace and is based on a fixed-term employment contract (min. 25 h/week). Apprenticeship also entails a salary based on an applicable collective agreement, and thus, the apprentice pay has been rather high in comparison to other countries (cf. Ryan et al., 2013). Subsequently, apprenticeship training in Finland has been mainly adult education focusing on those over 25 year old, and it has allowed existing employees to be converted into apprentices (Haapakorpi & Virtanen, 2015; Leino, 2011; Stenström & Virolainen, 2018). As a pathway for youth, it has played only a marginal role (Mazenod, 2016). For example, in 2017, there were 21,657 new apprentices, of which only 645 (2.98%) were 15 to 19 years old, and 2550 (11.77%) were 20 to 24 years old (Education Statistics Finland,

2018). School-based VET is the primary model of education especially with respect to initial VET. However, in school-based VET, the curriculum also included compulsory on-the-job learning periods (min. of half a year for a three-year study period) in the 2000s (Virolainen & Persson Thunqvist, 2017). Further, the recent reform of vocational upper secondary education which came into effect in 2018, aimed to highlight WBL as an educational approach. Currently, no minimum or maximum time is set for WPL in school-based VET. Instead, VET highlights individualized pathways allowing a flexible combination of apprenticeship and school-based VET (including WPL through training agreements) based on a personal competence development plan. According to the recently established law on VET (531/2017), VET's goal is to increase and maintain professional competence and employment and to develop working life. Further, it aims to support learners' development into solid and civilized members of the society who have the knowledge and skills needed in relation to development of personality, professional skills and further studies. Regarding permeability between VET and HE, all VET qualifications provide eligibility for HE covering both universities and universities of applied sciences (UAS). In 2017, 23% of new students in UAS had vocational qualification (no matriculation examination of general upper secondary education) in the 19 and younger age groups and 27% in the 20 to 24 year old age groups (Ministry of Education and Culture, 2019c). However, starting in university based only on a vocational qualification is scarce, as only three per cent of new students in 2017 only had a vocational qualification (Ministry of Education and Culture, 2019c).

3.2 Literature reviews

The first two publications were qualitative literature reviews conducted to gain an understanding and to inform the empirical research on apprenticeship training and WPL. Philosophically, literature reviews can often be combined with pragmatism as quantitative and qualitative studies are synthesised into a mixed research synthesis (Biesta, 2010; Johnson & Onwuegbuzie, 2004). There are various types of literature reviews (see e.g. Dixon-Woods et al., 2005; Grant & Booth, 2009). In this dissertation, publication I was a literature review that aimed to provide an examination of recent research related to apprenticeship training as part of VET systems and as an institution. Publication I compared apprenticeships in Finland, Germany and England at the institutional level. The literature review was based on

a limited time frame, from 2000 to 2016, and featured searches in electronic databases with versatile keywords used to focus the search on the selected countries. However, regarding Finland, the database search was deemed insufficient. Thus, the searches were extended to other databases and manual searches were also done to locate, and eventually include, various reports and dissertations in the review. Therefore, there was no formal appraisal or scoring of the original data. The literature review included a total of 38 articles, dissertations or reports. Most of these discussed apprenticeships or the dual system in Germany (21 studies), whereas the apprenticeship system in England was less studied (15 studies). The literature review showed that apprenticeship training in Finland has been little studied (9 studies or reports). Also, only seven of the included articles made comparisons between or among countries. The analysis of the data was theory driven (Onwuegbuzie & Frels, 2016) as it was based on the conceptual framework by Scott (2014). The synthesis of the data was narrative (Grant & Booth, 2009), and, as a result, the literature review was only qualitative.

Publication II was a literature review that focused on guidance in the context of WPL and VET. It aimed to recognise both supporting and hindering factors of guidance. This literature review was descriptive in nature, and it can be best defined as a mapping review (Grant & Booth, 2009) that aimed to map out existing literature on guidance and WPL. The literature review was first focused on searches in electronic databases to locate relevant literature published from 1995 to 2015. In addition, the references of the found articles and volumes of two relevant journals in the field were manually searched. Two researchers participated in setting the inclusion and exclusion criteria and discussed the articles selected for the study. Eventually, only peer-reviewed empirical articles were accepted for the review that was initially inductive and directed by the research question. To synthesize the findings of the original studies, they were assigned to wider themes or categories by two researchers. As a result, the literature review synthesized original quantitative and qualitative studies. The focus and limitations of the review resulted in 17 articles being summarised. The studies concentrated on the European context, with the following countries represented: Finland (5 studies), Switzerland (2 studies), Denmark (2 studies), Norway (1 study), Netherlands (1 study) and the UK (1 study). Outside of Europe, studies from the following countries were included: Australia (2 studies), New Zealand (1 study), the USA (1 study) and Canada (1 study).

3.3 Empirical studies

The latter two publications reported qualitative multiple case studies exploring various communities, fields and learning pathways in order to understand WPL in VET. The empirical studies were philosophically underpinned by critical realism. Ontologically, i.e. considering the nature of reality, this approach is somewhere between relativist (subjective) and realist (objective). In the social sciences, realism is often manifested as critical realism (Maxwell, 2012). The metatheory of critical realism is especially concerned with ontology that distinguishes among three different layers: the real, the actual and the empirical (Bhaskar, 2008; de Souza, 2014). De Souza (2014) outlined how the domain of the real includes mechanisms, powers and structures that can be physical and material objects and/or human practices, for example, large social systems or an individual's conceptual structures. The domain of the actual includes all existing events and phenomena that occur when powers are activated, regardless of them being experienced by humans (de Souza, 2014). Finally, the empirical domain is comprised of human perceptions and experiences (de Souza, 2014). This empirical domain includes what can become known to people through research and theories related to natural and social phenomena (Schiller, 2016).

Epistemologically, i.e. considering the nature of knowledge, critical realism emphasises multiple and partly socially constructed knowledge and puts emphasis on description and explanation that is possible through identifying powers, mechanisms or tendencies (potentialities) (Sousa, 2010). As in the constructivist approach, critical realists also regard social reality as dependent upon concepts and as socially constructed, but according to the critical realist approach, social reality cannot be reduced to language (Peters et al., 2013). Thus, people's words give access to their version of reality, but access to reality in qualitative research is mediated by socio-cultural meaning and interpretation in critical realism (Terry et al., 2017, p. 8). The constructivist approach would put more emphasis on language as a means of constructing realities (e.g. discourses) as people's words are not considered to be evidence of social reality (Terry et al., 2017).

According to Schiller (2016, p. 93), critical realism is 'increasingly highlighted as a viable option for underpinning meaningful research related to the social and practice-based sciences'. Critical realism often uses qualitative approaches, although methodologically, a variety of approaches may be used (Schiller, 2016; Sousa, 2010). As suggested by Denzin and Lincoln (2008, p. 7), qualitative research cannot capture objective reality, but only representations of things. Thus, a qualitative researcher often tries to recreate experiences, understanding and meanings from the viewpoint

of the studied (Salkind, 2010, p. 1159). As a result, qualitative approaches are often descriptive in nature (Castleberry & Nolen, 2018).

The first empirical study (publication III) investigated versatile workplaces and vocational fields in order to provide an overall picture of the workplaces as learning environments in the context of apprenticeship training. The multiple case study focused on apprentices' experiences of participation and their sense of belonging to various workplaces and in relation to vocational schools. Based on previous studies (e.g. Virtanen et al., 2014a), the fields of social and health care and technology were chosen in the study. Thus, purposive (or purposeful) sampling was used to gain maximum variation in the stratified sample (Robinson, 2014). The apprentices and employers in these fields were first contacted by an apprenticeship office, and if they were interested in participating in the research, their contact information was given to the researchers. The researchers then contacted the workplaces and negotiated the dates of the interviews and the people to be interviewed. Eventually, the data were collected from 10 workplaces, and in each workplace, an apprentice ($n = 10$, 5 males, 5 females), the apprentice's co-worker ($n = 10$, 6 males, 4 females), the apprentice's officially nominated workplace trainer ($n = 10$, 6 males, 4 females) and an employer or an employer's representative ($n = 10$, 6 males, 4 females) were individually interviewed ($N = 40$). Based on the European Union's (2015) definition, the workplaces represented small (fewer than 50 persons) and medium-sized enterprises (fewer than 250 persons). In the social and health care field, data were collected from five nursing and care homes, one of which was small and four were medium-sized. The five workplaces in the technology field covered three medium-sized enterprises in construction or building maintenance and two small enterprises in metalwork and machinery. During the data collection, apprentices most often described spending two contact days in a vocational school per month and the rest of the time at work. The data were collected in 2015.

The second empirical study (publication IV) focused on vocational students and apprentices' experiences of WPL and the integration of these experiences into education and basic vocational upper secondary qualifications. The multiple case study investigated both apprenticeship training and a school-based pathway (including on-the-job learning), and interview data were collected from apprentices ($n = 15$, 9 males, 6 females) and students in school-based VET ($n = 18$, 7 males, 11 females). The study focused on three different fields: social and health care, technology (construction, infrastructure construction) and business and administration (customer services and sales, financial and office services). The field of business and administration was added to the data collection under the

assumption that it would be located somewhere between the other two fields regarding learning practices and opportunities (Virtanen et al., 2014b) and provide a more gender-balanced field. These fields also covered the three biggest VET sectors, including technology, communications and transport; social sciences, business and administration; and social services, health and sports (Ministry of Education and Culture & Finnish National Agency for Education, 2018). The data were collected in 2017 before the reform of the vocational upper secondary education was implemented at the beginning of 2018.

3.3.1 Participants

Altogether, the empirical studies included 73 participants. Table 2 shows an overview of the participants. Characteristic of the Finnish context, apprentices were older than students in school-based VET, and they often already had some work experience. It was estimated that, in both studies, the sample size resulted in a reasonable amount of data that was possible to manage but could also show some tendencies and patterns (see Fugard & Potts, 2015).

Table 2. Overview of the participants

Participants		Vocational field		
		Social and health care	Business and administration	Technology (construction, metalwork and machinery)
Publication III (<i>N</i> = 40)	Apprentices <i>n</i>	5	-	5
	Gender, male <i>n</i>	1		4
	female <i>n</i>	4		1
	Age <i>M</i> (range)	33.0 (25–43)		24.8 (22–30)
	Work experience <i>M</i>	7.9		5.9
	Employers <i>n</i>	5	-	5
	Gender, male <i>n</i>	1		5
	female <i>n</i>	4		0
	Age <i>M</i> (range)	54.6 (48–62)		56.0 (50–67)
	Work experience <i>M</i>	33.0		36.6
	Co-workers <i>n</i>	5	-	5
	Gender, male <i>n</i>	1		5
	female <i>n</i>	4		0
	Age <i>M</i> (range)	39.6 (27–54)		43.0 (29–56)
	Work experience <i>M</i>	11.9		25.8
Publication IV (<i>N</i> = 33)	Workplace trainers <i>n</i>	5	-	5
	Gender, male <i>n</i>	2		4
	female <i>n</i>	3		1
	Age <i>M</i> (range)	46.4 (34–62)		40.6 (30–59)
	Work experience <i>M</i>	20.4		21.4
	Apprentices <i>n</i>	7	4	4
	Gender, male <i>n</i>	3	3	3
	female <i>n</i>	4	1	1
	Age <i>M</i> (range)	38.8 (22–49)	24.5 (16–33)	20.5 (17–27)
	Work experience <i>M</i>	18.4	6.0	3.1
	Students in school-based VET <i>n</i>	6	6	6
	Gender, male <i>n</i>	1	1	5
	female <i>n</i>	5	5	1
	Age <i>M</i> (range)	17.5 (17–18)	16.8 (16–17)	17.7 (17–18)
	Work experience <i>M</i>	0.83	0.28	2.67
Participants in total (<i>N</i> = 73)		33	10	30

3.3.2 Data collection and analysis

The data were collected through semi-structured individual interviews. Interviews are often seen as an efficient and convenient means of gathering data for the researcher, but they also enable the participants to provide data and to use the language on their own terms (Kvale & Brinkmann, 2009; Qu & Dumay, 2011). The interviewees were first contacted through education providers, and the information of voluntary participants was forwarded to the researchers. The researchers then contacted those participants that matched the aims of the research (e.g. the chosen field, qualification or VET pathway) and scheduled the interviews in advance, which took place mainly either at the workplace or at school. At the beginning of each interview, the interviewees were further informed about the study and the issues of anonymity, and the recording and reporting of the interview data were discussed, after which signed consent forms were obtained. Regarding both studies, the interviews were organised around a set of predetermined questions that supported dialogue between the interviewer and the interviewee. The aim of the interview guides (see Appendices) was to ensure that themes were discussed in a systematic manner in various interviews, although they also provided an opportunity for the interviewer to probe and to reach beyond initial responses to elicit more elaborate responses. This kind of interview process also inevitably leads to a situated event in which the interviewer and the interviewee shape the interaction and the reality (Qu & Dumay, 2011).

For the analysis, the recorded interviews were transcribed verbatim. Computer-assisted qualitative data analysis software NVivo was used to manage and organise the interview data. In the course of the study, the data analysis focused on thematic analysis (TA). TA has become popular since it was discussed by Braun and Clarke (2006). Recently, Terry et al. (2017) summarised how there is much diversity and tension within TA and how these are prominent in versatile procedures for conducting TA. According to their view, there are two kinds of approaches to TA, of which the first approach is more in line with a positivist research paradigm, and it focuses on coding reliability. This kind of approach is often deductive: the purpose of the coding is to find evidence for the themes. Here, a codebook or coding frame are the tools that guide the coding process, and inter-rater reliability is considered as a measurement for success. In contrast, the second approach is more qualitative and considers the subjectivity of the researcher integral to the process of analysis. Therefore, coding is more of a flexible process and requires engagement with the data: coding and theme development from coding are assumed to be subjective and

interpretative processes. Thus, the analysis is rather ‘created by the researcher, at the intersection of the data, their theoretical and conceptual frameworks, disciplinary knowledge, and research skills and experience; it is not seen as something waiting ‘in’ the data to be found’ (Terry et al., 2017, p. 6). Consequently, quality assurance strategies underline reflection, rigour and a systematic and thorough approach, for example through reviewing themes (Terry et al., 2017). This latter approach was also adopted by Braun and Clarke (2006) in their approach to TA, and it was chosen for this thesis.

Terry et al. (2017) underlined how TA is a flexible method, rather than a methodology, as it can be used to answer various kinds of research questions. They (see also Braun & Clarke, 2006) included six phases in their analytic and iterative process: familiarising with the data, generating codes, constructing themes, reviewing potential themes, defining and naming themes and, finally, producing the report. The familiarisation phase is related to knowing the data set, and in this phase, some casual or observational notes may be helpful. The second phase of coding is a systematic approach to creating labels attached to the segments of the data. Codes (and eventually themes) may be exclusively or primarily worked through inductive or deductive coding. In any case, codes capture the researcher’s interpretations of the data in relation to the research question; codes may capture explicit and obvious meanings (semantic coding) or implicit meanings, concepts or ideas (latent coding). Thus, ‘codes are the smallest units of analysis that capture interesting features of the data (potentially) relevant to the research question’ (Clarke & Braun, 2017, p. 297). The third phase includes a producing a list of the codes to identify patterning and diversity, a phase of theme development related to finding central organising concepts or ideas that are shared across a range of codes. In the fourth phase, the themes are further reviewed to ensure that they work well in relation to the coded data, the whole data set and the research question. It is important to make sure that themes are distinct from each other, but still they should still relate to each other as the research builds a story about the data through the themes. Therefore, in the fifth phase, defining and naming themes takes an interpretative orientation as the researcher writes the analysis or analytic narrative and chooses data extracts to present the themes. In respect to the final naming of the themes, the names are expected to give a clear indication of the content within the theme. Finally, the research question is answered by producing a report.

4 OVERVIEW OF THE ORIGINAL PUBLICATIONS

4.1 Publication I

The aim of publication I was to describe differences between VET systems and to investigate apprenticeship as an institution. First, in the narrative literature review, Scott's (2014) institutional approach was utilised to compare apprenticeship training as an institution in Germany, England and Finland. Second, this comparative data and previous research were used to discover challenges and trends that affect apprenticeship training. The data for the review consisted of previous research and reports ($N = 38$). The research questions were:

RQ1. What kind of institution is apprenticeship in Germany, England and Finland?

RQ2. What kind of challenges and trends affect apprenticeship training?

The literature review first characterised VET systems through typologies that reflected interdependencies between VET and other structures. This revealed that institutional elements, including governance, norms and expectations and shared understandings, vary in each chosen country. The VET governance in Finland follows a state-led model, where social partners mainly participate in the skills anticipation and other development measures. Finland has primarily applied the school-based model of VET, and the role of apprenticeship training has been complementary to the VET system. As an educational pathway for youth, it has a marginal role.

The literature review suggested that the governance of apprenticeship training is not without challenges. Apprenticeship training should generally integrate a youth into society and working life, as well as promoting professional development. It has been suggested that societal goals are hard to reach if employers are given the responsibility since these goals are not essential to them. The integration of migrant youths or breaking down gendered norms may, therefore, additionally require other solutions. The review also noted that the development of the knowledge society and knowledge-intensive industries and services has emphasised the role of HE. This has been promoted on the societal level, but also students have preferred educational

pathways leading to HE. Therefore, the flexibility and permeability of educational pathways have become central topics.

The review indicated that apprenticeship training is often promoted in general discussion in Finland, following the gold standard of Germany. The success factors of the German dual system include its positive image, parity of esteem with other educational pathways and the conditions of the workplaces that enable providing training, as well as the long traditions of workplace training (Deissinger, 2015; Wieland, 2015). According to the literature review, apprenticeship training is, in each country, built on differing principles connected to wider educational and societal contexts. However, due to international trends and Europeanisation, it seems that the Finnish VET is adopting principles from Anglo-Saxon education systems that have traditionally emphasised general education and HE, while vocational education has underlined key skills and employability. This approach includes a risk that vocational education leads to skills which are too narrow. Overall, it seems that the European model in VET is promoting WBL, learning outcomes and employable individuals who can steer their own learning and careers in the changing labour markets (Powell et al., 2012).

4.2 Publication II

The aim of publication II was to investigate guidance in the context of WPL and VET. The literature review aimed to recognise factors that support or hinder guidance and learning at the workplace. The data for the review consisted of peer-reviewed empirical articles ($N = 17$) published between 1995 and 2015. The research question was:

RQ. Which factors promote or hinder guidance and workplace learning?

The synthesis of the reviewed research determined three basic themes: work community, guidance relationships and educational practices. The first theme highlighted the atmosphere and relationships in the work community. The student's positive and reciprocal relationships with members of the work community, sense of belonging and equality and support from peers and family seemed to support guidance and learning, whereas lack of support, power struggles and competition in communities were recognised as hindering factors. Secondly, this theme emphasized the importance of co-participation (Billett, 2001, 2002), which refers to the bases for participation, which include both how workplaces afford opportunities for learning and guidance and how the learner chooses to engage in the activities provided.

Previous research showed that the learner's active participation and agency, the learner's independent work and gradually increasing responsibility and opportunities to participate in new tasks (e.g. job rotation), acknowledging the learner's participation and views and time and resources for guidance supported participation. A workplace's lack of resources, an obsessive focus on productivity, the learner's marginalisation and an imbalance of guidance hindered participation.

The second theme focused on the guidance relationships between the learner and the trainer. On the one hand, learners' individual characteristics, such as self-initiated and proactive behaviour, self-regulation skills, social skills and previous work experience, were identified as important. On the other hand, trainers' formal training, individual characteristics and pedagogical skills, such as being able to utilise versatile guidance methods, to share knowledge, to encourage asking questions and to promote critical reflection, were acknowledged in previous studies. When considering the relationship between the learner and the trainer, the studies underlined the importance of an encouraging and supportive relationship. However, this relationship could be hindered by the learner's poor work ethic and introverted or demanding behaviour and by the trainer's lack of personal engagement and unpredictable behavior, or if it turns into dependency and a power relationship between the trainer and the learner. Nevertheless, it was suggested that learners tend to choose a matching trainer.

The third theme focused on educational practices. Previous studies have emphasised connectivity (Guile & Griffiths, 2001) and co-operation between education and work. Nevertheless, this could be hindered by incoherence between learning environments, limited resources for the teachers and interpreting guidance only as a workplace's duty. The studies implied that, in order to support learning and guidance, there is a need for individualized approaches and a framework defining roles and responsibilities, as well as clear goals.

The literature review showed that WPL and guidance are collective by nature. The learner's active engagement and agentic actions are central to initiating guidance that is needed to support participation and progress towards more demanding and independent tasks. WPL and guidance as parts of VET could be promoted by identifying and making the aims of the guidance more explicit for the whole community.

4.3 Publication III

The aim of publication III was to investigate the perceptions and experiences of apprentices' participation and sense of belonging. First, the study analysed apprentices' experiences of participation and their sense of belonging in the workplaces and at vocational school. The study then focused on the challenges related to these in the work communities. The data for the study were collected from 10 workplaces: five of the workplaces were nursing and care homes in the social and health care sector, the other five covered three organisations in the field of construction and building maintenance and two enterprises in metalwork and machinery. In each workplace, an apprentice ($n = 10$), apprentice's co-worker ($n = 10$), a workplace trainer ($n = 10$) and an employer representative ($n = 10$) were individually interviewed ($N = 40$). The research questions were:

RQ1. How do apprentices describe their participation and sense of belonging in workplaces and at school?

RQ2. What kinds of challenges are related to apprentice's participation and sense of belonging to a work community?

The small-scale study showed that apprentices aiming to become practical nurses strongly experienced being a member of the work community. However, the apprentices in the technology field had varying experiences: some felt like full members in the community, whereas some experienced a lack of access to full participation, that their participation was at the periphery (cf. Lave & Wenger, 1991). The views on a sense of belonging within the school setting and students' peer groups were highly varied. Continuing changes in groups, no time dedicated to getting to know others and there being heterogeneous groups were experienced as barriers to a sense of belonging. The heterogeneity of the groups was especially connected to differing specialisations, i.e. competence areas and levels of competence among apprentices. However, some of the interviewees expressed that co-operation and interaction in the peer group supported studies, although it was almost exclusively focused on the few days spent at the school. Particularly apprentices in the technology field stated that they did not want to participate or belong to a peer community and that studies did not relate to actual work.

The findings suggested that participation and a workplace's culture and practices, as well as an apprentice's active engagement, were related to experiencing belonging. In the technology field, participation in meaningful and gradually more independent and demanding tasks and activities was sometimes described as challenging due to safety and financial risks. Therefore, apprentices had to observe more experienced

workers and participate in low-risk, assistive tasks. From a workplace's standpoint, guiding apprentices required resources. However, interviewees suggested that assigning easier and more peripheral work to apprentices or workers in junior positions was also related to the culture of the industry. Furthermore, in the hierarchical work culture, supervisors were considered important sources of guidance and feedback, instead of official workplace trainers. In the social and health care field, apprentices' fast transition into demanding and responsible duties was expected based on the employment contract, and participation in nursing and care tasks was also considered an easy and natural process. However, some of the workplace trainers and co-workers voiced concerns about apprentices' roles and the high expectations placed upon them as they were given no time or opportunities to practice, think or make mistakes.

Social interactions were considered highly important in the work communities and at best, communication and interaction between the workplace trainer and the apprentice promoted reciprocal learning in the social and health care field. In general, working in a multi-professional environment was stated to be a positive experience as it allowed observation and co-operation with various actors. Also, interaction with clients was highly meaningful to the apprentices. Apprentices' active engagement in interaction was emphasised in interviews both by the apprentices and the members of the work communities. Apprentices experienced a sense of belonging to the community, especially when they felt they were receiving support and guidance, but they noted the need for a proactive role in such participation. Similarly, the members of the work communities emphasised the apprentices' self-directedness in relation to participation.

It was concluded in the study that apprentices' sense of belonging to the community is related to opportunities for participation and interaction, depending on the cultures and practices of the work and the community. It seemed that employment-based apprenticeship training supports the possibility of belonging to the work community, but the sense of belonging to the peer community was often lacking, especially in the technology field.

4.4 Publication IV

The aim of publication IV was to contribute to an understanding of the nature of WPL experiences and how these might differ across VET pathways, vocational fields and workplace settings. The data for the study were collected from apprentices ($n = 15$) and students in school-based VET ($n = 18$), who represented three different vocational fields: social and health care, business and administration and construction. Each participant ($N = 33$) was individually interviewed. The research question was:

RQ. How do learners experience workplace learning on various learning pathways?

In the course of the study, four themes were chosen to interpret students' experiences of WPL as a part of vocational education. The first theme highlighted that the chosen VET pathway builds a framework for participation and learners' experienced workplace curriculum (Billett, 2006) referring to learners' experiences and interpretations when participating in WPL in VET. The study showed that there seems to be a tendency to consider WPL in school-based VET as an opportunity to apply the knowledge and skills learned at school, whereas apprentices emphasised the importance of WPL tailored to match the needs of a workplace. Instead of specialising at the end of their studies, the apprentices often started by specialising in tasks required in a specific workplace. The strong work-based focus of apprenticeship training was considered both as an asset and a challenge related to connectivity and employability.

The second theme suggested that work and its practices and goals shape participation in workplaces. Interviewees in the construction sector experienced that they needed to adjust to the workplace's needs and goals, which undermined official educational goals. Both in business and administration and in social and health care fields, apprentices were given tasks similar to those of other workers, whereas students were assigned to basic activities and had an opportunity to set educational goals.

The third theme suggested that social interaction and practices also shape participation. In most cases, co-workers supported participation and provided guidance and feedback on tasks. However, especially in the construction sector, both students and apprentices considered themselves as being positioned lower in the hierarchy, thus impeding their progression into more difficult tasks as they were left to assistive tasks. The teacher's role was considered especially important in providing

information during education (e.g. requirements and assessment) and, if needed, in intervening for shortcomings in relation to workplace learning.

The fourth theme emphasised the role of individuals in altering boundaries to participation. Based on the interviews, it seemed that some of the students were able to act as autonomous workers, whereas some of the apprentices were assigned to assistive or specialised tasks requiring narrow skills. Based on learners' experiences, especially those in the construction sector, the importance of background and agentic actions in enriching learning opportunities was stressed. Furthermore, learners attempted to promote their participation by actively seeking to enter meetings, participate in job rotation or working extra hours in other workplaces.

In summary, it was suggested that all the four themes are interconnected, and that participation in WPL is a result of a complex set of factors. According to the findings of this study, there seemed to be a tendency that apprenticeship training as an employment relationship was based on the productive work and goals of the workplaces. In contrast, WPL as part of school-based VET allowed and promoted learners' roles, including the setting of educational goals, negotiating tasks and employing a wider range of support from teachers and trainers (cf. Grytnes et al., 2018). This finding suggests that students in school-based VET were legitimate peripheral participants (Lave & Wenger, 1991), whereas apprentices' experienced curriculum (Billett, 2006) suggested that they were full participants from the beginning. The study argued that, based on learners' experiences, learning pathways cannot be considered as parallel or interchangeable. In the Finnish context, this implies that the flexible combination of these pathways, as promoted in the reform of VET, is not without challenges because the learner is put in different positions and meets various expectations in each of these pathways.

5 MAIN FINDINGS AND DISCUSSION

5.1 Apprenticeship as an institution and a work-based learning pathway

The first section of the findings generally describes apprenticeships in the Finnish context. In publication I, apprenticeships were described through institutional theory (Scott, 2014). This theory suggests that the alignment between rules, norms and shared beliefs leads to strong institutions. In the case of apprenticeship, the review emphasised governance and labour markets, norms and goals and shared understandings. The literature review revealed how apprenticeship training is integrated into the regulatory framework of vocational education in Finland, thus making the governance of apprenticeship training state-led. However, apprenticeship training is also closely related to labour markets and steered by market forces and fluctuations. As a consequence, apprenticeship training has been a part of both education and labour policy in Finland (Kivinen & Peltomäki, 1999). The regulatory framework, for example, the law on VET, set out the same goals for apprenticeship training as for other vocational education. A major difference between these educational pathways is that, compared with supply-led school-based VET, apprenticeship training is considered to apply a work-based approach where workplaces' and employers' needs and interests are acknowledged or are even a starting point for training (Leino, 2011; Viinisalo, 2010). Compared to school-based VET, apprenticeship training is often considered more affordable to society; however, it has been estimated that apprenticeship training is not necessarily more efficient than school-based VET (Haapakorpi & Virtanen, 2015). Moreover, some inconsistencies exist regarding goals and shared understandings. Currently, apprenticeship training has had a minor role as an educational pathway for youth, and employers have favoured providing training for adults, who may already have some work experience and qualifications. Regardless of this, apprenticeship training has been promoted and marketed to youths, sometimes specifically to youths disaffected with school (Kivinen & Peltomäki, 1999; Mazonod, 2016).

Empirical studies (publications III and IV) suggested that apprenticeship training is experienced as a demanding WBL pathway. Apprentices often experienced

simultaneously working and studying requiring time and effort. On the other hand, some apprentices failed to recognise the role of vocational schools, which was considered something separate and distant from actual work:

I have got everything I need, work-wise, from the workplace. The vocational school provides, at least this far, only extra. Last time we had geometry, it is fun but something I don't need. (Publication IV_apprentice/construction)

This implies that connectivity (Griffiths & Guile, 2003; Guile & Griffiths, 2001) between education and work was often considered lacking. For some, education and contact days at vocational school provided an opportunity to learn more, implying also some complementarity was experienced between learning experiences (Sappa & Aprea, 2014). Moreover, contact days facilitated peer support. However, continuing changes in groups, no time to getting to know others and heterogeneous groups were experienced as barriers to a sense of belonging to the peer community. More than education and the peer community, apprentices emphasised their participation and sense of belonging to the work communities.

However, it seemed that apprentices' participation in workplaces was not always gradually progressive as suggested by LPP (Lave & Wenger, 1991). Based on the interviews, especially employers often expected apprentices to become productive workers from early on (cf. Reegård, 2015). This implies that full participation was expected and apprentices were not given a legitimate learner role. Some trainers and co-workers argued that considering apprentices as employees and having high expectations of them were problematic, as apprentices were given no time or opportunities to practice or make mistakes. However, it appeared that the apprentice's role was not unambiguously that of a learner or an employee:

Well, I feel being an employee, but then again I am taken as a student, so that is a bit... Or I am a student but at least I feel like being a proper employee. (Publication III_apprentice/technology)

The particular given role also reflected upon the learning opportunities. In a case where the apprentice was not allowed to participate in productive work, she/he was only given easy and risk-free assistive tasks, leaving her/him at the periphery. Learners experienced this as hampering their opportunities to demonstrate skills and competence. From a workplace's standpoint, this was the best solution when guiding apprentices would have required too many valuable resources, or apprentices' participation would have been risky and, for example, could lead to financial losses. However, apprentices experienced that help and guidance were provided if they were needed and asked for. This suggested that, as an apprentice, fully benefiting from learning opportunities required the learners' own initiative and abilities, thus emphasising the importance of co-participation (Billett, 2002).

Apprentices experienced that apprenticeship training was aimed at securing employment and a qualification. They acknowledged that training was matched to the needs of the employer and, hence, also dependent on the learning opportunities provided at work. The focus on employment and the needs of the workplace was sometimes experienced to hinder the planning of the studies and gaining greater professional knowledge. In some cases, apprenticeship training focused on workplace-specific skills. However, some workplaces appeared as expansive learning environments (Fuller & Unwin, 2003), as apprentices were encouraged to participate in tasks in other departments or even workplaces.

5.2 Apprentices' and school-based VET students' experiences of workplace learning in various vocational fields

The second section of the findings focuses on describing learners', both apprentices' and students', experiences of WPL in three specific vocational fields: social and health care, business and administration and technology (construction, metalwork and machinery). Publication III focused on apprentices' experiences in the social and health care and technology fields. This study was supplemented with a further study (publication IV), which added business and administration into the comparison and focused on opportunities for participation. Publication IV further aimed to compare two vocational WBL pathways: apprenticeship training and school-based VET including on-the-job learning.

Based on empirical studies, the field of social and health care was found to offer a rather expansive (Fuller & Unwin, 2003) learning environment. Furthermore, vocational pathways of school-based VET (including on-the-job learning) and apprenticeship training seemed to provide highly versatile learning pathways. The VET students experienced that they had an opportunity to practice skills first at vocational school without pressure (e.g. through simulations), so they were prepared for entering work. They were supported by their teachers to set individual and educational goals for each on-the-job learning period (usually five weeks each), and these provided an opportunity to participate in versatile CoPs (cf. Grytnes et al., 2018). Furthermore, they felt that the compulsory units of the qualification supported their gradual progress towards completing more difficult tasks; for example, students becoming practical nurses mainly started WPL with day-care duties, from which they next progressed to assisting in nursing tasks and eventually focused on more individualised and patient-centred methods of working before

choosing a specialisation. These experiences suggest that participation in CoPs was considered progressive and that the learner role was supported, thus making access to more independent and responsible tasks easy – only dispensing medication and inputting patient data were usually not allowed, both for VET students and apprentices.

In contrast, apprentices often started their studies by specialising in tasks required in a specific workplace. Thus, apprentices felt that their studies and learning were dependent on the learning opportunities in the workplace, which also limited their opportunities. For example, setting educational goals was more demanding as they were expected to participate in work as employees from the beginning. In the first data set, apprentices aiming to become practical nurses described their WPL experiences in positive terms. They considered themselves full members of the work community and clearly experienced a sense of belonging to the community. This was promoted by easy access to responsible tasks and support from and interactions with the wider community, including workplace trainers and co-workers, in particular, but also clients:

This support from colleagues is probably one big thing. There are a lot of skilled practitioners. They have always been willing to answer questions and help. (Publication III_apprentice/social and health care)

Especially in the second data set, apprentices acknowledged the downside of fast transition to productive work. They felt that the role as a learner was sometimes forgotten, the introduction phase to the work was inadequate in retrospect, they were isolated (cf. Brown and Duguid, 1991) or that actual skills and competence contradicted expectations. Often apprentices, but also VET students, had opportunities to work independently. This was sometimes preferred as it was suggested that division of labour was experienced unfairly by the learners as they were given physically heavier or less important tasks when they worked together with more experienced colleagues. However, instead of only limiting learning opportunities, co-workers were recognised as an important resource for learning. In particular, co-workers who had recently completed the same qualification were able to assist and also guide also with studies as a whole.

The business and administration field similarly offered a fast transition to productive tasks for apprentices. They were autonomous workers under various job titles as assistants or in sales. They participated in challenging tasks, solved problems and were part of various networks. However, in a few CoPs, this status as an autonomous employee was also related to hiding their status as a learner: some were hesitant to tell the work community about their apprenticeship. In contrast, VET students appreciated the opportunity to prepare for WPL by focusing on one thing

at a time at school and practising the skills needed at work, including social skills or language skills. Most often, they started their learning path by first filling shelves, then moving on to customer service and gradually having more responsibility, including the right to use the cash register. VET students felt they were given similar tasks as those of other workers, but they were given a legitimate role as learners:

I was mainly a trainee, I had responsibilities, but if I say that an employee had a 100 per cent responsibility so then I had like 80 to 85 per cent. So, basically, it was counted that, if a mistake happens, it is not the end of the world, and there was not too much pressure. There was a good balance. (Publication IV_student/business)

Some of the workplaces even supported task sequencing with planned tasks for each week and shift. Overall, they experienced doing similar tasks to other colleagues, but their student status granted them the right to ask for and receive guidance and help if needed (cf. Grytnes et al., 2018). Students also trusted their teachers' support, and instead of trusting assessment entirely to the work community, they felt that the teacher was the right person to assess their competence in the workplace.

In comparison, the technology field (covering construction, infrastructure construction and metalwork and machinery) offered a more restrictive (Fuller & Unwin, 2003) approach to workplace learning. Apprentices in the field stated that they did not want to participate or belong to a peer community. In a similar manner, some students intentionally chose to forego attendance at vocational school and preferred working, thereby practising their agency in less positive terms. Learners generally expressed a lack of connectivity between school and work as studies were considered irrelevant to actual work as they offered idealised ways of working. However, opportunities to participate in various tasks at work were sometimes limited. Apprentices often had to observe more experienced workers and participate only in low-risk assistive tasks. This was often due to safety or financial risks and limited guidance resources. However, interviewees suggested that assigning easier and more peripheral work to apprentices or workers in a junior position was also related to the culture of the industry. In hierarchical work cultures, apprentices or students were given a lower position, reflecting also upon the given tasks:

Whether you are an apprentice or a new employee, you are always, in a way... How should I put it... You get little less pleasant tasks. [--] You have to show, prove a bit and earn your place here and so on. (Publication III_trainer/technology)

Instead of nominated workplace trainers, supervisors were considered as important sources of guidance and feedback. Overall, learners in the field experienced that they needed to adjust to the workplaces' needs and goals. This was especially the case in small companies that had no long-term assignments and, hence, less opportunity for long-term planning. Sometimes, tasks were planned on a day-to-day basis. However, it seemed that learners in smaller companies worked together with more experienced

workers in various tasks, whereas division of labour was more specialised in larger companies. For learners, this could mean focusing on some particular tasks for longer periods of time.

It is noteworthy, that learners' active engagement and co-participation (Billett, 2002) were emphasised in various fields and pathways. The socio-cultural approach adopted in this research, highlights the interplay between the socio-cultural context and the individual's engagement, agency and learning (Billett, 2002; Eteläpelto et al., 2013). According to the empirical studies, certain kinds of characteristics and behaviours were also expected by the CoPs and considered important by the apprentices and VET students. Self-directed characteristics and active engagement were considered especially important in the technology field, as a following recounted experience shows:

You have to be self-directed and prepare things. You cannot just concentrate on that, that the supervisor gives you one task and then you finish it. You have to think about the whole worksite. (Publication IV_apprentice/construction)

Without relevant knowledge, skills, abilities – or chances to demonstrate these or their own vision – and a determination to participate in tasks, learners were at risk of remaining in assistive tasks in this field (cf. Virtanen et al., 2014a). Eventually, it seemed that vocational pathways were close to each other in the field of technology as learners were put in similar, often assistive, tasks regardless of their status as a learner or as an employee. However, individual background, characteristics and agentic actions (Goller & Harteis, 2017) could break the boundaries and promote participation, and a few of the students in the field were able to act as autonomous workers despite of their student status (publication IV).

5.3 Micro, meso and macro level aspects related to work-based learning in VET

The third section of the findings puts together aspects and issues related to WBL in VET found in publications I, II, III and IV. The aspects mentioned in Table 3 are organised to reflect various analytical levels, including micro, meso and macro levels (see also VETNET, 2017).

