How Do Students Describe Their Study Processes in the Competence-Based Vocational Special Education Teacher Training?

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Abstract

The competence-based approach has entered Finnish education after the recent reform of vocational education. Although there is plenty of research nationally and internationally about the idea of competence-based education, the student perspective has remained in the shadow. This research focused on vocational special education teacher students' experiences of the competence-based education. They started at the Oulu University of Applied Sciences in 2014 in the new competence-based teacher training program. This was a narrative research focusing on the students' ($N=20$) descriptions of their study processes. The data consisted of their written narratives as well as personal interviews at the beginning and end of the study process. Students' experiences of the different phases of education and perceived benefits and challenges of competence-based education are introduced as results. While the competence-based education seemed to serve well adult students participating in it, there are many definitions and practices that have to be studied and defined better. Suggestions for future development to enhance both vocational teacher training and competence-based education in general are discussed based on the findings.

Keywords Competence · Competence-based education · Vocational special education teacher · Narrative research

Introduction

The development of competence-based education originates in the Bologna Agreement (see e.g., Adam 2004; Gonzalez and Wagenaar 2003), to which 29 countries of the European Union joined in 1999 (Ministerial Conference Bologna 1999). Currently, the competence-based

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education arouses many questions and plenty of debate. Simultaneously, its philosophical foundations and teaching practices have gained increasing interest outside European Union in North- and South-America, Australia, Asia, and Africa (Mulder 2017).

The development of competence-based practices necessitates research and theoretical development (Mulder and Winterton 2017). Indeed, the idea of competence base has been studied from various viewpoints (see e.g., de Bruijn 2012; van der Klink et al. 2007; Winch 2017). However, less attention has been on students' experiences of competence-based education and learning processes. Instead, research has focused on work skills, that is, competences needed in work, and not so much on the competence-based learning process itself (Barabasch 2017; Heijke et al. 2003). It is important to know how students perceive the new type of training in order to be able to develop the training programs further. At the time of the educational reform taking place in the Finnish vocational education and training (VET), research from various perspectives is greatly needed.

This research focused on special education teacher students' experiences of the competence-based education. How do they describe their study processes? The purpose of this research was to obtain information about the study processes from students' perspectives so that the new type of training could be also developed to serve the students better. Understanding from the students' experiences was considered crucial. In this research, the students were asked to narrate their processes. As the competence-based education is socio-constructionist in nature, the research approach leaning on the same conception of knowledge appeared suitable.

What Does the Competence-Based Approach Mean?

When taking a historical and international look at the competence-based approach, it seems that its roots hark back to master-apprentice or mastery-learning model in the 1920s (Guskey and Gates 1986). In teacher training, the competence-based curriculum was tested in the USA in the 1970s (Tuxworth 1989) but mainly the competence-based model became more popular in work and vocational education. Teaching started to focus more on learning instead of just transmitting of information. It became clear that information does not automatically transfer itself into action. Thus, the ground for developing competence-based education was fruitful. Yet, higher education institutions started to become interested in the competence-based approach only at the end of 1990s (van der Klink et al. 2007).

In competence-based education, competence means general knowledge, skills, and attitudes (see e.g., de Bruijn 2012; Ford and Meyer 2015; Sánchez and Ruiz 2008). Mulder and Winterton (2017) present that competences can also be viewed as behavior-based general competences and task-specific special competences. Billett (2017) distinguishes three areas of expertise: canonical competence means societally produced entity that is explicitly expressed for example in curricula, situational competence means the way competences appear in various conditions such as in different workplaces, and personal competence that is the foundation of efficient action and ability to meet challenges at work.

In competence-based education, learning is perceived as a reconstructive process taking place in interaction with others, underlying different characteristics and experiences of individuals, and thus, resembles socio-constructivism (Wesselink et al. 2010b). When it comes to competences, new skills and knowledge are considered being based on earlier skills and knowledge, and thus, students possess abilities on which new skills become built (e.g., Straka

2002). According to Meijers et al. (2013), dialogical analysis of concrete experiences helps the development of competences through emphasis on earlier, personal professional expertise (see also Schaap et al. 2009; Fosnot 2013). Likewise, the development of professional identity is seen as an area of competence (Geijssel and Meijers 2005). In addition, competences can be obtained at work, in education, or through everyday learning (Harris and Wihak 2014). On the other hand, experience-based competence can also hinder the learning of theoretical information, and therefore, it is necessary to question one's previous competences in competence-based education (Merriam 2008). This is why competence-based education is based on personal study plans in which the teachers guide students to recognize the connection between their earlier experience and the learning goals included in the competence-based vocational education.

