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Vocational teachers' identity construction at the interface of work and education – workplaceoriented VET teacher training

Abstract

This longitudinal study examined the identity trajectories of vocational education and training (VET) teacher trainees during a workplace-oriented teacher training process. It also sought to determine the factors that may either support or challenge their identity construction. All participants (n = 15) were already working as non-qualified vocational teachers during their training. The qualitative data included (i) individual stories written at the start and the end of the training and (ii) learning diaries during the training. Both narrative thematic analysis and qualitative content analysis were conducted. The participants exhibited different identity trajectories over time, showing varying degrees of continuity and transformation. The participants who were oriented towards teaching and the teaching profession at the start of the training ended up with refined pedagogical identities. Social support and structured learning affordances in the workplace (with teacher training) encouraged individual reflection and conceptualization of pedagogical phenomena. This led to the implementation of new teaching methods, which emerged as the driving force of teacher identity construction. However, the workplace also challenged VET teacher identity construction. Overall, positioning the teachers' work and the workplace at the interface of social and individual elements seems to constitute a favourable environment for development and growth as a vocational teacher.

Introduction

In parallel with the continuous technological, social, economic and cultural changes that occur in working life (Harteis et al., 2020; Tynjälä, 2013), ways of promoting workplace learning have become increasingly necessary. Similar to other professionals, vocational teachers face continuous changes in their work, including diversification in the student groups, demographic developments, a closer relation between work and education, and increased use of technology-enhanced learning settings (Billett, 2014; Kirpal, 2011; Mulder et al., 2015; Vähäsantanen & Hämäläinen, 2019). In such a changing environment, professionals, including teachers, are required to engage in continuous professional identity construction, beyond developing professional competencies, skills and knowledge (Berger & Le Van, 2019; Colliander, 2019; Vähäsantanen et al., 2017). Within this, individuals reflect on their personal experiences and interests, also considering how their values relate to their professional selves, their expectations and their work conditions.

Seeking to contribute to research and practice in workplace learning, in this chapter, we present our study, where we investigated the longitudinal processes of vocational teacher identity construction. In the context of teacher education, the tradition of focusing merely on teachers' acquisition of

occupational assets and of assessing their development in terms of predefined professional competencies has turned out to be too narrow a perspective when aiming to research and support teachers' identity construction (Akkerman & Meijer, 2011; Lipponen & Kumpulainen, 2011). According to Korthagen (2004), a focus on inner levels, such as teacher identity and personal growth, preferred over outer levels, such as skills and competencies, could lead to deeper insights on teachers' learning processes.

This longitudinal study was carried out in the context of Finnish vocational teacher education. The participant teacher trainees were also working full-time as vocational teachers in formal education settings (vocational schools and universities of applied sciences) during a period of significant reforms in vocational education. These reforms included new legislation integrating vocational education and adult vocational education, leading to changes in school organizations and teachers' everyday work. In practice, from the teachers' perspective, this meant demands to build a more workplace-oriented, effective and customer-oriented (competence-based) VET system highlighting flexible and individual learning paths (Rintala & Nokelainen, 2020).

Our study had two aims. The first was to identify the different identity trajectories of the participants over the period of their training to qualifying as VET teachers and working as VET teachers simultaneously. The second aim was to identify the factors that either support or challenge vocational teacher identity construction in workplace-oriented educational settings. Our theoretical grounding lies on teacher identity research. In the next section, we first elaborate on the previous literature concerning teacher identity with an individual approach, while considering the social process of teacher identity construction. Then, we highlight the context of vocational teaching and training by focusing on vocational teacher identity as a complex, hybridized identity between teaching and the teachers' former professions.

Teacher identity

Teacher identity is often defined as a set of teaching-related personal concepts, beliefs, interests, values and goals (Akkerman & Meijer, 2011; Beijaard et al., 2004). Identity can also be perceived as a teacher's resource for professional self-reflection and as a framework for reacting to and predicting changes in teachers' work and in society (Pillen et al., 2013; Vähäsantanen & Billett, 2008). Teacher identity construction is also a social process, encompassing professional demands from institutes and schools; these include accepted values, knowledge, standards and practices related to teaching, student behaviour, mentor feedback and other organizational and cultural circumstances (Beijaard et al., 2004; Leeferink et al., 2019; Vähäsantanen & Hämäläinen, 2019). It has also been noted that the structural workplace conditions of schools, including learning resources and professional development policies – in conjunction with cultural workplace conditions, such as leadership and the teachers' collaborative culture – can either enable or constrain teachers' development (Louws et al., 2017).