Firstly, learner characteristics and behaviours were emphasised both in the literature review (publication II) and interview data. Publication II gathered previous studies and emphasised the importance of self-directed and self-regulated approaches to learning at work, responsibility and work ethics, as well as social skills and skilful behaviour at work preventing behaviours that would be considered

annoying by the work community. Furthermore, previous studies highlighted learner's engagement and agency. In line with this, publication IV suggested that individuals can break boundaries to participation through their own background, experience and skills, as well as through agentic actions, referring to self-initiated and goal-directed behaviours (Goller & Harteis, 2017). Publication III underlined the active role of the learner in relation to interaction, as apprentices were expected to ask for help, guidance and support. Thus, if this support is provided by more experienced others, it could possibly further support participation and a sense of belonging (Chan, 2016).

Secondly, the socio-cultural perspective in this thesis emphasised communities and organisations. In VET, the connectivity (Guile & Griffiths, 2001) or coherence and co-operation between education and work has been found to be important. The investigation of both school-based VET learners' and apprentices' experiences in the Finnish context (publication IV), indicated that connectivity was more prominent in VET students' experiences as they considered school as the means to prepare them for entering workplace. Furthermore, teachers supported them in planning WPL and encouraged them to set both educational and personal goals. In addition, especially students in business and administration stressed their role in assessment. In contrast, it seemed that apprentices put more emphasis on workplaces, and vocational school was considered secondary. The vocational school was often experienced as distant and the sense of belonging to it was limited. The literature review (publication II) underlined the role of the teachers with respect to workplace learning; however, previous studies found that teachers lacked time and resources (Evanciew & Rojewski, 1999; Tanggaard, 2005). Also, some learners in the Finnish context (publication IV) pointed out that teachers should co-operate more in the workplace and provide more information on qualifications, requirements and assessment and, eventually, intervene if the learner is facing problems at work.

This thesis specifically focused on studying workplace learning. The literature review on WPL and guidance (publication II) explored communities and relationships and found that both workplaces' affordances for participation (e.g. time and resources for guidance, task rotation and autonomy) and learners' relationships should be considered in relation to organising WBL. The student's positive and reciprocal relationships to members of the work community, sense of community and equality and support from peers and family seemed to support guidance and learning, whereas a lack of support, power struggles and competition in communities were recognised as hindering factors. When investigating various vocational fields and CoPs, some notable differences and tendencies were found (publication IV).

Vocational fields and communities seemed to have various traditions, climate and cultures, and they seemed to vary in how they allowed progression into independent work and increasing responsibilities. Furthermore, learners had varying access to observing and working with others, such as clients or professional networks (cf. Fuller & Unwin, 2003).

Thirdly, WBL is related to the VET system and wider society. The literature review (publication I) showed that differences in VET systems can be characterised through institutional responsibilities and the role of the state (Greinert, 1988), complex youth transition regimes or welfare systems (Niemeyer, 2007; Walther, 2006) or through multiple institutions of the political economy (Busemeyer & Trampusch, 2012; Hall & Soskice, 2001). The literature review showed that apprenticeship training is governed differently in other countries, and it has different kinds of goals. In Germany, governance of the dual system is in the hands of social partners, employers' associations and trade unions (e.g. Lange, 2012), and the collective system provides broad and portable skills through standardisation. In England, the VET system is rather fractured, but mainly led by the government and training providers, as training provided by employers has been largely voluntary (Keep, 2015) and focused on employer needs, skills and outputs, instead of wider occupational capacity (e.g. Clarke, Winch, & Brockmann, 2013). The European model in VET seems to be promoting WBL, learning outcomes and employable individuals who can steer their own learning and careers in the changing labour markets (Powell et al., 2012). Due to international trends and Europeanisation, it also appears that the Finnish VET is adopting principles from other education systems. The literature review also discussed how WBL is challenged by the development of the knowledge society and knowledge-intensive industries and services, as well as global competition that has changed labour markets and emphasised the role of HE. Regarding WBL pathways in VET, the literature review investigating WPL (publication II) recognised good practices related to structures of education, these included personalisation of learning and a clear framework defining clear goals and the roles and responsibilities of actors. Publication IV suggested that studying either in school-based VET or in apprenticeship training provided a framework for participation, for example, through defining status either as a student or as an employee.

Thus, it is suggested that WBL is a complex issue: learning is related to learner characteristics and behaviours, but it is also related to issues with communities and organisations participating in the learning process, as well as the wider society.

Table 3. Micro, meso and macro level aspects related to work-based learning in VET

<p>Learner characteristics and behaviours (micro level)</p>	<ul style="list-style-type: none"> • Background, experience and skills (e.g. social skills) • Self-directed approach, self-regulative skills (e.g. motivation, determination, self-reflection) • Agency, proactive behaviour • Engagement, sense of belonging • Work ethics, responsibility
<p>Communities and organisations (meso level)</p>	<ul style="list-style-type: none"> • Connectivity, coherence and cooperation between education and work <ul style="list-style-type: none"> ▪ Ordering and duration of workplace learning experiences ▪ Teachers' resources, support and competence (e.g. interventions, providing information, feedback and assessment) ▪ Learners' peer relationships and support ▪ Goals (work organisation vs. educational vs. personal goals) • Vocational field, traditions, climate and culture (e.g. hierarchies, division of labour) • Progression into independent work and increasing responsibilities <ul style="list-style-type: none"> ▪ Risk minimisation (e.g. safety, financial damages) ▪ Planning perspective (e.g. short-term vs. long-term planning) ▪ Sequencing of tasks, task variation ▪ Time and resources for guided participation and practice • Social relationships <ul style="list-style-type: none"> ▪ Between the learner and the work community (reciprocal vs. power or dependency relationships) ▪ Formal and informal guidance relationships ▪ Other interaction opportunities (e.g. multi-professional environment, networks, clients)
<p>VET system and society (macro level)</p>	<ul style="list-style-type: none"> • Interdependence of VET and other systems (e.g. labour and employment vs. education policy, job-specific vs. general skills) • Governance, norms and conceptions related to VET (strong vs. weak institutions and pathways, goals, target groups and expectations) • Education policy developments (e.g. Europeanization, HE) • Frameworks and learning pathways (e.g. roles and responsibilities of different actors, personalisation)

6 CONCLUSIONS

6.1 Scientific contributions

This research had two aims: to investigate WBL by focusing on apprenticeship training and, in particular, to develop a good understanding of WPL in VET. The main findings of the dissertation were presented by answers to three research questions. By answering the research questions, this work contributes to the diverse field of WPL research. Here, WPL is analysed by specifically focusing on socio-cultural perspectives on learning at the level of communities of practice (see Tynjälä, 2013), but the context of VET connects this research to education, educational systems and policy research (see Nylander, Österlund, & Fejes, 2018).

The first research question addressed the nature of apprenticeship as an institution and a WBL pathway in the Finnish context. It was determined that apprenticeship training has a clear framework, but there are varying expectations and understandings of its role as it seems that there is no consistent or shared understanding of the target group of apprenticeship training. In this study, the interviewed apprentices, mainly adults, intended to secure employment and gain an official qualification. It seemed that apprenticeship training was often experienced as job-specific training rather than education (cf. Mazonod, 2016), although some emphasised the effort and time needed for self-study. Nevertheless, apprentices acknowledged and accepted that learning opportunities at work may be limited. Apprentices said they preferred WPL and authentic tasks as the studies in vocational school were judged to offer theory and ‘idealistic’ ways of working that were distant from the reality of the workplace (cf. Grytnes et al., 2018). Leino (2011, pp. 97–98) similarly concluded that apprentices were often satisfied with their workplace learning, but its nature as education was often forgotten. The tendency to prefer WPL has also been recognised in international studies (Harris et al., 2003; Sappa & Aprea, 2014). Currently, apprenticeship training in Finland most often serves as a pathway supporting continuous learning for adults and those already employed (Leino, 2011). This should be noted when making international comparisons, as this limits drawing direct comparisons among the results of studies focusing on apprenticeship training.

The second research question addressed WPL in VET that was more closely studied based on learners' experiences on two vocational pathways. These have not been widely studied and compared, but the findings of this research implied that there are differences between apprenticeship training and school-based VET, although officially the two different VET pathways have the same objectives. It was suggested that apprentices were expected to be productive workers early on, whereas students had the right to progress more slowly, and their progress was more planned; additionally, they were encouraged to set personal goals, and their learning was supported by trainers and teachers (cf. Grytnes et al., 2018). This finding supports the idea that the concept of the VET system is sometimes difficult as it suggests a high degree of inner coherence and may ignore the role of inner diversity (Jørgensen, 2018).

Furthermore, the second research question addressed various vocational fields. The findings implied that there are field-related differences: the technology sector – covering construction, infrastructure construction and metalwork and machinery – was shown to be more restrictive for learning than the business and administration field and, in particular, the social and health care field. This finding is consistent with that of previous studies in the Finnish context (Virtanen et al., 2008; Virtanen et al., 2014a). Interestingly, Virtanen et al. (2014a) found that student-related individual factors explained to a lesser degree student learning outcomes in the social and health care than in the sector of technology and transport. In a similar manner, this study suggested that learning in the field of technology was less structured, for example by employing plans or official trainers, and the learning environment was quite restrictive for both apprentices and VET students. However, apprentices and students' own characteristics and actions could support their access to more difficult tasks. It seemed that the technology field had similar learning pathways, whereas apprenticeship training and school-based VET offered highly varying learning pathways in the other two fields.

However, a note of caution is needed here regarding field- and pathway-related differences since, in a previous comparative study, Poortman (2007) concluded that the variance among individuals was so high that it hindered identifying differences between the pathways. It should be noted that in the Finnish context, one reason behind these differences may be age: apprentices are commonly over 25 years of age, whereas school-based VET students are younger (see Table 2). Regarding age and workplace learning, Schulz and Stamov Roßnagel (2010) studied intentional informal learning in a workplace and hypothesised that worker age would be positively associated with success in informal learning; however, they found that success in

informal learning was independent of age. Yet, Coetzer (2007) found that younger employees viewed the work environment and supervisors' support for learning more favourably than did older employees. Moreover, it seemed that younger employees relied more on close guidance than relatively older employees. Similarly, in this study, especially younger VET students emphasised the role of support which was provided by the VET teachers and the colleagues. However, Virtanen et al. (2009) found that VET students emphasised learning practices of working alone, whereas employees seemed to prefer collaboration and knowledge sharing. According to the participants' experiences in this research, this could be due to unequal status and unfair division of work when working with others. Overall, age differences and differences between student and employee status should be taken into account in international comparisons (see also Grytnes et al., 2018).

The third research question summarised aspects related to WBL. In general, this dissertation adds to the growing body of literature on WPL in the context of VET. Theoretically, the study started from situated learning and the concept of CoP (Lave & Wenger, 1991; Wenger, 1998). The reported experiences implied that not all work communities are CoPs from the learner's viewpoint if they are expected to have mutual engagement, common goals and a shared repertoire, in Wenger's (1998) sense, or if they are expected to support interaction, emphasise knowledge sharing and foster a sense of belonging (Li et al., 2009). In some workplaces, learners were not equally included in the community or given the same tools or resources. The studies concluded that, next to context-related aspects, learning was related to learner characteristics and behaviours. These results are in line with previous understanding (e.g. Billett, 2002; Eteläpelto et al., 2013; Tynjälä, 2013). For example, the 3-P model of WPL (Tynjälä, 2013) promotes the idea that the learner's own interpretation of the learning context and factors related to the learner itself are essential, while it also widely acknowledges the importance of versatile context factors. In this research, communities and organisations were considered as important contexts; thus, the investigation of WPL focused on participation, guidance and a sense of belonging. The findings at different levels also emphasise that, in the VET context, the role of education and vocational schools, as well as wider society and policy, must be acknowledged.

6.2 Practical implications

This dissertation and its findings have some practical implications for apprenticeship training and workplace learning. The findings suggest that apprenticeship training as an institution in Finland could benefit from a common understanding of its means and aims. A common, shared understanding would support choosing the proper measures to promote apprenticeship training for all involved parties, including apprentices, education providers and employers. The challenge is that various developmental measures, such as reducing employers' costs by reducing apprentices' pay rates, modifying the time spent in vocational school or tailoring apprenticeships to the needs of individual employers may make apprenticeship training profitable to employers, but at the same time make apprenticeship training a less attractive option from the viewpoint of the apprentice (Gambin & Hogarth, 2017). Norontaus (2016) concluded that unclear ideas and understanding of apprenticeship training, lack of communications and information, failure to recognise the training potential and a lack of training culture hinder the provision of apprenticeships in companies. Recently, apprenticeship training has been marketed and incentivised for youths with modest results (see e.g. Jauhola, 2015). It seems that offering apprenticeship training for youths is hindered by factors related to employment relationship and finances, young people's stage of development and pedagogical issues and other ethical considerations inside workplaces (Norontaus, 2016). Moreover, for the apprentices, workplaces may be demanding learning environments – interviewees suggested that self-directed approaches and initiative were expected. Pylväs (2018) concluded that workplaces seem to provide learning possibilities for apprentices who have strong self-regulative skills and who are capable of engaging in self-directed learning. Nonetheless, it has been suggested that apprenticeship training could have the potential to expand for students needing special support, especially if supported by legislative measures (Irijala, 2017). However, Käyhkö (2018) recently found, for example, that regarding students with special educational needs, also education providers seem to lack the skills, structures and resources to organise the teaching and support they require in apprenticeship training.

At the same time, the development of apprenticeship training also requires acknowledging the complementary and competitive relationships among the various educational pathways (Powell & Solga, 2010). Although apprenticeship training and school-based VET are parallel pathways at the macro level and officially have the same objectives and the same qualification requirements, this study found that, at the micro level, experiences of these pathways vary widely. Currently, apprenticeship

training (as an employment contract) and training agreements (between the education provider and the workplace) are considered as flexible alternatives to WBL (Ministry of Education and Culture, 2019a; Ministry of Education and Culture & Finnish National Agency for Education, 2018). According to the findings of this research, these VET pathways are experienced differently in some fields. This could imply that the technology sector with similar, although often also restrictive, learning pathways could support flexibility. However, it should be acknowledged that regardless of the field, changing the status from a student to an employee results in changing rights, responsibilities and expectations. At the level of organisations and communities, better communicating these various expectations in each of learning pathways could support mutual engagement in WPL (Brennan Kemmis, Ahern, & Middleton, 2012).

The findings imply that WPL could be developed as part of VET. They also reveal that the role of WPL was experienced as central, especially in apprenticeship training, whereas education and educational goals were peripheral. For VET students, WPL seemed to be more guided by their teachers. However, there were notable individual and workplace-specific differences. On a general level, there seemed to be a tendency for workplaces in the social and health care field to have more expansive approaches to learning than workplaces in technology. This is notable because the field of technology is especially affected by the structural change of labour markets (Maczulskij & Karhunen, 2017). Although socialisation and social integration are also important outcomes of WBL, building and construction has been specifically identified as a challenged field considering transition to higher education (Olsen, Persson Thunqvist, & Hallqvist, 2018). In this era of the knowledge economy, there is also a need to consider permeability between VET and HE. Overall, it is widely acknowledged that enhanced co-operation and collaboration between education and work are needed. In this collaboration, the role of vocational teachers could be promoted by ensuring the availability of resources that enable knowledge sharing, recognition and the promotion of learning opportunities and interventions, if needed. At work, learners' progression and practices could be more explicitly discussed and planned to make learning experiences at work more visible and connected to educational goals (cf. Billett, 2006). It is suggested here that different workplaces and communities could be developed from their own starting points as learning environments when opportunities for learner participation, guidance and a sense of belonging are fostered.

6.3 Limitations and ethical considerations

This dissertation includes limitations that should be acknowledged in interpreting results and in considering future studies. Regarding research ethics, the ethical principles (National Advisory Board on Research Ethics [TENK], 2009) guided the research process from the beginning to the publishing of the results.

The first two publications were literature reviews. Regarding both literature reviews, the amount of previous research turned out to be surprisingly small. This may have resulted from the chosen search strategies and the inclusion and exclusion criteria that could have led to ignoring relevant research. It could have been beneficial to span the search for a longer time period or scan more widely the grey literature published outside of academic journals (e.g. reports, theses, conference proceedings). As the aim was to not to test hypotheses or theories, publication bias towards the publishing of only significant and supporting results was not considered as an issue. The quality of previous literature was also variable, although it was not rigorously assessed. In publication I, the data were mainly from theoretical articles; in publication II, the empirical articles most often relied upon small sample sizes and qualitative data. The synthesis of the data was mostly narrative in publication I and thematic in publication II. These approaches which allowed integrating qualitative and quantitative evidence could have suffered from a lack of transparency (Dixon-Woods et al., 2005). This challenge was acknowledged, and the aim was to provide the reader with clear references and descriptions of search strategies and the frameworks used. However, these kinds of narrative literature reviews may have a limited scope, and they can oversimplify findings at a broad descriptive level (Grant & Booth, 2009).

For the latter two publications, empirical data were collected through interviews (publication III $N = 40$, publication IV $N = 33$). The autonomy of the participants was promoted by voluntary participation and by providing information about the study. The potential participants were asked if they would attend an interview and were given some general information about the study by the education providers. If the potential participants were tentatively ready to participate, their contact details were given to the researchers, who then informed them of the topic and procedures related the study (e.g. approximate length of the interview, anonymization, and publishing the results in journals). The purposive sampling used in both studies to recruit participants in different fields and workplaces had both advantages and disadvantages. This approach allowed selecting the cases or participants that could best serve the research objectives and provide rich information (Patton, 2002).

Additionally, the aim was to choose cases meeting the possible variations in vocational fields and pathways, thus resulting in stratified purposeful sampling. However, this procedure may have led to sampling frame bias (Groger, Mayberry, & Straker, 1999) that restricted the sampling. For example, regarding publication III, only an apprentice, the apprentice's workplace trainer, a co-worker and an employer's representative were interviewed from each workplace, although other workers could also have provided information in relation to a sense of belonging. Furthermore, gatekeeper bias (Tuckett, 2004) could not be avoided as participants were first contacted through education providers, and after committing to the study, some of the participants were nominated by the employer or the learner. Participation was voluntary, and thus, refusals to participate also affected sampling and possibly restricted attaining a full range of variation in experiences (cf. Groger et al., 1999).

Eventually, the voluntary participants provided informed consent and were individually interviewed in order to avoid social harm in the work communities. The interviews were audio recorded and verbatim transcripts were produced. These were kept in secure storage with the access limited only to a group of researchers in order to protect privacy. The anonymised transcripts were analysed only by the researchers of the project. Considering the quality of the data, it was recognised that the data were based on self-reports, and thus, for example, the possibility of social desirability bias in the interview situation could not be excluded (cf. Lüke & Grosche, 2018). Especially in grounded theory, theoretical saturation has been used to evaluate whether the widest possible diversity of data is reached in a non-linear research process (Saunders et al., 2018). More generally, data saturation has been used to assess whether interviews have provided enough information in the data collection phase, thereby aiming to identify redundant data before the analysis phase (Saunders et al., 2018). In this research, data saturation was evaluated during the data collection phase. During the analysis phase, it was acknowledged that thematic analysis is a flexible method but also requires choices and consistency from the researcher (Braun & Clarke, 2006). Additionally, it was recognised that the interpretative power of the analysis could be promoted by employing a theoretical framework in order to avoid mere description (Braun & Clarke, 2006). This was especially considered in publication IV.

Evaluating the quality of qualitative research is important, although the terminology for this often originates from the quantitative research tradition, including validity, reliability and generalisability (Noble & Smith, 2015; Tracy, 2010). Firstly, according to Noble and Smith (2015), *validity* can be defined as the precision

in which findings reflect the data, and they suggested that the term *truth value* could be associated with the assessment of the credibility of qualitative research. In this study, truth value was promoted by two rounds of data collection, allowing the development of data collection, analysis and findings. Additionally, verbatim transcriptions of interview data allowed revisiting of the data through the whole analysis process, and the verbatim descriptions of participants' experiences were also included in the manuscripts in order to support reviewers and readers in assessing the research (cf. Noble & Smith, 2015). The interview excerpts used here and in publication IV were translated by the author from Finnish to English. The aim was to achieve clarity and accuracy in meaning, but translation may unavoidably pose some challenges, such as losing subtle meanings or changing the voice of participants (van Nes et al., 2010). Adding interview excerpts to the manuscripts was also considered ethically. Quotations were anonymised; gender and age were not expressed, but the vocational field and pathway were considered important for interpretation. These kinds of choices would have been more transparent for the participants if an additional quotation agreement was added to the informed consent form. In general, the aim was to choose excerpts that would address varied experiences – both challenges and successes – and to highlight different viewpoints in a balanced and fair manner as expected according to the guidelines of TENK (2009).

Secondly, *reliability* is often considered as consistency of the analytical procedures and can be associated with the *consistency* and *neutrality* of qualitative research (Noble & Smith, 2015). This was especially promoted by writing out and discussing decisions, limitations and research processes. Furthermore, working as part of a research group made research triangulation possible, as researchers in the project had access to the data, data were analysed from different perspectives and interpretations and findings could be discussed. Thirdly, *generalisability* is related to whether findings are transferable to or applicable in other contexts (Noble & Smith, 2015). The applicability of the findings is considered limited in other contexts. However, this limitation was addressed by providing context descriptions that could be helpful in the evaluation of results and their transferability (cf. Noble & Smith, 2015).

6.4 Suggestions for further research

This dissertation provides some insights for future research. First of all, there is a current need to address the changes taking place in the Finnish VET system. The data for this research were collected prior to the reform of vocational upper secondary education that has shaped the Finnish VET system. Unavoidably, this has affected the topicality of the results. Coming into force at the beginning of 2018, the reform has affected the regulation system and has introduced a new funding model based on outcomes, efficiency and effectiveness (Ministry of Education and Culture & Finnish National Agency for Education, 2018; Ministry of Education and Culture, 2019a). The reform has been explained by referring to continuous changes in work and working life, which will require more individual approaches to competence development, and by acknowledging limited financial resources for education (Ministry of Education and Culture, 2019a).

The effects of this reform should be widely studied from the macro down to the micro level. Currently, the VET system is described as competence-based and customer-oriented with a focus on personalisation and ‘missing’ competence (Ministry of Education and Culture, 2019a; Ministry of Education and Culture & Finnish National Agency for Education, 2018). Further studies could investigate whether the system-centred approach has been replaced by the adoption of more individual approaches. For example, publication IV suggested that VET pathways may be highly variable and that their flexible combining may include some challenges. In further studies, there is also a need to evaluate learning outcomes related to various pathways. Previous studies have suggested that diverse learning experiences are related to differences, for example, in competence and vocational identity development (Bound & Lin, 2013; Grytnes et al., 2018; Virtanen et al., 2008, 2014a), creativity and productivity at work (e.g. developing new methods and completing tasks) (Fjellström & Kristmansson, 2016) and commitment to the occupation and organisation (Bound & Lin, 2013).

The new conceptualisation highlighting ‘missing’ competence may also affect WBL at the meso and micro levels and this conceptualisation could be internationally compared. For example, Avis (2014) emphasised how vocational pedagogy and education are historically and culturally formed and the understandings of VET vary. He has subsequently critically commented on the Anglo-Saxon conceptualisation of vocational education. This conceptualisation implies that vocational education is considered as narrow preparation for working life and the focus is on technical and

practical issues (Avis, 2014). In some other conceptualisations, civic education is also acknowledged, and vocational education is more about personal development in addition to addressing the needs of the employers (Avis, 2014). For example, the dual system in Germany has traditionally acknowledged civic education, and the concept of *Beruf* (vocation) has been an important underlying principle for moving towards holistic competence and beyond the interests of single employers (e.g. Billett, 2014; Deissinger, 2019; Grollmann & Rauner, 2007).

This study has suggested that WPL and activities or processes related to it are highly individual and context dependent. Thus, further research should be undertaken to explore how individual characteristics are related to learning or how WPL is realised in various contexts. For example, various occupations should be more closely studied (see e.g. Goller, Steffen, & Harteis, 2018; Kyndt & Beusaert, 2017; Samppala, 2017) in order to better understand these contextual differences and to support continuous learning for various communities and vocational fields. It should be noted that investigating WPL in various communities or organisations can be difficult as workplace learning is often unconscious, invisible, not recognised as learning and, thus, often not reported, or its value is underestimated (Eraut, 2004a; Marsick et al., 2017). From the learner's point of view, longitudinal and observational studies could promote an understanding of individual learning pathways between education and work. However, the processes of participation, guidance and a sense of belonging also seem to be collective by nature, and the relationships among these could be further studied through a diverse set of methods, including quantitative approaches.

Overall, there is a need to understand VET from multiple viewpoints in order to build a holistic understanding of aspects related to VET. This study has mainly focused on the experiences of learners, but the views of employers, education providers and policymakers could be further studied. Besides qualitative studies aiming to better understand the VET context, quantitative large-scale studies are needed to support education policy implementation and to suggest courses of action for developing VET.

REFERENCES

- Aarkrog, V. (2005). Learning in the workplace and the significance of school-based education: A study of learning in a Danish vocational education and training programme. *International Journal of Lifelong Education*, 24(2), 137–147.
- Akkerman, S. F., & Bakker, A. (2012). Crossing boundaries between school and work during apprenticeships. *Vocations and Learning*, 5(2), 153–173.
- Akkerman, S. F., & Bruining, T. (2016). Multilevel boundary crossing in a professional development school partnership. *Journal of Learning Sciences*, 25(2), 240–284.
- Ante, C. (2016). *The Europeanisation of vocational education and training*. Cham: Springer.
- Avis, J. (2014). Workplace learning, VET and vocational pedagogy: The transformation of practice. *Research in Post-Compulsory Education*, 19(1), 45–53.
- Baethge, M., & Wolter, A. (2015). The German skill formation model in transition: From dual system of VET to higher education? *Journal of Labour Market Research*, 48(2), 97–112.
- Bahl, A., Dietzen, A., Salmon-Ferguson, K., & Schwarz, M. (2019). Introduction. In A. Bahl & A. Dietzen (Eds.), *Work-based learning as a pathway to competence-based education. A UNEVOC network contribution* (pp. 13–22). Bonn: Federal Institute for Vocational Education and Training.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong. Desire for interpersonal attachments as a fundamental of human motivation. *Psychological Bulletin*, 117(3), 497–529.
- Bhaskar, R. (2008). *A realist theory of science*. Oxon: Routledge.
- Biesta, G. (2010). Pragmatism and the philosophical foundations of mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Sage handbook of mixed methods in social & behavioral research* (2nd ed., pp. 95–118). Thousand Oaks, CA: Sage.
- Billett, S. (2001). Learning through work: Workplace affordances and individual engagement. *Journal of Workplace Learning*, 13(5), 209–214.
- Billett, S. (2002). Workplace pedagogic practices: Co-participation and learning. *British Journal of Educational Studies*, 50(4), 457–481.
- Billett, S. (2004). Workplace participatory practices: Conceptualising workplaces as learning environments. *Journal of Workplace Learning*, 16(6), 312–324.
- Billett, S. (2006). Constituting the workplace curriculum. *Journal of Curriculum Studies*, 38(1), 31–48.
- Billett, S. (2009). Vocational learning: Contributions of workplaces and educational institutions. In R. Maclean & D. Wilson (Eds.), *International handbook of education for the changing world of work* (pp. 1711–1723). Dordrecht: Springer.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training*, 66(1), 1–21.
- Billett, S. (2018). Student readiness and the integration of experiences in practice and education settings. In S. Choy et al. (Eds.), *Integration of vocational education and training*

- experiences, *Technical and vocational education and training: Issues, concerns and prospects*, 29 (pp. 19–40). Singapore: Springer.
- Bound, H., & Lin, M. (2013). Developing competence at work. *Vocations and Learning*, 6(3), 403–420.
- Bouw, E., Zitter, I., & de Bruijn, E. (2019). Characteristics of learning environments at the boundary between school and work: A literature review. *Educational Research Review*, 26(1), 1–15.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Brennan Kemmis, R., Ahern, S., & Middleton, D. (2012). Promises and expectations between apprentices, trainees and their employers. Proceedings from 15th Annual AVETRA Conference: *Value and Voice of VET Research for Individuals, Industry, Community and the Nation*, (pp. 1–13). Australia: AVETRA.
- Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science*, 2(1), 40–57.
- Burke, L., Marks-Maran, D. J., Ooms, A., Webb, M., & Cooper, D. (2009). Towards a pedagogy of work-based learning: Perceptions of work-based learning in foundation degrees. *Journal of Vocational Education and Training*, 61(1), 15–33.
- Busemeyer, M. R., & Jensen, C. (2012). The impact of economic coordination and educational institutions on individual-level preferences for academic and vocational education. *Socio-Economic Review*, 10(3), 525–547.
- Busemeyer, M. R., & Schlicht-Schmälzle, R. (2014). Partisan power, economic coordination and variations in vocational training systems in Europe. *European Journal of Industrial Relations*, 20(1), 55–71.
- Busemeyer, M. R., & Trampusch, C. (2012). Introduction: The comparative political economy of collective skill formation. In M. R. Busemeyer & C. Trampusch (Eds.), *The political economy of collective skill formation* (pp. 3–38). Oxford, NY: Oxford University Press.
- Castleberry, A., & Nolen, A. L. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807–815.
- Chan, S. (2013). Proximal participation: A pathway into work. *Journal of Vocational Education and Training*, 65(4), 474–488.
- Chan, S. (2016). Belonging to a workplace: First-year apprentices' perspectives on factors determining engagement and continuation through apprenticeship. *International Journal for Educational and Vocational Guidance*, 16(1), 9–27.
- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297–298.
- Clarke, L., Winch, C., & Brockmann, M. (2013). Trade-based skills versus occupational capacity: The example of bricklaying in Europe. *Work, Employment and Society*, 27(6), 932–951.
- Coetzer, A. (2007). Employee perceptions of their workplaces as learning environments. *Journal of Workplace Learning*, 19(7), 417–434.
- Contu, A., & Wilmott, H. (2003). Re-embedding situatedness: The importance of power relations in learning theory. *Organization Science*, 14(3), 227–351.
- Conway, M.-L., & Foskey, R. (2015). Apprentices thriving at work: Looking through an appreciative lens. *Journal of Vocational Education and Training*, 67(3), 332–348.

- Cox, A. (2005). What are communities of practice? A comparative review of four seminal works. *Journal of Information Science*, 31(6), 527–540.
- Deissinger, T. (2015). International education policy: Its influence on the conception of VET and the VET system in Germany. *Research in Comparative and International Education*, 10(4), 607–621.
- Deissinger, T. (2019). The sustainability of the dual system approach to VET. In D. Guile & L. Unwin (Eds.), *The Wiley handbook of vocational education and training* (pp. 293–310). Hoboken, NJ: Wiley Blackwell.
- Denzin, N. K., & Lincoln, Y. S. (2008). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (3rd ed., pp. 1–44). Thousand Oaks, CA: Sage.
- de Souza, D. E. (2014). Culture, context and society – the underexplored potential of critical realism as a philosophical framework for theory and practice. *Asian Journal of Social Psychology*, 17(2), 141–151.
- Dixon-Woods, M., Agarwal, S., Jones, D., Young, B., & Sutton, A. (2005). Synthesising qualitative and quantitative evidence: A review of possible methods. *Journal of Health Services Research and Policy*, 10(1), 45–53.
- Education Statistics Finland. (2018). *Students and qualifications*. Retrieved May 3, 2019, from <https://vipunen.fi/en-gb/vocational/Pages/Opiskelijat-ja-tutkinnot.aspx>.
- Engeström, Y. (2007). From communities of practice to mycorrhizae. In J. Hughes, N. Jewson, & L. Unwin (Eds.), *Communities of practice: Critical perspectives* (pp. 41–54). Abingdon: Routledge.
- Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology*, 70(1), 113–136.
- Eraut, M. (2004a). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247–273.
- Eraut, M. (2004b). Transfer of knowledge between education and workplace settings. In H. Rainbird, A. Fuller, & A. Munro (Eds.), *Workplace learning in context* (pp. 201–221). London: Routledge.
- Eteläpelto, A. (2017). Emerging conceptualisations on professional agency and learning. In M. Goller & S. Paloniemi (Eds.), *Agency at work. Agentic perspective on professional learning and development* (pp. 183–201). Cham: Springer.
- Eteläpelto, A., Vähäsantanen, K., Hökkä, P., & Paloniemi, S. (2013). What is agency? Conceptualizing professional agency at work. *Educational Research Review*, 10(1), 45–65.
- European Centre for the Development of Vocational Training (Cedefop). (2019). *Vocational education and training in Finland. Short description*. Luxembourg: Publications Office of the European Union. Retrieved October 17, 2019, from https://www.cedefop.europa.eu/files/4176_en.pdf
- European Commission (2013). *Work-based learning in Europe. Practices and policy pointers*. Retrieved February 10, 2016, from http://ec.europa.eu/dgs/education_culture/repository/education/policy/vocational-policy/doc/alliance/work-based-learning-in-europe_en.pdf
- European Commission (2015). *High-performance apprenticeships & work-based learning: 20 guiding principles*. Retrieved February 10, 2016, from <https://publications.europa.eu/en/publication-detail/-/publication/8f010ea2-265b-11e7-ab65-01aa75ed71a1/language-en>

- European Council (2018). *Recommendation on European framework for quality and effective apprenticeships*. Retrieved May 3, 2019, from <http://data.consilium.europa.eu/doc/document/ST-6779-2018-INIT/en/pdf>
- European Union (2015). *User guide to the SME definition*. Retrieved October 15, 2017, from <http://ec.europa.eu/DocsRoom/documents/15582/attachments/1/translations>
- Evanciew, C., & Rojewski, J. (1999). Skill and knowledge acquisition in the workplace: A case study of mentor-apprentice relationships in youth apprenticeship programs. *Journal of Industrial Teacher Education*, 36(2), 24–53.
- Evans, K., Guile, D., & Harris, J. (2013). Rethinking work-based learning: For education professionals and professionals who educate. In M. Malloch, L. Cairns, K. Evans, & B. O'Connor (Eds.), *The Sage handbook of workplace learning* (pp. 149–161). Thousand Oaks, CA: Sage.
- Fjellström, M., & Kristmansson, P. (2016). Learning as an apprentice in Sweden: A comparative study of affordances for vocational learning in school and work life apprentice education. *Education and Training*, 58(6), 629–642.
- Forster, A. G., Bol, T., & van de Werfhorst, H. G. (2016). Vocational education and employment over the life cycle. *Sociological Science*, 3, 473–494.
- Fugard, A. J. B., & Potts, H. W. W. (2015). Supporting thinking on sample sizes for thematic analyses: A quantitative tool. *International Journal of Social Research Methodology*, 18(6), 669–684.
- Fuller, A., Hodkinson, H., Hodkinson, P., & Unwin, L. (2005). Learning as peripheral participation in communities of practice: A reassessment of key concepts in workplace learning. *British Educational Research Journal*, 31(1), 49–68.
- Fuller, A., & Unwin, L. (2003). Learning as apprentices in the contemporary UK workplace: Creating and managing expansive and restrictive participation. *Journal of Education and Work*, 16(4), 407–426.
- Fuller, A., & Unwin, L. (2016). Applying an apprenticeship approach to HRD: Why the concepts of occupation, identity and the organisation of workplace learning still matter. In H. Shipton, P. Budhwar, P. Sparrow, & A. Brown (Eds.), *Human resource management, innovation and performance* (pp. 66–79). London: Palgrave Macmillan.
- Gambin, L., & Hogarth, T. (2017). Employers and apprenticeships in England: Costs, risks and policy reforms. *Empirical Research in Vocational Education and Training*, 9(16), 1–22.
- Gherardi, S., Nicolini, D., & Odella, F. (1998). Toward a social understanding of how people learn in organizations. *Management Learning*, 29(3), 273–297.
- Goller, M., & Harteis, C. (2017). Human agency at work: Towards a clarification and operationalisation of the concept. In M. Goller & S. Paloniemi (Eds.), *Agency at work. Agentic perspective on professional learning and development* (pp. 85–103). Cham: Springer.
- Goller, M., Steffen, B., & Harteis, C. (2018). Becoming a nurse aide: An investigation of an existing workplace curriculum in a nursing home. *Vocations and Learning*, 12(1), 67–85.
- Graf, L. (2013). *The hybridization of vocational training and higher education in Austria, Germany, and Switzerland*. Opladen: Budrich UniPress Ltd.
- Grant, M. J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information and Libraries Journal*, 26(2), 91–108.
- Greinert, W-D. (1988). Marktmodell – schulmodell – duales system. Grundtypen formalisierter berufsbildung. *Die Berufsbildende Schule*, 40(3), 145–156.
- Griffiths, T., & Guile, D. (2003). A connective model of learning: The implications for work process knowledge. *European Educational Research Journal*, 2(1), 56–73.

- Groger, L., Mayberry, P. S., & Straker, J. K. (1999). What we didn't learn because of who would not talk to us. *Qualitative Health Research*, 9(6), 829–835.
- Grollmann, P., & Rauner, F. (2007). Exploring innovative apprenticeship: Quality and costs. *Education and Training*, 49(6), 431–446.
- Grytnes, R., Grill, M., Pousette, A., Törner, M., & Nielsen, K. J. (2018). Apprentice or student? The structures of construction industry vocational education and training in Denmark and Sweden and their possible consequences for safety learning. *Vocations and Learning*, 11(1), 65–87.
- Guile, D. (2018). Work experience and VET: Insights from the connective typology and the recontextualisation model. In S. Choy et al. (Eds.), *Integration of vocational education and training experiences, Technical and vocational education and training: Issues, concerns and prospects*, 29 (pp. 41–61). Singapore: Springer.
- Guile, D., & Griffiths, T. (2001). Learning through work experience. *Journal of Education and Work*, 14(1), 113–131.
- Gurtner, J.-L., Cattaneo, A., Motta, E., & Mauroux, L. (2011). How often and for what purposes apprentices seek help in workplaces: A mobile technology-assisted study. *Vocations and Learning*, 4(2), 113–131.
- Haapakorpi, A., & Virtanen, P. (2015). *Oppisopimusjärjestelmän toimivuus ja vaikuttavuus*. Helsinki: Helsingin yliopiston koulutus- ja kehittämisspalvelut.
- Hager, P. (2013). Theories of workplace learning. In M. Malloch, L. Cairns, K. Evans, & B. O'Connor (Eds.), *The Sage handbook of workplace learning* (pp. 17–31). London: Sage.
- Hall, P. A., & Soskice, D. (2001) *Varieties of capitalism: The institutional foundations of comparative advantage*. Oxford: Oxford University Press.
- Hampf, F., & Woessmann, L. (2017). Vocational vs. general education and employment over the life cycle: New evidence from PIAAC. *CESifo Economic Studies*, 63(3), 255–269.
- Hanushek, E. A., Schwerdt, G., Woessmann, L., & Zhang, L. (2017). General education, vocational education, and labor-market outcomes over the lifecycle. *Journal of Human Resources*, 52(1), 48–87.
- Harris, R., Simons, M., Willis, P., & Carden, P. (2003). Exploring complementarity in on- and off-job training for apprenticeships. *International Journal of Training and Development*, 7(2), 82–92.
- Harteis, C., Billett, S., Goller, M., Rausch, A., & Seifried, J. (2015). Effects of age, gender and occupation on perceived workplace learning support. *International Journal of Training Research*, 13(1) 64–81.
- Heikkinen, A. (1995). *Lähtökobtia ammattikasvatuksen kulttuuriseen tarkasteluun: Esimerkkinä suomalaisen ammattikasvatuksen muotoutuminen käsityön ja teollisuuden alalla 1840–1940* (Doctoral dissertation). Acta Universitatis Tamperensis Ser. A, 442. University of Tampere.
- Irjala, M. (2017). *Osallinen, syrjässä, marginaalissa, onnellinen? Tutkimus oppisopimuskoulutuksen erityisopiskelijoista Suomessa ja Saksassa* (Doctoral dissertation). Acta Universitatis Ouluensis, E Scientiae Rerum Socialium, 173. University of Oulu.
- Jauhola, L. (2015). Vauhtia, vaikkei vielä volyymia, nuorten oppisopimuskoulutuksen kehittämiseen ja toteutukseen. Katsaus nuorten työssäoppimis- ja oppisopimusudistuksen toimenpideohjelman arvioinnin tuloksiin. *Ammattikasvatuksen aikakauskirja*, 17(4), 82–93.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26.

- Jørgensen, C. H. (2018). Vocational education and training in the Nordic countries: Different systems and common challenges. In C. H. Jørgensen, O. J. Olsen, & D. Persson Thunqvist (Eds.), *Vocational education in the Nordic countries: Learning from diversity* (pp. 1–28). Abingdon: Routledge.
- Keep, E. (2015). Governance in English VET: On the functioning of a fractured ‘system’. *Research in Comparative and International Education*, 10(4), 464–475.
- Kivinen, O., & Peltomäki, M. (1999). On the job or in the classroom? The apprenticeship in Finland from the 17th century to the 1990s. *Journal of Education and Work*, 12(1), 75–93.
- Klemelä, K. (1999). *Ammattikunnista ammatillisiin oppilaitoksiin: Ammatillisen koulutuksen muutoutuminen Suomessa 1800-luvun alusta 1990-luvulle* (Doctoral dissertation). Report of the Centre for Educational Sociology Research, 48. University of Turku.
- Kvale, S., & Brinkmann, S. (2009). *Inter views: Learning the craft of qualitative research interviewing*. Los Angeles, CA: Sage.
- Kyndt, E., & Beusaert, S. (2017). How do conditions known to foster learning in the workplace differ across occupations? In J. E. Ellingson & R. A. Noe (Eds.), *Autonomous learning in the workplace* (pp. 201–218). New York, NY: Routledge.
- Käyhkö, J. (2018). *Erityisen tuen toimintaprosessien nykytila ja kehittäminen suomalaisessa oppisopimuskoulutuksessa* (Doctoral dissertation). Acta Universitatis Lappeenrantaensis, 810. Lappeenranta University of Technology.
- Lange, T. (2012). German training revisited: An appraisal of corporatist governance. *Education and Training*, 54(1), 21–35.
- Laukia, J. (2013). *Tavoitteena sivistynyt kansalainen ja työntekijä. Ammattikoulu Suomessa 1899–1987* (Doctoral dissertation). University of Helsinki.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Law on vocational education and training (531/2017). <https://www.finlex.fi/fi/laki/smur/2017/20170531>
- Leino, O. (2011). *Oppisopimusopiskelijan oppimisen henkilökohtaistaminen ja oppimismahdollisuudet työpaikalla* (Doctoral dissertation). Dissertations in Education, Humanities, and Theology, 20. University of Eastern Finland.
- Levett-Jones, T., Lathlean, J., Higgins, I., McMillan, M. (2009). Staff-student relationships and their impact on nursing students’ belongingness and learning. *Journal of Advanced Nursing*, 65(2), 316–324.
- Li, L., Grimshaw, J., Nielsen, C., Judd, M., Coyte, P., & Graham, I. (2009). Evolution of Wenger’s concept of community of practice. *Implementation Science*, 4(11). <https://doi.org/10.1186/1748-5908-4-11>
- Lohman, M. C. (2005). A survey of factors influencing the engagement of two professional groups in informal workplace learning activities. *Human Resource Development Quarterly*, 16(4), 501–527.
- Lüke, T., & Grosche, M. (2018). What do I think about inclusive education? It depends on who is asking. Experimental evidence for a social desirability bias in attitudes towards inclusion. *International Journal of Inclusive Education*, 22(1), 38–53.
- Maczulskij, T., & Karhunen, H. (2017). Työmarkkinoiden rakennemuutos ja ammatillisen koulutuksen saaneiden nuorten työttömyys. *Talous & Yhteiskunta*, 45(3), 14–19.
- Manuti, A., Pastore, S., Scardigno, A. F., Giancaspro, M. L., & Morciano, D. (2015). Formal and informal learning in the workplace: A research review. *International Journal of Training and Development*, 19(1), 1–17.

- Marsick, V. J., & Watkins, K. E. (1990). *Informal and incidental learning in the workplace*. New York: Routledge.
- Marsick, V. J., Watkins, K. E., Scully-Russ, E., & Nicolaidis, A. (2017). Rethinking informal and incidental learning in terms of complexity and the social context. *Journal of Adult Learning, Knowledge and Innovation*, 1(1), 27–34.
- Maxwell, J. A. (2012). *A realist approach for qualitative research*. London: Sage.
- Mazenod, A. (2016). Education or training? A comparative perspective on apprenticeships in England. *Journal of Vocational Education and Training*, 68(1), 102–117.
- Messmann, G., Segers, M., & Dochy, F. (Eds.). (2018). *Informal learning at work: Triggers, antecedents, and consequences*. London: Routledge.
- Metso, S. (2014a). Vocational students' perspective on organizational factors enhancing workplace learning. *Education and Training*, 56(5), 381–396.
- Metso, S. (2014b). *A multimethod examination of contributors to successful on-the-job learning for vocational students* (Doctoral dissertation). Acta Universitatis Lappeenrantaensis, 616. Lappeenranta University of Technology.
- Metso, S., & Kianto, A. (2014). Vocational students' perspective on professional skills workplace learning. *Journal of Workplace Learning*, 26(2), 128–148.
- Ministry of Education and Culture (2019a). *Reform of vocational upper secondary education*. Retrieved March 14, 2019, from <https://minedu.fi/en/reform-of-vocational-upper-secondary-education>
- Ministry of Education and Culture (2019b). *Vocational education and training promotes lifelong learning and continuous learning in Finland*. Retrieved October 24, 2019, from <https://minedu.fi/documents/1410845/4150027/Lifelong+and+continuous+learning+in+Finland.pdf/8cc84ec0-06bf-583b-1a45-38dec497da3d/Lifelong+and+continuous+learning+in+Finland.pdf>
- Ministry of Education and Culture. (2019c). *Katse korkealle ja horisontti laajaksi. Näkökulmia ammatillisen koulutuksen järjestäjien ja korkeakoulujen yhteistyöhön*. Opetus- ja kulttuuriministeriön julkaisuja 2019:26. Helsinki: Ministry of Education and Culture. Retrieved October 15, 2019, from <http://urn.fi/URN:ISBN:978-952-263-652-2>
- Ministry of Education and Culture & Finnish National Agency for Education (2018). *Finnish VET in a nutshell. Education in Finland*. Retrieved March 14, 2019, from https://www.oph.fi/download/165770_finnish_vet_in_a_nutshell.pdf
- Musset, P. (2019). *Improving work-based learning in schools*. OECD Social, Employment and Migration Working Papers, No. 233. Retrieved October 14, 2019, from <https://dx.doi.org/10.1787/918caba5-en>
- National Advisory Board on Research Ethics [TENK]. (2009). *Ethical principles of research in the humanities and social and behavioural sciences and proposals for ethical review*. Retrieved April 11, 2019, from <https://www.tenk.fi/sites/tenk.fi/files/ethicalprinciples.pdf>
- Niemeyer, B. (2007). Between school and work: Dilemmas in European comparative transition research. *European Journal of Vocational Training*, 41(2), 116–136.
- Nikolova, I., van Ruysseveldt, J., De Witte, H., & Syroit, J. (2014). Work-based learning: Development and validation of a scale measuring the learning potential of the workplace (LPW). *Journal of Vocational Behavior* 84(1), 1–10.
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, 18(2), 34–35.
- Noe, R. A., Tews, M. J., & Marand, A. D. (2013). Individual differences and informal learning in the workplace. *Journal of Vocational Behavior*, 83(3), 327–335.

- Norén Creutz, I., & Wiklund, M. (2014). Learning paradigms in workplace e-learning research. *Knowledge Management & E-Learning*, 6(3), 299–315.
- Norontaus, A. (2016). *Oppisopimuskoulutus yritysten tuottamana koulutuspalveluna: Tavoitteista vaikuttuksiin* (Doctoral dissertation). Acta Universitatis Lappeenrantaensis, 693. Lappeenranta University of Technology.
- Numminen, U. (2000). Strategies for improving vocational education: The Finnish case. In M.-L. Stenström & L. Lasonen (Eds.), *Strategies for reforming initial vocational education and training in Europe* (pp. 74–91). Jyväskylä: University of Jyväskylä, Institute for Educational Research.
- Nylander, E., Österlund, L., & Fejes, A. (2018). Exploring the adult learning research field by analysing who cites whom. *Vocations and Learning*, 11(1), 113–131.
- Olsen, O. J., Persson Thunqvist, D., & Hallqvist, A. (2018). Building and construction. A critical case for the future of vocational education. In C. H. Jørgensen, O. J. Olsen, & D. Persson Thunqvist (Eds.), *Vocational education in the Nordic countries: Learning from diversity* (pp. 136–155). Abingdon: Routledge.
- Onstenk, J., & Blokhuis, F. (2007). Apprenticeship in the Netherlands: Connecting school- and work-based learning. *Education and Training*, 49(6), 489–499.
- Onwuegbuzie, A., & Frels, R. (2016). *7 steps to a comprehensive literature review: A multimodal & cultural approach*. London: Sage.
- Pattayanunt, S. (2009). Does the concept of apprenticeship still have relevance as a model of skill formation and vocational learning in contemporary society? *Transition Studies Review*, 16(2), 529–541.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Peters, L. D., Pressey, A. D., Vanharanta, M., & Johnston, W. J. (2013). Constructivism and critical realism as alternative approaches to the study of business networks: Convergences and divergences in theory and in research practice. *Industrial Marketing Management*, 42(3), 336–346.
- Pilz, M. (2016). Typologies in comparative vocational education: Existing models and a new approach. *Vocations and Learning*, 9(3), 295–314.
- Poortman, C. L. (2007). *Workplace learning processes in senior secondary vocational education* (Doctoral dissertation). University of Twente.
- Powell, J. J. W., Bernhard, N., & Graf, L. (2012). The emergent European model in skill formation: Comparing higher education and vocational training in the Bologna and Copenhagen processes. *Sociology of Education*, 85(3), 240–258.
- Powell, J. J. W., & Solga, H. (2010). Analyzing the nexus of higher education and vocational training in Europe: A comparative-institutional framework. *Studies in Higher Education*, 35(6), 705–721.
- Pylväs, L. (2018). *Development of vocational expertise and excellence in formal and informal learning environments* (Doctoral dissertation). Acta Universitatis Tamperensis, 2353. University of Tampere.
- Pylväs, L., Nokelainen, P., & Rintala, H. (2018). Finnish apprenticeship training stakeholders' perceptions of vocational expertise and experiences of workplace learning and guidance. *Vocations and Learning*, 11(2), 223–243.
- Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, 8(3), 238–264.
- Reegård, K. (2015). Sales assistants in the making: Learning through responsibility. *Vocations and Learning*, 8(2), 117–133.

- Rintala, H., Nokelainen, P., & Pylväs, L. (2019). Informal workplace learning: Turning the workplace into a learning site. In S. McGrath, M. Mulder, J. Papier, & R. Suart (Eds.), *Handbook of vocational education and training* (pp. 729–742). Cham: Springer. https://doi.org/10.1007/978-3-319-94532-3_97
- Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology, 11*(1), 25–41.
- Ryan, P., Backes-Gellner, U., Teuber, S., & Wagner, K. (2013). Apprentice pay in Britain, Germany and Switzerland: Institutions, market forces and market power. *European Journal of Industrial Relations, 19*(3), 201–220.
- Salkind, N. J. (2010). *Encyclopedia of research design*. Thousand Oaks, CA: Sage.
- Samppala, M.-L. (2017). *Käsityksiä ja kokemuksia laitosbuoltajaopiskelijoiden oppimisesta työpaikalla* (Doctoral dissertation). Helsinki Studies in Education, 12. University of Helsinki.
- Sappa, V., & Aprea, C. (2014). Conceptions of connectivity: How Swiss teachers, trainers and apprentices perceive vocational learning and teaching across different learning sites. *Vocations and Learning, 7*(3), 263–287.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality and Quantity, 52*(4), 1893–1907.
- Savoie-Zajc, L. & Dolbec, A. (2003). Co-operative education in the pulp and paper sector in Quebec. *Journal of Workplace Learning, 15*(3), 114–122.
- Schaap, H., Baartman, L. K. J., & de Bruijn, E. (2012). Students' learning processes during school-based learning and workplace learning in vocational education: A review. *Vocations and Learning, 5*(2), 99–117.
- Schiller, C. J. (2016). Critical realism in nursing: An emerging approach. *Nursing Philosophy, 17*(2), 88–102.
- Schneider, M. R., & Paunescu, M. (2012). Changing varieties of capitalism and revealed comparative advantages from 1999 to 2005: A test of the Hall and Soskice claims. *Socio-Economic Review, 10*(4), 731–753.
- Schulz, M., & Stamov Roßnagel, C. (2010). Informal workplace learning: An exploration of age differences in learning competence. *Learning and Instruction, 20*(5), 383–399.
- Scott, W. R. (2014). *Institutions and organizations: Ideas, interests, and identities* (4th ed.). Thousand Oaks, CA: Sage.
- Sfard, A. (1998). On two metaphors for learning and the dangers of choosing just one. *Educational Researcher, 27*(2), 4–13.
- Smith, R. (2018). Negotiation and learning: Context and conditions in relationship. In R. Smith (Ed.), *Learning in work: A negotiation model of socio-personal learning* (pp. 65–98). Cham: Springer.
- Sousa, F. J. (2010). Metatheories in research: Positivism, postmodernism and critical realism. In A. G. Woodside (Ed.), *Organizational culture, business-to-business relationships, and interfirm networks* (pp. 455–503). Bingley: Emerald Group.
- Stenström, M.-L., & Virolainen, M. (2018). The development of Finnish vocational education and training from 1850 to 1945. In S. Michelsen & M.-L. Stenström (Eds.), *Vocational education in the Nordic countries: The historical evolution* (pp. 24–45). Oxon: Routledge.
- Streumer, J. N., & Kho, M. (2006). The world of work-related learning. In J. N. Streumer (Ed.), *Work-related learning* (pp. 3–49). Dordrecht: Springer.

- Swager, R., Klarus, R., van Merriënboer, J. J. G., & Nieuwenhuis, L. F. M. (2015). Constituent aspects of workplace guidance in secondary VET. *European Journal of Training and Development, 39*(5), 358–372.
- Tanggaard, L. (2005). Collaborative teaching and learning in the workplace. *Journal of Vocational Education and Training, 57*(1), 109–122.
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In C. Willig & W. Stainton Rogers (Eds.), *The Sage handbook of qualitative research in psychology* (2nd ed.) (pp. 17–37). London: Sage.
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 837–851.
- Trampusch, C. (2009). Europeanization and institutional change in vocational education and training in Austria and Germany. *Governance: An International Journal of Policy, Administration, and Institutions, 22*(3), 369–395.
- Tuckett, A. G. (2004). Qualitative research sampling: The very real complexities. *Nurse Researcher, 12*(1), 47–61.
- Tuomi-Gröhn, T., & Engeström, Y. (2003). Conceptualizing transfer: From standard notions to developmental perspectives. In T. Tuomi-Gröhn & Y. Engeström (Eds.), *Between school and work. New perspectives on transfer and boundary-crossing* (pp. 19–38). Amsterdam: Pergamon.
- Tynjälä, P. (2013). Toward a 3-P model of workplace learning: A literature review. *Vocations and Learning, 6*(1), 11–36.
- UNESCO and Inter-Agency Group on Technical and Vocational Education and Training (2017). *Investing in work-based learning*. Retrieved May 3, 2019, from <https://unesdoc.unesco.org/ark:/48223/pf0000260677>
- van Nes, F., Abma, T., Jonsson, H., & Deeg, D. (2010). Language differences in qualitative research: Is meaning lost in translation? *European Journal of Ageing, 7*(4), 313–316.
- VETNET (2017). VET research framework. In C. Nägele & M. Gessler (Eds.), *Report on the VETNET research workshop during the second VET skills week in Brussels, 22.11.17*. Retrieved May 9, 2019, from <http://doi.org/10.5281/zenodo.1345228>
- Viinisalo, K. (2010). Oppisopimuskoulutus ja oppiminen. *Ammattikasvatuksen aikakauskirja, 12*(3), 20–31.
- Viirolainen, M., & Persson Thunqvist, D. (2017). Varieties of universalism: Post-1990s developments in the initial school-based model of VET in Finland and Sweden and implications for transitions to the world of work and higher education. *Journal of Vocational Education and Training, 69*(1), 47–63.
- Virtanen, A. (2013). *Opiskelijoiden oppiminen ammatillisen peruskoulutuksen työssäoppimisen järjestelmässä* (Doctoral dissertation). Jyväskylä Studies in Education, Psychology and Social Research, 473. University of Jyväskylä.
- Virtanen, A. & Tynjälä, P. (2008). Students’ experiences of workplace learning in Finnish VET. *European Journal of Vocational Training, 44*(2), 199–213.
- Virtanen, A., Tynjälä, P., & Collin, K. (2009). Characteristics of workplace learning among Finnish vocational students. *Vocations and Learning, 2*(3), 153–175.
- Virtanen, A., Tynjälä, P., & Eteläpelto, A. (2014a). Factors promoting vocational students learning at work: Study on student experiences. *Journal of Education and Work, 27*(1), 43–70.
- Virtanen, A., Tynjälä, P., & Eteläpelto, A. (2014b). Opiskelijoiden työssäoppimista selittävät tekijät kaupan ja hallinnon alalla sekä matkailu-, ravitsemis- ja talousalalla. *Ammattikasvatuksen aikakauskirja, 16*(4), 44–59.

- Virtanen, A., Tynjälä, P., & Stenström, M.-L. (2008). Field-specific practices as a source for students' vocational identity formation. In S. Billett, C. Harteis, & A. Eteläpelto (Eds.), *Emerging perspectives of workplace learning* (pp. 19–34). Rotterdam: Sense.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Walther, A. (2006). Regimes of youth transitions: Choice, flexibility and security in young people's experiences across different European contexts. *Young*, 14(2), 119–139.
- Wenger, E. (1998). *Communities of Practice: Learning, meaning, and identity*. New York, NY: Cambridge University Press.
- Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston: Harvard Business School Press.
- Wesselink, R., de Jong, S., & Biemans, H. J. A. (2010). Aspects of competence-based education as footholds to improve the connectivity between learning in school and in the workplace. *Vocations and Learning*, 3(1), 19–38.
- Wheelahan, L. (2007). Blending activity theory and critical realism to theorise the relationship between the individual and society and the implications for pedagogy. *Studies in the Education of Adults*, 39(2), 183–196.
- Wieland, C. (2015). Germany's dual vocational-training system: Possibilities for and limitations to transferability. *Local Economy*, 30(5), 577–583.
- Zhao, Y., & Ko, J. (2018). Workplace learning in the professional development of vocational education teachers. *Studia Paedagogica*, 23(2), 43–58.

APPENDICES

Appendix 1: Interview questions for apprentices and their co-workers, workplace trainers and employers

Date:

Interview started/ended:

Duration of interview:

Name:

Age:

E-mail:

Phone number:

Organisation:

Field of vocation:

Current job assignment:

(Employers) Size of the organisation:

(Apprentices) Vocational institution:

(Apprentices) Vocational education/adult education:

Total years of work experience in current job:

Total years of previous work experience:

Total years of work experience:

(Workplace trainers) Total years of workplace trainer experience:

<i>Apprentice</i>	<i>Co-worker</i>	<i>Workplace trainer</i>	<i>Employer</i>
Part 1: Vocational expertise			
1. How did you initially become interested in this vocational field?	1. How did you initially become interested in this vocational field?	1. How did you initially become interested in this vocational field?	
2. What kinds of vocational plans and goals do you have for the future?	2. What kinds of vocational plans and goals do you have for the future?	2. What kinds of vocational plans and goals do you have for the future?	
3. How did you decide to participate in apprenticeship training? How did you find this job?			1. How did you become interested in apprenticeship training? How did you choose [the apprentice] to work for your organisation?
4. How do you think apprenticeship training prepares young people/adults for this vocational field?		3. How do you think apprenticeship training prepares young people/adults for this vocational field?	2. How do you think apprenticeship training prepares young people/adults for this vocational field?
5. What is your job like? What kinds of skills do you need to succeed in/perform in your work?	3. What is your job like? What kinds of skills do you need to succeed in/perform in your work?	4. What is your job like? What kinds of skills do you need to succeed in/perform in your work?	3. What is your job like? What kinds of skills do you need to succeed in/perform in your work?
6. How would you evaluate your vocational expertise and development? Have you been given more responsibility at work?	4. How would you evaluate your vocational expertise and development?	5. How would you evaluate your vocational expertise and development?	

<i>Apprentice</i>	<i>Co-worker</i>	<i>Workplace trainer</i>	<i>Employer</i>
		6. Has working as a workplace trainer developed your own vocational expertise?	
7. What kinds of expertise have you contributed to your workplace?	5. What kinds of expertise has the apprentice contributed to your workplace?	7. What kinds of expertise has the apprentice contributed to your workplace?	4. What kinds of expertise has the apprentice contributed to your workplace?
8. When you succeeded in an important situation in your working life, what did you think was the reason for that?		8. Can you remember any important situations in which you were successful as a workplace trainer? Could you give an example? What did you think was the reason for that?	
9. When you failed in an important situation in your working life, what do you think was the reason for that?		9. Can you remember any important situations in which you struggled as a workplace trainer? Could you give an example? What do you think was the reason for that?	
10. How do you learn best? What has facilitated your learning?	6. How do you learn best?	10. How do you learn best?	
11. What has hindered your learning? What do you do if you are not progressing in your learning?			

<i>Apprentice</i>	<i>Co-worker</i>	<i>Workplace trainer</i>	<i>Employer</i>
Part 2: Guidance			
12. What is good guidance like?	7. What is good workplace guidance like?	11. What is good workplace guidance like?	
13. How have you been taught new things and been guided in the workplace?	8. What kinds of things do you teach or guide the apprentice in? In what kinds of contexts? And how?	12. What kinds of things do you teach or guide the apprentice in? In what kinds of contexts? And how?	5. What kinds of things do you teach or guide the apprentice in? In what kinds of contexts? And how?
14. Do you receive enough guidance? What kinds of issues influence whether you receive any help or guidance? In what areas would you like to receive more/less guidance?	9. How much do you work with the apprentice?	13. How much effort are you able to put into guiding the apprentice? Do you have time enough for guidance?	6. How much do you work with the apprentice?
	10. What kinds of skills and knowledge does a workplace trainer need?	14. What kinds of skills and knowledge does a workplace trainer need? What kinds of pedagogical expertise do you have? Do you think you need more expertise for the task?	7. What kind of employee is suitable to work as a workplace trainer?
	11. Have you faced any problems when guiding an apprentice? How have they been solved?	15. Have you faced any problems when guiding an apprentice? How have they been solved?	8. Have you faced any problems when guiding an apprentice? How have they been solved?
		16. What kinds of issues challenge the processes of providing guidance?	

<i>Apprentice</i>	<i>Co-worker</i>	<i>Workplace trainer</i>	<i>Employer</i>
Part 3: Responsibilities			
15. Who is mainly responsible for your guidance?	12. Who do you think is responsible for guiding the apprentice at work?	17. Who do you think is responsible for guiding the apprentice at work?	9. Who do you think is responsible for guiding the apprentice at work?
16. Who else is helping and guiding you? Who provides you with vocational skills and knowledge? Whom do you ask for help if you face problems?	13. Who participates in providing guidance to apprentices in the workplace? Have you agreed on the areas of responsibility?	18. Who participates in providing guidance to apprentices in the workplace? Have you agreed on the areas of responsibility?	10. Who participates in providing guidance to apprentices in the workplace? Have you agreed on the areas of responsibility?
		19. How did you become a workplace trainer?	11. How do you decide who should be a workplace trainer?
Part 4: Work community			
17. How do you see your own position in the work community? Do you consider yourself a student or an employee?	14. What do you consider the apprentice's position to be within the work community?	20. What do you consider the apprentice's position to be within the work community?	12. What do you consider the apprentice's position to be within the work community?
18. How are you treated in the work community?	15. How does the presence of an apprentice influence the work community's actions?	21. How does the presence of an apprentice influence the work community's actions?	13. How does the presence of an apprentice influence the work community's actions?

<i>Apprentice</i>	<i>Co-worker</i>	<i>Workplace trainer</i>	<i>Employer</i>
19. How much do you communicate with the other apprentices? Do you feel like you are part of a student community?			
20. How does meeting other students support your studies? What have you learned from them?			
21. Do theoretical studies support your work? If so, how?			
22. Do the training coordinator and vocational teachers participate in guiding you in the workplace?		22. How much do you co-operate with the training coordinator and vocational institution? How does this work? In what instances would you contact the workplace coordinator/vocational institution?	14. How much do you co-operate with the training coordinator and vocational institution? How is it working?
		23. Do you think the division of responsibilities is clear between the workplace, vocational institution and workplace coordinator?	15. Do you think the division of responsibilities is clear between the workplace, vocational institution and workplace coordinator?

<i>Apprentice</i>	<i>Co-worker</i>	<i>Workplace trainer</i>	<i>Employer</i>
		24. What kinds of support or guidance do you receive in the workplace?	16. What kinds of support would you like to have for apprentice guidance from vocational coordinators and vocational institutions?
		25. What kinds of support or guidance do you receive in the workplace?	17. What kinds of support or guidance does one receive in the workplace? What kinds of support would be needed?
Is there anything else you would like to add or comment?			

Appendix 2: Interview questions for apprentices and students in school-based VET

Date:

Interview started/ended:

Duration of interview:

Name:

Age:

E-mail:

Phone number:

(Apprentices) Organisation:

Qualification(s):

Vocational field:

Vocational institution:

(Apprentices) Vocational education/adult education:

(Apprentices) Current job:

(Apprentices) Current work experience:

(School-based VET students) On-the-job learning periods (amount, duration, workplaces):

Previous work experience:

Part 1: Vocational expertise

A. Vocational competence

1. How did you initially become interested in this vocational field?
 2. What kinds of competence areas are included in the work X? Are there any changes in the future?
 3. What kinds of characteristics are needed to perform well in this field?
 4. How would you describe your vocational competence at the moment?
-

B. Internationality

5. What is internationalisation in your field? Talk about your experiences.
 6. What kinds of capabilities are needed in order to work in an international (working/studying) environment?
 7. How would you like *apprenticeship training/VET* to prepare you for work in international environments?
-

C. Digitisation

8. What is digitisation for you in your everyday life?
 9. What is your stance on digitisation? Has it changed during past years?
 10. What kind of social media are you using and for what purposes?
 11. How has digitisation affected your professional development?
 12. Do you think that you have benefitted from social media in relation to your professional development?
 13. How should digitisation and social media be utilised during *apprenticeship training/VET* in order to support *apprentices'/students'* professional development?
-

Part 2: Workplace as a learning environment

A. Learning process (environment)

14. How would you describe your working environment(s)?
 15. How would you describe your tasks? How have they changed?
 16. How is your work and position in the work community compared to other employees? Have these changed during your studies?
 17. How would you describe learning at work? In what kind of situations do you learn? Talk about a typical learning situation.
 18. How are you taught things at work? How are you guided?
 19. In what ways have your studies been planned at work (e.g. goals, competence demonstrations)?
-

B. Learning process (individual)

20. What motivates you to finish your studies and to develop professionally? How do you make sure that you do not drop out of studies?
 21. How do you prepare yourself for new situations in studies or at work (e.g. group work, new methods)? How much time do you use for the preparation?
 22. Think about a situation (studies or work) in which you have succeeded. When you have succeeded in your studies or work, for what reasons did this happen?
 23. Think about a situation (studies or work) in which you have not succeeded. When you have not succeeded in your studies or work, for what reasons did this happen?
-

24. How are fails or errors handled at work? How do you react to these?

C. Assessment

25. How is your learning evaluated and assessed (e.g. When do you get feedback)?

26. How do you monitor your own performance? How do you ensure during studies or at work that you know what you need to know?

27. What kind of assessment promotes your learning?

Part 2: Education and work

A. Vocational school and workplace

28. What is your relation to vocational school? How is co-operation with working life in your studies? Talk about your experiences.

29. How would you develop co-operation between vocational school and the workplace?

30. Can you describe how you utilise knowledge and skills learned at school at work (and vice versa)?

B. Education and work

31. How does *apprenticeship training/VET* prepare you for work?

32. How would you assess your readiness to work in various workplaces in your field after completing *apprenticeship training/your studies*?

Part 3: Future plans

33. Where do you see yourself in five years?

34. What do you think about continuing studies in the future?

35. What kind of skills and knowledge are needed to access to higher education (university of applied sciences or university)?

36. What kind of readiness does VET provide for continuing studies?

37. What is your stance on entrepreneurship as an option?

38. How does *apprenticeship training/VET* prepare you for entrepreneurship?

39. How would you develop *apprenticeship training/VET*?

Is there anything else you would like to add or comment?

ORIGINAL PUBLICATIONS

- Publication I Rintala, H., Nokelainen, P., & Pylväs, L. (2017). Katsaus oppisopimuskoulutukseen instituutiona Saksassa, Englannissa ja Suomessa [A review on apprenticeship as an institution in Germany, England and Finland]. *Kasvatus*, 48(2), 128–140.
- Publication II Rintala, H., Mikkonen, S., Pylväs, L., Nokelainen, P., & Postareff, L. (2015). Työpaikalla tapahtuvaa oppimista ja ohjausta edistävät ja estävät tekijät [Promoting and hindering factors of workplace learning and guidance]. *Ammattikasvatuksen aikakauskirja*, 17(4), 9–21.
- Publication III Rintala, H., Pylväs, L., & Nokelainen, P. (2017). Oppisopimusopiskelijan osallisuus työyhteisössä [Apprentice's sense of belonging to a work community]. In A. Toom, M. Rautiainen, & J. Tähtinen (Eds.), *Toiveet ja todellisuus: Kasvatus osallisuutta ja oppimista rakentamassa* (pp. 317–334). Turku: Suomen kasvatustieteellinen seura.
- Publication IV Rintala, H., & Nokelainen, P. (2019). Vocational education and learners' experienced workplace curriculum. *Vocations and Learning*. <https://doi.org/10.1007/s12186-019-09229-w>

PUBLICATION

I

**Katsaus oppisopimuskoulutukseen instituutiona
Saksassa, Englannissa ja Suomessa
[A review on apprenticeship as an institution
in Germany, England and Finland]**

Heta Rintala, Petri Nokelainen & Laura Pylväs

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HETA RINTALA – PETRI NOKELAINEN – LAURA PYLVÄS

Katsaus oppisopimuskoulutukseen instituutiona Saksassa, Englannissa ja Suomessa

Rintala, Heta – Nokelainen, Petri – Pylväs, Laura. 2017. KATSAUS OPPISOPIMUSKOULUTUKSEEN INSTITUUTIONA SAKSASSA, ENGLANNISSA JA SUOMESSA. Kasvatus 48 (2), 128–140.

Oppisopimuskoulutuksen ja työpaikalla tapahtuvan oppimisen edistäminen on ollut kansainvälinen kehityssuunta viime vuosina. Tämän narratiivisen katsauksen tavoitteena on kuvata ammatillisten koulutusjärjestelmien eroja sekä tarkastella erityisesti oppisopimuskoulutusta instituutiona Saksassa, Englannissa ja Suomessa. Katsaus pyrkii lisäksi huomioimaan ne kehitystrendit ja haasteet, jotka voivat vaikuttaa oppisopimuskoulutuksen asemaan osana ammatillista koulutusta. Katsauksen aineisto koostuu aiemmasta tutkimuksesta, raporteista ja selvityksistä. Katsaus toteutettiin teorialähtöisesti Scottin (2014) institutionaalisen viitekehyksen avulla. Katsaus osoittaa, että oppisopimuskoulutus sekä siihen kohdistuvat odotukset ja arvostus vaihtelevat maittain mutta saavat aikaan myös haasteita oppisopimuskoulutuksen kehittämiseksi. Myös globaalit työelämän muutokset ja koulutuksen trendit vaikuttavat sekä opiskelijoiden että työnantajien osallistumiseen ja oppisopimuskoulutuksen kysyntään, jotka ovat merkittäviä tekijöitä oppisopimuskoulutuksen toteutumisessa.

Avainsanat: oppisopimuskoulutus, ammatillinen koulutus, institutionaalinen viitekehys, narratiivinen katsaus

Johdanto

Oppisopimuskoulutuksen ja työpaikalla tapahtuvan oppimisen edistäminen on ollut viime vuosina merkittävä osa Euroopan uni-

onin työllisyys- ja nuorisopolitiikkaa (European Commission 2013, 2015). Oppisopimustyyppisen koulutuksen hyödyt yhdistetäänkin

usein erityisesti nuorten rakenteellisen työttömyyden vähentämiseen (Baldi, Brüggemann-Borck & Schlaak 2014). Kuten muualla Euroopassa oppisopimuskoulutuksesta on kiinnostuttu myös Pohjoismaissa, vaikka oppilaitosmuotoisella ammatillisella koulutuksella on niiden koulutusjärjestelmissä merkittävä rooli (Jørgensen 2015). Viime vuosina useissa selvityksissä ja raporteissa on kartoitettu eri maiden tapoja toteuttaa oppisopimuskoulutusta sekä kuvattu oppisopimuskoulutuksen toimivia periaatteita ja rakenteita (ks. esim. European Commission 2012, 2013, 2015; Smith & Brennan Kemmis 2013; Steedman 2012). Hyvien käytänteiden siirtäminen eri maiden välillä on kuitenkin lähes mahdotonta, sillä ammatilliset koulutusjärjestelmät noudattelevat erilaisia kansallisia tai kulttuurisia logiikoita, jotka pohjautuvat historialliseen kehitykseen (Deissinger 2014). Siten myös oppisopimuskoulutus on riippuvainen toimintaperiaatteista, joita ohjaavat erilaiset kansalliset sosiopoliittiset, taloudelliset sekä koulutukselliset kontekstit (Pattayanunt 2009).

Tämän katsauksen tavoitteena on kuvata oppisopimuskoulutuksen asemaa ja merkitystä osana ammatillista koulutusta sekä tarkastella, millaisena instituutiona oppisopimuskoulutus näyttäytyy Saksassa, Englannissa ja Suomessa. *Instituutiot* voidaan määritellä vaikiintuneiden sosiaalisten sääntöjen järjestelmiksi, jotka muokkaavat inhimillistä toimintaa ennakoitavaksi (Hodgson 2006). Scottin (2014) eri teoreettisia näkökulmia yhdistävän viitekehyksen mukaan instituutiot koostuvat regulatiivisista, normatiivisista ja kulttuuris-kognitiivisista elementeistä, jotka aikaansaavat pysyvyyttä, ohjaavat käytöstä ja vastustavat muutosta. *Regulatiivinen elementti* korostaa käytökseen vaikuttavia säänteleviä prosesseja, joihin liittyvät lakien ja sääntöjen asettaminen ja valvonta sekä sanktioiden, rangaistusten ja kannustinten määrääminen. *Normatiivinen elementti* puolestaan korostaa yhteisön arvoja ja normeja. Arvot kuvaavat toiminnalle asetetut tavoitteet, ja normit määrittelevät legitiimit toimintatavat niiden saavuttamiseksi.

Kulttuuris-kognitiivinen elementti sen sijaan painottaa yhteisön jaettuja käsityksiä, jotka luovat kehykset tulkinnoille ja muokkaavat sosiaalista toimintaa siten, että toiminta noudattaa rutiineja ilman virallista sääntelyä ja niitä kyseenalaistamatta. (Scott 2014.)

Käytännössä instituutiot muodostuvat erilaisista elementtien yhdistelmästä. Elementtien linjakkuus tuottaa vahvoja instituutioita, kun taas vastaavasti niiden erilaiset suunnat aikaansaavat konflikteja ja muutoksia. Institutionaalisen näkemyksen mukaan instituutiot tarvitsevat sosiaalista hyväksyntää ja uskottavuutta eli legitimitteettiä pärjätäkseen sosiaalisessa ympäristössään. Jokainen elementti tarjoaa erilaiset perusteet instituution olemassaolon legitimoimiseksi: regulatiivinen elementti perustuu sääntöjen noudattamiseen, normatiivinen elementti moraaliseen legitimitettiin arviointiin ja kulttuuris-kognitiivinen elementti jaettuihin käsityksiin siitä, onko instituutio ymmärrettävä, tunnistettava ja kulttuurisesti tuettu. (Scott, 2014.) Koulutuksen kaltaiset suuret institutionaaliset rakenteet sekä niihin liittyvät käytännöt ovat ehdollisia ja alttiita muutoksille, jolloin ne voivat saada erilaisia muotoja eri toimijoiden keskuudessa ja erilaisissa yhteiskunnissa. Instituutioiden analyysissä voidaankin tarkastella, miksi johonkin tiettyyn muotoon on päädytty. (Meyer & Rowan 2006.) Katsauksessa ammatillista koulutusta tarkastellaan ensin erilaisten luokittelujen näkökulmasta. Luokittelut auttavat ymmärtämään tekijöitä, jotka vaikuttavat erilaisiin tapoihin toteuttaa ammatillista koulutusta eri maissa. Tämän jälkeen katsaus keskittyy vastaamaan seuraaviin tutkimuskysymyksiin: 1) Millainen instituutio oppisopimuskoulutus on Saksassa, Englannissa ja Suomessa? 2) Millaiset haasteet ja trendit vaikuttavat oppisopimuskoulutukseen?