Increasingly, studies of teachers' identity construction have recognized the intertwining of the personal and the social aspects and have used a dual focus to capture this interconnection. Vähäsantanen et al. (2017) have shown that identity construction occurs through sharing experiences and receiving feedback in social interaction, encountering different people and their perspectives, observing other people and evaluating one's own work experiences and practices. Leeferink et al. (2019) similarly conclude that it is important to be aware of the interaction between individual and social factors, which can either support or hinder student teachers' professional growth. When student teachers' personal desires and expectations conflict with workplace practices, this can lead to strong

negative feelings and to discontinuity in workplace learning (Kira & Balkin, 2014; Leeferink et al., 2019).

To conclude, a teacher's identity can be understood as encompassing the individual's current professional interests, values and commitments, together with one's views on teaching and students' learning, and their own future prospects (Arvaja & Sarja, 2021; Vähäsantanen & Hämäläinen, 2019). Teacher identity construction is an active, dynamic and continuous process, negotiated between the person and the sociocultural context (Vähäsantanen & Billett, 2008). Furthermore, Akkerman and Meijer (2011) argue that identity construction could be perceived as a dialogical process between several dimensions: social and individual, discontinuity and continuity, and multiplicity and unity (see also Hermans, 2003).

Vocational teacher identity

Vocational teacher identity can be perceived as a hybridized teacher identity, negotiated between the teaching profession and the vocational teacher's former craft or profession, such as electrician, chef, hairdresser, engineer, and so on (Farnsworth & Higham, 2012; Fejes & Köpsen, 2012). Fejes and Köpsen (2012) describe this process as *boundary crossing*; within it, vocational teacher identities are constructed across the communities of their prior occupations and fields of work, the teaching occupation and the teacher training community.

The present collection of chapters adds another dimension to these observations – workplace practices are often in flux. These changes may involve minor adjustments or significant transformation as consequences of digitalization and other innovations. This study's participants were all training to become qualified teachers in educational institutions, raising questions about the influence of changing workplaces on their identity construction.

Overall, vocational teacher identity construction can be perceived as an active, ongoing and *hybrid* process. It is influenced by both the teaching profession (involving teaching skills) and the teacher's former work practice (involving profession-related knowledge). There is a particular need for identity work when an individual is moving one's professional position from a vocational worker to a vocational teacher. This transition usually includes challenges and emotions, even grief and feelings of loss (Sarastuen, 2020). The worlds of schooling and education have been established to function with logics that differ from those of the world of work and production, so this transition usually causes detachment. (Moodie & Wheelahan, 2012; Sarastuen, 2020).

It often happens that after teacher training, the challenge then is how the teacher identity that was negotiated during training will be experienced when entering the world of work. Previous studies have shown that initially, teachers often suppress their own voices while they adapt to the prevailing culture in the school community, with its overt and covert structures and practices (e.g., Räihä et al., 2011). The misalignment between one's preferred or ideal teacher identity and the school reality often leads to identity dilemmas, conflicts and struggles (e.g., Arvaja, 2016; Eteläpelto et al., 2015).

In this study, the VET teacher trainees participated in teacher training while working as vocational teachers in vocational training institutions. In this chapter, we aim to shed new light on vocational teachers' longitudinal identity construction processes in the context of their work as teachers. The research questions are as follows:

1. What kinds of vocational teacher identity trajectories occur during a workplaceoriented training process?

2. What kinds of factors are associated with vocational teacher identity construction in a workplace-oriented training process?

Context of the study

In Finland, a vocational teaching qualification is defined and required by legislation, and it consists of 60 credits of pedagogical studies. There are also requirements for a higher education degree in the craft field (if there is one) and for work experience. In this research, all participants (n = 15) were VET teacher trainees who were already working as (non-qualified) vocational teachers in vocational schools or in universities of applied sciences. The training of this group was pedagogically conducted, following workplace-oriented and personalized competence-based approaches. The VET teacher trainees' prior competencies were recognized and documented in personal study plan meetings, and new learning goals (based on competence-based criteria) were integrated into the participants' own field of work as vocational teachers. At the same time, guidance and assessment were provided by a mentor from each VET teacher trainee's own organization. In addition to workplace learning, teacher training contact days and webinars (2–3 per month) and small-group activities were held during the training.