Ammatillinen koulutus luokittelujen valossa

Ammatillisten koulutusjärjestelmien vertailuvassa tutkimuksessa hyödynnetään usein

luokitteluja (Deissinger 2014; Gonon 2014; Pilz 2016). Greinert (1988) kuvaa luokittelussaan ammatillisiin koulutusjärjestelmiin heijastuvia valtion, työmarkkinajärjestöjen ja talouselämän suhteita, vastuita ja yhteistyörakenteita. *Markkinamallin* maissa (esim. Englanti) markkinat ja yritykset sääntelevät esimerkiksi koulutuksen kysyntää ja tarjontaa sekä laadullista sisältöä. *Koulumallin* maissa (esim. Ranska) tutkintojen kysyntä ja tarjonta puolestaan määritellään hallinnollisten toimijoiden kesken, ja koulutus keskittyy oppilaitokseen ja sen akateemisten sekä ammatillisten aineiden tarjontaan. *Duaalijärjestelmissä* (Saksa, Sveitsi, Itävalta) koulutusta ohjaavat erityisesti yritykset sekä niiden etujärjestöt, mutta sääntelyyn osallistuvat sosiaalipartnerit – ammattiliitot ja työnantajajärjestöt – sekä valtion instituutiot ja lopulta valtiojohto (Greinert 2010). Vaikka jaottelu on aiemmin ollut suosittu, sitä on kritisoitu myös liian yksinkertaiseksi suhteessa erilaisiin tapoihin toteuttaa ammatillista koulutusta erilaisissa kansallisissa konteksteissa (Deissinger 2014; Pilz 2016).

Koulutussiirtymien tutkimuksessa koulutuspolut nähdään osana hyvinvointijärjestelmiä sekä sosiaalipolitiikkaa (Niemeyer 2007; Walther 2006). Waltherin (2006) mukaan *regiimit* kuvaavat erilaisten kontekstien taloudellisia, institutionaalisia ja kulttuurisia ulottuvuuksia sekä mallintavat nuorten siirtymiä. *Työllisyyskeskeisessä regiimissä* (Saksa, Ranska, Hollanti) ammatillinen koulutus on keskiössä, kun taas *liberaaliregiimi* (Iso-Britannia, Irlanti) keskittyy markkinoiden edellyttämään nopeaan työllistettävyyteen. Waltherin (2006) kuvaamassa *universaaliregiimissä* tai Niemeyerin (2007) *skandinaavisessa hyvinvointijärjestelmässä* ammatillinen koulutus sekä koulutus kokonaisuudessaan nähdään jokaisen oikeutena, jolloin sosiaaliturva sekä sen mukana ammatillinen koulutus siirretään valtion vastuulle. Tästä syystä skandinaavisten hyvinvointijärjestelmien voidaan nähdä suosivan tasa-arvoa edistävää oppilaitosmuotoista ammatillista koulutusta (Niemeyer 2007).

Työnantajien motiivit osallistua osaamisen kehittämiseen linkittyvät järjestelmiin, joissa eri institutionaaliset alueet, kuten talousjärjestelmät, työmarkkinat sekä ammatillisen koulutuksen järjestelmät täydentävät toisiaan (Hall & Soskice 2001; Thelen 2004). Hall ja Soskice (2001) ovat jakaneet luokittelussaan kehittyneet länsimaat koordinoituiksi ja liberaaleiksi markkinatalouksiksi. *Koordinoiduissa markkinatalouksissa* (esim. Saksa, Sveitsi, Itävalta, Tanska, Ruotsi, Norja ja Suomi) esimerkiksi työmarkkinalainsäädäntö ja työehtosopimukset sääntelevät työmarkkinoita, jolloin järjestelmä ohjaa yrityksiä luomaan yhteistyötä sekä verkostoja. Samalla työvoiman liikkuvuutta rajoitetaan sääntelyn ja sopimisen avulla, mikä vähentää yritysten riskiä panostaa osaavan työvoiman koulutukseen. Näin ollen koulutuksen tavoitteena on tuottaa osaamista yrityksen pitkäaikaisiin tarpeisiin. (Hall & Soskice 2001.) Saksan ammatillinen koulutus voidaankin nähdä *kollektiivisena osaamisen kehittämisen järjestelmänä*, jossa merkittävää on, että yritykset tuottavat yhdessä inhimillistä pääomaa, kun taas työllisyys- ja sosiaaliturva edistävät työntekijöiden panostusta ammatilliseen osaamiseensa. Suomi puolestaan näyttää *valtiojohtoisena järjestelmänä*, jossa julkinen sitoutuminen ammatilliseen koulutukseen on vahvaa, mutta työnantajien osallistuminen heikkoa. (Busemeyer & Schlicht-Schmälzle 2014.) *Liberaaleissa markkinatalouksissa* (esim. Yhdysvallat, Iso-Britannia, Australia, Kanada) yrityksillä on enemmän valtaa säädellä toimintaansa joustavilla, mutta samalla epävarmoilla työmarkkinoilla. Ammatillisen koulutuksen tehtävänä on täydentää joustavia työmarkkinoita ja työvoiman liikkumista tarjoamalla yleistä osaamista, joka on siirrettävissä yrityksestä toiseen. (Hall & Soskice 2001, 30.) *Liberaaleissa järjestelmissä* (Iso-Britannia, Irlanti, Kreikka, Italia) sekä julkista sitoutumista että työnantajien osallistumista ammatillisen koulutukseen on kuvattu heikoksi (Busemeyer & Schlicht-Schmälzle 2014).

Vaikka luokitteluja on toteutettu erilaisista lähtökohdista käsin, ne ovat usein kuitenkin

kin rajoittuneita, sillä käytännössä koulutusjärjestelmä, talousjärjestelmä sekä politiikka kietoutuvat toisiinsa (Gonon 2014). On myös huomattava, että luokittelut antavat kuvan pysyvistä tilasta, jolloin järjestelmien dynaamisuus ja muutosprosessit jäävät huomioimatta (Walther 2006). Esimerkiksi Schneider ja Pauenescu (2012) ovat todenneet, että 1990-luvulta 2000-luvulle tultaessa Suomi on siirtynyt koordinoitua markkinataloudesta lähemmäs kohti liberaalia markkinatalouden mallia. Lisäksi luokittelujen haasteena on, että ne johtavat yleisiin ideaalityyppeihin, jolloin empiiriset tapaukset ja kansalliset mallit edustavat aina välimuotoja eri ideaalityypeistä (Busemeyer & Schlicht-Schmälzle 2014; Walther 2006). Näistä rajoituksista huolimatta luokittelujen perusteella voidaan päätellä, että erilaiset kontekstit ja periaatteet ohjaavat ammatillista koulutusta ja oppisopimuskoulutusta sen osana eri tavoin Saksassa, Englannissa ja Suomessa.

Katsauksen toteutus

Katsauksen tavoitteena oli kuvata oppisopimuskoulutusta instituutiona, mikä ohjasi myös aineistonhankintaa. Tutkimusaineistoa haettiin ensisijaisesti elektronisesta Scopus-tietokannasta. Hakusanoina toimivat *apprenticeship* tai *dual system*, joita yhdistettiin hakulausekkeiksi sanojen *institution** tai *system** kanssa. Tämän lisäksi hakulausekkeeseen lisättiin hakua tarkastelumaihin kohdentavia hakusanoja (*england, english, great britain, british, united kingdom, germany, german* tai *finland, finnish*). Haku suunnattiin erityisesti otsikoihin, abstrakteihin sekä avainsanoihin. Alustavien hakujen perusteella oppisopimuskoulutukseen liittyvien julkaisujen määrä oli noussut selvästi viimeisen noin kymmenen vuoden aikana, joten haku rajattiin vuosien 2000–2016 välillä julkaistuihin artikkeleihin. Hakulausekkeet tuottivat joulukuussa 2016 yhteensä 364 osumaa Scopus-tietokannasta. Tutkimusaineistoa rajattiin sulkemalla abstraktien perusteella pois irrelevantit sekä oppisopimuskoulutusta muissa maissa, korkea-asteella tai

historiallisesta näkökulmasta tarkastelevat artikkelit. Tietokantahaku kuitenkin tuotti vain vähän Suomen oppisopimuskoulutukseen liittyviä relevantteja osumia. Oppisopimuskoulutukseen liittyvän tutkimuksen vähäinen määrä on todettu haasteeksi myös muissa viimeaikaisissa tutkimuksissa (Mazenod 2016; Norontaus 2016). Tästä syystä erityisesti suomalaiseseen oppisopimuskoulutukseen liittyviä tutkimuksia etsittiin lisää myös muista tietokannoista (ARTO, Google Scholar) hakemalla laajemmin ammatillisen koulutuksen tutkimuksia sekä etsimällä kirjallisuutta jo löydettyjen tutkimuksien lähdeluetteloista. Lopulta Suomesta aineistoon sisällytettiin myös raportteja (Haapakorpi & Virtanen 2015; Stenström & Virolainen 2014) ja väitöskirjoja (Leino 2011, Norontaus 2016). Näin ollen tutkimusaineistoa ei myöskään valikoitu tutkimusotteiden perusteella tai arvioitu laadullisesti kriteerien avulla. Lopulta tutkimusaineisto koostui artikkeleista, monografiaväitöskirjoista ja raporteista ($n = 38$). Katsauksen aineisto on koottu taulukkoon 1, jossa aineisto on esitetty pääasiallisen tarkastelunäkökulman sekä tarkastelumaan tai -maiden mukaan.

Analyysi- ja synteisivaiheessa katsaus toteutettiin teoriaohjaavasti (Onwuegbuzie & Frels 2016). Analyysivaiheessa analyysirunkona hyödynnettiin Scottin (2014) viitekehystä. Sen perusteella analyysiyksikkönä toimivat oppisopimuskoulutusta kuvaavat ilmaukset, jotka liittyivät instituution *regulatiiviseen* (ohjaavat säännöt), *normatiiviseen* (odotukset, arvot ja normit) tai *kulttuuris-kognitiiviseen* (ajattelutavat, jaetut käsitykset) elementtiin. Tässä aineistossa regulatiivinen elementti näyttäytyi erityisesti hallinnon ja päätöksenteon kuvauksina. Tämän lisäksi työelämän ja koulutuksen rajapinnalla olevaan oppisopimuskoulutukseen heijastui työmarkkinoiden sääntely, joka on kuvattu regulatiivisen elementin alaluokkana katsauksen tulokset kokoavassa taulukossa 2. Normatiivinen elementti puolestaan liittyi koulutuksen arvoihin ja tavoitteisiin sekä normeihin, ja ilmauksissa kuvattiin tavoiteltua osaamista sekä koulutuksen järjes-

TAULUKKO 1. Katsauksen aineisto teemojen ja tarkastelumaiden mukaan jaoteltuna

Teema	Saksa	Englanti	Suomi
Ammatillinen koulutusjärjestelmä	Kupfer (2010)	Laczik & Mayhew (2015)	Bäckman, Jakobsen, Lorentzen, Österbacka & Dahl (2015); Stenström & Virolainen (2014); Virolainen & Stenström (2014)
	Bol & Weeden (2015)		
Ammatillisen koulutuksen hallinto	Kuhlee (2015); Lange (2012); Rauner & Wittig (2010)	Keep (2015)	
	Oliver (2010)		
Oppisopimuskoulutus	Baethge & Wolter (2015); Baldi, Brüggemann-Borck & Schlaak (2014); Deissinger (2015a); Deissinger (2015b); Deissinger & Gonon (2016); Deissinger, Heine & Ott (2011); Deissinger & Hellwig (2005); Grollmann & Rauner (2007); Pilz (2012); Walden & Troltsch (2011); Wieland (2015)	Brockmann, Clarke & Winch (2010); Chankseliani & James Relly (2015); Fuller & Unwin (2007); Hogarth, Gambin & Hasluck (2012); Lee (2012); Oultram (2012)	Haapakorpi & Virtanen (2015); Kivinen & Peltomäki (1999); Leino (2011); Norontaus (2016); Viinisalo (2010)
	Brockmann & Laurie (2016); Campbell, Thomson & Pautz (2011); Clarke, Winch & Brockmann (2013); Pattayanunt (2009)		
			Mazenod (2016)

tämisen periaatteita. Kulttuuris-kognitiivinen elementti kuvasi erityisesti käsityksiä oppisopimuskoulutuksen asemasta ja arvostuksesta. Näiden kuvausten perusteella oppisopimuskoulutuksen institutionaalista rakenteesta muodostettiin synteesi, joka tulososiossa kuvataan maakohtaisesti. Kokonaisuutena katsausta voidaankin luonnehtia narratiiviseksi (ks. Paré, Trudel, Jaana & Kitsiou 2015).

Oppisopimuskoulutus instituutiona Saksassa, Englannissa ja Suomessa

Saksa

Saksassa duaalijärjestelmä edustaa yhtä merkittävimmistä korporatistisen hallinnon

alueista (Baethge & Wolter 2015). Korporatistisessa järjestelmässä valtio, ammattijärjestöt, työnantajajärjestöt sekä kauppakamarit sopivat koulutuksen sääntelystä ja periaatteista yhdessä (Deissinger & Gonon 2016; Oliver 2010; Rauner & Wittig 2010; Wieland 2015). Kolmi-kantainen järjestelmä päättää erityisesti työpaikalla tapahtuvasta oppimisesta, kun taas ammatillisen koulutuksen kehittäminen oppilaitoksissa on osa liittovaltion hallintoa (Kuhlee 2015). Hallintojärjestelmä heijastuu esimerkiksi valtakunnalliseen sisältöjen ja koulutuksen keston standardointiin (Baldi ym. 2014). Oliver (2010) toteaa, että valtion vaikutus on kasvanut koulutuksen eurooppalais-tumisen, esimerkiksi eurooppalaisen tutkintojen viitekehyksen, myötä. Edelleen hallintojär-

jestelmässä päätöksenteko perustuu kuitenkin konsensukseen, joten sidosryhmien vaihtelevat intressit, asema ja valta ovat johtaneet monimutkaiseen neuvottelujärjestelmään sekä konservatiiviseen puolustautumiseen innovaatioilta ja muutokselta, ja esimerkiksi koulutusjärjestelmän reformit ovat vaikeita ja hitaita (Deissinger 2015b; Deissinger & Gonon 2016; Kuhlee 2015; Pattayanunt 2009).

Langen (2012) mukaan suurten yritysten intressien on väitetty ohjaavan hallintoa yhä enemmän, mutta edelleen järjestelmän voidaan nähdä perustuvan yhdessä sopimiseen. Baethge ja Wolter (2015) kuitenkin toteavat, että korporatistiseen hallintoon ja sen vaikutusvalttaan kohdistuu paineita, koska duaalijärjestelmä ei ole pystynyt vastaamaan markkinoiden kysyntään tai integroimaan heikkoja opiskelijoita. Lisäksi on yleisesti kyseenalaistettu, voivatko sosiaalipartnerit edes vaikuttaa opiskelijoiden integrointiin tai etenemiseen korkea-asteelle, koska oletettavaa on, että haasteisiin vastaaminen vaatisi muita koulutuspolitiikan välineitä (Baethge & Wolter 2015). Duaalijärjestelmän legitimitettä onkin vähentänyt erityisesti sen vaikeus vastata koulutuksen kysyntään, mikä puolestaan on johtanut oppilaitosmuotoisen ammatillisen koulutuksen sekä niin sanottujen siirtymäjärjestelmien ja tutkintoon johtamattomien koulutusten kysynnän lisääntymiseen (Deissinger 2015a; Deissinger, Heine & Ott 2011; Walden & Trotsch 2011; Wieland 2015). Haasteita työpaikalla tapahtuvalle oppimiselle ovat tuoneet esimerkiksi globaali kilpailu ja sen aiheuttamat muutokset organisaatioissa ja työmarkkinoilla sekä rakennemuutos teollisesta yhteiskunnasta kohti palvelu- ja tietoyhteiskuntaa sekä sen edellyttämiä korkeakoulutuksen tuottamia taitoja ja osaamista (Baethge & Wolter 2015; Kupfer 2010; Pattayanunt 2009; Walden & Trotsch 2011). Campbell, Thomson ja Pautz (2011) kuitenkin toteavat, että jälkiteollistuminen ja siirtyminen rutiini- ja suorittavasta työstä kohti palveluyhteiskuntaa ei ole ollut yhtä voimakasta Saksassa kuin Isossa-Britanniassa. Siitä huolimatta, että Saksassa työmarkkinoi-

den sääntelyä on purettu, työmarkkinat edelleen tukevat eri tavoin oppisopimuskoulutusta (Campbell ym. 2011).

Korkeakoulutuksen osuus on kuitenkin kasvanut siinä määrin, että viime vuosina korkeakoulutuksessa on aloittanut yhtä monta opiskelijaa kuin duaalijärjestelmässä (Baethge & Wolter 2015; Deissinger 2015a). Trendinä on, että akateemiset koulutuspolut ovat vahvistuneet samalla tavoin kuin anglosaksisissa koulutusjärjestelmissä. Tämän on tulevaisuudessa nähty johtavan jopa kohti eurooppalaista järjestelmien yhdenmukaistumista, jossa oppisopimuskoulutus nähdään toissijaisena korkeakoulutukseen verrattuna. (Deissinger 2015a; Deissinger & Gonon 2016.) Yksi haasteista on se, että eteneminen ammatillisesta koulutuksesta korkea-asteelle on heikkoa, koska akateemisen ja ammatillisen koulutuksen rahoitus, hallinto ja sääntely ovat olleet erillisiä (Baethge & Wolter 2015; Lange 2012). Duaalijärjestelmää onkin luonnehdittu sosiaalisesti rakentuneeksi ja segmentoituneeksi, koska yritykset suosivat jo tutkinnon suorittaneita tai työllistyneitä, minkä seurauksena esimerkiksi maahanmuuttajien tai heikosti koulussa menestyneiden opiskelijoiden integrointi duaalijärjestelmään on yhä vaikeampaa (Baethge & Wolter 2015; Deissinger & Gonon 2016). Myös Kupfer (2010) toteaa, että koko ammatillista koulutusjärjestelmää leimaa sosiaalinen epätasa-arvoisuus, johon liittyy akateemisen ja ammatillisen koulutuksen välinen kuilu, mutta myös koulutuksen sukupuolittuneisuus.

Duaalijärjestelmä perustuu kahteen oppimisympäristöön, mutta erityisesti koulutusta ohjaa ammattiperiaate. Periaatteen mukaisesti koulutuksen tavoitteena on ammatillinen kompetenssi, joka käsitetään laajana ammatillisen identiteetin kehittymisenä sekä ammattialakohtaisena osaamisena työpaikoilla ja työmarkkinoilla (Baethge & Wolter 2015; Baldi ym. 2014; Brockmann, Clarke & Winch 2010; Deissinger & Hellwig 2005; Grollmann & Rauner 2007). Ammattiperiaatteen mukaisesti koulutuksen tavoitteena on tuottaa siirrettävää osaamista, joka on hyödynnettävissä

kouluttavassa yrityksessä, mutta myös muissa ammattialan yrityksissä tai työtehtävissä. Alueellisten kauppakamareiden valvonta- ja arviointitehtävään kuuluukin varmistaa, että työpaikalla tapahtuvaa koulutusta ohjaa ennen kaikkea ammatti eivätkä yksittäiset yritykset (Deissinger 2015a; Grollmann & Rauner 2007; Kuhlee 2015). Clarke, Winch ja Brockmann (2013) arvioivat yleisen osaamisen ja koulutuksen osuuden olevan merkittävämmässä roolissa Saksassa kuin Englannissa. Näin ollen ammattiperiaate ja oppisopimuskoulutuksen keskeinen asema myös vaikeuttavat eurooppalaisten konseptien omaksumista. Osaamisperusteisuuden ja tutkinnon osien sijaan fokus on ollut koulutuksen sisällöissä sekä kokonaisvaltaisen kompetenssin kehittämässä (Deissinger ym. 2011; Deissinger & Hellwig 2005; Pilz 2012). Duaalijärjestelmän haasteista huolimatta oppisopimuskoulutusta arvostetaan yhtä paljon kuin muita koulutusvaihtoehtoja, ja oppisopimuskoulutus on sekä työnantajille että opiskelijoille houkutteleva vaihtoehto. Opiskelijoiden näkökulmasta koulutus edistää pääsyä työmarkkinoille, mahdollistaa etenemisen uralla sekä varmistaa suhteellisen korkean palkkatason valmistumisen jälkeen. (Campbell ym. 2011.)

Englanti

Saksaan verrattuna Ison-Britannian koulutusjärjestelmällä on heikko keskitetty koordinaatio ja sääntelevä viitekehys (Bol & Weeden 2015). Kokonaisuutena ammatillinen koulutusjärjestelmä on monimutkainen ja hajautunut, joten on kyseenalaista, voidaanko erilaisista ohjelmista ja viitekehyksistä koostuvaa oppisopimuskoulutustakaan pitää varsinaisesti järjestelmänä (Bol & Weeden 2015; Hogarth, Gambin & Hasluck, 2012; Keep 2015; Oliver 2010). Isossa-Britanniassa hallituksen suhtautumista ammatilliseen koulutukseen on kuvattu voluntaristiseksi, koska ammatillinen koulutus on perustunut työnantajien vapaaehtoiseen osallistumiseen ja tarpeisiin (Brockmann ym. 2010; Fuller & Unwin 2007). Hal-

lituksella on kuitenkin merkittävä valta päättää ammatillisesta koulutuksesta eikä se tarvitse muiden osapuolien suostumusta reformien toteuttamiseen, minkä vuoksi ammatillisen koulutuksen rakenteet, instituutiot ja ohjelmat voivat muuttua nopeasti (Keep 2015; Oliver 2010). Viime vuosina oppisopimuskoulutuksesta on kuitenkin pyritty tekemään työnantajajohtoinen järjestelmä, jossa työnantajat vastaavat koulutuksen suunnittelusta, arvioinnista ja rahoituksesta (Laczik & Mayhew 2015). Hallintojärjestelmä ei kuitenkaan perustu laajasti sosiaalipartnerien mukanaoloon, koska työnantajat ovat edustettuina etujärjestöjensä välityksellä, eivät kollektiivisesti, ja ammattijärjestöillä on ainoastaan marginaalinen rooli (Brockmann ym. 2010). Keep (2015) toteaa, että ammatillisen koulutuksen hallinto on muuttumassa, mutta muutoksen suunta on edelleen epävarma, koska samanaikaisesti julkinen rahoitus vähenee, rahoitusta suunnataan työnantajille ja päätösvaltaa siirretään paikallistasolle. Chankselianin ja James Rellyn (2015) mukaan uudistus kysyntälähtöiseksi ja työnantajajohtoiseksi järjestelmäksi on haastava tavoite, ja toisaalta laadukas oppisopimuskoulutus edellyttäisi usean vahvan toimijan yhteistyötä. Tällä hetkellä tausta-ajatuksena on, että opiskelijat ja työnantajat ovat ammatillisen koulutuksen asiakkaita, mutta tästä huolimatta oppisopimuskoulutusta ohjaavat erityisesti työnantajien tarpeet (Chankseliani & James Relly 2015). Englannin joustavilla työmarkkinoilla työnantajien osallistuminen koulutukseen on kuitenkin yhä vaikeampaa. Työmarkkinat ovat johtaneet epätyypillisten työsuhteiden yleistymiseen, mikä heijastuu myös työpaikkojen resursseihin ja koulutusosaamiseen. (Brockmann ym. 2010; Fuller & Unwin 2007.) Campbell ym. (2011) nostavat esiin sen, että oppisopimuskoulutus tuottaa selvästi enemmän palkkaan sekä urakehitykseen liittyvää hyötyä miehille kuin naisille. Samalla he toteavat, että sukupuolten eriarvoisuuden lisäämisen voidaan nähdä jopa kyseenalaistavan oppisopimuskoulutuksen legitimitettä (Campbell ym. 2011).

Englannin koulutusjärjestelmä korostaa enemmän yleistä osaamista ja korkeakoulutusta kuin ammatillista koulutusta (Bol & Weeden 2015; Lee 2012). Mazonodin (2016) mukaan koko koulutusjärjestelmän kontekstissa oppisopimuskoulutus käsitteellistetään enemmän harjoitteluna (*training*) kuin koulutuksena (*education*). Ammatillisen koulutuksen keskeisenä konseptina ovat taidot, ei laaja ammatillinen kompetenssi, mistä osoituksena on koulutuksen määrän ja teoreettisen tiedon väheneminen (Brockmann ym. 2010; Brockmann & Laurie 2016; Clarke ym. 2013; Ryan & Unwin 2001). Tästä syystä ammatilliset tutkinnot ovat kapeita ja erikoistuneita, ja niiden on nähty vastaavan vain työnantajien työpaikkakohtaisiin osaamistarpeisiin, ei pitkäaikaiseen urakehitykseen ja työvoiman kehittämiseen (Brockmann ym. 2010). Oppisopimuskoulutukselle kuitenkin asetetaan erilaisia tavoitteita, koska sen avulla on pyritty varmistamaan koulutus heikoille opiskelijoille, mutta toisaalta myös vastaamaan globaalin kilpailukyvyyn vaatimuksiin tuottamalla korkeamman tason osaamista (Brockmann & Laurie 2016; Mazonod 2016).

Englannissa akateeminen ja ammatillinen koulutus koetaan selvästi erillisinä. Ammatillisella koulutuksella on suhteellisen heikko status, jonka voidaan nähdä historiallisesti pohjautuvan englantilaiseen luokkajärjestelmään (Brockmann & Laurie 2016). Monilla nuorilla, vanhemmilla ja opettajilla on negatiivinen mielikuva oppisopimuskoulutuksesta (Lee 2012). Opiskelijat on esimerkiksi leimattu ei-akateemiseksi tai luokkahuoneista vieraantuneiksi henkilöiksi, jotka voivat oppia ainoastaan tekemällä (Brockmann & Laurie 2016; Keep 2015; Oultram 2012; Pattayanunt 2009). Akateemisen koulutuspolun rinnalla oppisopimuskoulutus on nähty toissijaisena vaihtoehtona, joten tietoyhteiskunnassa jatko-opintokelpoisuuden varmistaminen sekä ammatillisen liikkuvuuden edistäminen on nostettu merkittäviksi toimenpiteiksi tämän negatiivisen leiman hävittämiseksi (Campbell ym. 2011; Hogarth ym. 2012; Lee 2012).

Suomi

Suomessa oppisopimuskoulutus on yksi ammatillisen koulutuksen järjestämismuodoista, joten sitä ohjaavat säädökset sisältyvät ammatillisen koulutuksen järjestämistä ja rahoitusta koskevaan lainsäädäntöön (Haapakorpi & Virtanen 2015). Samalla ammatillisen koulutuksen päätöksenteko ja sääntely ovat valtiojohtoisia, sillä sosiaalipartnerit osallistuvat lähinnä koulutustarpeiden ennakointiin koulutustoimikunnissa sekä toimivat koulutuksen järjestäjien hallintoelimissä (Stenström & Virolainen 2014). Suomessa pääasiallisena ammatillisen koulutuksen muotona on oppilaitosmuotoinen ammatillinen koulutus (Bäckman, Jakobsen, Lorentzen, Österbacka & Dahl 2015; Virolainen & Stenström 2014). Viime vuosikymmeninä oppisopimuskoulutuksen tehtäviksi ovat jääneet aikuisten koulutus, institutionaalisen koulutusjärjestelmän aukkojen paikkaaminen sekä talouden taantumien aikoina myös työllisyyspolitiikan tukeminen (Kivinen & Peltomäki 1999).

Oppisopimuskoulutuksen lähtökohtana on sekä opiskelijan että työpaikan osaamistarpeiden huomioiminen (Leino 2011). Leino (2011, 1) kuitenkin näkee, että eurooppalaisista malleista poiketen suomalaisen oppisopimuskoulutuksen peruslähtökohdat määrittävät erityisesti työpaikkojen ja työnantajien intressien perusteella. Myös Viinisalo (2010) korostaa koulutuksen kysyntälähtöisyyttä, työpaikkalähtöisyyttä sekä henkilökohtaistamista, vaikka suomalaisella koulutusjärjestelmällä onkin taipumus oppilaitos- ja tarjontalähtöiseen toimintatapaan. Samoin kuin muun ammatillisen koulutuksen, myös oppisopimuskoulutuksen tarkoituksena on muun muassa kohottaa ja ylläpitää ammatillista osaamista, edistää työllisyyttä ja antaa valmiuksia yrittäjyyteen, kehittää työelämää sekä tukea elinikäistä oppimista (Haapakorpi & Virtanen 2015). Yhteiskunnan näkökulmasta oppisopimuskoulutus on edullisempaa kuin oppilaitosmuotoinen ammatillinen koulutus, mutta niiden tehokkuudessa ei ole selkeitä ero-

ja, vaan molemmat ovat yhtä toimivia omis- sa kohderyhmissään (Haapakorpi & Virtanen 2015). Mazenod (2016) arvioi, että Suomen oppisopimuskoulutus luo paremmat oppi- mismahdollisuudet kuin Englannin oppi- sopolimuskoulutus.

Oppisopimuskoulutus on kuitenkin ollut erityisesti aikuisten ammatillista lisäkoulutus- ta, joka kohdistuu jo työllistyneille henkilöil- le (Haapakorpi & Virtanen 2015; Stenström & Virolainen 2014). Tyypillisellä oppisopimus- opiskelijalla onkin usein jo vuosien työkoke- mus opiskeltavalta alalta sekä ammatillinen tutkinto suoritettuna, joten oppisopimuskou- lutus ei saavuta kouluttamattomia tai nuoria aikuisia (Leino 2011). Nuorten koulutusmuo-

tona oppisopimuskoulutuksen asema onkin edelleen marginaalinen (Haapakorpi & Vir- tanen 2015; Mazenod 2016; Stenström & Virolainen 2014; Virolainen & Stenström 2014). Oppisopimuskoulutukseen osallistuu alle pro- sentti 15–19-vuotiaiden ikäluokasta (Haapa- korpi & Virtanen 2015, 9). Oppisopimuskou- lutuksen on kuitenkin toisinaan kuvattu sopi- van erityisesti koulussa heikosti menestyneil- le nuorille (Kivinen & Peltomäki 1999; Ma- zenod 2016). Bäckman ym. (2015) arvioivat Pohjoismaiden ammatillisia koulutusjärjestel- miä ja koulupudokkuutta tarkastelevassa tut- kimuksessa, että järjestelmänä oppisopimus- koulutus ei vähennä koulutuksen keskeytyksiä tai edistä koulupudokkaiden pääsyä työmark-

TAULUKKO 2. Kooste oppisopimuskoulutuksesta instituutiona Saksassa, Englannissa ja Suo- messa

Elementti	Alaluokka	Saksa	Englanti	Suomi
Regulatiivinen elementti (ohjaavat säännöt)	Hallinto, päätöksen- teko	Yhteistyö valtion, yksityisen sektorin ja sosiaalipartnereiden välillä; korporativismi, liittohallitus, osavaltiot ja sosiaalipartnerit	Työnantajajohtoisuus, yksityiset ja itsenäiset tutkinto-organisaatiot sekä työnantajajärjestöjen etujärjestöt kehittäjinä valtion tavoitteiden mukaisesti, ammattijärjestöt marginaalissa	Valtiojohtoisuus, kolmikantajärjestelmä (valtio, työnantajat, työntekijät) kehittämistyössä, sosiaalipartnerit koulutustoimikunnissa
	Työmarkkinoiden sääntely	Tiukasti säännelty työmarkkinat, suunta kohti joustavampia työmarkkinoita	Liberaalit työmarkkinat, ei sääntelyä	Säännelty työmarkkinat (esim. työehtosopimukset)
Normatiivinen elementti (odotukset)	Arvot ja tavoitteet	Vahva ammatillinen identiteetti ja laaja kompetenssi (myös yleinen osaaminen)	Avaintaidot ja ydin- taidot, työllistettävyyys	Ammatillinen osaaminen, työllisyyden edistäminen
	Normit	Ammattispesifi duaalikoulutus, standardoinnin avulla tutkinnon läpäinäkkyvyys ja osaamisen siirrettävyys	Standardoimaton harjoittelu ja erikoistuminen	Työpaikkalähtöinen koulutus, henkilökohtaistaminen
Kulttuuris- kognitiivinen elementti (ajattelutavat)	Jaetut käsitykset	Korkea arvostus	Heikko arvostus	Heikko arvostus (erityisesti nuorten koulutuksena)

kinoille vaan edellyttää lisäksi muita tukitoimia. Norontauksen (2016, 164) mukaan oppisopimuskoulutuksen toteuttamisen esteet yrityksissä liittyvät taloudellisiin seikkoihin sekä viestinnän ja tiedottamisen puutteisiin, mutta myös yritysten heikkoon koulutuskulttuuriin ja koulutusmahdollisuuksien tunnistamiseen sekä epäselviin mielikuviin ja käsityksiin oppisopimuskoulutuksesta.

Johtopäätökset ja pohdinta

Katsauksen tavoitteena oli tarkastella oppisopimuskoulutusta instituutiona ja osana ammatillista koulutusta sekä huomioida oppisopimuskoulutukseen kohdistuvia haasteita ja trendejä Saksassa, Englannissa ja Suomessa. Katsaus osoitti, että ammatilliseen koulutukseen vaikuttavat laajat järjestelmät, joita vasten myös oppisopimuskoulutusta tulee tarkastella. Oppisopimuskoulutuksen tarkastelu instituutiona osoitti, että oppisopimuskoulutuksen hallinto, siihen kohdistuvat odotukset sekä koulutuksen arvostus vaihtelevat Saksassa, Englannissa ja Suomessa. Katsauksessa nousi myös esiin ammatillisen koulutuksen ja oppisopimuskoulutuksen hallintoon ja päätöksentekoon liittyviä ajankohtaisia näkökulmia ja haasteita.

Valtion ja eri sidosryhmien valta ja intressit vaikuttavat uudistusten nopeuteen, mutta myös oppisopimuskoulutukseen kohdistuviin odotuksiin. Oppisopimuskoulutuksen haasteena on, että sen tehtäväksi annetaan usein nuorten integroiminen yhteiskuntaan ja työelämään, mutta toisaalta sen odotetaan vastaavan myös osaamisen kehittämisen tarpeisiin (Steedman 2012). Näyttääkin siltä, että jos työnantajat ovat avainasemassa oppisopimuskoulutuksen tavoitteiden määrittelyssä, ei sen avulla saavuteta yhteiskunnallisia tavoitteita, vaan oppisopimuskoulutus vastaa ensisijaisesti työnantajien tarpeisiin. Silloin koulutukseen pääsyyn vaikuttavat esimerkiksi opiskelijan koulutustausta sekä eri alojen, ammattien ja organisaatioiden sukupuolittuminen. Myös globaalit työelämän muutokset ja koulutuksen

trendit ovat vaikuttaneet oppisopimuskoulutukseen sekä työnantajien että opiskelijoiden näkökulmasta. Esimerkiksi Saksassa korkeakoulutuksen vetovoima ja erilliset koulutuspolut ovat vähentäneet oppisopimuskoulutuksen suosiota erityisesti nuorten näkökulmasta. Toisaalta nykyisessä tietoyhteiskunnassa korkeakoulutuksen edistäminen saattaa olla myös yhteiskunnan intressien mukaista.

Yleisessä oppisopimuskoulutusta koskevassa keskustelussa on toisinaan nostettu esiin toive siitä, että oppisopimuskoulutus olisi Saksan mallin mukaisesti myös Suomessa keskeinen ammatillisen koulutuksen väylä nuorille. Katsaus osoittaa, että Saksassa ja Suomessa oppisopimuskoulutus rakentuu erilaisille periaatteille, jotka ovat yhteydessä laajempiin koulutuksen ja yhteiskunnan konteksteihin. Näin ollen oppisopimuskoulutuksen, kuten muidenkin instituutioiden, muuttaminen on haastavaa. Saksassa oppisopimuskoulutuksen menestyksen keskeisiksi tekijöiksi on nostettu koulutuksen positiivinen imago ja arvostus suhteessa muihin koulutuspolkuihin, työpaikkojen edellytykset tarjota koulutusta sekä niiden koulutusperinteet (Deissinger 2015b; Wieland 2015). Näyttää kuitenkin siltä, että kansainvälisten trendien ja koulutuksen eurooppalaistumisen myötä myös Suomen ammatillinen koulutus ja oppisopimuskoulutus suuntaavat ennemminkin kohti anglosaksisia joustavia järjestelmiä. Powell, Bernhard ja Graf (2012) ovat hyödyntäneet Scottin viitekehystä Bolognan ja Kööpenhaminan prosessien virallisissa dokumenteissa kuvatun eurooppalaisen osaamisen kehittämisen mallin tarkastelussa. Eurooppalainen malli korostaa ammatillisessa koulutuksessa työpaikalla tapahtuvan oppimisen merkitystä ja opintojen avoimuutta kaikille, erityisesti erityisryhmille. Koulutuksen tavoitteina voidaan nähdä jatkuva osaamisen kehittäminen, elinikäinen oppiminen ja työllistettävyys, jotka valmistavat opiskelijoita rakenteellisiin muutoksiin ja työmarkkinoiden tarpeisiin. Samat eurooppalaiset trendit tosin haastavat oppisopimuskoulutuksen uudistumaan myös Saksassa.

Katsaukseen sisältyy rajoituksia, jotka on syytä huomioida tulosten arvioinnissa. Katsauksen toteutuksessa kirjallisuushaku on kriittinen vaihe. On mahdollista, että hakuvaiheessa tehtyjen valintojen ja rajausten vuoksi kaikkea relevanttia kirjallisuutta ei tavoitettu. Lisäksi erityisesti Suomeen liittyvät haut olivat haasteellisia, koska oppisopimuskoulutusta Suomessa on tutkittu vain vähän (ks. myös Mazonod 2016; Norontaus 2016). Tästä syystä kirjallisuushakua jouduttiin täydentämään lisähakujen avulla. Suomea koskeva tutkimus jäi kuitenkin tämän katsauksen näkökulmasta määrällisesti ja laadullisesti heikoksi. On myös huomattava, että aineisto koostui pääasiassa katsaustyyppisistä, ei empiirisistä artikkeleista. Lisäksi aineistonhausu korostui ammatillisen koulutuksen ja oppisopimuskoulutuksen hallintoa tarkasteleva kirjallisuus, kun taas oppisopimuskoulutukseen liittyviä käsityksiä tarkasteleva tutkimus oli vähiten edustettuna. Jatkotutkimuksissa voidaan tarkastella lähemmin empiirisiin aineistoihin perustuen esimerkiksi oppisopimusopiskelijoiden, työnantajien tai opiskelijoiden vanhempien käsityksiä oppisopimuskoulutuksesta ja sen suhteesta muihin koulutusmuotoihin. Suomessa on yleisesti tarve ammatilliseen koulutukseen sekä oppisopimuskoulutukseen kohdennetulle tutkimukselle, jossa hyödynnetään empiirisiä aineistoja. Jatkotutkimuksissa tulee huomioida myös oppisopimuskoulutuksen toteuttamiseen liittyvät ala- ja organisaatiokohtaiset erot, jotka jäivät tämän katsauksen ulkopuolelle, mutta joita on havaittu useissa aikaisemmissa tutkimuksissa (esim. Brockmann ym. 2010; Campbell ym. 2011; Fuller & Unwin 2007; Haapakorpi & Virtanen 2015).

Toisen asteen ammatillisen koulutuksen reformi ja sen tuomat muutokset tarjoavat tärkeän tutkimusalueen myös institutionaalisesta näkökulmasta. Hallituksen kärkihankkeisiin kuuluva reformi uudistaa laajasti esimerkiksi ammatillisen koulutuksen rahoitusta, ohjausta sekä toimintaprosesseja. Yhtenä keskeisenä tavoitteena on lisätä työpaikoilla tapahtuvaa

oppimista. (Valtioneuvoston kanslia 2016.) Uudistuksen myötä on aiheellista tarkastella oppisopimuskoulutusta entistä tarkemmin suhteessa erilaisiin koulutusmuotoihin ja laajempaan kontekstiin, joka rakentuu erilaisen koulutusmuotojen toisiaan täydentävän ja kilpailullisen suhteen perusteella (Powell & Solga 2010). Onko uusi työssäoppimisen korvaava koulutussopimus esimerkiksi kulttuuris-kognitiivisesta näkökulmasta tarkasteltuna ymmärrettävä, tunnistettava ja kulttuurisesti tuettu sekä näin ollen legitiimi uudistus? Jatkotutkimuksissa voidaankin kysyä, mitä oppisopimuskoulutukselle tapahtuu ammatillisen koulutuksen reformin myötä.

Lähteet

- Baethge, M. & Wolter, A. 2015. The German skill formation model in transition: From dual system of VET to higher education? *Journal for Labour Market Research* 48 (2), 97–112.
- Baldi, G., Brüggemann-Borck, I. & Schlaak, T. 2014. The effect of the business cycle on apprenticeship training: Evidence from Germany. *Journal of Labor Research* 35 (4), 412–422.
- Bol, T. & Weeden, K. A. 2015. Occupational closure and wage inequality in Germany and the United Kingdom. *European Sociological Review* 31 (3), 354–369.
- Brockmann, M., Clarke, L. & Winch, C. 2010. The apprenticeship framework in England: A new beginning or a continuing sham? *Journal of Education and Work* 23 (2), 111–127.
- Brockmann, M. & Laurie, I. 2016. Apprenticeship in England – The continued role of the academic-vocational divide in shaping learner identities. *Journal of Vocational Education & Training* 68 (2), 229–244.
- Busemeyer, M. R. & Schlicht-Schmälzle, R. 2014. Partisan power, economic coordination and variations in vocational training systems in Europe. *European Journal of Industrial Relations* 20 (1), 55–71.
- Bäckman, O., Jakobsen, V., Lorentzen, T., Österbacka, E. & Dahl, E. 2015. Early school leaving in Scandinavia: Extent and labour market effects. *Journal of European Social Policy* 25 (3), 253–269.
- Campbell, J., Thomson, E. & Pautz, H. 2011. Apprenticeship training in England: Closing the gap? *Journal of Contemporary European Studies* 19 (3), 365–378.
- Chankseliani, M. & James Rely, S. 2015. From the provider-led to an employer-led system: Implications of apprenticeship reform on the private training market. *Journal of Vocational Education & Training* 67 (4), 515–528.

- Clarke, L., Winch, C. & Brockmann, M. 2013. Trade-based skills versus occupational capacity: The example of bricklaying in Europe. *Work, Employment and Society* 27 (6), 932–951.
- Deissinger, T. 2014. TVET system research. Teoksessa Z. Zhao & F. Rauner (toim.) *Areas of vocational education research*. New Frontiers of Educational Research. Heidelberg: Springer, 91–108.
- Deissinger, T. 2015a. The German dual vocational education and training system as 'good practice'? *Local Economy* 30 (5), 557–567.
- Deissinger, T. 2015b. International education policy: Its influence on the conception of VET and the VET system in Germany. *Research in Comparative & International Education* 10 (4), 607–621.
- Deissinger, T. & Gonon, P. 2016. Stakeholders in the German and Swiss vocational educational and training system: Their role in innovating apprenticeships against the background of academisation. *Education + Training* 58 (6), 568–577.
- Deissinger, T., Heine, R. & Ott, M. 2011. The dominance of apprenticeships in the German VET system and its implications for Europeanisation: A comparative view in the context of the EQF and the European LLL strategy. *Journal of Vocational Education & Training* 63 (3), 397–416.
- Deissinger, T. & Hellwig, S. 2005. Apprenticeships in Germany: Modernising the dual system. *Education + Training* 47 (4/5), 312–324.
- European Commission. 2012. Apprenticeship supply in the member states of the European Union. Final report. <http://ec.europa.eu/social/BlobServlet?docId=7717&langId=en>. (Luettu 10.2.2016.)
- European Commission. 2013. Apprenticeship and traineeship schemes in EU27: Key success factors. A guidebook for policy planners and practitioners. <http://ec.europa.eu/social/BlobServlet?docId=11348&langId=en>. (Luettu 10.2.2016.)
- European Commission. 2015. High-performance apprenticeships & work-based learning: 20 guiding principles. <http://ec.europa.eu/social/BlobServlet?docId=14881&langId=en>. (Luettu 10.2.2016.)
- Fuller, A. & Unwin, L. 2007. What counts as good practice in contemporary apprenticeships? Evidence from two contrasting sectors in England. *Education + Training* 49 (6), 447–458.
- Gonon, P. 2014. What makes the dual system to a dual system? A new attempt to define VET through a governance approach. *Bwp@* 25, 1–13. http://www.bwpat.de/ausgabe25/gonon_bwpat25.pdf. (Luettu 10.2.2016.)
- Greinert, W-D. 1988. Marktmodell – Schulmodell – duales System. Grundtypen formalisierter Berufsbildung. *Die berufsbildende Schule* 40 (3), 145–156.
- Greinert, W-D. 2010. Governance models of training for employment: A European perspective. *Research in Comparative and International Education* 5 (3), 251–260.
- Grollmann, P. & Rauner, F. 2007. Exploring innovative apprenticeship: Quality and costs. *Education + Training* 49 (6), 431–446.
- Haapakorpi, A. & Virtanen, P. 2015. Oppisopimusjärjestelmän toimivuus ja vaikuttavuus. Helsingin yliopisto. Koulutus- ja kehittämiskeskus Palmenia. <http://docplayer.fi/5267911-Oppisopimusjarjestelman-toimivuus-ja-vaikuttavuus-arviointi.html>. (Luettu 13.12.2015.)
- Hall, P. A. & Soskice, D. (toim.) 2001. *Varieties of capitalism: The institutional foundations of comparative advantage*. Oxford: Oxford University Press.
- Hodgson, G. M. 2006. What are institutions? *Journal of Economic Issues* 40 (1), 1–25.
- Hogarth, T., Gambin, L. & Hasluck, C. 2012. Apprenticeships in England: What next? *Journal of Vocational Education & Training* 64 (1), 41–55.
- Jørgensen, C. H. 2015. Challenges for work-based learning in vocational education and training in Nordic countries. Teoksessa S. Bohlinger, U. Haake, C. H. Jørgensen, H. Toiviainen & A. Wallo (toim.) *Working and learning in times of uncertainty: Challenges to adult, professional and vocational education*. Research on the Education and Learning of Adults, Volume 4. Rotterdam: Sense, 159–171.
- Keep, E. 2015. Governance in English VET: On the functioning of a fractured 'system'. *Research in Comparative and International Education* 10 (4), 464–475.
- Kivinen, O. & Peltomäki, M. 1999. On the job or in the classroom? The apprenticeship in Finland from the 17th century to the 1990s. *Journal of Education and Work* 12 (1), 75–93.
- Kuhlee, D. 2015. Federalism and corporatism: On the approaches of policy-making and governance in the dual apprenticeship system in Germany and their functioning today. *Research in Comparative & International Education* 10 (4), 476–492.
- Kupfer, A. 2010. The socio-political significance of changes to the vocational education system in Germany. *British Journal of Sociology of Education* 31 (1), 85–97.
- Laczik, A. & Mayhew, K. 2015. Labour market developments and their significance for VET in England: Current concerns and debates. *Research in Comparative & International Education* 10 (4), 558–575.
- Lange, T. 2012. German training revisited: An appraisal of corporatist governance. *Education + Training* 54 (1), 21–35.
- Lee, D. 2012. Apprenticeships in England: An overview of current issues. *Higher Education, Skills and Work-Based Learning* 2 (3), 225–239.
- Leino, O. 2011. Oppisopimusopiskelijan oppimisen henkilökohtaistaminen ja oppimismahdollisuudet työpaikalla. Publications of the University of Eastern Finland. Dissertations in Education, Humanities, and Theology 20.
- Mazenod, A. 2016. Education or training? A comparative perspective on apprenticeships in England. *Journal of Vocational Education & Training* 68 (1), 102–117.

- Meyer, H-D. & Rowan, B. 2006. Institutional analysis and the study of education. Teoksessa H-D. Meyer & B. Rowan (toim.) The new institutionalism in education. Albany, NY: State University of New York Press, 1–14.
- Niemeyer, B. 2007. Between school and work – Dilemmas in European comparative transition research. *European Journal of Vocational Training* 41 (2), 116–136.
- Norontaus, A. 2016. Oppisopimuskoulutus yritysten tuottamana koulutuspalveluna: Tavoitteista vaikutuksiin. *Acta Universitatis Lappeenrantaensis* 693.
- Oliver, D. 2010. Complexity in vocational education and training governance. *Research in Comparative and International Education* 5 (3), 261–273.
- Onwuegbuzie, A. & Frels, R. 2016. 7 steps to a comprehensive literature review: A multimodal & cultural approach. London: Sage.
- Oultram, T. 2012. Fresh insights into British apprenticeship schemes: A multi-perspective, multi-method approach. *International Journal of Organizational Analysis* 20 (1), 51–67.
- Paré, G., Trudel, M-C., Jaana, M. & Kitsiou, S. 2015. Synthesizing information systems knowledge: A typology of literature reviews. *Information & Management* 52 (2), 183–199.
- Pattayanunt, S. 2009. Does the concept of apprenticeship still have relevance as a model of skill formation and vocational learning in contemporary society? *Transition Studies Review* 16 (2), 529–541.
- Pilz, M. 2012. Modularisation of vocational training in Germany, Austria and Switzerland: Parallels and disparities in a modernisation process. *Journal of Vocational Education & Training* 64 (2), 169–183.
- Pilz, M. 2016. Typologies in comparative vocational education: Existing models and a new approach. *Vocations and Learning* 9 (3), 295–314.
- Powell, J. J. W., Bernhard, N. & Graf, L. 2012. The emergent European model in skill formation: Comparing higher education and vocational training in the Bologna and Copenhagen processes. *Sociology of Education* 85 (3), 240–258.
- Powell, J. J. W. & Solga, H. 2010. Analyzing the nexus of higher education and vocational training in Europe: A comparative-institutional framework. *Studies in Higher Education* 35 (6), 705–721.
- Rauner, F. & Wittig, W. 2010. Differences in the organisation of apprenticeship in Europe: Findings of a comparative evaluation study. *Research in Comparative and International Education* 5 (3), 237–250.
- Ryan, P. & Unwin, L. 2001. Apprenticeship in the British 'training market'. *National Institute Economic Review* 178 (1), 99–114.
- Schneider, M. R. & Paunescu, M. 2012. Changing varieties of capitalism and revealed comparative advantages from 1990 to 2005: A test of Hall and Soskice claims. *Socio-Economic Review* 10 (4), 731–753.
- Scott, W. R. 2014. *Institutions and organizations: Ideas, interests, and identities*. 4. painos. Thousand Oaks, CA: Sage.
- Smith, E. & Brennan Kemmis, R. (toim.) 2013. *Towards a model apprenticeship framework: A comparative analysis of national apprenticeship systems*. Geneve: ILO. http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_234728.pdf. (Luettu 10.2.2016.)
- Steedman, H. 2012. Overview of apprenticeship systems and issues. ILO contribution to the G20 task force on employment. Geneve: ILO. <http://ssrn.com/abstract=2283123>. (Luettu 10.2.2016.)
- Stenström, M-L. & Virolainen, M. 2014. The current state and challenges of vocational education and training in Finland. Roskilde: Nord-VET. http://nord-vet.dk/indhold/uploads/report1b_fi.pdf. (Luettu 10.2.2016.)
- Thelen, K. 2004. *How institutions evolve. The political economy of skills in Germany, Britain, the United States, and Japan*. Cambridge: Cambridge University Press.
- Valtioneuvoston kanslia. 2016. *Toimintasuunnitelma strategisen hallitusohjelman kärkihankkeiden ja reformien toimeenpanemiseksi 2015–2019*. Päivitys 2016. Hallituksen julkaisusarja 2/2016. <http://valtioneuvosto.fi/documents/10184/321857/Toimintasuunnitelma+strategisen+hallitusohjelman+kärkihankkeiden+ja+reformien+toimeenpanemiseksi+2015–2019+%2C+päivitys+2016/305dcb6c-c9f8-4aca-bbbb-1018cd7a1fd8>. (Luettu 1.2.2017.)
- Viinisalo, K. 2010. Oppisopimuskoulutus ja oppiminen. *Ammattikasvatuksen aikakauskirja* 12 (3), 20–31.
- Virolainen, M. & Stenström, M-L. 2014. Finnish vocational education and training in comparison: Strengths and weaknesses. *International Journal for Research in Vocational Education and Training* 1 (2), 81–106.
- Walden, G. & Trotsch, K. 2011. Apprenticeship training in Germany: Still a future-oriented model for recruiting skilled workers? *Journal of Vocational Education and Training* 63 (3), 305–322.
- Walther, A. 2006. Regimes of youth transitions: Choice, flexibility and security in young people's experiences across different European contexts. *Young* 14 (2), 119–139.
- Wieland, C. 2015. Germany's dual vocational-training system: Possibilities for and limitations to transferability. *Local Economy* 30 (5), 577–583.

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II

**Työpaikalla tapahtuvaa oppimista ja ohjausta edistävät ja estävät tekijät
[Promoting and hindering factors of workplace learning and guidance]**

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Työpaikalla tapahtuvaa oppi- mista ja ohjausta edistävät ja estävät tekijät

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Tiivistelmä

Toisen asteen ammatillisen koulutuksen reformi pyrkii lisäämään työpaikoilla tapahtuvaa oppimista. Työpaikoilla oppimista tapahtuu osallistumisen kautta, mutta

työpaikka oppimisympäristönä edellyttää myös ohjattua oppimista. Tämä kuvaileva kirjallisuuskatsaus tarkastelee ohjausta ammatillisen koulutuksen kontekstissa osana työpaikalla tapahtuvaa oppimista. Katsauksessa pyritään tunnistamaan kes-

keisiä työpaikalla tapahtuvaa oppimista ja ohjausta edistäviä ja estäviä tekijöitä. Kirjallisuuskatsauksen aineisto koostuu 17 vertaisarvioidusta artikkelista. Aineistolähtöisen sisällönanalyysin avulla löydetty tekijät teemoiteltiin laajemmiksi kokonaisuuksiksi teoriaohjaavasti. Katsauksen perusteella ohjausta ja oppimista edistävät ja estävät voidaan jaotella kolmeen teemaan: työyhteisöön ja oppijaan, ohjaussuhteeseen sekä koulutusohjelmaan. Tutkimustuloksia voidaan hyödyntää erityisesti oppisopimuskoulutuksen ja ammatillisen koulutuksen työssäoppimisjaksojen kehittämisessä.

Avainsanat: *työpaikalla tapahtuva oppiminen, ohjaus, toisen asteen ammatillinen koulutus, kuvaileva kirjallisuuskatsaus.*

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Abstract

The reform of vocational upper secondary education aims at increasing learning in the workplace. Learning in the workplace occurs through participation, but workplace as a learning environment requires

guided learning as well. This descriptive literature review discusses guidance in the context of vocational education and training and as a part of learning in the workplace. The literature review aims to identify factors that support or hinder guidance and learning in the workplace. The data for the literature review consists of 17 peer-reviewed journal articles. In the content analysis, the factors were grouped together through inductive approach and then further into wider categories, in which abductive reasoning was used. Based on the literature review the factors supporting or hindering guidance and workplace learning relate to three main categories: community of practice and the learner, guidance relationship and training programme. The literature review aims at identifying good practices in workplace guidance, which can further support development of the learning in the workplace in the context of vocational education and training.

Keywords: *workplace learning, guidance, secondary level vocational education, descriptive literature review.*

.....

Johdanto

Uuden hallitusohjelman yhtenä koulutuksen kärkihankkeena on toisen asteen ammatillisen koulutuksen uudistaminen, jonka myötä työpaikoilla tapahtuvaa oppimista lisätään (Hallituksen ohjelma, 2015, s. 18). Kiinnostus työpaikalla tapahtuvaan oppimiseen osana ammatillista koulutusta on kasvanut viimeisen parin vuosikymmenen aikana siinä määrin, että aiempi kriittisyys työpaikalla tapahtuvaa oppimista kohtaan on jopa sivuutettu (Illeris, 2003). Samanaikaisesti myös tutkimuksessa useilla eri tieteen-

aloilla on kiinnitetty huomio työpaikoilla tapahtuvaan oppimiseen, ja työpaikkojen merkitys oppimisympäristöinä on tunnistettu (Fuller & Unwin, 2011). Pedagogisista ja organisatorisista näkökulmista tarkasteltuna työpaikat kuitenkin tarjoavat vaihtelevia, sekä oppimista mahdollistavia että rajoittavia, oppimisympäristöjä (Fuller & Unwin, 2003, 2011).

Viime vuosikymmenten aikana työpaikalla tapahtuvan oppimisen teoriat ovat kehittyneet yksilön oppimista kuvaavista teorioista kohti yhteisöllistä näkökulmaa. Työpaikalla tapahtuvan oppimisen sosiokulttuuriset teoriat tarkastelevat oppimista sekä yksilöllisenä että sosiaalisena

prosessina, johon vaikuttavat sosiaaliset, organisatoriset, kulttuuriset ja muut kontekstuaaliset tekijät. (Hager, 2011.) Lave ja Wenger (1991) tarkastelevat oppimista osallistumisen prosessina, jossa oppiminen on lisääntyvää vuorovaikutusta ja osallistumista kohti käytäntöyhteisön (Wenger, 1998) täysivaltaista jäsenyyttä. Laven ja Wengerin (1991) antropologisista lähtökohdista muodostettua teoriaa on myös kritisoitu. Ensinnäkin teoria perustuu ajatukseen siitä, että taitoja, tietoja ja tapoja välitetään noviiseille, jolloin oppimisen vastavuoroisuus sekä oppijan kasvun jatkuminen työyhteisön täysivaltaiseksi jäsenenä sivuutetaan (Fuller, Hodgkinson, H., Hodgkinson, P., & Unwin, 2005). Teoria jättää huomioimatta myös ohjauksen sekä formaalin koulutuksen merkityksen työpaikalla tapahtuvalle oppimiselle (Fuller ym., 2005). Ohjattu oppiminen on tarpeellista, koska oppimisympäristönä työpaikka ei useinkaan mahdollista oppimista ainoastaan yrityksen ja erehdyksen kautta, vaikka oppimista tapahtuukin myös havainnoinnin, jäljittelyn ja harjoittelun avulla (Billett, 2014). *Ohjattu oppiminen* voidaan nähdä toimintana, jossa kokeneemmat työntekijät hyödyntävät erilaisia tekniikoita tai strategioita ohjatakseen ja seuratakseen kokemattomampien työntekijöiden osaamisen kehittymistä (Billett, 2000).

Työpaikalla tapahtuva oppiminen voidaan nähdä vastavuoroisena yhteisöosallistumisen prosessina, johon vaikuttavat sekä työpaikan tarjoumat, kuten mahdollisuus osallistua ohjaukseen ja oppia työssä, mutta myös oppijan henkilökohtainen kiinnostus, motivaatio sekä kyky kiinnittyä työyhteisön tarjoumiin (Billett, 2002a, 2002b). Myös Vehviläinen (2014) määrittelee ohjauksen yhteistointana, jonka tavoitteena on esimerkiksi oppimis- tai ongelmanratkaisuproses-

sien tukeminen ja edistäminen siten, että ohjattavan toimijuus vahvistuu. Ammatillisen koulutuksen kontekstissa *ohjaus* voidaan laajasti määritellä tukena, jota oppija saa sekä opettajilta että työyhteisön jäseniltä (Virtanen & Tynjälä, 2008). Työpaikalla tapahtuva ohjaus voidaan edelleen jakaa epäsuoraan tai suoraan ohjaukseen (Billett, 2001). *Epäsuoralla ohjauksella* tarkoitetaan työpaikan sosiaalisen ja fyysisen ympäristön vaikutusta työpaikalla tapahtuvaan oppimiseen. Muiden työntekijöiden toiminnan havainnointi ja kuuntelu sekä työympäristö tarjoavat malleja, vihjeitä ja välineitä oppimisen avuksi. *Suoralla ohjauksella* puolestaan tarkoitetaan kokeneempien työntekijöiden ja oppijoiden läheistä ohjausta ja vuorovaikutusta.

Tämän kuvailevan kirjallisuuskatsauksen tavoitteena on kuvata ohjausta ammatillisen koulutuksen kontekstissa ja erityisesti osana työpaikalla tapahtuvaa oppimista. Tässä katsauksessa *työpaikalla tapahtuva oppiminen* viittaa kokoaavana käsitteenä työssäoppimiseen sekä työpaikalla tai työssä tapahtuvaan oppimiseen koko toisen asteen ammatillisen koulutuksen kontekstissa (vrt. Jokinen, Lähtenmäki & Nokelainen, 2009, ss. 9–12). Katsauksessa tarkastellaan ohjausta ja työpaikalla tapahtuvaa oppimista sekä niihin vaikuttavia tekijöitä ja pyritään aikaisempien tutkimusten pohjalta kokoamaan keskeisiä työpaikalla tapahtuvaa oppimista ja ohjausta edistäviä hyviä käytäntöjä. Tutkimustuloksia voidaan hyödyntää erityisesti oppisopimuskoulutuksen ja ammatillisen koulutuksen työssäoppimisjaksojen kehittämisessä. Katsaus vastaa seuraavaan tutkimuskysymykseen: Mitkä tekijät estävät tai edistävät ohjausta ja työpaikalla tapahtuvaa oppimista?

Tutkimuksen toteutus

Tutkimus on toteutettu kuvailevana kirjallisuuskatsauksena (ks. Paré, Trudel, Jaana & Kitsiou, 2015). Tutkimusaineiston hankinnassa hyödynnettiin elektronisia tietokantoja ERIC, Education Research Complete ja Google Scholar. Hakusanoina käytettiin termejä guidance, counselling, supervising, mentoring, coaching ja instruction, jotka yhdistettiin haussa termien apprenticeship, workplace learning, on the job learning, work-based, vocational training ja vocational education kanssa. Tutkimusaineiston rajaamista varten kirjallisuudelle määriteltiin sisäänotto- ja poissulkukriteerit. Ensimmäisenä sisäänottokriteerinä oli ohjauksen tarkastelu toisen asteen ammatillisen koulutuksen kontekstissa. Toisena sisäänottokriteerinä oli empiirisen aineiston käyttö tutkimuksessa. Kolmanneksi aineisto rajattiin vertaisarvioituihin artikkeleihin, joiden julkaisuajankohdaksi määriteltiin vuodet 1995–2015. Vastaavasti poissulkukriteereinä olivat ohjauksen tarkastelu muissa konteksteissa (esim. yritysten mentorointiohjelmat ja korkea-asteen koulutus), teoreettiset artikkelit ja muut sisäänottokriteerien ulkopuolelle jäävät julkaisut. Tutkimusaineisto rajattiin sisäänotto- ja

poissulkukriteerien avulla, minkä jälkeen se koostui 17 artikkelista. Tutkimusaiheen kannalta relevanttien tutkimusten tavoittamiseksi myös valittujen artikkelien lähdeluettelot käytiin läpi. Tutkimuksia etsittiin manuaalisesti myös kahden tieteellisen aikakausjulkaisun kaikista vuosikerroista (Journal of Workplace Learning ja Journal of Vocational Education and Training). Lisähaut eivät tuottaneet tulosta, ja lopulta aineisto koostui 17 vertaisarvioidusta artikkelista.

Tutkimusaineisto koottiin analyysia varten datamatriisiin, jossa eriteltiin kukin tutkimuksen toteutus. Tutkimuskysymyksen ohjaamana aineistosta etsittiin ohjaukseen vaikuttavia tekijöitä. Löydetty tekijät ryhmiteltiin ensin induktiivisesti aineiston pohjalta, minkä jälkeen ne teemoiteltiin laajemmiksi kokonaisuuksiksi teoriaohjaavasti. Teemoittelua ohjasivat teoriat liittyen työyhteisöön (Lave & Wenger, 1991), työyhteisön tarjontaan sekä yhteisosallistumiseen (Billett, 2000, 2001, 2002a, 2002b), työyhteisön epäsuoraan ja suoraan ohjaukseen (Billett, 2001) sekä käytännön ja teorian integraatioon (Guile & Griffiths, 2001). Tutkimusaineisto on kuvattuna taulukossa 1.

Taulukko 1. Tutkimusaineiston kuvaus.

Tutkimus	Otos	Maa	Aineisto	Tutkimusote
1. Chan, S. (2014)	90 oppisopimusopiskelijaa	Uusi-Seelanti	Haastattelut	Kvalitatiivinen
2. Collin, K. & Valleala, U-M. (2005)	18 suunnitteluinsinööriä 15 nuorisotyöntekijää	Suomi	Havainnointi Haastattelut	Kvalitatiivinen
3. Corney, T. & du Plessis, K. (2010)	106 miespuolista oppisopimusopiskelijaa	Australia	Kysely	Kvantitatiivinen
4. Evanciew, C & Rojewski, J. (1999)	3 oppisopimusopiskelijaa, 3 mentoria	Yhdysvallat	Havainnointi Muistimpanot Haastattelut Dokumenttianalyysi	Kvalitatiivinen

Tutkimus	Otos	Maa	Aineisto	Tutkimusote
5. Filliettaz, L. (2011)	n. 40 oppisopimusopiskelijan kohortti, 3 alaa	Sveitsi	Havainnointi Kuva- ja äänital- lenteet	Kvalitatiivinen
6. Fuller, A. & Unwin, L. (2004)	29 oppisopimusopiskelijaa, 29 vanhempaa työntekijää, 4 yritystä	Iso-Britannia	Haastattelut Oppimispäiväkirjat Kyselyt Havainnointi	Mixed methods
7. Gurtner, J-L., Cattaneo, A., Motta, E., & Mauroux, L. (2011)	19 oppisopimusopiskelijaa	Sveitsi	Äänitykset mobiililaitteilla	Mixed methods
8. Koskela, I. & Palukka, H. (2011)	Vaihe 1: 9 harjoittelijaa, 6 kouluttajaa Vaihe 2: 2 harjoittelijaa, 4 kouluttajaa	Suomi	Havainnointi Kuvanauhotukset Haastattelut	Kvalitatiivinen
9. Nielsen, K. (2008)	4 oppisopimusopiskelijaa, 2 kisälliä, 1 mestari 12 oppisopimusopiskelijaa (3 ryhmää)	Tanska	Havainnointi Haastattelut	Kvalitatiivinen
10. Onnismaa, J. (2008)	27 opiskelijaa	Suomi	Haastattelut	Kvalitatiivinen
11. Reegård, K. (2015)	11 oppisopimusopiskelijaa, 7 johtajaa	Norja	Haastattelut Havainnointi	Kvalitatiivinen
12. Savoie-Zajc, L. & Dolbec, A. (2003)	175 opiskelijaa; opettajia, paperialan edustajia	Kanada	3 kyselylomaketta: Odotukset Oppiminen Kokonaisarviointi Haastattelut	Mixed methods
13. Smith, P. (2000)	389 oppisopimusopiskelijaa; 8 oppisopimusopiskelijaa	Australia	Kyselylomake (CLSI) Haastattelut	Mixed methods
14. Tanggaard, L. (2005)	10 miespuolista oppisopimusopiskelijaa	Tanska	Haastattelut Havainnointi	Kvalitatiivinen
15. Winters, A., Meijers, F., Kuijpers, M., & Baert, H. (2009)	24 opiskelijaa, 15 opettajaa, 18 mentoria	Alankomaat	Ohjauskeskustelut	Mixed methods
16. Virtanen, A. & Tynjälä, P. (2008)	531 ammatillisen koulutuksen opiskelijaa	Suomi	Kyselylomake	Kvantitatiivinen
17. Virtanen, A., Tynjälä, P., & Eteläpelto, A. (2014a)	1603 ammatillisen koulutuksen opiskelijaa	Suomi	Kyselylomake	Kvantitatiivinen

Aineiston tarkastelu osoittaa, että valituista artikkeleista kuusi on julkaistu vuosien 1995–2005 välillä ja loput yksitoista artikkelia on julkaistu vuoden

2008 jälkeen. Seitsemän tutkimusta on julkaistu 2010-luvulla, mikä osoittaa, että aiheen tutkimus on lisääntynyt viime vuosina. Aineisto koostuu erityises-

ti eurooppalaisesta ja suomalaisesta tutkimuksesta. Maista edustettuina ovat: Suomi (viisi tutkimusta), Sveitsi (kaksi tutkimusta), Tanska (kaksi tutkimusta), Norja, Alankomaat sekä Iso-Britannia. Euroopan ulkopuolella tutkimusta on tehty anglosaksisissa maissa, joita aineistossa edustavat Australia (kaksi tutkimusta), Uusi-Seelanti, Yhdysvallat ja Kanada. Tutkimusotteiden tarkastelu osoittaa, että kvalitatiivinen lähestymistapa (yhdeksän tutkimusta) on hallitseva. Kvantitatiivista menetelmää on käytetty kolmessa artikkelissa, ja useita aineistoja ja menetelmiä yhdistävää, ns. mixed methods -tutkimustapaa, on hyödynnetty viidessä artikkelissa. Kaikki tutkimusaineistoon kuuluvat artikkelit ovat vertaisarvioinnin läpikäyneitä artikkeleita.

Tutkimustulokset

Tässä kappaleessa kuvataan kirjallisuuskatsauksen tuloksia. Aluksi taulukossa 2 esitetään yhteenveto työpaikoilla tapahtuvaa ohjausta ja oppimista edistävästä ja estävästä tekijöistä. Tämän jälkeen tarkastellaan yksityiskohtaisemmin työyhteisöön, ohjaussuhteeseen ja koulutusohjelman rakentumiseen liittyviä tekijöitä ohjauksen näkökulmasta.

Oppiminen ja ohjaus työyhteisössä

Työyhteisön sosiaalisessa ympäristössä oppijan suhdeverkosto on avaintekijä oppimisen edistäjänä. Tutkimukset osoittavat, että toimiva suhde useaan työyhteisön jäseneseen vaikuttaa positiivisesti ohjaukseen sekä oppimisprosessiin, johon ei liity formaalia ohjaussuhdetta (Chan, 2014; Corney & du Plessis, 2010; Fillietaz, 2011; Savoie-Zajc & Dolbec, 2003; Smith, 2000; Virtanen, Tynjälä, & Ete-

läpelto, 2014a). Heikko työyhteisön tuki sen sijaan vaikuttaa negatiivisesti ohjaukseen ja muuhun työpaikalla tapahtuvaan oppimiseen (Chan, 2014; Reegård, 2015; Smith, 2000). Työyhteisössä oppijat saavat usein apua, ohjausta ja tukea myös vertaisiltaan. Vertaistuki ja -ohjaus ovat merkittävässä asemassa varsinkin silloin, kun oppijalla ei ole käytössään muita ohjaajia (Tanggaard, 2005). Matalan kynnyksen vertaistukea ja -ohjausta hyödynnetään työpaikalla erityisesti oppimisen alkuvaiheessa ja myöhemmin niiden merkitys vähenee (Gurtner, Cattaneo, Motta, & Mauroux, 2011). Myös oppijan lähipiiriltä saama tuki ja ohjaus heijastuvat työyhteisöön ja oppimiseen; lähipiirin tarjoama tuki voidaan nähdä myös osana ohjausta (Chan, 2014; Corney & du Plessis, 2010).

Työyhteisössä vallitseva yhteisöllisyyden tunne, matala hierarkia ja tasa-arvoisuus edistävät työyhteisöön sopeutumista ja ammatin oppimista (Collin & Valleala, 2005; Fuller & Unwin, 2004; Reegård, 2015). Oppijan mielipiteiden ja osallistumisen huomiointi vaikuttaa positiivisesti myös oppijan kokemukseen omista oppimismahdollisuuksistaan (Onnismaa, 2008; Reegård, 2015; Virtanen, Tynjälä, & Ete-läpelto, 2014a). Oppijan ja kaikkien työyhteisön jäsenten välillä on ideaalitapauksessa vastavuoroisen suhde, jolloin myös oppijalta voidaan oppia. Vastavuoroisuus lisää luottamusta ja kunnioitusta, mutta se vaikuttaa positiivisesti myös tiedon ja osaamisen jakamiseen työyhteisössä (Fuller & Unwin, 2004; Onnismaa, 2008). Myös ohjaustilanteiden tulisi olla avoimia vastavuoroisuudelle, jolloin ohjaus voidaan nähdä merkityksellisenä sekä oppijan että ohjaajan identiteetin muotoutumiselle (Nielsen, 2008). Työyhteisö voi kokea oppijan myös uhkana. Työyhteisön koke-

Taulukko 2. Yhteenveto ohjausta ja oppimista edistävästä (+) ja estävästä (-) tekijöistä.

Yläteema	Alateema	Ohjaukseen ja oppimiseen vaikuttavat tekijä (+/-)	Artikkelien lukumäärä	Lähdeviite (ks. taulukko 1)	
Ohjaussuhteeseen liittyvät tekijät	Työilmapiiri ja suhteet	+ Oppijalla hyvät suhteet useaan työyhteisön jäseneseen - Valtataistelu ja kilpailu työyhteisössä - Heikko työyhteisön tuki + Tunne yhteisöllisyydestä ja tasa-arvosta + Oppijan ja työyhteisön jäsenten vastavuoroinen suhde + Oppijan vertaissuhteet ja tuki + Oppijan lähipiiriltään saama tuki ja ohjaus	6 4 3 3 3 3 2	[1, 3, 5, 12, 13, 17] [5, 6, 9, 10] [1, 11, 13] [2, 6, 11] [6, 9, 10] [1, 7, 14] [1, 3]	
	Yhteisosallistuminen: tarjoumat ja oppijan kiinnittyminen	+ Oppijan osallistuminen, aktiivinen rooli ja toimijuus + Oppijan itsenäinen työ, vähitellen kasvava vastuu - Työpaikan resurssien puute ja taloudellinen fokus - Oppijan marginaalinen asema työyhteisössä ja tehtävissä + Työkierto tai tiimikierto + Oppijan mielipiteiden ja osallistumisen huomiointi + Ohjaukseen osoitettu aika ja resurssit - Oppijan liiallinen vastuu ja vapaus, riittämätön tuki - Ohjaajan liiallinen tuki - Työyhteisön polarisoituneet taidot ja osaaminen	9 6 5 4 3 3 2 2 1 1	[1, 2, 4, 5, 7, 8, 9, 12, 17] [4, 5, 7, 9, 11, 13] [7, 9, 10, 12, 13] [5, 9, 12, 15] [6, 12, 17] [10, 11, 17] [9, 13] [7, 11] [9] [6]	
	Oppijan yksilölliset piirteet	+ Aloitteellisuus, vastuuntuntoisuus + Itsesääntely + Sosiaaliset taidot - Työyhteisön kannalta vaativa käytös + Aiempi työkokemus, harkittu ammatinvalinta - Heikko työmoraali - Introverttiys	5 3 2 2 1 1 1	[7, 11, 12, 13, 14] [11, 16, 17] [4, 12] [7, 9] [1] [4] [14]	
	Oppijan ja ohjaajan / ohjaajien suhde	+ Oppijan ja ohjaajan välinen kannustava suhde - Oppijan ja ohjaajan välinen riippuvuus- ja valtasuhde - Ohjaajan arvaamaton reagointi ohjauspyyntöön - Ohjaajan sitoutumattomuus ohjaukseen + Oppijalla taipumus valita sopiva(t) ohjaaja(t)	4 2 1 1 1	[1, 4, 14, 17] [12, 14] [13] [1] [14]	
	Ohjaajan yksilölliset piirteet ja pedagogiset taidot	+ Monipuolisten ohjausmenetelmien hyödyntäminen + Kyky jakaa tietoa ja kannustaa kysymään + Kyky aikaansaada kriittistä reflektiota + Itsereflektio + Pedagoginen pätevyys, formaali koulutus	2 2 1 1 1	[4, 8] [6, 7] [10] [8] [5]	
	Koulutusohjelmaan liittyvät tekijät	Oppimisympäristöt	+ Konnektiivisuus (teoria + käytäntö), yhteistyö - Epäjohtamukaisuus oppimisympäristöjen välillä - Opettajien riittämätön aika ohjaukseen - Ohjaus nähdään ainoastaan työpaikan tehtävänä	5 2 2 1	[10, 12, 15, 16, 17] [4, 12] [4, 14] [17]
		Rakenne	+ Oppimisen ja ohjauksen henkilökohtaistaminen + Koko koulutusohjelman viitekehys, selvät säännöt ja roolit - Työpaikalla tapahtuvan oppimisen organisoimattomuus + Selkeät tavoitteet	4 3 2 2	[6, 10, 13, 17] [6, 10, 13] [1, 6] [4, 13]

ma uhka rajoittaa ohjauksen saatavuutta sekä vaikuttaa rajoittavasti oppijan asemaan työyhteisössä. Jos kokeneemmat työntekijät kokevat uuden tulokkaan uhkana ja kilpailijana, he eivät ole halukkaita jakamaan omaa osaamistaan (Filliet-taz, 2011; Fuller & Unwin, 2004; Nielsen, 2008; Onnismaa, 2008). Valtataistelua ja kilpailu työyhteisön jäsenten välillä voi asettaa oppijan tilanteeseen, jossa hänen pitää valita puolensa ja ohjaajansa (Filliet-taz, 2011).