Ten men and five women participated in the study. They represented the following crafts: technology and logistics (n = 6); marketing, social sciences and administration (n = 4); healthcare and physical education (n = 2); natural sciences (n = 2); and educational sciences (n = 1). The participants' ages ranged from 41 to 60 years. The duration of their teaching experience ranged from 4 months to 8 years (average = 3 years, median = 2 years). All participants were informed about the research before their consent to participate was requested. Research permits were also obtained at the organizational level. The data for this study were stored in accordance with the (2019) directions of the University of Jyväskylä. The study's findings are reported here in such a way that the participants and their organizations remain anonymous.

Methods and materials

Data collection

The study, which was qualitative, longitudinal and multimethod in nature, was conducted from May 2018 to December 2019. A multimethod approach is recommended when studying teacher trainees' development processes in the workplace (Meijer et al., 2002). The data were gathered by various means. First, *written stories* were collected. Previous research has suggested that such stories are useful tools for encapsulating the complex phenomena of student teachers' workplace learning (Leeferink et al., 2019). Before starting training, every VET teacher trainee wrote a narrative about one's "path to becoming a teacher". When the participants graduated, they wrote a follow-up narrative based on the first one, with the theme "I as a teacher, now and in the future." Second, *learning diaries* written over the course of the entire training process were utilized in the study. In their learning diaries, the participants reflected on and documented their processes of constructing their teacher identity and competencies. This was done simultaneously with their work and their training.

Data analysis

Our data consisted of participants' narratives (written stories), which we analyzed via narrative thematic analysis (Riessman, 2008). Within this first analysis, we looked for thematic key elements of each narrative, respecting the entirety of each narrative and keeping the whole narrative as a unit of analysis. We did not mix or combine quotes from different participants, preferring to analyze materials from one participant at a time and maintain these as intact data units. Based on the key thematic elements of the identities revealed in the participants' stories (Riessman, 2008), we determined a starting-point and graduation identities (see Tables 1 and 2), aiming to identify the teachers' identity trajectories over time. We wish to clarify that start/end refers to the VET teacher training program in which the study was conducted rather than the start/end of the professional identity process.

In their initial narratives, the participants reflected on their backgrounds, experiences and thoughts about becoming and being a teacher. We constructed four starting-point identities based on the similarities of key elements within individual stories (Table 1). Subsequently, by analyzing the participants' graduation narratives, we identified four different kinds of identities (Table 2).

Identity at the	Key thematic elements of identities	
start of training		
"Craft field" identity $(n = 5)$	 Strong emphasis on one's own craft field Strong craft expert, but also some aims to be a teacher Identity seems to be strongly craft-related; teacher identity as a future goal 	
"Calling" identity (<i>n</i> = 4)	 Always wanted to be a teacher – has consciously worked towards this goal Has conducted "teacher-like" tasks in spare time, hobbies, or as part of their craft field Foundation of teacher identity has already started to develop 	
"Drifter" identity (<i>n</i> = 4)	 Teacher's work encountered by coincidence, or by drifting from one profession to another with no specific plans Started with a job as a teacher, and only later started plans to qualify as a vocational teacher Teacher identity seems vague or absent 	

Table 1. Teacher identities at the star	t of vocational	teacher training
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•	Not necessarily an inspiration to be a teacher; worked in the craft
	field rather than having experienced teaching as a "calling"
•	A history of several professions, and qualifications

• Somewhat skeptical about being a teacher

Table 2. Teacher identities at the end of vocational teacher training

Identity at the	Key thematic elements of identities	
end of training		
Identity as reflective pedagogical actor (n = 7)	 Major changes in pedagogical and educational thinking and actions as a teacher Changes in the concept of learning have led to a richer implementation of teaching and guiding methods Teacher as educator and developer of teaching within the organization and craft field 	
Enriched stable pedagogical identity $(n = 4)$	 Enrichment and diversity in the teacher identity, but the foundations of being a teacher remain relatively stable Broadened positions as a teacher, networker, developer, etc. 	
Identity formed by pedagogized craft field $(n = 2)$	 "Double" identity, balancing teacher and craft-field identity An increase in the experience of being a teacher; nevertheless, emphasizes the importance of being a professional in the craft field 	
Strengthened craft-field identity (n = 2)	 Teaching profession doesn't seem to be the person's "own" profession, even if satisfied with the training Teaching is seen as an option for the future, if there are changes in the craft field or work 	

After identifying the starting-point and graduation identities, we conducted an analysis of each participant's narratives one at a time to determine which starting-point identity led to which graduation identity. Overall, eight teacher identity trajectories were identified (see Table 3 in the Findings section).