Tutkimusten perusteella oppijan autonomian sekä ohjauksen yhdistäminen on haaste.

Oppijoiden mahdollisuus osallistua työyhteisöön, aktiivinen rooli sekä toimijuus tarjoavat parhaat edellytykset työpaikalla tapahtuvalle oppimiselle (Chan, 2014; Collin & Valleala, 2005; Evanciew & Rojewski, 1999; Filliet-taz, 2011; Gurtner ym., 2011; Koskela & Palukka, 2011; Nielsen, 2008; Savoie-Zajc & Dolbec, 2003; Virtanen, Tynjälä, & Eteläpelto, 2014a). Marginaalinen asema yhteisön sisällä tai työtehtävissä estää vaativampien ja haastavampien tehtävien suorittamisen, mikä puolestaan on edellytys ammatilliselle kasvulle (Filliet-taz, 2011; Nielsen, 2008; Savoie-Zajc & Dolbec, 2003). Ammatillista kasvua rajoittaa myös eriytynyt työyhteisö. Eriytyneessä työyhteisössä taidot ja osaaminen ovat jakaantuneet ääripäihin esimerkiksi suorittavan työn ja johdon välille, mikä ei mahdollista sujuvaa siirtymistä haastavampiin tehtäviin (Fuller & Unwin, 2004). Osallistuminen erilaisiin tehtäviin laajentaa ammatillista osaamista, minkä vuoksi oppimista tukeva työ-

ympäristö tulisikin rakentaa niin, että se tarjoaa mahdollisuuden erilaisiin tehtäviin ja aktiiviseen työhön (Virtanen, Tynjälä, & Eteläpelto, 2014a). Tutkimuksissa konkreettisina ratkaisuuksina nähdään työkierto tai tiimikierto, jotka tarjoavat erilaisten tehtävien lisäksi mahdollisuuden oppia ja saada ohjausta eri henkilöiltä (Fuller & Unwin, 2004; Savoie-Zajc & Dolbec, 2003).

Tutkimusten perusteella oppijan autonomian sekä ohjauksen yhdistäminen on haaste. Työpaikalla tapahtuvaa oppimista tukevat ennen kaikkea oppijan itsenäinen työ sekä vähitellen kasvava vastuu (Evanciew & Rojewski, 1999; Filliet-taz, 2011; Gurtner ym., 2011; Nielsen, 2008; Reegård, 2015; Smith, 2000). Toisaalta oppijan liiallinen vastuu ja itsenäisyys johtavat helposti ohjauksen ja tuen laiminlyöntiin, josta seurauksena voivat olla oppimisen pysähtyminen sekä oppijan aloittekyvyttömyys ja eristäytyminen (Gurtner ym., 2011; Reegård, 2015). Myös liiallinen ohjaus tai marginaalinen asema työyhteisössä johtavat matalaan autonomiaan, mikä vaikuttaa negatiivisesti oppimiseen (Nielsen, 2008; Savoie-Zajc & Dolbec, 2003).

Työelämän ja ammattien muuttuminen ovat haaste työpaikalla tapahtuvalle oppimiselle. Tuottavan työn vaatimus ja aikataulut voivat johtaa siihen, että oppija asetetaan marginaaliseen asemaan, jossa hän ei vaaranna tuottavuutta tai turvallisuutta (Savoie-Zajc & Dolbec, 2003). Suurimpana esteenä työpaikalla tapahtuvalle ohjaukselle nähdään kuitenkin ajanpuute (Gurtner ym., 2011; Nielsen, 2008; Onnismaa, 2008; Reegård, 2015; Smith, 2000). Ajan ja resurssien varmistaminen ohjaukselle on tärkeä kehittämiskohde (Smith, 2000), sillä ajankäyttö ohjaukseen vahvistaa oppijan

identiteetin muodostumista sekä tunnetta siitä, että häneen kannattaa panostaa (Nielsen, 2008).

Ohjaussuhde ja ohjausvalmiudet

Työyhteisön sosiaalisen ja fyysisen ympäristön lisäksi oppijaan liittyvät yksilölliset tekijät vaikuttavat ohjaukseen. Oppijan nähdään olevan vastuussa omasta oppimisestaan, minkä vuoksi oppijan aloitteellisuus (kysymysten esittäminen, avun pyytäminen) on ohjauksen saamisen kannalta oleellista (Gurtner ym., 2011; Reegård, 2015; Savoie-Zajc & Dolbec, 2003; Smith, 2000; Tanggaard, 2005). Tutkimukset korostavat oppijan itsesäätelytaitojen merkitystä ammatillisen osaamisen kehittymisessä (Reegård, 2015; Virtanen & Tynjälä, 2008; Virtanen, Tynjälä, & Eteläpelto, 2014a). Hyvät sosiaaliset taidot edistävät ohjauksen saamista sekä ohjaussuhteen muodostumista (Evanciew & Rojewski, 1999; Savoie-Zajc & Dolbec, 2003), mutta aloitteellisuus ohjaustilanteissa sekä ohjaussuhteen muodostamisessa voivat muodostua haasteeksi introverteille henkilöille (Tanggaard, 2005). Toisaalta myös liiallinen kysymysten esittäminen ja ohjauksen pyytäminen koetaan työpaikalla negatiivisesti, koska ne voidaan kokea työyhteisöä rasittavana käytöksenä (Gurtner ym., 2011; Nielsen, 2008). Gurtnerin ym. (2011) tutkimus osoittaa, että oppisopimusopiskelijat kysyvät yhä enemmän ja tehokkaammin ohjausta koulutuksen edetessä, mikä kuvaa oppijoiden itseluottamuksen ja sitoutumisen kasvua. Työyhteisöön sitoutumiseen ja osallistumiseen vaikuttavat positiivisesti sekä aiempi työkokemus että uravalinnan suunnitelmallisuus (Chan, 2014). Oppijan heikko työmoraali voi johtaa työpaikalla tapahtuvan koulutuksen keskeytyk-

seen, jos se nähdään ominaisuutena, johon ei voida vaikuttaa ohjauksella (Evanciew & Rojewski, 1999).

Edellä osoitettiin, että koko työyhteisöllä sekä oppijan vertaissuhteilla ja jopa lähipiirin antamalla tuella on merkittävä rooli ohjauksessa. Tutkimukset osoittivat myös, että oppijan yksilöllinen vuorovaikutussuhde työpaikkaohjaajan kanssa on ohjausta ja oppimista edistävä tekijä (Chan, 2014; Evanciew & Rojewski, 1999; Tanggaard, 2005; Virtanen, Tynjälä, & Eteläpelto, 2014a). Työpaikkaohjaajan ja oppijan välinen suhde voi muodostua formaalisti tai informaalisti. Ennen kaikkea oppijoilla on taipumus valita omaan persoonaansa sopivat ohjaajat (Tanggaard, 2005). Työyhteisössä ohjaajilla on merkittävä rooli suhteessa oppijan asemaan ja tehtäviin. Ohjaaja arvioi oppijan osaamista ja sen kehittymistä, jolloin siirtyminen haastavampiin tehtäviin voi olla kiinni ohjaajan vallasta (Savoie-Zajc & Dolbec, 2003). Ohjaajan valta ohjaussuhteessa saattaa näkyä myös siten, että oppija kopioi kritiikittömästi myös huonot tavat (Tanggaard, 2005). Ohjaajan tai ohjaajien sitoutumisen ohjaussuhteeseen edistää oppimista (Chan, 2014). Ohjaussuhteen rakentuminen ja ohjauksen pyytäminen perustuvat myös ennakointiin, koska oppijalta edellytetään aloitteellisuutta ohjaussuhteen rakentumisessa. Ohjaajien vaihteleva ja ennakoimaton suhtautuminen ohjauksen pyytämiseen vaikuttaa negatiivisesti aloitteellisuuteen ohjaustilanteissa (Smith, 2000).

Tutkimusten perusteella ohjaajien pedagoginen osaaminen edistää oppimista, mutta formaalin pedagogisen koulutuksen merkitys jää epäselväksi. Erilaisten ohjausmenetelmien käyttäminen vaikuttaa positiivisesti oppimiseen (Evanciew

& Rojewski, 1999; Koskela & Palukka, 2011). Ohjaajat hyödyntävät erityisesti menetelmiä, jotka tuntuvat luontevilta heille itselleen, ja ohjaajat osaavat hyödyntää tehokkaita ohjausmenetelmiä myös ilman formaalia koulutusta (Evanciew & Rojewski, 1999). Toisaalta pedagoginen pätevyys nähdään tärkeänä ohjauksen laadun parantamiseksi (Filliettaz, 2011). Ohjausmenetelmien monipuolisen osaamisen lisäksi pedagogiset taidot voivat näyttäytyä kykynä jakaa tietoa sekä kykynä saada oppijat osallistumaan ohjausprosessiin esimerkiksi kysymysten muodossa (Fuller & Unwin, 2004; Gurtner ym., 2011). Ohjaaja voi aikaansaada myös kriittistä reflektiota, jota pidetään tärkeänä ammatilliselle kasvulle (Onnismaa, 2008), mutta ohjauksen onnistumiseksi myös ohjaajalta itseltään vaaditaan itsereflektiota sekä jatkuvaa ohjaussuhteen vuorovaikutuksen havainnointia (Koskela & Palukka, 2011).

Oppiminen ja ohjaus koulutusohjelmien rakenteissa

Ammatillisten koulutusohjelmien rakenteilla on huomattava rooli ohjauksen toteutumisessa. Ammatillisissa koulutusohjelmissa oleellista on eri oppimisympäristöjen, työpaikan ja oppilaitoksen yhdistäminen. Tutkimusten perusteella on vahvaa näyttöä siitä, että konnektiivisuus eli teorian ja käytännön tiivis integrointi, ja yhteistyö oppimisympäristöjen välillä tukee parhaiten ohjausta ja ammatillisen osaamisen kehittymistä (Onnismaa, 2008; Savoie-Zajc & Dolbec, 2003; Winters, Meijers, Kuijpers, & Baert, 2009; Virtanen & Tynjälä, 2008; Virtanen, Tynjälä, & Eteläpelto, 2014a). Haasteena oppimisympäristöjen välisessä vuorovaikutuksessa nähdään erityisesti suuret kulttuurierot sekä epäjohtomukaisuus, mikä voi vaikuttaa negatiiv-

visesti myös oppimiseen (Evanciew & Rojewski, 1999; Savoie-Zajc & Dolbec, 2003). Ammatillisen osaamisen kehittymisen haasteena nähdään myös se, että opettajat eivät ehdi ohjata opiskelijoita tarpeeksi (Evanciew & Rojewski, 1999; Tanggaard, 2005), jolloin ohjaus voi jäädä ainoastaan työpaikan tehtäväksi (Virtanen, Tynjälä, & Eteläpelto, 2014a).

Koulutusohjelman rakenteen osalta tärkeimpänä pidetään oppijan aiemman osaamisen ja tavoitteiden huomioimista oppimisen edistämiseksi. Sekä ohjauksen että oppimisen henkilökohtaistaminen tarjoavat hyvät edellytykset yksilön ammatilliselle kasvulle (Fuller & Unwin, 2004; Onnismaa, 2008; Smith, 2000; Virtanen, Tynjälä, & Eteläpelto, 2014a). Oppijat arvostavat selkeitä ja määriteltyjä tavoitteita ohjauksessa ja oppimisessä (Evanciew & Rojewski, 1999; Smith, 2000). Kokonaisuutena ohjausta ja oppimista edistävänä tekijänä toimii selkeä viitekehys, joka määrittelee oppimisympäristöjen ja toimijoiden roolit, säännöt ja vastuut (Fuller & Unwin, 2004; Onnismaa, 2008; Smith, 2000). Myös työpaikalla tapahtuvan oppimisen tulee olla suunniteltua (Chan, 2014). Esimerkiksi tehtävien ja taitojen määrittäminen tukevat suunnitelmallista koulutusta, jota eivät ohjaa ainoastaan organisaation tai liiketoiminnan vaatimukset (Fuller & Unwin, 2004).

Johtopäätökset

Katsausartikkelin tavoitteena oli kuvata ohjaukseen ja työpaikalla tapahtuvaan oppimiseen vaikuttavia tekijöitä ja hyviä käytäntöjä. Tulosten mukaan oppimista tapahtuu työyhteisössä myös ilman suoraa ohjausta (Lave & Wenger, 1991; Billett, 2014), mutta ohjauksella voidaan edistää työpaikalla

tapahtuvaa oppimista. Ohjausta ja oppimista edistävät ja estävät tekijät kytkeytyvät niin työyhteisöön ja työympäristöön, oppijaan ja ohjaajaan, kuin koko koulutusohjelman rakentumiseen.

Ohjaajan sitoutuminen, tavoitteellisuus, monipuoliset ohjausmenetelmät ja reflektioidot vaikuttavat positiivisesti oppimiseen.

Katsaus osoittaa, että työpaikalla tapahtuva oppiminen ja ohjaus voidaan nähdä yhteisöllisenä toimintana. Pelkkä osallistuminen työyhteisön toimintaan ei riitä tuottamaan laajaa ammatillista osaamista. Oppijan aktiivinen toimijuus ja vähitellen kasvava vastuu tukevat ammatillisen osaamisen kehittymistä, jos ohjausta ja tukea on saatavilla riittävästi. Tutkimusten perusteella vastuu työpaikalla tapahtuvasta ohjauksesta on osin oppijalla, jolta edellytetään riittäviä sosiaalisia taitoja ja itsenäisyysvalmiuksia, jotka ilmenevät mm. itseohjautuvuutena ja aloitteellisuutena ohjaustilanteissa. Työpaikalla rakentuvat ohjaussuhteet voivat olla symmetrisiä vertaisuuhteita tai epäsymmetrisiä mestari-kisälli-suhteita (Tanggaard, 2005). Oppimisen kannalta olennaisinta ovat kuitenkin ohjaussuhteen tai -suhteiden vastavuoroisuus oppimisessa ja tiedon jakamisessa sekä tasa-arvoisuus työyhteisön jäsenenä ja oppijan roolissa. Ohjaussuhteilla on taipumus rakentua yksilöllisten piirteiden sopivuuden perusteella (Tanggaard, 2005), mikä haastaa käytännön nimetystä työpaikkaohjaajasta tai -kouluttajasta. Ohjaussuhteessa ja työpaikalla tapahtuvan oppimisen edistämässä myös ohjaajan

pedagogisilla taidoilla on kuitenkin merkitystä. Ohjaajan sitoutuminen, tavoitteellisuus, monipuoliset ohjausmenetelmät ja reflektioidot vaikuttavat positiivisesti oppimiseen. Koulutusohjelman rooli oppimisen ja ohjauksen tukemisessa tiivistyy yhteistyön rakentamiseen oppimisympäristöjen välille, joka parhaimmillaan tukee teorian ja käytännön vuoropuhelua edistäen kokonaisvaltaisesti oppijan ammatillista kehittymistä.

Koulutusohjelmaan liittyvät tekijät korostavat oppimisympäristöjen tiivistä yhteistyötä ja integrointia, ns. konnektiivista mallia (Guile & Griffiths, 2001). Aiempi tutkimus on nostanut esiin yksilöllisen ohjauksen kytköksen työpaikan sosiaalisiin tekijöihin (Virtanen, Tynjälä, & Eteläpelto, 2014b), mutta käsillä olevan katsauksen perusteella ohjausta edistävät ja estävät tekijät liittyvät työyhteisöön, oppijan sekä koulutusohjelman lisäksi myös ohjaussuhteisiin. Yksilöllisten ohjaussuhteiden tukemisen lisäksi koko työyhteisön tulee olla tietoinen roolistaan työpaikalla tapahtuvassa ohjauksessa. Ammatillisen koulutuksen työpaikalla tapahtuvan oppimisen suunnittelua sekä toteutusta voidaan kehittää selkiyttämällä ohjauksen tavoitteita ja läpinäkyvyyttä koko työyhteisön tasolla.

Katsauksen perusteella ohjausta on tutkittu rajallisesti ammatillisen koulutuksen kontekstissa. Erityisesti oppisopimuskoulutuksen kontekstissa työpaikalla tapahtuvan ohjauksen tutkimus on ollut vähäistä (Nielsen, 2008; Tanggaard, 2005). Useissa katsauksen valituissa artikkeleissa ohjaus ei ole ollut tutkimuksen pääkohteena, vaan yksi tutkimuskysymyksistä. Lisäksi artikkelit kohdistuvat tarkastelemaan erityisesti nuorten työpaikalla tapahtuvaa oppimista sekä ohjausta. Tulosten yleistettävyyden osalta tulee

myös huomioida se, että aiemmissä tutkimuksissa eri alojen välillä on havaittu huomattavia eroja työpaikalla tapahtuvaan oppimiseen liittyen (Virtanen, Tynjälä, & Ereläpelto, 2014a, 2014b). Jatko-tutkimuksissa on tärkeää kiinnittää huomiota eroihin eri koulutusmuotojen sekä alojen välillä. Toisaalta tarkentavaa tutkimusta tarvitaan myös työpaikalla tapahtuvaan ohjaukseen osallistuvan työyhteisön jäsenen, ohjaajan ja oppijan välisten ohjaussuhteiden rakentumisesta ja oppimisproesseista.

Lähteet

Billett, S. (2000). Guided learning at work. *Journal of Workplace Learning*, 12(7), 272-285.

Billett, S. (2001). *Learning in the workplace. Strategies for effective practice*. Sydney: Allen & Unwin.

Billett, S. (2002a). Towards a workplace pedagogy: guidance, participation and engagement. *Adult Education Quarterly*, 53(1), 27-43.

Billett, S. (2002b). Workplace pedagogic practices: co-participation and learning. *British Journal of Educational Studies*, 50(4), 457-481.

Billett, S. (2014). Mimesis: Learning through everyday activities and interactions at work. *Human Resource Development Review*, 13(4), 462-482.

Chan, S. (2014). Belonging to a workplace: first-year apprentices' perspectives on factors determining engagement and continuation through apprenticeship. *International Journal for Educational and Vocational Guidance*, 2014, 1-19. Haettu huhtikuu 15, 2015, sivustolta <http://link.springer.com/article/10.1007%2Fs10775-014-9282-2>.

Collin, K., & Valleala, U-M. (2005). Interaction among employees: how does learning take place in the social communities of the workplace and how might such learning be supervised? *Journal of Education and Work*, 18(4), 401-420.

Corney, T., & du Plessis, K. (2010). Apprentices' mentoring relationships. The role of significant others' and supportive relationships across the work-life domains. *Youth studies Australia*, 29(3), 18-26.

Evanciew, C., & Rojewski, J. (1999). Skill and knowledge acquisition in the workplace: a case study of mentor-apprentice relationships in

youth apprenticeship programs. *Journal of Industrial Teacher Education*, 36(2), 24-53.

Filliettaz, L. (2011). Collective guidance at work: a resource for apprentices? *Journal of Vocational Education and Training*, 63(3), 485-504.

Fuller, A., Hodkinson, H., Hodkinson P., & Unwin, L. (2005). Learning as peripheral participation in communities of practice: a reassessment of key concepts in workplace learning. *British Educational Research Journal*, 31(1), 49-68.

Fuller, A., & Unwin, L. (2003). Learning as apprentices in the contemporary UK workplace: creating and managing expansive and restrictive participation. *Journal of Education and Work*, 16(4), 407-426.

Fuller, A., & Unwin, L. (2004). Young people as teachers and learners in the workplace: challenging the novice-expert dichotomy. *International Journal of Training and Development*, 8(1), 32-42.

Fuller, A., & Unwin, L. (2011). Workplace learning and the organization. Teoksessa M. Malloch, L. Cairns, K. Evans, & B. N. O'Connor (toim.), *The SAGE handbook of workplace learning* (ss. 46-59). Lontoo: Sage Publications.

Guile, D., & Griffiths, T. (2001). Learning through work experience. *Journal of Education and Work*, 14(1), 113-131.

Gurtner, J-L., Cattaneo, A., Motta, E., & Mauroux, L. (2011). How often and for what purposes apprentices seek help in workplaces: a mobile technology-assisted study. *Vocations and Learning*, 4(2), 113-131.

Hager, P. (2011). Theories of workplace learning. Teoksessa M. Malloch, L. Cairns, K. Evans, & B. N. O'Connor (toim.), *The SAGE handbook of workplace learning* (ss. 17-31). Lontoo: Sage Publications.

Hallituksen ohjelma. (2015). *Ratkaisujen Suomi. Pääministeri Juha Sipilän hallituksen strateginen ohjelma 29.5.2015*. Hallituksen julkaisusarja 10/2015. Valtioneuvoston kanslia. Haettu elokuu 22, 2015, sivustolta http://valtioneuvosto.fi/documents/10184/1427398/Ratkaisujen+Suomi_FI_YHDISTETTY_netti.pdf/801f523e-5dfb-45a4-8b4b-5b5491d6cc82.

Illeris, K. (2003). Workplace learning and learning theory. *Journal of Workplace Learning*, 15(4), 167-178.

Jokinen, J., Lähteenmäki, L., & Nokelainen, P. (2009). *Työssäoppimisen lumo. Ammatillisen sekä ammatillisen korkea-asteen koulutuksen ja työelämän yhteistyön hyvät käytänteet*. Hämeenlinna: Hämeen ammattikorkeakoulu.

- Koskela, I., & Palukka, H. (2011). Trainer interventions as instructional strategies in air traffic control training. *Journal of Workplace Learning*, 23(5), 293-314.
- Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Nielsen, K. (2008). Scaffold instruction at the workplace from a situated perspective. *Studies in Continuing Education*, 30(3), 247-261.
- Onnismaa, J. (2008). Age, experience, and learning on the job: crossing the boundaries between training and workplace. *Journal of Employment Counseling*, 45(2), 79-90.
- Paré, G., Trudel, M. C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: a typology of literature reviews. *Information and Management*, 52(2), 183-199.
- Reegård, K. (2015). Sales assistants in the making: learning through responsibility. *Vocations and Learning*, 8(2), 117-133.
- Savoie-Zajc, L., & Dolbec, A. (2003). Co-operative education in the pulp and paper sector in Quebec. *Journal of Workplace Learning*, 15(3), 114-122.
- Smith, P. (2000). Flexible delivery and apprentice training: preferences, problems and challenges. *Journal of Vocational Education and Training*, 52(3), 483-503.
- Tanggaard, L. (2005). Collaborative teaching and learning in the workplace. *Journal of Vocational Education and Training*, 57(1), 109-122.
- Vehviläinen, S. (2014). Ohjaustyön opas. Yhteistyössä kohti toimijuutta. Helsinki: Gaudeamus.
- Virtanen, A., & Tynjälä, P. (2008). Students' experiences of workplace learning in Finnish VET. *European Journal of Vocational Training*, 44(2), 200-213.
- Virtanen, A., Tynjälä, P., & Eteläpelto, A. (2014a). Factors promoting vocational students' learning at work: study on student experiences. *Journal of Education and Work*, 27(1), 43-70.
- Virtanen, A., Tynjälä, P., & Eteläpelto, A. (2014b). Opiskelijoiden työssäoppimista selittävät tekijät kaupan ja hallinnon alalla sekä matkailu-, ravitsemis- ja talousalalla. *Ammattikasvatuksen aikakauskirja*, 16(4), 44-59.
- Wenger, E. (1998). *Communities of practice: learning, meaning and identity*. Cambridge: Cambridge University Press.
- Winters, A., Meijers, F., Kuijpers, M., & Baert, H. (2009). What are vocational training conversations about? Analysis of vocational training conversations in Dutch vocational education from a career learning perspective. *Journal of Vocational Education and Training*, 61(3), 247-266.



PUBLICATION

III

Oppisopimusopiskelijan osallisuus työyhteisössä **[Apprentice's sense of belonging to a work community]**

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11. Oppisopimusopiskelijan osallisuus työyhteisössä

Johdanto

Tässä artikkelissa tarkastelemme opiskelijan osallistumista ja osallisuutta suomalaisen oppisopimuskoulutuksen ja erityisesti työpaikalla tapahtuvan oppimisen kontekstissa. Työpaikalla tapahtuvan oppimisen keskiössä on ollut usein erityisesti *osallistuminen* (*participation*) sekä siihen kytkeytyvä oppimisen prosessi, jossa yksilö siirtyy yhteisön ulkorajoilta ja tarkkailijan roolista kohti täyttä osallistumista (Lave & Wenger 1991). *Osallisuus* (*sense of belonging, belongingness*) viittaa puolestaan yleisesti yhteisöihin kuulumisen ja jäsenyyden, *yhteisöllisen osallisuuden* (*belonging*) ulottuvuuteen (Raivio & Karjalainen 2013). Ryhmään kuulumisen tarve, osallisuus, on nähty ihmisen perustarpeena, mutta myös merkittävänä toimintaa ohjaavana tekijänä (Baumeister & Leary 1995). Osallisuuden ja kuulumisen tunne voidaan määritellä prosessina, jossa yksilö tuntee olonsa turvalliseksi, hyväksytyksi ja arvostetuksi ryhmässä tai yhteisössä sekä jakaa yhteisön ammatilliset tai henkilökohtaiset arvot (Levett-Jones, Lathlean, Higgins & McMillan 2009, 319). Sekä osallistuminen että osallisuus ovat prosesseja, joihin yksilön lisäksi vaikuttaa ympäristön tuki (esim. Billett 2001;

Chan 2013; Levett-Jones & Lathlean 2008). Vaikka tunne osallisuudesta yhteisöön on henkilökohtainen, voi yhteisö vaikuttaa sen syntyyn edistävästi tai estävästi (Korhonen 2012). Osallistuminen voi myös edistää osallisuutta, mutta se toteutuu vasta, kun yksilö tuntee kuuluvansa yhteisöön (Nivala & Ryyänen 2013).

Suomessa koulutuksen kontekstissa kuulumisen tunnetta on tarkasteltu osana laajempaa ja monitahoista koulutyöhön ja opintoihin *kiinnittymisen* (*engagement*) ilmiötä erityisesti perusasteella (esim. Ulmanen 2017) sekä korkeakoulutuksessa (esim. Korhonen 2012). Työpaikalla tapahtuvan oppimisen kontekstissa kiinnittymistä on tarkasteltu oppijan ja työyhteisön vastavuoroisena prosessina, jossa yksilön kiinnittyminen työpaikan sosiaalisiin käytänteisiin avaa uusia oppimismahdollisuuksia ammatillisen osaamisen saavuttamiseksi (esim. Billett 2001, 2004, 2016). Työyhteisössä osallisuuden nähdäänkin näyttäytyvän siten, että työyhteisö hyväksyy yksilön ammatillisen osaamisen ja tunnustaa yksilön panoksen työyhteisön jäsenenä, mutta edellyttää toisaalta yksilön aktiivista toimijuutta työyhteisössä (Chan 2016). Myös ammatillisessa koulutuksessa sekä osallistuminen, oppiminen että osallisuus nähdään rinnakkaisina prosesseina, jotka muokkautuvat yksilöön liittyvien tekijöiden ja työpaikan kontekstuaalisten tekijöiden vaikutuksesta (esim. Billett 2001; Chan 2013; Levett-Jones & Lathlean 2008). Suomalaisessa tutkimuksessa opiskelijoiden kokemus työyhteisön jäsenyydestä on yhdistetty kokemuksiin oppimis- ja kehittymismahdollisuuksista työssäoppimisjaksojen aikana (Virtanen, Tynjälä & Eteläpelto 2012). Kansainvälisessä oppisopimuskoulutusta koskevassa tutkimuksessa työyhteisöjä on kuvattu vaihtelevina oppimisympäristöinä, jotka voivat joko mahdollistaa tai rajoittaa oppimista. Erityisesti mahdollistavat oppimisympäristöt sallivat vähittäisen siirtymän kohti täyttä osallistumista. (Fuller & Unwin 2003.)

Osallisuuden kokemusta voidaan pitää merkittävänä tekijänä oppimisen kannalta, sillä osallisuus tai tunne kuulumisesta yhteisöön kannustaa yksilöä hyödyntämään työpaikan oppimismahdollisuuksia sekä toimimaan itseohjautuvasti ja itsenäisesti. Erityisen merkityksellistä oppimisen kannalta on, että tunne osallisuudesta

rohkaisee yksilöä esittämään kysymyksiä sekä kyseenalaistamaan käytäntöjä. (Levett-Jones & Lathlean 2008.) Sen lisäksi, että työpaikalla tapahtuvaan oppimiseen yhdistetty osallisuuden kokemus on liitetty myönteisiin oppimistuloksiin (Levett-Jones & Lathlean 2008), sen on nähty heijastuvan myös yleiseen tyytyväisyyteen sekä myönteisiin arvioihin työpaikan ohjaussuhteista (Swager, Klarus, van Merriënboer & Nieuwenhuis 2015). Toisaalta taas heikko osallisuuden kokemus on liitetty oppimista haittaaviin tekijöihin kuten stressiin, ahdistuneisuuteen, masennukseen ja matalaan itsetuntoon (Levett-Jones & Lathlean 2008; Levett-Jones ym. 2009). Oppisopimuskoulutuksessa osallisuus on yhdistetty myös koulutuksen läpäisyyn (Chan 2016). Chan (2016) on nostanut esiin kolme keskeistä tekijää oppisopimusopiskelijoiden osallisuuden kokemuksen taustalla. Ensinnäkin koulutuksen alussa ammatin vastaaminen opiskelijan omiin odotuksiin ja mieltymyksiin on keskeistä. Näin ollen jonkinlainen tuntuma ammattiin, esimerkiksi harjoittelu tai aiempi työkokemus voivat edistää osallisuuden tunnetta. Toiseksi työpaikan tarjoamien oppimismahdollisuuksien tulee vastata opiskelijoiden ammatillisiin odotuksiin, oppimistarpeisiin ja tavoitteisiin. Tutkimuksessa havaittiin, että oppisopimusopiskelijat olivat aluksi valmiita ottamaan noviiisiin tai aloittelijan tehtäviä, mutta mikäli työyhteisössä ei ollut pääsyä haastavampiin tehtäviin, he irtaantuivat työyhteisöstä (Chan 2016). Haastavien ja organisaatiolle merkityksellisten tehtävien rooli on tunnustettu myös oppimisen kannalta (Bailey, Hughes & Thornton Moore 2004). Fjellström ja Kristmansson (2016) havaitsivat lisäksi, että erityisesti henkilökohtaisiin haasteisiin ja osaamistarpeisiin vastaaminen edisti opiskelijan oppimista virallisten osaamistavoitteiden sijaan. Kolmantena tekijänä työpaikan tuki, kannustava ympäristö sekä työtoveruus tukevat opiskelijan ammatillisen osaamisen kehittymistä, mutta myös arvostuksen ja osallisuuden tunnetta (Chan 2016). Nuoria oppisopimusopiskelijoita tarkastelevassa tutkimuksessa on havaittu myös, että sosiaalinen integraatio ja kokemus osallisuudesta vaihtelee: sosiaalinen integraatio työyhteisöön arvioidaan positiivisesti erityisesti alkuvaiheessa, mutta työyhteisössä toimimisen myötä kokemus osallisuudesta laskee (Nägele & Neuenschwander 2016).

Tutkimuksen mukaan ammatillisessa koulutuksessa opiskelijoiden osallisuuden tunne on heikompi kuin akateemisilla koulutuspoluilla (Van Houtte & Van Maele 2012). Oppisopimusopiskelijoiden asema on nähty erityisen haastavana, koska oppisopimusopiskelijat ovat yhtä lailla sekä työ- että oppilaitosyhteisön jäseniä, joilla on vaarana olla marginaalissa molemmissa yhteisöissä (Akkerman & Bakker 2011; Tanggaard 2007). Tämän tutkimuksen tavoitteena on tuottaa tietoa opiskelijoiden ja työyhteisön jäsenten näkemyksistä ja kokemuksista osallistumisen ja osallisuuden toteutumiseen oppisopimuskoulutuksessa.

Oppisopimuskoulutus Suomessa

Ammatillisen koulutuksen ja työelämän suhde on vaihdellut eri aikoina. Suomessa kaupunkien ammattikunnat vastasivat aikoinaan ammatillisesta koulutuksesta (esim. Heikkinen 1995; Kivinen & Peltomäki 1999; Klemelä 1999; Laukia 2013). 1820-luvulta alkaen ammattikuntalaitoksen tueksi perustettiin sunnuntaikouluja, mutta ne olivat luonteeltaan yleissivistäviä, eivätkä tuottaneet päteväen käsityöläisen asemaa ilman oppipoika-kisälli-mestari-järjestelmässä hankittua ammattipätevyyttä (Heikkinen 1995, 163). Ammattikuntalaitos lakkautettiin 1860-luvulla, jonka jälkeen oppilasjärjestelmä loppui joiltakin aloilta kokonaan tai jäi lähinnä tavaksi järjestää alaikäisten työntekijöiden työsuhde (Kivinen & Peltomäki 1999). 1800-luvun lopulla oppisopimuskoulutusjärjestelmä mureni erityisesti elinkeinoelämän vapautumisen ja teollistumisen myötä (Kivinen & Peltomäki 1999; Klemelä 1999). Työnantajien luottamus oppilasjärjestelmään ammattitaidon nostajana säilyi, mutta erityisesti työntekijät näkivät opetuksen siirtämisen ammatillisiin oppilaitoksiin parempana vaihtoehtona. Oppilasjärjestelmä nähtiin vanhentuneena ammattikasvatusmuotona, joka tuotti kaipa osaamista ja halpaa työvoimaa tehtaisiin. (Kivinen & Peltomäki 1999; Klemelä 1999.) Ensimmäiset valtiolliset ammatilliset oppilaitokset perustettiin 1940-luvulla. Pohjoismaisen hyvinvointivaltion vahvistuessa vaatimukset tasa-arvoisesta koulutuksesta ja teollisuuden kasvava työvoiman tarve vaikuttivat myös koulu-

tuksen institutionaalistumiseen ja keskittymiseen julkiselle sektorille. (Kivinen & Peltomäki 1999.) Oppisopimuskoulutus ei kuitenkaan saanut vastaavaa tukea, ja koulutus eriytyi työelämästä (Kivinen & Peltomäki 1999). 1980-luvulla koulutuksen ja työelämän eriytynyt suhde alettiin nähdä haasteena, mutta vailla koulutusperinteitä työnantajat tyytyivät jättämään koulutuksen valtion ja kuntien vastuulle (Kivinen & Peltomäki 1999). Vaikka koulutuksessa painotettiin 1990-luvulle saakka institutionalisoitunutta oppimista, useiden muutosten ja trendien seurauksena myös työssäoppimisen järjestelmää alettiin samanaikaisesti kehittää (Virtanen 2013). Oppisopimuskoulutuksen tehtävänä on viime vuosikymmeninä kuitenkin ollut lähinnä institutionaalisen koulutusjärjestelmän aukkojen paikkaaminen, aikuisten koulutus sekä talouden taantumien aikoina myös työllisyyspolitiikan tukeminen (Kivinen & Peltomäki 1999).

Tällä hetkellä oppisopimuskoulutus voidaan nähdä aikuisten ammatillisena lisäkoulutuksena, jonka kohderyhmänä ovat jo työllistyneet henkilöt (Haapakorpi & Virtanen 2015; Stenström & Virolainen 2014). Esimerkiksi vuonna 2014 noin 80 prosenttia oppisopimusopiskelijoista oli 25 vuotta täyttäneitä ja ainoastaan noin 20 prosentilla opintonsa aloittaneista ei ollut perusteen jälkeistä tutkintoa (Kumpulainen 2016, 10, 22). Opintojen aloituksesta viiden vuoden tarkastelujakson aikana oppisopimuskoulutuksen suoritti tutkintoon asti keskimäärin vain 54 prosenttia opiskelijoista, vaikka tutkintojen suorittamiseen liittyykin merkittäviä alue- ja alakohtaisia eroja (Kumpulainen 2016, 35). Oppisopimuskoulutusta on pyritty kehittämään myös nuorten koulutusmuotona (ks. esim. Jauhola 2015), mutta sen asema on edelleen marginaalinen (Haapakorpi & Virtanen 2015; Mazonod 2016; Stenström & Virolainen 2014). Oppisopimuskoulutuksen hyödyntäminen on jäänyt vähäiseksi esimerkiksi yritysten taloudellisten tekijöiden, mutta myös heikon koulutuskulttuurin sekä epäselvien mielikuvien vuoksi (Norontaus 2016). Toisen asteen ammatillisen koulutuksen uudistus pyrkii kuitenkin lisäämään työpaikkojen hyödyntämistä oppimisympäristöinä (HE 39/2017). Uudistuksen myötä työpaikalla järjestettävä koulutus voidaan

toteuttaa oppisopimuskoulutuksena tai ei-työsopimussuhteina koulutuksena koulutusopimukseen perustuen (Laki ammatillisesta koulutuksesta 531/2017). Työpaikkojen lisääntyvä hyödyntäminen oppimisympäristöinä edellyttää syvempää ymmärrystä työyhteisöistä ja niiden sosiaalisista prosesseista. Vaikka työpaikalla tapahtuva oppiminen ei itsessään ole uusi ilmiö, asemoituu tämän päivän oppisopimuskoulutus uudenaikaiseen fyysiseen ja sosiaaliseen ympäristöön edellyttäen myös uudenlaista tietoa yksilön ja yhteisön välisestä vuorovaikutuksesta erilaisissa työelämän konteksteissa. Toisaalta on muistettava, että työelämän ja ammattien muuttuessa tulevaisuudessa työtä tehdään entistä yksilöllisemmällä tavoilla suhteessa aikaan, paikkaan ja yhteisöön (Järvensivu & Alasoini 2012).