At the second phase of the analysis, we explored the factors that the participants experienced as linked to their identity construction. For this purpose, we analyzed and coded the learning diaries using inductive qualitative content analysis (Saldaña, 2013; Schreier, 2012). From each learning diary, we used a section containing an open instruction to reflect on the factors that were either supportive or challenging regarding the identity construction process. In the coding itself, we applied simple main

categories of *supportive* factors and *challenging* factors. Based on their contents, these categories were further classified into three subcategories: (1) *social*, (2) *individual* and (3) *at the interface of social and individual*. In the Findings section, *n* refers to the number of individual participants, while *f* denotes the overall frequency of individual codes under the main category.

The first author was mainly responsible for conducting the analysis. However, to ensure higher reliability and credibility (Guba, 1981), the data analysis proceeded in a cyclical process, with the first author repeatedly negotiating the analysis and interpretation of the data with the other authors.

Findings

In this section, we first present the teacher identity trajectories that represent different identities at the start and the end of the training (hereafter, starting and graduation identities). We then present the factors that either support or challenge teacher identity construction. At the end of this section, we exemplify the identity trajectories through four cases.

Vocational teacher identity trajectories during the workplace-oriented teacher training process

During their training, the participants exhibited eight distinctive teacher identity trajectories over time. Table 3 presents these trajectories, including their starting and graduation identities. We found that the VET teacher trainees starting with the *craft-field identity* or the *calling identity* mainly reached an *identity as a reflective pedagogical actor*. Starting with the *drifter identity* led to more dispersed or diversified graduation identities. Both of the participants who started with the *backup identity* reached the *strengthened craft-field identity* at the end of their training.

Identity at the start of training	Identity at the end of training
"Craft field" identity ($n = 5$)	Identity as reflective pedagogical actor $(n = 4)$
	Enriched stable pedagogical identity $(n = 1)$
"Calling" identity $(n = 4)$	Identity as reflective pedagogical actor $(n = 3)$
	Enriched stable pedagogical identity $(n = 1)$
"Drifter" identity ($n = 4$)	Identity formed by pedagogized craft field $(n = 2)$ Identity as reflective pedagogical actor $(n = 1)$
	Enriched stable pedagogical identity $(n = 1)$
"Backup" identity $(n = 2)$	Strengthened craft-field identity $(n = 2)$

Table 3. Teacher identity trajectories (n = 15) *during the vocational teacher training*

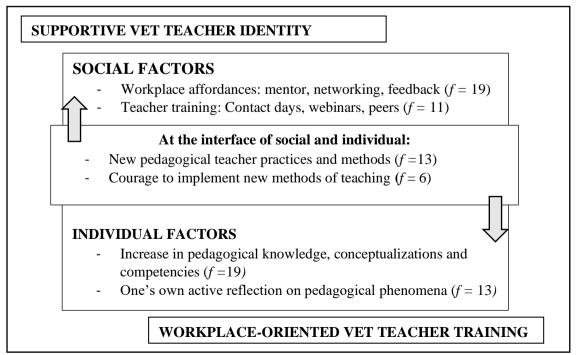
Regarding continuity and transformation (Akkerman & Meijer, 2011), some identity transformation was observed among all participants, but there were notable variations in the trajectories that followed. Some participants highlighted identity transformation, while others emphasized continuity. Identity trajectories leading to an *enriched stable pedagogical identity* or a *strengthened craft-field identity* were more stable; here, the participants indicated that they had enriched or strengthened their teacher identity, but the changes were relatively small. In the *strengthened craft-field identity*, the teacher training seemed to confirm that the participants had no wish to build up their teacher identity. In the trajectories of the *identity as reflective pedagogical actor* and the *identity formed by pedagogized craft field*, the participants reported continuity and consistency in their vocational teacher identity, as manifested, for example, in the transformation in their pedagogical thinking.

Factors associated with vocational teacher identity construction in the workplace-oriented training process

The findings showed the kinds of supportive and challenging factors associated with vocational teacher identity construction in the workplace-oriented training process. The three main categories of supportive factors related to vocational teacher identity construction in workplace-oriented training were (1) *social*, (2) *individual* and (3) *at the interface of social and individual factors* (see Figure 1). The training process seemed to offer many different social affordances, notably some possibilities to expand the scope of one's job description, engage in networking and consult with a workplace mentor. Feedback from different sources was also reported to be a significant tool in constructing one's teacher identity. The teacher training practices (e.g., contact days and webinars) were reported to support identity construction. The peer student group also helped some participants in forming their teacher identity in a positive manner.