Tässä artikkelissa tarkastelemme oppisopimusopiskelijoiden ja työyhteisön jäsenten näkemyksiä ja kokemuksia osallistumisen ja osallisuuden toteutumisesta oppisopimuskoulutuksessa. Tutkimus vastaa seuraaviin kysymyksiin:

1. Miten oppisopimusopiskelijat kuvaavat osallistumistaan ja osallisuuttaan työpaikoilla ja oppilaitoksessa?
2. Millaisia haasteita oppisopimusopiskelijan osallistumiseen ja osallisuuteen liittyy työyhteisöissä?

Tutkimuksen toteutus

Tutkimusaineisto on kerätty sosiaali- ja terveystieteiden alan työpaikoilla ($N=10$) vuonna 2015 (ks. taulukko 1). Valitut alat tarjoavat monipuolisen tutkimuskohteen: aiemmissä tutkimuksissa (Virtanen 2013, 2014) on muun muassa havaittu, että koulutusmyönteisenä näyttäytyvällä sosiaali- ja terveystieteiden alalla opiskelijat arvioivat käyttävänsä monipuolisesti erilaisia ohjaus- ja arviointitapoja sekä oppimisen muotoja, kun taas hyötyajattelua heijastelevan tekniikan alan opiskelijat sijoittuvat toiseen ääripäähän. Tutkimukseen osallistui sosiaali- ja terveystieteiden alalta viisi hoivakotia, joista yksi oli pieni (alle 50 henkilöä) ja neljä keskisuuria (alle 250 henkilöä). Tekniikan alan viisi työpaikkaa olivat kolme keskisuurta ra-

kennus- tai kiinteistöalan yritystä ja kaksi pientä metallialan yritystä. Jokaisessa työpaikassa haastateltiin yhtä oppisopimusopiskelijaa, työnantajaa, työpaikkakouluttajaa sekä oppisopimusopiskelijan kanssa työskentelevää henkilöä. Laadullinen tutkimusaineisto koostuu yhteensä 40 yksilöhaastattelusta, joista puolet kerättiin sosiaali- ja terveysalalta ja puolet tekniikan alalta.

Taulukko 1. Tutkimukseen osallistuneiden taustatiedot

Oppisopimuskoulutuksen työyhteisön edustajat (N=40)				
Sosiaali- ja terveysala: työpaikat (n=5), osallistujat (n=20)				
	Oppisopimusopiskelija	Työntekijä	Työpaikkakouluttaja	Työnantaja
Ikä ka (kh)	33.0 (7.7)	39.6 (12.1)	46.4 (10.1)	54.6 (6.5)
Sukupuoli mies n (%)	1 (20.0)	1 (20.0)	2 (40.0)	1 (20.0)
nainen n (%)	4 (80.0)	4 (80.0)	3 (60.0)	4 (80.0)
Työkokemus nykyisessä työssä ka (kh)	1.9 (2.4)	5.5 (3.6)	8.2 (7.4)	12.2 (8.2)
Työkokemus yhteensä ka (kh)	7.9 (2.5)	11.9 (5.7)	20.4 (6.4)	33.0 (7.0)
Tekniikan ala: työpaikat (n=5), osallistujat (n=20)				
	Oppisopimusopiskelija	Työntekijä	Työpaikkakouluttaja	Työnantaja
Ikä ka (kh)	24.8 (3.3)	43.0 (10.6)	40.6 (11.5)	56.0 (6.5)
Sukupuoli mies n (%)	4 (80.0)	5 (100.0)	4 (80.0)	5 (100.0)
nainen n (%)	1 (20.0)	0 (0.0)	1 (20.0)	0 (0.0)
Työkokemus nykyisessä työssä ka (kh)	2.5 (1.8)	13.4 (10.9)	14.2 (9.0)	14.4 (11.0)
Työkokemus yhteensä ka (kh)	5.9 (2.9)	25.8 (8.4)	21.4 (14.0)	36.6 (10.3)

Haastatteluteemat käsittelivät ammatillista osaamista, työpaikkaa oppimisympäristönä sekä oppisopimuskoulutusta kokonaisuutena, joskin yksittäiset haastattelukysymykset vaihtelivat eri toimijoiden välillä. Laajempaa tutkimusaineistoa on hyödynnetty tarkasteltaessa oppisopimuskoulutustoimijoiden käsityksiä ammatillisesta osaamisesta sekä kokemuksia työpaikalla tapahtuvasta oppimisesta ja ohjauksesta (Pylväs, Nokelainen & Rintala 2017). Tässä artikkelissa tarkastelemme erityisesti oppisopimusopiskelijan asemaa ja osallisuutta työyhteisössä ja oppilaitoksessa (haastattelu-

kysymyksinä esim. Miten näet oman asemasi työyhteisössä muiden työntekijöiden joukossa? Miten koet muiden työyhteisön jäsenten suhtautuvan sinuun? Koetko kuuluvasi opiskelijoiden yhteisöön?) sekä muiden työyhteisön jäsenten näkemyksiä opiskelijan osallisuudesta (esim. Miten näet oppisopimusopiskelijan aseman työyhteisössä verrattuna muihin työntekijöihin? Miten opiskelijan läsnäolo vaikuttaa muun työyhteisön toimintaan?). Haastattelujen kesto vaihteli 20 minuutista 60 minuuttiin. Tulososioon on sisällytetty otteita haastatteluaineistosta. Anonymiteetin varmistamiseksi haastateltujen sukupuolta ja ikää ei mainita aineistositaattien yhteydessä.

Haastattelut litteroitiin analyysia varten. Aineiston analyysi perustui temaattiseen analyysiin, joka pyrkii tunnistamaan, kuvaamaan ja tulkitsemaan aineistosta löytyviä rakenteita ja säännönmukaisuuksia eli teemoja (Braun & Clarke 2006; Vaismoradi, Turunen & Bondas 2013). Temaattinen analyysi ja sisällönanalyysi ovat samankaltaisia, mutta temaattinen analyysi ei tavoittele aineiston kvantifiointia, mikä puolestaan on mahdollista sisällönanalyysissä (Vaismoradi ym. 2013). Analyysin alkuvaiheessa aineistosta koodattiin tutkimuskysymysten ohjaamana merkittäviksi tulkittuja analyysiyksiköjä (esim. lause, kappale, ajatus). Näiden perusteella koottiin alustavia teemoja. Lopulta teemoja tarkasteltiin vielä suhteessa koodeihin ja edelleen koko aineistoon. Temaattinen analyysi toteutettiin pääsääntöisesti aineistolähtöisesti tutkimuskysymysten ohjaamana, mutta teemojen nimeäminen ja niiden välisten suhteiden hahmottelu perustui myös teoriataustaan ja aiempaan tutkimukseen. Näin ollen temaattinen analyysi voidaankin nähdä josain määrin sekä induktiivisena että deduktiivisena lähestymistapana. (Braun & Clarke 2006; Vaismoradi ym. 2013.)

Tulokset

Tulososion ensimmäisessä osiossa tarkastellaan oppisopimusopiskelijoiden näkemyksiä osallistumisesta ja osallisuudesta oppisopimuskoulutuksessa. Opiskelijanäkökulma kohdistuu sekä työ- että

opiskelijayhteisöihin. Tulosten toinen osio keskittyy työyhteisöihin. Tulokset käsittelevät osallistumiseen ja osallisuuteen liittyviä haasteita, jotka kytkeytyvät työnkuvaan, työyhteisöön sekä opiskelijan aktiivisuuteen ja itseohjautuvuuteen.

Oppisopimusopiskelijan osallistuminen ja osallisuus

Oppisopimusopiskelijoiden kokemuksissa osallisuudesta korostui erityisesti työyhteisön merkitys. Sosiaali- ja terveystieteiden lähiohito- ja opiskelijat kokivat vahvasti toimivansa osana työyhteisöä ja olevansa osa työyhteisöä. Tekniikan alalla rakennus- ja metallialan tutkintoja suorittavien oppisopimusopiskelijoiden käsitykset osallisuudestaan työyhteisöön vaihtelivat. Osa opiskelijoista koki olevansa täysivaltaisia työyhteisön jäseniä, kun taas osa näki itsensä enemmän perifeerisessä asemassa työyhteisössä, mikä heijastui toiminta- ja vaikuttamismahdollisuuksiin yhteisössä (ks. Lave & Wenger 1991).

Hyvin oon päässy joukkoon. Totta kai se opiskelijarooli sieltä pais-
taa varmastikin. Toisille se kestää enemmän antaa sitä luottamus-
ta ja aikaa ja toisilla sitte on päässy vähä nopeemminki. (Oppisopi-
musopiskelija_3_sote)

No mä koen olevani työntekijä, mut sit taas mua pidetään opiskeli-
jana, että se on vähän... Tai no niinhän mä oon opiskelija mutta kyl-
lä mä koen ite olevani ainakin jo ihan työntekijä. (Oppisopimusopis-
kelija_9_tekniikka)

Suhteessa oppilaitoksen opiskelijayhteisöön käsitykset osallistu-
misesta ja osallisuudesta vaihtelivat. Opiskelijoiden elämäntilanne
ja muut henkilökohtaiset tekijät, kuten poissaolot ja oppisopimus-
koulutuksen keskeytykset, aikaansaivat jatkuvaa muutosta opin-
toryhmiin. Näiden seurauksena ryhmä ei välttämättä tullut opis-
kelijalle tutuksi. Toisaalta yksittäisten oppilaitoksessa vietettyjen
päivien aikana ei ehtinyt riittävästi tutustumaan toisiin opiskeli-
joihin. Keskeisenä opiskelijayhteisöön kuulumisen haasteena ko-
ettiin myös vaihtelevat osaamisalat ja ammatillisen osaamisen erot,

mikä osaltaan esti yhteenkuuluvuuden tunnetta. Muutoksista, kii-reestä ja osaamiseroista huolimatta osa opiskelijoista koki opiskeli-jayhteisön tarjoavan mahdollisuuden uuden oppimiseen keskuste-lujen ja vuorovaikutuksen kautta. Yhteistyön ja vuorovaikutuksen muiden opiskelijoiden kanssa nähtiin myös tarjoavan vertaistukea opintoihin. Vuorovaikutus muiden opiskelijoiden kanssa keskittyi lähipäiviin, sillä vain muutama oli yhteydessä toisiin opiskelijoihin myös sosiaalisen median välityksellä. Huomattavaa kuitenkin on, että suurin osa haastateltavista ei edes kaivannut osaksi opiskelijayhteisöä.

No en oikeestaan että, must se oli vaan enemmän et mä olin tääl-lä töissä ja sit mä kävin vaan sieltä keräämässä ne teoriat ja sit se oli vaan siinä, et ei siinä mitään semmosta yhteisöä ollu. (Oppisopi-musopiskelija_9_tekniikka)

Niin en mä tiää, ku se on vaihtunu se porukka niin usein kuitenkin sii-nä matkan varrella. Sillon alkuun oli just semmonen et joo tää on meidän luokka mut sit ne, sit se kuiteskin meni pirstaleiks tai sil-lain. — Niin moni on, ollu sillai et ne on periaatteessa ollu just jo-tain koneistajia, et ne on ollu niin eri tasolla siinä osaamisessansa. (Oppisopimusopiskelija_7_tekniikka)

Osallistumisen ja osallisuuden haasteet työyhteisöissä

Työyhteisöissä osallistuminen tuottaviin ja merkityksellisiin teh-täviin nähtiin oleellisena osana oppisopimuskoulutusta. Osallis-tumisen mahdollisuuksissa ilmeni kuitenkin joitakin alakohtaisia eroja, jotka liittyivät erityisesti työnkuvien ja ympäristön eroavai-suuksiin. Sosiaali- ja terveystalalla työnantajat edellyttivät taloudel-lisista syistä ja työsopimussuhteeseen perustuen laajaa ja nopeaa osallistumista ammattialan tehtäviin, mikä korostui myös muiden työyhteisön jäsenten näkemyksissä. Työpaikkakouluttajat ja muut työntekijät näkivät haasteellisena sen, että oppisopimusopiskeli-jalta edellytetään heti alkuvaiheessa siirtymää vastuullisiin tehtä-viin, vaikka opiskelijoiden tulisi saada erehtyä, harjoitella, pohtia ja hämmästellä. Toisaalta sosiaali- ja terveystalalla työyhteisöön ja

tehtäviin osallistuminen nähtiin myös helppona ja luontevana prosessina.

Täältä talouden puoleltahan minä nään heidät työntekijänä, joka hankkii itselleen lisää osaamista. Koska oikeesti me ei voitais koskaan oikeestaan ottaa ketään oppisopimukseen opiskelemaan johonkin ammattiin, jos me ei voitais käyttää heitä työntekijöinä. (Työnantaja_1_sote)

Ehkä se ensimmäinen kuukausi, hän oli ehkä enemmän semmissä opiskelijaroolissa siinä. Mutta kyllä hän on ihan meillä vahvuudessa siinä missä mekin. Tekee ihan samoja asioita siinä missä mekin, paitsi lääkehoitoo. Kyl mä nään et se on ihan tasavertasesa asemassa meiän kanssa. Eikä me olla tehty siitä mitään numero et hän on opiskelija. (Työpaikkakouluttaja_3_sote)

Tekniikan alalla osallistuminen alan tehtäviin näyttäytyi osin haasteellisena, sillä joissakin tapauksissa oppisopimusopiskelija ei pääsyt osoittamaan osaamistaan ja etenemään haastavammaksi koettuihin ja itsenäisempiin tehtäviin. Metallialan tuotantotehtävissä opiskelijoiden osallistuminen tuotannon asiakastöihin nähtiin myös taloudellisena riskinä, minkä vuoksi heidän osallistumisensa nähtiin vaativan paljon ohjausresursseja. Sen sijaan rakennuslalla työ organisoitiin siten, että oppisopimusopiskelijat toimivat apumiehenä kokeneemman työntekijän rinnalla ja siirtymä ammattialan tehtäviin tapahtui vähitellen helppojen ja riskittömien tehtävien kautta.

Onhan se lähettävä sieltä alkutekijöistä, tavallaan voisko sanoo että hanttihommista periaatteessa liikkeelle. Mutta taas sitte ku aatellaan sitä, että onhan meillä semmosia jotka on.. miten sen aattelee että mikä on hanttihomma, ku meillä on miehiä jotka on olu 20 vuotta talossa ja ne tekee niitä samoja. (Työpaikkakouluttaja_10_tekniikka)

Myös työyhteisöjen kulttuuri ja käytännöt mahdollistivat osallistumisen ja osallisuuden eri tavoin. Useissa tapauksissa viitattiin oppisopimusopiskelijoiden ja kokeneempien työntekijöiden väliseen jännitteeseen. Sosiaali- ja terveysalalla ilmapiiri nähtiin kuitenkin

tasa-arvoisena, mikä mahdollistaa jopa vastavuoroisen oppimisen. Tekniikan alalla oppisopimusopiskelijaa ei nähty täysin tasa-arvoisena työyhteisön jäsenenä työnantajien ja työpaikkakouluttajien näkökulmasta.

Kyllähän se on oppisopimusopiskelija tai sit oot sä uus työntekijä, ni oothan sä aina vähän semmonen, tietyllä tavalla.. miten sen sa-nois.. saat vähän epämiellyttävämpiä työtehtäviä. Menehän se sil-leen. Et oo ehkä ihan samalla tasolla, siis silleen.. Ymmärrät var-maan mitä tarkotan. Pitää todistaa, todistella vähän ja ansaita sitä omaa paikkaa täällä ja tälle. Ei ketään sorsita eikä mitään, mutta se on vähän semmonen. Ei siinä asemassa sinänsä mitään vikaa oo. Mutta kyllähän sua vähän lapsena pidetään silleen. (Työpaikka-kouluttaja_8_tekniikka)

Jotkut opiskelijat viisastelee sitten kun on jotain oppinu, noille van-hemmille, että "ei kuule, ku se on näin". Ja se on ihan hyväki et on semmosta aika avointa ja reilua se, et uskalletaan sanoo. Mun mie-lestä se kertoo just työilmapiirin semmosesta tietynlaisesta avoi-muudesta ja reiluudesta. Et sallitaan monenlaista näkemystä. Totta kai se on sitte mulle aina vähän haastavampaa, pitää sitten sitä ka-sassa. (Työpaikkakouluttaja_2_sote)

Vuorovaikutusmahdollisuuksia tarkasteltaessa alat näyttäytyivät erilaisina. Sosiaali- ja terveysalalla kynnys vuorovaikutukseen oli matalalla ja vuorovaikutussuhteet ulottuivat moniammatillisen työyhteisön (esim. lähihoitajat, laitoshuoltajat) lisäksi asiakkaisiin. Tekniikan alan hierarkisemmassa yhteisössä työnjohdolla oli merkittävä rooli vuorovaikutuksen toteutumisessa. Työpaikkakoulut-tajan nimeämisestä huolimatta työn organisointi (mm. työvuoro-suunnittelu, työpiste) ja kiire vaikuttivat siihen, keneltä oppisopi-musopiskelijat pyysivät ja saivat tukea ja apua. Kahdessa työyhteisössä opiskelijan vuorovaikutussuhteisiin heijastui myös sukulai-suussuhde toiseen työyhteisöön jäsenen, mikä toisaalta myös hei-kensi vuorovaikutusta muun työyhteisön kanssa.

No jos on niinku, vanhempia kirvesmiehiä niin sit se on lähinnä aina se mun työparina niin se on sit aina lähinnä se joka mua sit neuvoo siinä tilanteessa, kun me mennään. Mehän ollaan tosi vähän tehty

ton mun työpaikkaohjaajan kans töitä että mul on yleensä ollu vaan joku vanhempi, kirvesmies joka on sitten kertonu mulle aina mitä tehään seuraavaks. (Oppisopimusopiskelija_9_tekniikka)

Työyhteisöissä vuorovaikutus perustui opiskelijan aktiiviseen rooliin. Opiskelijan osallisuuteen liittyivät toisaalta yksilölliset persoonallisuuden piirteet, mutta erityisesti sekä opiskelijat että työyhteisön jäsenet korostivat itseohjautuvuuden ja opiskelijan oman motivaation merkitystä osallisuuden toteutumisessa. Opiskelijan itseohjautuvuus nostettiin keskeiseen asemaan myös suhteessa osallistumiseen ja oppimiseen, sillä oppisopimusopiskelijan odotettiin itse pyytävän apua, neuvoja ja tukea työtehtäviä suorittaessaan.

Se vähän riippuu oppilaasta, et miten se itte hakeutuu tuolla. Monet puhuu ku kiviyömiehet jo tuolla muutaman kuukauden jälkeen ja jotkut on viel vuoden jälkeen aika hissukseen. Mutta ei niitäkään pitkään katota ja pidetään huolta, mut ne on niin persoonasta kiinni. Toinenhan ajaa itensä heti sisään ja toisel kestää pidempään. (Työntekijä_9_tekniikka)

Tää kollegoiden tuki varmaan on yks iso juttu. Tässä on paljon osavaa ammattikuntaa. He on ollu aina valmiita vastaan kysymyksiin ja auttamaan. Se on yks iso. Ja sitte se oma tietysti halu oppia, se on kaiken lähtökohta. (Oppisopimusopiskelija_6_sote)

Kokonaisuutena tutkimustulokset osoittivat, että osallisuuden kokemukseen sisältyvät hyväksyntä, arvostus ja ryhmään kuulumisen tunne ovat yhteydessä työssä suoriutumiseen; miten opiskelija itse tai työyhteisön tuella pystyy vastaamaan työtehtävään liittyviin odotuksiin tai vaatimuksiin. Sosiaali- ja terveystieteiden opiskelijat siirtyivät nopeasti vastuullisiin tehtäviin, mutta työyhteisöissä luotettiin siihen, että opiskelijat selviävät tehtävistä työyhteisön tuella. Vaikka vastuulliset tehtävät koettiin pääasiassa positiivisina, aiheutti tehtävien vastuullisuus toisaalta myös epävarmuutta. Jotkut opiskelijat totesivatkin, että erityisesti opintojen alkuvaiheessa he olisivat tarvinneet enemmän työyhteisön tukea. Toisaalta opiskelijan odotetaan vastaavan työnkuvan ja työyhteisön vaatimuksiin aktiivisesti ja itseohjautuvasti, mutta toisaalta osallistuminen ja osallisuus työyhteisössä edellyttää tukea, arvostusta ja hyväk-

syntää. Näin ollen osallisuus, samoin kuin osallistuminen ja oppiminenkin, muodostuvat työyhteisössä vastavuoroisen prosessin seurauksena.

Tulosten pohdintaa

Tutkimustulokset vahvistivat näkemystä siitä, että osallistuminen, oppiminen ja osallisuus liittyvät tiiviisti toisiinsa työyhteisössä. On kuitenkin huomattava, että oppisopimusopiskelijat kokivat olevansa osallisia erityisesti työyhteisöissä, vaikka eri alojen osallistumis- ja oppimismahdollisuudet näyttivät eroavan toisistaan. Keskeisiksi osallistumista ja osallisuutta edistäviksi tekijöiksi, ja samalla useiden työyhteisöjen haasteiksi, nousivat työnkuvaan (työn vastuullisuus, haastavuus, monipuolisuus ja tuottavuus), työyhteisön kulttuuriin ja käytäntöihin (tasa-arvoisuus, hierarkia, vuorovaikutus ja koulutuksen organisointi) sekä opiskelijaan (itseohjautuvuus ja motivaatio) liittyvät tekijät. Aiemman työssäoppimisesta tehdyn tutkimuksen (Virtanen 2013, 2014) mukaisesti myös tässä tutkimuksessa erityisesti sosiaali- ja terveysala näyttäytyi osallistumista ja osallisuutta tukevana ammattialana. Sosiaali- ja terveysalalla oppisopimusopiskelijat kokivat olevansa täysivaltaisia työyhteisön jäseniä, jotka työskentelivät itsenäisissä ja vastuullisissa tehtävissä. Tekniikan ala näyttäytyi puolestaan oppimista rajoittavampana, kun tarkastellaan työyhteisön tarjoamia mahdollisuuksia itsenäiseen työskentelyyn ja etenemistä vastuullisempiin tehtäviin. Tutkimuksen aineistoon liittyen on huomattava, että oppisopimusopiskelijoilla oli keskimäärin jo noin kaksi vuotta työkokemusta nykyisessä tehtävässä. Näin ollen he eivät olleet uusia työyhteisön jäseniä. Sosiaali- ja terveysalalla ainoastaan kaksi opiskelijaa oli ollut alle puoli vuotta omassa työyhteisössään, kun taas tekniikan alalla kaksi opiskelijaa oli ollut työyhteisössä alle vuoden. Jatko-tutkimuksissa alakohtaisia eroja tulisi tarkastella entistä kattavammilla aineistoilla. Pitkittäisasetelmien avulla on mahdollista tarkastella myös osallisuuden kokemuksen kehittymistä ja mahdollisia muutoksia opintojen aikana.

Näyttää siltä, että työsopimussuhteeseen perustuva oppisopimuskoulutus tukee osallisuuden kokemusta työyhteisössä, mutta osallisuuden kokemus suhteessa opiskelijayhteisöön jää usein pinnalliseksi tai puuttumaan kokonaan. Eri kouluasteiden tutkimuksissa on tarkasteltu esimerkiksi opettajan roolia kuulumisen tunteen mahdollistajana (Ulmanen 2017; Van Houtte & Van Maele 2012). Toisaalta ammatillisessa koulutuksessa suhteet muihin opiskelijoihin on koettu jopa opettajan roolia tärkeämpänä (Elffers, Oort & Karsten 2012). Ammatillisen koulutuksen reformissa entistä joustavammat ja yksilölliset opintopolut sekä monipuolisemmat fyysiset ja digitaaliset oppimisympäristöt voivat olla myös haaste opettajien ja opiskelijoiden väliselle sekä opiskelijoiden keskinäiselle vuorovaikutukselle. Oppilaitosten ja työpaikkojen oppimisympäristöissä tulisikin edelleen kiinnittää huomiota siihen, kuinka opettajat ja opiskelijayhteisö voivat tukea osallisuutta. Yhä enenevässä määrin myös digitaaliset oppimisympäristöt ja verkko-opetus haastavat opettajat miettimään keinoja opiskelijoiden osallisuuden sekä vuorovaikutuksen ja yhteistyön edistämiseksi (ks. Thomas, Herbert & Teras 2014).

Oppisopimusopiskelijalta odotetaan palkallisena työntekijänä täyttä osallistumista opintojen alkuvaiheesta lähtien, mikä haastaa oppisopimuskoulutuksen kehittämisen ja laajentamisen nuorten koulutusmuotona (ks. myös Rintala, Nokelainen & Pylväs 2017). Tutkimustulosten perusteella voidaan kuitenkin todeta, että osallistumisen ja osallisuuden edellytyksiä on syytä edistää niin oppisopimuskoulutuksessa kuin työpaikoilla yleisestikin. Työyhteisön vuorovaikutus ja tuki näyttäytyivät merkittävinä tekijöinä osallisuuden kokemuksen taustalla kuten aiemmissakin tutkimuksissa (ks. esim. Fuller & Unwin 2003; Levett-Jones ym. 2009). On kuitenkin huomattava, että tässä aineistossa oppisopimusopiskelijoilla oli jo entuudestaan työkokemusta, jonka tiedetään edistävän kokemusta osallisuudesta (Chan 2016; Nägele & Neuenschwander 2016). Työyhteisöjen prosesseja kehittämällä voidaan vaikuttaa sekä koulutuksen keskeyttämisten ennaltaehkäisyyn että laadukkaiden oppimisympäristöjen kehittämiseen. Erityisenä tulevaisuuden haasteena voidaan nähdä työyhteisöjen lisääntyvä käytännön vastuu

koulutuksen organisoinnissa työpaikoilla ja työntekijöiden pedagogisen tuen tarve, mikä puolestaan korostaa oppilaitosten ja ammatillisten opettajien tärkeää roolia pedagogisen tiedon tuottajana ja välittäjänä. Toisaalta koulutuksen kehittämisessä on myös syytä miettiä keinoja, joiden avulla voidaan edistää opiskelijoiden itseohjautuvuutta.

Lähteet

- Akkerman, S. F. & Bakker, A. 2011. Boundary crossing and boundary objects. *Review of Educational Research* 81 (2), 132–169.
- Bailey, T. R., Hughes, K. L. & Thornton Moore, D. 2004. *Working knowledge. Work-based learning and education reform*. New York, NY: Routledge-Falmer.
- Baumeister, R. F. & Leary, M. R. 1995. The need to belong. Desire for interpersonal attachments as a fundamental of human motivation. *Psychological Bulletin* 117 (3), 497–529.
- Billett, S. 2001. Learning through work: Workplace affordances and individual engagement. *Journal of Workplace Learning* 13 (5), 209–214.
- Billett, S. 2004. Workplace participatory practices: Conceptualising workplaces as learning environments. *Journal of Workplace Learning* 16 (6), 312–324.
- Billett, S. 2016. Apprenticeship as a mode of learning and model of education. *Education + Training* 58 (6), 613–628.
- Braun, V. & Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3 (2), 77–101.
- Chan, S. 2013. Learning through apprenticeship: Belonging to a workplace, becoming and being. *Vocations and Learning* 6 (3), 367–383.
- Chan, S. 2016. Belonging to a workplace: First-year apprentices' perspectives on factors determining engagement and continuation through apprenticeship. *International Journal for Educational and Vocational Guidance* 16 (1), 9–27.
- Effers, L., Oort, F. J. & Karsten, S. 2012. Making the connection: The role of social and academic school experiences in students' emotional engagement with school in post-secondary vocational education. *Learning and Individual Differences* 22 (2), 242–250.
- Fjellström, M. & Kristmansson, P. 2016. Learning as apprentice in Sweden: A comparative study on affordances for vocational learning in school and work life apprentice education. *Education + Training* 58 (6), 1–15.
- Fuller, A. & Unwin, L. 2003. Learning as apprentices in the contemporary UK workplace: Creating and managing expansive and restrictive participation. *Journal of Education and Work* 16 (4), 407–426.
- Haapakorpi, A. & Virtanen, P. 2015. *Oppisopimusjärjestelmän toimivuus ja vaikuttavuus arviointi*. Helsinki: Helsingin yliopisto, Koulutus- ja kehittämiskeskus Palmenia.

- HE 37/2017. Hallituksen esitys eduskunnalle laiksi ammatillisesta koulutuksesta ja eräksi siihen liittyviksi laeiksi. https://www.eduskunta.fi/FI/vaski/HallituksenEsitys/Sivut/HE_39+2017.aspx. (Luettu 1.9.2017.)
- Heikkinen, A. 1995. Lähtökohtia ammattikasvatuksen kulttuuriseen tarkasteluun: Esimerkkinä suomalaisen ammattikasvatuksen muotoutuminen käsityön ja teollisuuden alalla 1840–1940. *Acta Universitatis Tamperensis Ser. A* 442.
- van Houtte, M. & Van Maele, D. 2012. Students' sense of belonging in technical/vocational schools versus academic schools: The mediating role of faculty trust in students. *Teachers College Record* 114 (7), 1–36.
- Jauhola, L. 2015. Vauhtia, vaikei vielä volyymia, nuorten oppisopimuskoulutuksen kehittämiseen ja toteutukseen. Katsaus nuorten työssäoppimis- ja oppisopimusuudistuksen toimenpideohjelman arvioinnin tuloksiin. *Ammattikasvatuksen aikakauskirja* 17 (4), 82–92.
- Järvensivu, A. & Alasoini, T. 2012. Mitä työelämän muutoksen tulevaisuussuuntautunut tutkimus voisi olla? *Työpoliittinen aikakauskirja* 3, 31–43.
- Kivinen, O. & Peltomäki, M. 1999. On the job or in the classroom? The apprenticeship in Finland from the 17th century to the 1990s. *Journal of Education and Work* 12 (1), 75–93.
- Klemelä, K. 1999. Ammattikunnista ammatillisiin oppilaitoksiin. Ammatillisen koulutuksen muotoutuminen Suomessa 1800-luvun alusta 1990-luvulle. Koulutussosiologian tutkimuskeskuksen raportti 48.
- Korhonen, V. 2012. Towards inclusive higher education? Outlining a student-centered counselling framework for strengthening student engagement. Teoksessa S. Stolz & P. Gonon (toim.) *Challenges and Reforms in Vocational Education – Aspects of Inclusion and Exclusion*. Bern: Peter Lang, 297–320.
- Kumpulainen, T. 2016. Key figures on apprenticeship training in Finland. Opetushallitus. Publications 2016:7. http://www.oph.fi/download/177964_Key_figures_on_apprenticeship_training_in_Finland.pdf. (Luettu 1.9.2017.)
- Laki ammatillisesta koulutuksesta 513/2017. Annettu 11.8.2017.
- Laukia, J. 2013. Tavoitteena sivistynyt kansalainen ja työntekijä. *Ammattikoulu Suomessa 1899–1987*. Humanistinen tiedekunta, Helsingin yliopisto.
- Lave, J. & Wenger, E. 1991. *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Levett-Jones, T. & Lathlean, J. 2008. Belongingness: A prerequisite for nursing students' clinical learning. *Nurse Education in Practice* 8 (2), 103–111.
- Levett-Jones, T., Lathlean, J., Higgins, I. & McMillan, M. 2009. Staff-student relationships and their impact on nursing students' belongingness and learning. *Journal of Advanced Nursing* 65 (2), 316–324.
- Mazenod, A. 2016. Education or training? A comparative perspective on apprenticeships in England. *Journal of Vocational Education & Training* 68 (1), 102–117.

- Nivala, E. & Rynänen, S. 2013. Kohti sosiaalipedagogista osallisuuden ideaalia. *Sosiaalipedagoginen aikakauskirja* 14 (1), 14–41.
- Norontaus, A. 2016. Oppisopimuskoulutus yritysten tuottamana koulutuspalveluna: Tavoitteista vaikutuksiin. *Acta Universitatis Lappeenrantaensis* 693.
- Nägele, C. & Neuenschwander, M. P. 2016. Apprentice-trainer relationship and work group integration in the first months of an apprenticeship. *Empirical Research in Vocational Education and Training* 8 (4), 1–18.
- Pylväs, L., Nokelainen, P. & Rintala, H. 2017. Finnish apprenticeship training stakeholders' perceptions of vocational expertise and experiences of workplace learning and guidance. *Vocations and Learning*, 1–21. <https://link.springer.com/article/10.1007/s12186-017-9189-4>. (Luettu 6.11.2017.)
- Raivio, H. & Karjalainen, J. 2013. Osallisuus ei ole väline, palvelut ovat! Teoksessa T. Era (toim.) *Osallisuus – oikeutta vai pakkoa?* Jyväskylän ammattikorkeakoulun julkaisuja 156. <http://urn.fi/URN:ISBN:978-951-830-280-6>. (Luettu 1.9.2017.)
- Rintala, H., Nokelainen, P. & Pylväs L. 2017. Katsaus oppisopimuskoulutukseen instituutiona Saksassa, Englannissa ja Suomessa. *Kasvatus* 48 (2), 128–140.
- Stenström, M-L. & Virolainen, M. 2014. The current state and challenges of vocational education and training in Finland. Roskilde: Nord-VET. http://nord-vet.dk/indhold/uploads/report1b_fi.pdf. (Luettu 10.8.2017.)
- Swager, R., Klarus, R., van Merriënboer, J. J. G. & Nieuwenhuis, L. F. M. 2015. Constituent aspects of workplace guidance in secondary VET. *European Journal of Training and Development* 39 (5), 358–372.
- Tanggaard, L. (2007). Learning at trade vocational school and learning at work: boundary crossing in apprentices' everyday life. *Journal of Education and Work* 20 (5), 453–466.
- Thomas, L., Herbert, J. & Teras, M. 2014. A sense of belonging to enhance participation, success and retention in online programs. *The International Journal of the First Year in Higher Education* 5 (2), 69–80.
- Ulmanen, S. 2017. Miten kiinnittyä kouluun? Oppilaiden näkökulma koulutyöhön kiinnittymisen haasteisiin. *Acta Electronica Universitatis Tamperensis* 1792.
- Vaismoradi, M., Turunen, H. & Bondas, T. 2013. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences* 15 (3), 398–405.
- Virtanen, A. 2013. Opiskelijoiden oppiminen ammatillisen peruskoulutuksen työssäoppimisen järjestelmässä. *Jyväskylä Studies in Education, Psychology and Social Research* 473.
- Virtanen, A. 2014. Koulutusalat työssäoppimisen erilaisina oppimisympäristöinä. *Ammattikasvatuksen aikakauskirja* 16 (1), 10–27.
- Virtanen, A., Tynjälä, P. & Eteläpelto, A. 2012. Factors promoting vocational students learning at work: Study on student experiences. *Journal of Education and Work* 27 (1), 43–70.

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Vocational education and learners' experienced workplace curriculum

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Vocational Education and Learners' Experienced Workplace Curriculum

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Abstract

There has been a growing emphasis on providing students in vocational education and training (VET) with workplace experiences. School-based VET and apprenticeship training have been parallel routes in the Finnish VET system, but relatively little is known of their characteristics regarding students' experiences. This study addresses this research gap by investigating these two VET pathways and addressing the following research question: How do learners experience workplace learning on various learning pathways? This study further investigates three different vocational fields: social and health care, business and administration, and construction. The study was based on semi-structured individual interviews ($N=33$): 18 of the participants were students in school-based VET, and 15 were apprentices. The interview data were analysed with thematic analysis. The themes highlighted how the VET pathway builds a frame for participation that is then shaped by work practices and social practices and how, eventually, individuals alter boundaries to participation. The study implies that the two VET pathways, school-based VET and apprenticeship training, have significant differences. However, in the construction sector, differences between students' experiences of workplace learning seem to be less visible. Based on learning experiences, it seems that apprenticeship training and school-based VET cannot be considered parallel or interchangeable routes. This should be acknowledged because the recent reform of vocational upper secondary education aims to advance a flexible combination of school- and work-based pathways, and it can also be considered when discussing the coherence of VET systems.

Keywords Vocational education · Workplace learning · Curriculum · Student experiences

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Introduction

In vocational education and training (VET), apprenticeships and other forms of work-based learning have been promoted at the policy level in recent years (European Council 2018). This development requires understanding of how work-based learning experiences, such as apprenticeships or school-based VET including on-the-job training periods, are provided and made into effective learning opportunities. These both modes of education, school-based VET and apprenticeship training, co-exist in Finland, but in comparison to countries that mainly organise VET through apprenticeship training, Finland has mainly promoted school-based VET. This has been due to various historical developments, including the centralisation of schooling in order to support equal educational opportunities (Stenström and Virolainen 2018).

However, in full-time school-based VET, there has also been a growing emphasis on providing students with workplace learning experiences since the 1990s (Virolainen and Persson Thunqvist 2017). Until 2018, upper secondary school-based VET lasting 3 years usually included 6 months of instruction at the workplace (on-the-job learning). Next to school-based VET, apprenticeship training has complemented the VET system and provided an educational pathway mainly for adults (Mazenod 2016; Stenström and Virolainen 2018). Apprenticeship training has been tightly connected to regular employment because it is based on a fixed-term employment contract entitling the student to a salary based on an applicable collective agreement. Thus, apprentice pay has been rather high in comparison to other countries (cf. Ryan et al. 2013).

The reform of vocational upper secondary education, which came into force in 2018, aimed to further increase work-based learning, and thus, no minimum or maximum time was set for workplace learning in school-based VET. In the competence-based VET system, school-based VET and apprenticeships are officially parallel learning pathways as they follow the same national qualification requirements. Instead of final examinations to assure a common standard, competence is demonstrated and assessed in practical tasks during workplace learning. The reform of upper secondary VET has aimed to promote individual competence needs, and, thus, also instead of focusing on time served and a standardised approach, it has highlighted flexibility, including the flexible combining of school-based and work-based learning pathways (Finnish National Agency for Education 2018). These both pathways and qualifications provide eligibility for higher education. However, this article argues that the two learning pathways, school-based VET with on-the-job learning periods (currently via a training agreement) and apprenticeship training, cannot be considered as parallel or easily interchangeable based on learners' experiences of workplace learning.

In VET, as well as in the reform context, it should be noted that the kinds of workplace experiences that are provided to students, as well as their sequencing, duration and traditions, can have significant educational consequences. Identifying differences between VET pathways or vocational fields has been found to be challenging as the variance between individuals is often high (Poortman 2007). However, previous studies have suggested that diverse learning experiences are related to differences, for example, in competence and vocational identity development (Bound and Lin 2013; Grytnes et al. 2018; Virtanen et al. 2008, 2014a), creativity and

productivity at work (i.e. developing new methods and completing tasks) (Fjellström and Kristmansson 2016) and commitment to the occupation and organisation (Bound and Lin 2013). This study aims to contribute to an understanding of the nature of workplace learning experiences and how these differ across VET pathways, vocational fields and workplace settings. This study addresses the following research question: How do learners experience workplace learning on various learning pathways?