Figure 1

Supporting elements related to VET teacher identity construction in workplace- oriented training process

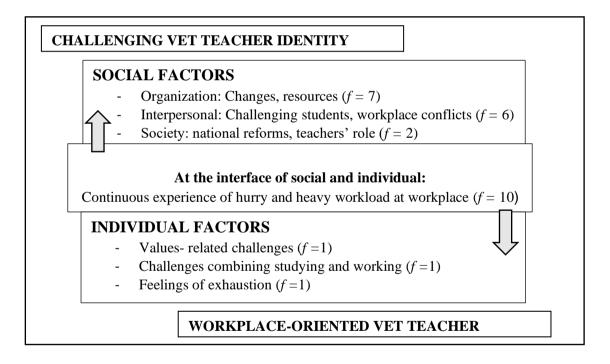


In addition to social factors, the participants' individual activities and reflections were found to support their identity construction. As they reflected on and conceptualized pedagogical phenomena (e.g., more student-centred teaching methods), they gained more understanding of teaching and learning, as well as the courage to implement new methods and practices. This also connects with the interface between the social and the individual dimensions (Vähäsantanen & Billett, 2008). *Interactions* between workplace and teacher training affordances (*social*) and the individual's own active reflection processes (*individual*) make it possible to change one's way of teaching; this also seems to be an important process supporting teachers' identity construction.

Some *challenging* factors were also linked to identity construction in workplace-oriented vocational teacher training (Figure 2). The findings above illustrated that although working and studying concurrently can create favourable opportunities, it can also pose challenges. Almost all the challenging factors were related to the student teachers' workplace.

Figure 2

Challenging elements related to VET teacher identity construction in workplace- oriented training process



The most challenging factor for identity construction seemed to be the experience of continuous rush and a heavy workload – interpreted here as occurring at the interface of social and individual factors. This study was conducted concurrently with a national reform of vocational education in Finland. Considerable organizational changes were taking place, along with cuts in the funding and resources for vocational education. The participants reported the continuous changes and decreasing resources as challenges to their identity construction. Some found that the role of vocational teachers was becoming excessively broad, extending towards taking care of students' basic needs at the expense of craft-specific teaching. At the interpersonal level, working with challenging students seemed to pose problems for the participants' identity construction. Interpersonal conflicts (with colleagues and managers) and the lack of support were reported as harmful to their identity construction. Beyond this, there were individual factors that were mentioned only once. In their learning diaries, some individuals reported value-related issues, life management problems and feelings of exhaustion.

Vocational teacher identity trajectories: four cases

In this section, we illustrate four identity trajectories with different starting identities, leading to different graduation identities. The factors that either support or challenge VET teacher trainees' identity work during the teacher training are also described. The first two cases (of Jack and Susan) show trajectories with more transformation both in and towards a vocational teacher identity. The third and the fourth cases (of Mariah and Tom) display more craft-oriented trajectories.

Jack: From craft-field identity to identity as reflective pedagogical actor

Jack was a professional in the field of logistics and had worked as a vocational teacher for a year before starting teacher training. At the start of the training, he described his long career in his craft field, including his engagement in the field. He emphasized the importance of this experience in his teaching and embarking on a career as a vocational teacher:

I have been working in the field of logistics since 1991.... Later as a logistic manager.... Now I'm working as a logistics teacher in a vocational school.... In my teaching, I'll try to motivate my students with my own field experience and with accounts of authentic workplace situations.

During the training, Jack's identity orientation moved from the craft field towards teaching. The pedagogical aspects started to open up as a result of active self-reflection and the implementation of new teaching methods in teaching and workplace learning. These kinds of processes helped Jack to rethink his identity and to refine a new kind of understanding of himself as a teacher:

Analyzing myself as a teacher is much easier, now when I understand that teaching is about much more than sharing knowledge. The teacher's role as an educator and even as a fosterer has been illuminating... this understanding has been the biggest development in me being a teacher.

During training, Jack's pedagogical thinking changed from subject orientation to a more studentcentred orientation (see also Arvaja & Sarja, 2021). Jack's view of teachership was enriched as well, and he perceived it through multiple roles (Akkerman & Meijer, 2011). Feedback from students and colleagues also encouraged Jack's professional development as a vocational teacher. At the same time, he found the national and organizational changes in the workplace challenging his identity:

As a challenge to my teacher identity, I see the continuous changes that are shaking up our vocational field and entire society. By this, I mean that we are supposed to carry out and develop high-quality teaching with continuously decreasing resources. It seemed that in the workplace, the misalignment between the provided resources and the expectations regarding teaching caused tensions in Jack's professional self, making it difficult to fully realize his goals as a teacher (Kira & Balkin, 2014; Leeferink et al., 2019).

On graduating, Jack was satisfied with the teacher training and even observed growth in himself as a person. From a teacher identity perspective, he found that his pedagogical thinking had deepened and become more structured. This led him to develop his work unit by implementing new methods of teaching. Thus, changes in pedagogical thinking due to training were manifested in the development of new modes of action supporting integration of teachers' work and teacher training. The focus of the teaching had shifted from "personal survival" to a student-centred orientation:

This [vocational teacher training] has been a great adventure, an expedition to humanity, which I wish I had already taken 20 years ago.... I feel like I have gotten my 'pieces together' now when I try to understand human behaviour.... My goal as a teacher is no longer just to survive from day to day. Now learning itself and supporting the students' learning and success in their studies have become the main things.

Susan: From calling identity to enriched and stable pedagogical identity

Susan had been working as a part-time foreign language teacher in the University of Applied Sciences for four years. She had always wanted to be a teacher and had performed teaching and guidance-related tasks through her hobbies and volunteer work while employed in other language-related professions (travelling and travel agency). At the start of the teacher training, Susan was happy to finally obtain a qualification and was certain about the teaching profession being her "thing":

You often hear people say that they have drifted into their profession. For me, it's the opposite -I feel that being a teacher has been part of me for a long time, even before starting the formal teacher training.... Becoming a qualified teacher has always been obvious to me.

Susan highlighted the importance of her workplace, which offered versatile possibilities to learn and develop via challenging development tasks and projects. Her own active, reflective and open-minded role as a teacher also helped her achieve her teacher training goals, as she described in her learning diary:

During the training, I have participated in many workplace development projects, which otherwise might have gone unnoticed. I have become an active actor in the workplace, which has strengthened my teacher identity with a lot of positive feedback... this also needs an open-minded attitude and endorsement of the reforms, the changes and the reconstruction of teachers' work.

Seemingly, the training and opportunities in the workplace formed an ideal context for supporting Susan's professional development. Her professional goals and motives were clearly aligned with the workplace affordances (Kira & Balkin, 2014).

At the end of the teacher training, Susan described her "deepest teacher identity" as staying the same although becoming enriched, indicating both continuity and discontinuity in her teacher identity. The

enrichment was manifested in the multiplicity in teacher identity by having different roles as a teacher (Akkerman & Meijer, 2011):

In a year, a lot has happened, but my thoughts about being a teacher as part of my own identity have not changed. Before this training, my teacher identity might have been more one-dimensional. Today, I'm a teacher, an active workplace actor and a developer. Despite that, I feel that my teacher identity has not changed, only extended and diversified.

Mariah: From drifter identity to identity formed by pedagogized craft field

Mariah was an experienced professional in cosmetic care. Her career as a teacher started unexpectedly with a call from a local vocational school, when she was asked to start part-time teaching of a course in cosmetics. Having had only a brief teaching experience, at the start of teacher training, Mariah was very unsure and sceptical about her teaching competencies. Her teacher identity seemed vague or even absent. Nevertheless, Mariah seemed happy about the sudden possibility to start a career as a vocational teacher:

I certainly know my own profession, and I have a strong professional competence in cosmetic care. So now after starting teaching, I want to be a good teacher as well.

During the training, implementing "new tools" provided mostly by teacher training started to offer Mariah positive experiences and feelings of success as a teacher. She described "finding the teacher" within herself, thus strengthening her identification as a teacher. Her actions as a teacher were shifting from traditional pedagogy to student-centred and participatory pedagogy (Arvaja & Sarja, 2021), hence constructing a vocational teacher identity in a positive manner:

Within a year, I noticed a remarkable change in my teaching. I used to do too much for the students and make them passive... now I support their self-direction and responsibility in their student work... it is very rewarding to see this work and to get feelings of success as a teacher. Besides the actual teaching, the best boost for my teacher development has been the teacher-training contact days.

At the end of teacher training, Mariah reported a notable growth in her teacher identity. However, her future goals as a professional remained within her craft field:

My teacher identity has grown strongly during the training. Today, I feel like a teacher in a school, whereas a year ago, I felt like a beautician.... I have gained a lot of confidence.... The ideal situation for me would be to do both professions (cosmetic care and teaching) simultaneously.

After the training, Mariah's identity and positioning as a vocational teacher had changed from a dominant craft orientation to a more pedagogical orientation. However, negotiating her ideal professional self in the future seemed to consist of both teaching and cosmetic care, indicating boundary crossing between craft-field and a teacher's work (Farnsworth & Higham, 2012; Fejes & Köpsen, 2012).