Theoretical Framework

Vocational curricula generally include both school-based and work-based learning. *Connectivity* (Guile and Griffiths 2001) and integrating practices and different forms of knowledge are usually considered essential for the development of vocational competence (Mikkonen et al. 2017; Tynjälä 2013). Often, the quality of workplace learning has been considered an issue, and, thus, learning in the workplace can benefit from being supplemented by experiences in school-based education (Aarkrog 2005; Akkerman and Bakker 2012; Onstenk and Blokhuis 2007). However, the dichotomy between school and work emphasises their different goals, rationales, and types of knowledge (Aarkrog 2005; Schaap et al. 2012). It seems that individuals' conceptions of connectivity or alignment between education and work are highly variable; while some consider learning experiences as separate, others may consider them complementary (Sappa and Aprea 2014). The principle of gradual release (Evans et al. 2013, p. 158) suggests that the sequencing of the elements should allow iterative development and ensure that school and workplace curricula are not separate sites of learning where it is the learner's task to connect theory and practice.

As a frame, this study considers workplace learning in VET as more or less intentionally organised activity towards full and effective work performance, with this being referred to as a *learning curriculum* (Lave and Wenger 1991), a *situated curriculum* (Gherardi et al. 1998) or a *workplace curriculum* (Billett 2006, 2011). This view of workplace learning as pathways of activities is based on Lave and Wenger's (1991) *legitimate peripheral participation*, which includes that learning must be situated in authentic, real-life contexts where learners or newcomers are allowed to interact with experts, and, eventually, the learner may become a full participant. Thus, this study takes a position in a socio-cultural paradigm and emphasises the importance of context, culture and the social aspects of learning (Lave and Wenger 1991; Billett 2004). More specifically, this study is rooted in learners' *experienced curriculum* (Billett 2006), i.e. what learners eventually experience and interpret when they participate in workplace learning in VET. According to Thornton Moore (2004), this type of curriculum of experience is shaped by the external environment covering other institutions and wider society, features of the organisation including roles, production processes and culture, but also by personal features of the learners, including educational histories or dispositions that they have when entering the workplace.

In workplaces, the sequencing of activities often includes the logic of increasing economic impact (Gherardi et al. 1998), a movement from activities with low

accountability levels, error costs and standing to tasks of higher accountability and standing (Billett 2006). However, Fjellström and Kristmansson (2016) compared construction worker and shop salesperson apprentices and found that apprentices in construction work often performed complex tasks with high accountability. In a similar manner, Reegård (2015) examined apprentices in the retail sector and noticed that they were given a great deal of autonomy and responsibility from early on. Although workplace learning is part of VET, it is not always intentionally structured, and educational goals may be overridden by workplace goals and activities (Fjellström and Kristmansson 2016). Goller et al. (2018) investigated novice aides' learning processes in nursing homes. They similarly noticed that a fast transition into productive work was expected to fully capitalise novice aides. Novice aides started with care-related activities and moved from simple cases to more demanding ones, minimising the consequences of errors and preventing discouragement and potential early dropout.

Progression can be promoted by support and guidance (Billett 2002, 2006; Mikkonen et al. 2017; Swager et al. 2015). Swager et al. (2015) underlined interaction and argued that guidance widely includes psychosocial support, structure-providing interventions (matching learners and trainers, as well as organising assessments) and didactical interventions to promote educational goals via goal-setting, selecting and sequencing tasks and providing support. Studies of workplace learning often emphasise the role of collaboration, interaction and shared practices, but students also tend to report that they learn alone (Virtanen et al. 2009). In practice, support and guidance are realised in varying ways. Reegård (2015) found that managers had no plan for organising training for retail apprentices, and this approach implied minimal instruction and guidance. However, granting responsibility to apprentices contributed to learning and self-confidence when the given responsibility was mastered. This shows that workplace learning can be characterised as *co-participation*, as an interplay between what opportunities are given and how learners are able to engage with the opportunities (Billett 2004, 2006). Learners' own abilities, motivation, goals and experiences shape participation and active engagement, and, for instance, the ability to demonstrate competence in activities is likely needed for movement to more demanding tasks (Billett 2006; Tynjälä 2013). In the Finnish context, Virtanen et al. (2014a) found through a survey that student-related individual factors were not considered equally important in relation to workplace learning outcomes in all vocational fields: individual factors, including motivational orientations and prior work experience, were especially related to workplace learning in the field of technology and transport.

The choice of engaging is also related to *agency* that is often considered as an individual feature or something that individuals do (Goller and Harteis 2017). Often, agency is considered relevant or even a necessary condition for learning, for example, novice aides were expected to actively seek information, feedback and social interaction to get access to new learning opportunities (Goller et al. 2018). Here, the focus is on these kinds of learners' agentic actions that may include versatile "self-initiated and goal-directed behaviours that aim to take control over the work environment and/or the acting individual's life" (Goller and Harteis 2017, p. 88). Agency is also influenced by the context (Eteläpelto

2017; Goller and Harteis 2017). For example, learners' engagement and agency can be influenced by providing them with a legitimate and influential role, allowing autonomy and independent work instead of a marginalised position, and by providing opportunities to observe others and to receive guidance (Bouw et al. 2019; Mikkonen et al. 2017). Regarding the VET system as a context, Grytnes et al. (2018) concluded that connectivity and learners' employment status during workplace learning varied in the construction sector in Danish and Swedish VET systems and, thus, affected safety practices adopted by learners. They found that Swedish students were novices for a longer time, had the right to voice concerns about safety and teachers acted as students' advocates, whereas Danish employed apprentices highlighted the role of the supervisors and considered safety standards as an expense and an ideal compared to practice.

Method

Context and Participants

The present study investigates and compares vocational students' experienced workplace curriculum on various VET pathways. This study focuses on three vocational fields: social and health care, construction, and business and administration. These fields were chosen to be studied further as previous quantitative studies in the Finnish VET and on-the-job learning context (Virtanen et al. 2008, 2014a, b) suggested that these fields have different workplace learning practices. These studies (Virtanen et al. 2008, 2014a, b) included wider vocational sectors, and it was found that, compared to the technology and transport sector (including construction), social services and the health care sector made more effort to integrate school and workplace learning, had more supportive and expansive learning environments and encouraged students' vocational identity development. The business and administration sector seemed to be located somewhere between the two above-mentioned fields (Virtanen et al. 2014b).

This study focuses on three vocational upper secondary qualifications: the vocational upper secondary qualification in social and health care, the vocational upper secondary qualification in construction and the vocational upper secondary qualification in business and administration. All of these qualifications include compulsory units and versatile specialisations or so called competence areas. The participants of this study included future practical nurses with versatile specialisations (apprentices focusing either on care for the elderly, children and youth care and education or mental health and substance abuse welfare work) or students yet to choose their specialisation, future builders and infrastructure builders and apprentices, and students focusing either on customer services and sales or financial and office services. The students in school-based VET were in their first year (business and administration) or second year of studies (social and health care, construction), and apprentices had mainly started their training in 2017, the year of data collection.

As mentioned in the introduction, both school-based VET and apprenticeship training exist in Finland. Of these two modes of education or pathways, school-based VET is the primary route, with apprenticeship training having an 18.47%

share of qualifications in 2017 (Education Statistics Finland 2018). Regarding initial preparation, Finland has mainly relied on the state-led, school-based model of VET, although the curriculum has included compulsory on-the-job learning periods (minimum of half a year for a three-year study period) in the 2000s (Virolainen and Persson Thunqvist 2017). In 2017, of the new students in apprenticeship training, only 14.75% were 15–24 year olds (Education Statistics Finland 2018). The sample (see Table 1) of this study consisted of 33 participants, of which 15 were apprentices and 18 were students in school-based VET. As Table 1 illustrates, the apprentices were older than the students in school-based VET, which is a noticeable characteristic of Finnish VET.

Data Collection and Analysis

Participants were informed about the study, and they voluntarily provided signed consent forms and permission to record the interviews. Their anonymity was ensured. The data were collected through semi-structured individual interviews, which were conducted at workplaces or at the vocational schools. The interviews included versatile themes and questions related to vocational expertise, workplace learning, education and work and future plans. This study focused on questions about learning experiences, for example: How would you describe your work community/communities? How would you describe your tasks? The apprentices' interviews lasted from 37 to 100 minutes, whereas the students' interviews were shorter, lasting from 37 to 63 min. The interviews were transcribed verbatim. The software programme NVivo was used to manage the data and the coding process.

Thematic analysis (TA) was chosen as a method because it is not bounded by research paradigms or theoretical commitments, and it can be applied to studying people's experiences in that it aims to identify, analyse and report patterns, i.e. themes, within data (Braun and Clarke 2006; Clarke and Braun 2017; Terry et al. 2017). The analysis began with a familiarisation process, during which the data

Table 1 Overview of the research participants ($N = 33$)

Mode of education	Participants	Vocational field		
		Social and health care	Business and administration	Construction
Apprenticeships	Apprentices n	7	4	4
Fixed-term employment relationship (min. 25 h per week), usually two contact days per month at vocational school	Male n	3	3	3
	Female n	4	1	1
	Age M (range)	38.8 (22–49)	24.5 (16–33)	20.5 (17–27)
School-based VET	Students n	6	6	6
Full-time study including on-the-job learning periods (often 5 weeks each, in total min. half a year for a three-year study period)	Male n	1	1	5
	Female n	5	5	1
	Age M (range)	17.5 (17–18)	16.8 (16–17)	17.7 (17–18)
	Students in total N	13	10	10

were read multiple times. This phase was followed by coding, with codes being the smallest units of analysis that capture relevant features of the data in relation to the research question (Clarke and Braun 2017). The coding was initially inductive, and the codes focused on students' experiences of the chosen VET pathway and workplace experiences. To emphasise this, the codes were formed from the students' perspective (e.g. "Student status allows me to seek guidance", "The community does not trust me", and "The teacher is the best person to assess my learning and competence"). After coding the items, the codes were compiled into list of codes to identify patterns and diversity. In this TA approach, based on Braun and Clarke (2006, see also Terry et al. 2017), the aim is not only to organise and summarise patterns but also to interpret these patterns and attempt to theorise the significance of the patterns, often in relation to the literature. Thus, the codes were combined and collapsed into themes centred on an idea or concept. During this phase, theme development was considered in relation to the literature and the entire dataset. This eventually led to an abductive analysis arising from the participants' experiences, but theoretical background was also acknowledged. The approach taken in this study emphasises that these themes do not emerge from the data. Rather, they are created by the researcher. Thus, the needed quality assurance strategies include the strict reviewing of themes to ensure their compatibility with the entire dataset and the coded data (Terry et al. 2017). Ultimately, four themes were chosen to interpret the student's experiences of workplace learning as a part of VET. The first theme highlights the meaning of context and the chosen VET pathway, the second theme focuses on the needs of the work and how the work practices shape the individual's participation, the third theme shows the meaning of social practices and interactions and the fourth theme describes how learners decide to participate in experiences and elect to exercise their agency in workplaces.

Findings

Theme 1: The VET Pathway Builds a Frame for Participation

Most students in school-based VET expressed that school is a preparation for work because it aims to ensure readiness to enter the workplace by providing the basic vocational skills needed in work tasks and also by conveying general knowledge about working life, such as employees' rights and obligations. The students were prepared for each five-week period of workplace learning by focusing on certain timely themes prior to this training. Practical nurse students in the social and health care field appreciated the opportunity to practise skills in school, without pressure, because the mistakes did not lead to any serious consequences. Therefore, simulations and hands-on practice with mannequins in school were important parts of their preparation for work. They also felt that the compulsory units of the qualification supported their slow progress towards completing more difficult and specialised tasks; they started workplace learning with daycare duties, from which they next progressed to assisting with nursing tasks and eventually focused on more individualised and patient-centred methods of working, before choosing a

specialisation. In the business sector, students similarly appreciated the opportunity to prepare for workplace learning by focusing on one thing at a time and practising the skills needed at work, such as social skills or language skills. The only compulsory unit for all apprentices focused on customer service, and these skills were further practised at work. Most often, on-the-job learning (usually 5 weeks) was considered as allowing participation in multiple communities and tasks, however, some individuals felt that the time was too short for understanding and mastering whole work processes and that the workplace learning opportunities did not match educational goals or the future profession.

In both the social and health care and business and administration fields, most of the students experienced that they were encouraged to set goals that could be achieved and discussed later in the assessment. In practice, this kind of goal setting and planning was realised at various levels, and two students critiqued planning for its focus on papers instead of discussions. However, planning was especially elaborated upon in the social and health care field, where only one student reported not to have planned workplace learning. Otherwise, students were encouraged and guided by their teachers:

Mainly, you just go and work there [workplace]. Then, of course, at school, they have told you that you have to come up with the goals, the tasks you have to do, and also with the competence demonstration plan. You have to do all the competence demonstration plans and give them to the supervising teacher and the workplace trainer. They accept them, and then, you proceed to the competence demonstration if they think that it is ok. (student_social)

In contrast, the apprentices emphasised the importance of workplace learning that was often tailored to match the needs of a workplace. Apprentices felt that the aim was to receive a qualification and employment. All apprentices acknowledged and accepted that their studies and learning were dependent on the learning opportunities in the workplace, which also limited their opportunities to plan their own studies. Instead of specialising at the end of their studies, the apprentices often started their studies by specialising in tasks required in a specific workplace. Hence, setting educational goals was more demanding and secondary. Often, the role of vocational school and education was experienced as unclear, distant or poorly aligned with workplace experiences. In addition, a few individuals experienced that apprenticeship training requires self-study, whereas some felt that it is mainly independent work that especially provides work-specific skills. However, in individual accounts, vocational school and contact teaching for a few days (often two) per month was found to enrich learning via providing theory, the correct working methods and opportunities for peer interaction. The following extracts show that a strong work-based focus of apprenticeship training was considered as an asset, but also as a challenge in relation to connectivity and employability:

I have got everything I need, work-wise, from the workplace. The vocational school provides, at least this far, only extra. Last time we had geometry, it is fun but something I don't need. (apprentice_construction)

I think this is good, but I consider that there should be some contact days [at vocational school], otherwise it feels a bit like a negligence. I think that, for example, two days in a month, but when you have none. Someone asked me in the beginning what it has been like to study, but I don't feel like I am studying. Of course, now, when I had two exams back to back, and I had to retake the other one, I have been reading a lot and felt very much like a student. But I think that there should be some contact days, personally, I need those. (apprentice_social)

It [apprenticeship] prepares you very well for the work you are doing. The problem of the apprenticeship, if you want to consider it as a problem, is that it does not necessarily teach – many companies wish that this would be developed further. In practice, it provides work-specific knowledge, which is not good for the wider interests of the society. (apprentice_business)

Theme 2: Work Practices Shape Participation

Despite the differences in organising VET pathways, in the construction sector, both students in school-based VET and apprentices reported that tasks and their sequencing cannot be planned as they are based on workplaces' or customers' needs. Thus, education and work were considered to be poorly aligned and incompatible. Individuals told of how they preferred workplace learning and authentic work tasks, as the studies in vocational school were judged to offer theory and ideal ways of working that differed from the practices in the workplaces. Experiences were shaped by the work and the workplaces' goals as the learning path at work was outlined by workplaces and assignments, sometimes even on a day-to-day basis:

In the beginning, there were less demanding tasks, something that you could do, and there was no chance to cause any damage or anything, but every year it has been like the responsibility has grown. Now it is like that you have to go wherever you have to go. They are no longer thinking whether you can manage, as they did in the beginning. (student_construction)

Most of the interviewed apprentices and students in the field had similar experiences, they often described how they started with more peripheral tasks to avoid potentially expensive consequences. Based on participants' individual views, the progression to more independent tasks was difficult because they worked on assistive tasks (in small companies), on specialised tasks (in large companies) or they did not have access to tools or resources. A few students in the school-based VET had additional rights and limitations because they were minors, and safety rules restricted their participation in tasks involving imminent danger, such as roof work and concrete works on construction sites.

In contrast, practical nurse students in school-based VET reported that they had easy access to basic care activities. After observing others, access to more independent, still guided, tasks was granted in a few days, but only if the student was ready to take on this responsibility. The tasks could also be negotiated, and, for example, in one case participation in taking care of a dead

person's body or dealing with the relatives after his or her death was not required as a part of nursing and care duties. However, all apprentices in social and health care felt that they were expected to participate in work as employees from the beginning. Only dispensing medication and inputting patient data into the repository were, in most cases, off limits for them. Four out of seven apprentices felt that the role of learner was sometimes forgotten and actual skills and competence contradicted expectations or that an introduction to the work was lacking. Eventually, this was overcome by individuals by focusing on routine tasks first and then learning new tasks as they presented themselves, as one apprentice experienced:

In the beginning, it was a bit strange and I wanted to complain that there was no one who could guide or brief me, but then maybe, I have adapted myself to that quite easily and seen that all the situations are so different that there is no point to explain those in detail. (apprentice_social)

In business and administration, apprentices in the field worked under various job titles as assistants or in sales. As in the social and health care field, they were given tasks that were similar to those of other workers, although compared to others, they saw themselves as having less experience. Due to their previous work experience, they were mainly autonomous workers in their current jobs, and they experienced that they participated in challenging tasks, problem-solving and various networks. In this field, students in school-based VET also experienced that they participated in similar tasks compared to others, but as students, they had the right to ask for and receive guidance. In a couple of cases, workplaces even provided students with planned tasks and goals for each week and shift. Most often, students, during their first on-the-job learning periods, participated first in filling shelves and then moved on to customer service and the responsibility granted by the right to use a cash register. The following extract describes the role of a student during on-the-job learning:

I was mainly a trainee, I had responsibilities, but if I say that an employee had a 100 per cent responsibility so then I had like 80 to 85 per cent. So, basically, it was counted that if a mistake happens, it is not the end of the world, and there was not too much pressure. There was a good balance. A nice role so that it was not boring, but then again I did not have to work my fingers to the bone, because that is not good either. A nice one, so that the work kept you alert. (student_business)

Theme 3: Social Interactions and Practices Shape Participation

Most of the interviewees felt that they were accepted as a member of the community because they were trusted and given proper tasks and responsibilities based on discussions about their previous experiences. In rare cases, participants felt that they were not fully trusted in the community, for example, due to previous negative experiences, and the atmosphere in some workplaces led to feelings of discouragement or

neglect because learners' views were dismissed, their participation was limited or they witnessed bad practices.

In most cases, co-workers supported participation and provided guidance and feedback on tasks. In business and administration, participants in this study described co-workers' role only in positive terms. However, in other fields, both negative and positive views on co-workers and their participation and guidance were voiced. In the social and health care field, co-workers were most often considered to understand and value previous knowledge and skills, and both students and apprentices had access to more independent tasks. However, in some cases working alongside more experienced workers or the trainer was considered as a challenge as it hindered the demonstration of competence and put learners into a more peripheral role. One student told how she could take care of patients in a relatively good shape independently, but when taking care of students in poor shape and working with a more experienced nurse, she was given more physically demanding or less meaningful tasks. In another case, the activity of the trainer was considered to allow the student to adopt an inactive role. Thus, distributing work equally was considered a challenge when working with others.

In the construction sector, both students and apprentices considered themselves as junior workers in the hierarchy. In this kind of hierarchy, feedback and acceptance from supervisors were especially important, but all students felt that co-workers were the best people to assess their competence and progress. However, their progression into more difficult tasks was impeded by work practices, but also by their co-workers and the culture of the workplaces. Positioned lower in the hierarchy, they were often left with assistive tasks, and sometimes their ideas were not acknowledged when working with more experienced workers:

I can do everything in my own way, in my own order, when I am alone. But when I have another person with me [co-worker] and I say my thing, the other person can resist this, like 'No, it is done like this'. But then again, I also have the vision for how to do it – we could finish it also in my way – but if this person is more experienced, then he/she is always giving orders.(student_construction)

In a few workplaces in the social and health care field, an emerging tradition of training and co-workers who had recently completed the same qualification were an additional resource for guidance, as they were able to provide feedback on wider studies. The following extract depicts a case, where an apprentice had started training by specialising in substance abuse welfare work, but the trainer aimed to support the entire learning process leading to the apprentice becoming a practical nurse with a wider range of skills:

[Trainer's name] has said to me many times that she wants me to become a professional and knowledgeable practical nurse, so we have to focus on those areas that are not present here, for example, wound care and such, as we do not have a readiness for that here. Then, we discussed the [alternative] training location and what it could be. (apprentice_social)

However, in a few cases, participants of this study expressed that knowledge about the qualification in the workplace was insufficient or outdated. A few learners emphasised

in their interviews that the teacher should cooperate with the workplace and provide more information on qualifications, requirements and assessment and, eventually, intervene if the learner was facing problems at work. In particular, in the business and administration field, students also highlighted teachers' role in the assessment of their competence. In relation to teaching at school, the individuals' few opinions about the importance of peer groups were varied; for some, peer groups provided new knowledge and support, but, for others, they did not promote learning.

Theme 4: Individuals Alter Boundaries to Participation

Eventually, the participants' backgrounds, experiences and own activities shaped and altered opportunities to participate in activities in the VET pathways right from the beginning. Some of them were actively involved in the planning of workplace learning and encouraged to do this, whereas some adopted a passive role. The social and health care field, in particular, seemed to support planning, but acknowledging learning opportunities was largely up to the learners. In all sectors, the VET students and apprentices underlined their ability to ask questions and request guidance if needed.

However, based on learners' experiences, especially students and apprentices in the construction sector highlighted the importance of their own backgrounds and agentic actions in enriching learning opportunities. Two students in the construction sector, specialising in infrastructure construction, described how they had grown up with the industry and machines, and in practice, they were autonomous workers despite their student status. In other cases, learners in the construction sector emphasised being flexible and self-directed because work was based on tasks, plans and timetables that were prone to change:

You have to be self-directed and prepare things. You cannot just concentrate on that, that the supervisor gives you one task and then you finish it. You have to think about the whole worksite. (apprentice_construction)

A few of the interviewees felt that in case they lacked a personal vision about how to execute tasks, they were assigned assistive work. From this position, it seemed more difficult to demonstrate the skills and competence needed to receive a more independent position or participate in more motivating and challenging tasks. In one case, agentic actions to receive a more independent role turned out to be disobeying guidance given at work:

Of course, they always say how it [the task] should be done, but if you know better, of course, you do it in your way. I have also advised my teacher many times here at school. (student_construction)

In other cases, agentic actions were related to choosing learning opportunities. In one case, a minor was encouraged to participate in construction tasks, which were restricted due to safety reasons. Eventually, the student decided to defend his rights and refused to do these tasks. Three students in the construction field also intentionally missed attendance at vocational school in preference for work. Otherwise, individual

accounts from the participants showed that learners actively attempted to promote their participation by actively seeking to enter meetings, participate in job rotation or working extra hours in another workplaces to promote learning opportunities. In summary, it is suggested that all the four themes (see also Appendix Table 2) and findings of this study are interconnected, and that participation in workplace learning is a result of a complex set of factors.

Discussion and Conclusion

This study examined two vocational learning pathways, school-based VET and apprenticeships. According to the findings of this study, there seemed to be a tendency that apprenticeship training as an employment relationship was based on the productive work and goals of the workplaces, and, thus, apprentices specialised in a particular situated practice. In contrast, workplace learning as part of school-based VET allowed and promoted learner roles, including the setting of educational goals, negotiating tasks and employing a wider range of support from teachers and trainers. This finding suggests that students in school-based VET were legitimate peripheral participants (Lave and Wenger 1991), whereas apprentices' experienced curriculum (Billett 2006) suggested that they were full participants from the beginning. These results reflect those of Reegård (2015) and Goller et al. (2018) who found that novices were given a lot of responsibility and that productive work was expected from them early on. In the case of apprenticeship training, vocational education did not prepare for workplace learning; instead, apprentices were provided contact days during studies. However, it was largely the task of apprentices to combine these learning opportunities, and these sites were often considered to be poorly aligned (cf. Bouw et al. 2019). In contrast, students in school-based VET were timely prepared for workplace learning, and they were able to gradually progress into more demanding tasks. Overall, these suggested differences between vocational pathways match those observed by Grytnes et al. (2018), who concluded that connectivity and learners' employment status (apprentice or student) were related to learning and support.

School-based VET students' and apprentices' experiences suggest that there are some field-related differences regarding workplace learning. In the construction sector, future builders had similar, often assistive, tasks in both learning pathways. Overall, learners emphasised their proactive role and actions in engaging in learning opportunities, but these were considered especially important in the construction sector. This finding is supported by the survey of Virtanen et al. (2014a), as they identified less connectivity and highlighted the importance of student-related individual factors in relation to workplace learning in the technology field compared to in the social and health care field. The findings from this study suggest that in the social and health care field, workplace learning is more structured by the school. In addition, the work allows easier progression into more demanding tasks; workplaces have traditions of training and more collective guidance practices, whereas in the construction sector tasks may be limited due to production and safety reasons, and learners may be put in a marginalised role in the hierarchy, only being allowed to carry out observation and assistive tasks. This finding is contrary to the study by Fjellström and Kristmansson (2016), as they concluded that apprentices performed highly complex tasks with high accountability.

However, they highlighted that educational goals were often overridden by the workplace goals, which also seemed to be the case in the Finnish context especially in the construction field and more generally in apprenticeship training.

Despite the learning opportunities and vocational pathways provided, individuals eventually decide how they can or choose to engage in these learning opportunities (e.g. Billett 2004; Goller and Harteis 2017). Often apprentices were autonomous workers, whereas a student role enabled the focus to be on learning. However, some of the students in school-based VET were able to act as autonomous workers, whereas some of the apprentices that were officially employed and paid were assigned to assistive or specialised tasks requiring narrow skills. Some of the interviewees felt that progression into more challenging tasks was dependent on the division of the work and other workers, which did not allow for the demonstration of competence, whereas some emphasised their skills, determination and motivation. Participants engaged in agentic actions in order to alter their learning opportunities, for instance, by asking for help and feedback (cf. Goller et al. 2018), preferring to do things their own way and working alone or even by neglecting vocational education. Overall, the themes recognised in this study have similarities with Thornton Moore's (2004) study highlighting environment, organisation and individual features. However, in this study, work practices and social practices related to student's experiences in various organisations and communities were described separately.

This qualitative study has certain limitations. First, this study is located in the Finnish context, and, therefore, the applicability of the findings might be limited. In this context, for example, apprenticeship training refers to a vocational pathway that is based on an employment contract, and it is mainly utilised by adults. Thus, it should be noted that apprentices in this study were older than in many other countries. Second, the sample drawn from two vocational pathways and three fields was relatively small. Therefore, the study was only able to suggest certain tendencies in students' experiences.

This study argues that based on learners' experiences, learning pathways cannot be considered as parallel or interchangeable. In the Finnish context, this implies that the flexible combination of these pathways, as promoted in the reform of VET, is not without challenges because the learner is put in different positions and meets various expectations in each of these pathways. Future studies should investigate how more individualised learning pathways are realised after the reform. This study suggests that there is a need to acknowledge these kinds of inner diversities in a VET system (see also Jørgensen 2018). This may also be relevant for other VET systems, although student-related individual differences might play a considerable role (see also Poortman 2007; Virtanen et al. 2014a). These context- and individual-related issues need to be further studied.

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Compliance with Ethical Standards

Conflict of Interest The authors declare no conflict of interest.

Appendix

Table 2 Overview of the themes and learners' experiences

VET pathway builds a frame for participation	Work practices shape participation	Social interactions and practices shape participation	Individuals alter boundaries to participation
<ul style="list-style-type: none"> • Vocational education prepares students for entering workplace and working life (theory, practice, focussing on specific issues, skills and ways of working) • Vocational education does not provide or match the skills needed at work (e.g., empathy) • Apprenticeship training provides a qualification and supports employment • Apprenticeship training includes few contact days and requires self-study • Apprenticeship training provides work-specific skills • Apprenticeship training is difficult for the employer • On-the-job learning (often 5 weeks) allows participation in multiple communities and tasks • On-the-job learning is progressively getting more difficult and specialised • On-the-job learning is too short to understand and master whole processes 	<ul style="list-style-type: none"> • Tasks and their sequencing cannot be planned; they are based on customers' needs • Tasks and their sequencing have been planned in the workplace (e.g., shifts, job rotation) • As a minor, I am not allowed to participate in all tasks • My student status allows me to start with simple tasks and to avoid or negotiate some tasks • My student status allows me to seek guidance • My employee status provides me with (almost) equal tasks and responsibilities from the beginning • My employee status contradicts my actual skills and competence 	<ul style="list-style-type: none"> • Atmosphere in the work community encourages me (e.g., asking questions, discussing mistakes) • Atmosphere in the work community discourages me (e.g., observing bad practices, neglecting behaviour) • Co-workers understand and value my previous experience • Co-workers do not have knowledge of this certain qualification and competence requirements, or this knowledge is insufficient or outdated • Co-workers hinder my access to more challenging activities (e.g., I am not acknowledged as an equal worker, I receive more peripheral tasks, I do not have opportunities to demonstrate my competence) • Co-workers encourage me to do things that I am not allowed to do (e.g., as a minor/worker) 	<ul style="list-style-type: none"> • I participated in planning (e.g., I turned qualification requirements into actual tasks and set specific goals) • I did not participate in planning (e.g., I was given a plan for competence demonstrations) • I have a student status, but I am an autonomous worker (e.g., I have grown up doing this job) • Progression depends on me, I need to accept more challenging tasks and show that I can manage those • I am expected to ask help and feedback if needed • I may ask advice, but still do things on my way • I am holding onto my rights (e.g., I am not participating in dangerous tasks) • I have not participated in education • I simultaneously work in other workplaces

Table 2 (continued)

VET pathway builds a frame for participation	Work practices shape participation	Social interactions and practices shape participation	Individuals alter boundaries to participation
<ul style="list-style-type: none"> • On-the-job learning makes knowledge and competence visible • Goals, requirements, tasks and competence demonstrations were not discussed or set with the teacher or the workplace • Prior to workplace learning, the focus was on official papers (e.g., special support needs should have been discussed) • Workplace learning opportunities do not match educational goals 		<ul style="list-style-type: none"> • Co-workers provide feedback and are best at assessing learning (e.g., junior workers who know a given qualification) • Co-workers allow me to participate in various meetings and networks (e.g., coaching) • The teacher is the best person to assess my learning and competence • The teacher should provide information on qualifications, requirements and assessment • The teacher should intervene if the student is facing problems at work • The teacher can also learn from students • My peer group at school provides new knowledge, ideas and insights • My peer group does not promote learning (e.g., the group is too heterogenous; various specialisations and skill levels) 	

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References

- Aarkrog, V. (2005). Learning in the workplace and the significance of school-based education: a study of learning in a Danish vocational education and training programme. *International Journal of Lifelong Education*, 24(2), 137–147.
- Akkerman, S. F., & Bakker, A. (2012). Crossing boundaries between school and work during apprenticeships. *Vocations and Learning*, 5(2), 153–173.
- Billett, S. (2002). Toward a workplace pedagogy: guidance, participation, and engagement. *Adult Education Quarterly*, 53(1), 27–43.
- Billett, S. (2004). Co-participation at work: learning through work and throughout working lives. *Studies in Education of Adults*, 36(2), 190–205.
- Billett, S. (2006). Constituting the workplace curriculum. *Journal of Curriculum Studies*, 38(1), 31–48.
- Billett, S. (2011). Workplace curriculum: Practice and propositions. In F. Dochy, D. Gijbels, M. Segers, & P. Van den Bossche (Eds.), *Theories of learning for the workplace: Building blocks for training and professional development programmes* (pp. 17–36). London: Routledge.
- Bound, H., & Lin, M. (2013). Developing competence at work. *Vocations and Learning*, 6(3), 403–420.
- Bouw, E., Zitter, I., & de Bruijn, E. (2019). Characteristics of learning environments at the boundary between school and work: A literature review. *Educational Research Review*, 26(1), 1–15.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297–298.
- Education Statistics Finland. (2018). *Students and qualifications*. <https://vipunen.fi/en-gb/vocational/Pages/Opiskelijat-ja-tutkinnot.aspx>. Accessed 14 Jan 2019.
- Eteläpelto, A. (2017). Emerging conceptualisations on professional agency and learning. In M. Goller & S. Paloniemi (Eds.), *Agency at work. Agentic perspective on professional learning and development* (pp. 183–201). Cham: Springer.
- European Council (2018). *Recommendation on a European framework for quality and effective apprenticeships*. 2017/0244 (NLE). <http://data.consilium.europa.eu/doc/document/ST-6779-2018-INIT/en/pdf>. Accessed 13 Feb 2019.
- Evans, K., Guile, D., & Harris, J. (2013). Rethinking work-based learning: For education professionals and professionals who educate. In M. Malloch, L. Cairns, K. Evans, & B. O'Connor (Eds.), *The SAGE handbook of workplace learning* (pp. 149–161). Thousand Oaks, CA: Sage.
- Finnish National Agency for Education. (2018). *Finnish VET in a nutshell*. https://www.oph.fi/download/165770_finnish_vet_in_a_nutshell.pdf. Accessed 14 Jan 2019.
- Fjellström, M., & Kristmansson, P. (2016). Learning as an apprentice in Sweden: A comparative study on affordances for vocational learning in school and work life apprentice education. *Education + Training*, 58(6), 629–642.
- Gherardi, S., Nicolini, D., & Odella, F. (1998). Toward a social understanding of how people learn in organizations. *Management Learning*, 29(3), 273–297.
- Goller, M., & Harteis, C. (2017). Human agency at work: Towards a clarification and operationalisation of the concept. In M. Goller & S. Paloniemi (Eds.), *Agency at work. Agentic perspective on professional learning and development* (pp. 85–103). Cham: Springer.
- Goller, M., Steffen, B., & Harteis, C. (2018). Becoming a nurse aide: An investigation of an existing workplace curriculum in a nursing home. *Vocations and Learning*, 12(1), 67–85.
- Grytnes, R., Grill, M., Pousette, A., Törner, M., & Nielsen, K. J. (2018). Apprentice or student? The structures of construction industry vocational education and training in Denmark and Sweden and their possible consequences for safety learning. *Vocations and Learning*, 11(1), 65–87.
- Guile, D., & Griffiths, T. (2001). Learning through work experience. *Journal of Education and Work*, 14(1), 113–131.

- Jørgensen, C. H. (2018). Vocational education and training in the Nordic countries: Different systems and common challenges. In C. H. Jørgensen, O. J. Olsen, & D. Persson Thunqvist (Eds.), *Vocational education in the Nordic countries: Learning from diversity* (pp. 1–28). London & New York: Routledge.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Mazenod, A. (2016). Education or training? A comparative perspective on apprenticeships in England. *Journal of Vocational Education & Training*, 68(1), 102–117.
- Mikkonen, S., Pylväs, L., Rintala, H., Nokelainen, P., & Postareff, L. (2017). Guiding workplace learning in vocational education and training: A literature review. *Empirical Research in Vocational Education and Training*, 9(9), 1–22.
- Onstenk, J., & Blokhuis, F. (2007). Apprenticeship in the Netherlands: Connecting school- and work-based learning. *Education + Training*, 49(6), 489–499.
- Poortman, C. L. (2007). *Workplace learning processes in senior secondary vocational education*. Enschede: University of Twente.
- Reegård, K. (2015). Sales assistant in the making: Learning through responsibility. *Vocations and Learning*, 8(2), 117–133.
- Ryan, P., Backes-Gellner, U., Teuber, S., & Wagner, K. (2013). Apprentice pay in Britain, Germany and Switzerland: Institutions, market forces and market power. *European Journal of Industrial Relations*, 19(3), 201–220.
- Sappa, V., & Aprea, C. (2014). Conceptions of connectivity: How Swiss teachers, trainers and apprentices perceive vocational learning and teaching across different learning sites. *Vocations and Learning*, 7(3), 263–287.
- Schaap, H., Baartman, L. K. J., & de Bruijn, E. (2012). Students' learning processes during school-based learning and workplace learning in vocational education: A review. *Vocations and Learning*, 5(2), 99–117.
- Stenström, M.-L., & Virolainen, M. (2018). The development of Finnish vocational education and training from 1850 to 1945. In S. Michelsen & M.-L. Stenström (Eds.), *Vocational education in the Nordic countries: The historical evolution* (pp. 24–45). Oxon: Routledge.
- Swager, R., Klarus, R., van Merriënboer, J. J. G., & Nieuwenhuis, L. F. M. (2015). Constituent aspects of workplace guidance in secondary VET. *European Journal of Training and Development*, 39(5), 358–372.
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In C. Willig & W. S. Rogers (Eds.), *The Sage handbook of qualitative research in psychology* (2nd ed., pp. 17–37). London: Sage.
- Thomton Moore, D. (2004). Curriculum at work: an educational perspective on the workplace as a learning environment. *Journal of Workplace Learning*, 16(6), 325–340.
- Tynjälä, P. (2013). Toward a 3-P model of workplace learning: a literature review. *Vocations and Learning*, 6(1), 11–36.
- Virolainen, M., & Persson Thunqvist, D. (2017). Varieties of universalism: Post-1990s developments in the initial school-based model of VET in Finland and Sweden and implications for transitions to the world of work and higher education. *Journal of Vocational Education and Training*, 69(1), 47–63.
- Virtanen, A., Tynjälä, P., & Stenström, M.-L. (2008). Field-specific practices as a source for students' vocational identity formation. In S. Billett, C. Harteis, & A. Eteläpelto (Eds.), *Emerging perspectives of workplace learning* (pp. 19–34). Rotterdam: Sense.
- Virtanen, A., Tynjälä, P., & Collin, K. (2009). Characteristics of workplace learning among vocational students. *Vocations and Learning*, 2(3), 153–175.
- Virtanen, A., Tynjälä, P., & Eteläpelto, A. (2014a). Factors promoting vocational students learning at work: Study on student experiences. *Journal of Education and Work*, 27(1), 43–70.
- Virtanen, A., Tynjälä, P., & Eteläpelto, A. (2014b). Opiskelijoiden työssäoppimista selittävät tekijät kaupan ja hallinnon alalla sekä matkailu-, ravitsemis- ja talousalalla. *Ammattikasvatuksen aikakauskirja*, 16(4), 44–59.

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