Tom: From backup identity to strengthened craft-field identity

Tom already had a fairly long teaching experience (eight years) in different fields. At the start of the training, he was working as a sports coach and a teacher in a sports academy (i.e., in a vocational school). He had several professions and qualifications, but even at the start of the teacher training, he reported that coaching sports and physical education were his "thing" – not teaching:

I see myself as a university-level coach, not a teacher. Back in the day, many of my colleagues completed teacher training, but I didn't consider that necessary since I didn't experience teaching as my calling – and I don't even now.

During the training, Tom reported some development in his pedagogical thinking and especially in his digital teaching competencies. This development led to experimenting with new teaching methods and to receiving positive feedback from his students and colleagues. He was also able to implement "new tools", which were provided by teacher training, in his coaching. The workplace and his work as a teacher had been especially important platforms for Tom's teaching (and coaching) development. However, he reported serious problems in finding time to reflect on and advance his teaching development while working so much. Additionally, Tom had quite often prioritized coaching over teacher-training interventions:

Discussions with my colleagues have supported me, also I've got a lot of fresh perspectives from my students. Often, I've been too busy [working] to attend teacher-training contact days, but meeting peers among the student teachers has encouraged me to believe in my teaching competencies.

On graduating, Tom was happy with the teacher training. He had obtained a teaching qualification that would secure his future in the labour market if coaching did not provide a living. In describing his developed teaching competencies, he nevertheless believed that teaching was still not the profession that he wanted to engage in. Tom reported having gained solid assets and competencies (outer level) as a teacher, yet his professional identity (inner level) continuously seemed to be oriented away from actual teaching (Korthagen, 2004):

I still don't believe that teaching could be my dream job.... but all this has not been a waste of time; I have gained a lot of confidence in my teaching and in working as an educator.... The teaching qualification is a safety net for the future if I decide to do something else... but for now, coaching and sports [constitute] the field I want to work in.

Discussion and conclusions

In this longitudinal study, we investigated the identity construction of Finnish vocational teacher trainees in the context of workplace-oriented training. In the course of this process, the VET teacher identity construction seems to be a continuous, longitudinal and active process. This involves transitions and negotiations between a former profession, teacher training and VET teachers' work. In the data, we found eight distinctive identity trajectories over time. Nine of the 15 participants reported a clear orientation towards teaching and the teaching profession at the start of the training (a *craft-field identity* and a *calling identity*). They ended up with refined pedagogical identities (*identity as a reflective pedagogical actor* or an *enriched stable pedagogical identity*). In line with the dialogical

approach to identity, this indicates continuity and coherence in identity trajectories (Akkerman & Meijer, 2011). In a similar vein, the continuity between the starting and the final identities can be observed in the initial *backup identity* (regarding teaching) that resulted in the *strengthened craft-field identity* (as opposed to the refined pedagogical teacher identity). This continuity within trajectories is also supported by the fact that the *drifter identity* (which had no clear initial orientation towards the teaching profession) led to various graduation identities.

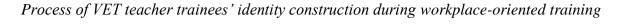
At the same time, the results showed movement (discontinuity) in the identities (Akkerman & Meijer, 2011), in the sense of change and development in the VET teacher trainees' identities. For example, those participants who had a *teacher orientation* at the start of the training reported major changes in their pedagogical thinking at the end of the training. However, those who ended up with a *strengthened craft-field identity* (rather than a refined pedagogical identity) still viewed the vocational teacher training as valuable from the perspective of their field and professional development. Even if they were participating in the same training process, the participants' individual interests contributed to different ways of constructing personalized identity trajectories (cf. Akkerman & Meijer, 2011). This suggests that vocational teacher training can support teacher trainees in developing their pedagogical and professional competencies in line with who they are and what motivates them as teachers. In doing so, they can overcome the dichotomy between "developing competencies versus personal growth" (Meijer et al., 2009, p. 298).

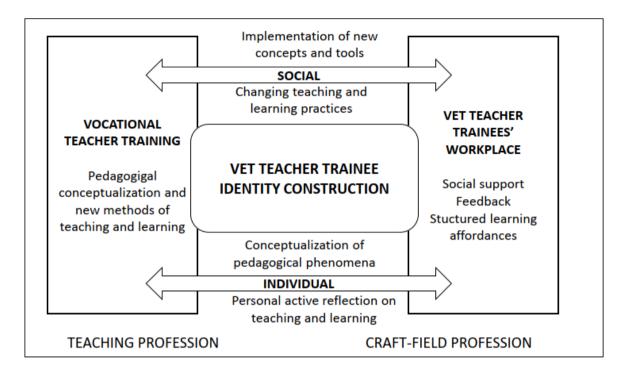
Previous studies have emphasized vocational teachers' multiple roles and novel work responsibilities, in addition to traditional teaching. These include performing professional duties outside the school, developing education and working life, educating students and gaining digital expertise (Fejes & Köpsén, 2012; Kirpal, 2011; Vähäsantanen & Hämäläinen, 2019). This study revealed how the changes in the participants' pedagogical thinking and activities were manifested in their adoption of many new roles as teachers and in the broadening of their teacher positioning and identity (Akkerman & Meijer, 2011). After the training, the participants with the identity of a *reflective pedagogical actor* characterized themselves also as educators, rather than as merely people who could deliver the knowhow connected with the field. Additionally, the participants with an *enriched stable pedagogical identity* had come to perceive themselves also as developers and networkers; hence, they ended up by connecting multiplicity of roles into a unity in terms of their teacher positioning and identity (Akkerman & Meijer, 2011; Hermans, 2003).

The main supportive factors for identity construction in workplace-oriented teacher training are summarized in Figure 3. Social support and structured learning affordances in the workplace – in collaboration with teacher training – encouraged individual reflection and a conceptualization of pedagogical phenomena. Eventually, this led to the implementation of new teaching methods, which the participants reported also as a driving force for teacher identity construction.

However, the workplace could also challenge teacher identity construction. Social factors, such as national and organizational changes, caused confusion in the workplace, and interpersonal conflicts could lead to individual issues, for example, with value-related or wellbeing problems. Other issues, such as a heavy workload and the constant hurried sensation, were found to be challenging. It is highly likely that such conditions might lead to teacher identity tensions and decreased wellbeing at work (e.g., Day & Kington, 2008; Kira & Balkin, 2014). In line with a study by Leeferink et al. (2019), our research also emphasizes the interaction between individual and social elements as they affect teacher identity construction in the workplace.

Figure 3





As shown in Figure 3, workplace-oriented teacher training offers good possibilities for developing and evaluating practices that support teacher identity construction. In response to the dichotomy identified by Meijer et al. (2009, p. 298), this study's results suggest that in developing a teacher trainee's own competencies, one can achieve personal growth *at the same time*.

The study has some limitations that should be noted. As a group teacher, the first author worked closely with the participants during the training process. This can be a benefit, leading to a deeper understanding in the research (Denzin & Lincoln, 1994), but it could also lead to subjectivity biases. However, this issue was addressed by working closely and transparently with the other authors (i.e., those who did not work with the VET teacher trainees or in this specific teacher training organization). Another limitation arises from the small sample size and the use of qualitative and inductive data analyses, meaning that caution is needed regarding the transferability of the findings. In the future, it would be beneficial to develop a framework in which our findings could be tested in different contexts by using larger samples and quantitative approaches. Moreover, our aim was to identify the factors associated with vocational teacher identity construction in this specific educational setting. Further research is needed regarding deeper elaborations on these findings, for example, *how* the identified factors (e.g., workplace mentor, changes in the workplace, workplace networks) are concretely associated with vocational teacher identity construction.

Despite these limitations, our study contributes knowledge derived from a longitudinal view of identity trajectories as they are formed during VET teacher training. Schools as teachers' workplaces are positioned at the interface of social and individual processes of teacher development, which seems to form a fruitful arena for growth as a teacher. However, in workplace learning, VET teacher trainees need solid guidance, for example, on how to align workplace affordances with their own learning

goals, in collaboration with workplace mentors, workplace networks and teacher trainers. VET teacher trainees in the vocational domain find themselves in a boundary-crossing position, located at the intersection of their own school workplace, the craft workplaces and the teacher training institute (Fejes & Köpsen, 2012). Individuals in this position can gain refined pedagogical identities, as long as they are supported in conceptualizing pedagogical phenomena and encouraged to implement new teaching methods, all the time reflecting deeply on the theories, actions and paths needed to become (or not become) a vocational teacher.

It can be suggested that since continuous changes are now part of each employee's life, in workplace learning, the emphasis should also be on constructing a professional identity (e.g., Tynjälä, 2013; Vähäsantanen et al., 2017), as well as developing more holistic workplace-oriented education and training possibilities. This kind of learning should be promoted through pedagogical practices in both the authentic settings of workplaces and a range of work-related training settings. Our findings suggest that workplace-oriented training could create valuable social settings and affordances for individuals to gain competencies *and* negotiate their professional identities in continuous interactions of the worlds of changing work and education. In this way, employees could better reflect on and work with their professional identities in relation to the changing conditions of their work.

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