Many factors have guided the competence-based in-service and vocational education. Among others, the rapid technological development has necessitated that the traditional supply-oriented education was replaced by competence-based education. European countries have also accepted informal and non-formal learning as a part of competence development. Informal learning is everyday learning that happens usually at work or in leisure activities, whereas non-formal learning is structured but not aiming at, for example, a degree. It means that learning outcomes become acknowledged regardless of where one has gained his or her expertise. The politics of life-long learning or European work life strategy is to increase the skills and competence needed in work (see Le Deist and Winterton 2005; EU 2008).

The Implementation of Competence-Based Education

As a concept, competence base is included in many curricula but it has not been defined congruently, nor has it been agreed how it appears in education and is implemented in practice (cf., Johnstone and Soares 2014)—in addition, its epistemological orientation may not be the same (see e.g., Wrigley 2004). Van der Klink et al. (2007) claim that educational institutions want to refer to competence-based education and implement it but there is no joint agreement about the concepts related to it (see also Biemans et al. 2009). Garrett and Lurie (2016) point out that higher education institutions are increasingly interested in the competence-based approach but that there is not enough information about its wider implementation and impact. According to them, there are much more questions than answers at the moment: To what does the competence-based approach actually refer? What kind of pedagogy, practices, and evaluation does it represent and who does it serve the best?

Harris and Wihak (2014) emphasize that the basis of planning is the study process of students. Learning situations and activities related to students' learning are designed to support the study processes. The foundation of this kind of learning process planning is the desired expertise and the student's starting point at the beginning of studies. On the other hand, de Bruijn (2012) points out that some core principles have been agreed upon, such as the competence-based vocational education includes knowledge, skills, and attitudes, and that these are defined in the objectives written in the curriculum. Some researchers consider it a critical weakness that there is not enough research on how students internalize their learning material during their personalized study processes (see e.g., Bowden 1997; Korthagen 2004; Schaap et al. 2009; van der Klink et al. 2007; van der Sanden and Teurlings 2003; Winch 2017).

Competence-based learning is not just timeless and placeless studying but it is a competence-based model that pays attention to students' needs in the learning process. However, this does not guarantee that people perceive the concept of competence-based similarly (Sturgis et al. 2011). In addition, it is worth noticing that competence-based education is also about becoming competent to perceive one's own competence. The objective of competence-based education is high-quality expertise. Sturgis et al. (2011) define that students advance upon mastery; competencies include explicit, measurable, transferable learning objectives that empower students; assessment is meaningful and a positive learning experience for students; students receive timely, differentiated support based on their individual learning needs; and learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions. If the aforementioned practices are realized appropriately, education should become equal and provide opportunity to reach good outcomes (Sturgis, Patrick, & Pittenger, 2011).

Wesselink et al. (2010a) have developed a model that presents eight principles for CBE. These principles concern (1) the curriculum and specification of the study program; (2) the way instruction should take place and the role of the teacher, or what is called the pedagogical or didactical practice; (3) the assessment procedure; and (4) the career competencies of the student. According to de Bruijn et al. (2005), these four components (curriculum, pedagogy, assessment and career competencies) together form an infrastructure for powerful learning environments. Applied to educational practice, the model can be used as a heuristic guideline that enables and empowers teams of teachers to interpret and translate developments on national and international level into aspects of their study programs.

Method

The purpose of this research was to describe the first group of adult students' experiences, who entered the competence-based special education teacher training. Their study processes were under investigation in this research from the beginning to the graduation phase. They did not have any previous experiences of this type of education, and it was also new to the educational institution.

One main research question was set for the research:

How do the students describe their study processes in the competence-based special education teacher training?

The main question was analyzed through three sub-questions:

1. What kinds of phases did the competence-based education model include as described by the students?
2. What kinds of challenges did the competence-based education model include as described by the students?
3. What kinds of benefits did the competence-based education model provide as described by the students?

The research was conducted at the Oulu University of Applied Sciences, Finland, where the vocational special education teacher training was introduced according to the new competence-based curriculum in 2014. The first 20 students were taken in the training and their purpose was to perform vocational special education teachers' pedagogical studies (60

ECTS). The competence areas of learning in their education were the following: competences in special education and pedagogy (10 ECTS), vocational special education teacher's collaboration and communication competences (15 ECTS), vocational special education teacher's pedagogical competences (20 ECTS), and vocational special education teacher's developmental competences (15 ECTS). All these competence areas were further specified as certain practical skills that were evaluated and obtained during the competence-based training process that included altogether 43 learning goals. Regarding each learning goal, students had to recognize their current expertise and supplement and prove their expertise as per their choice. For example, they could already possess pedagogical competences, and they could choose to illustrate their expertise with a method they and their teachers considered suitable. If the expertise was recognized and acknowledged, the student did not have to study the course related to this pedagogical expertise. If the expertise was not considered sufficient, the student could supplement his or her pedagogical expertise for the necessary part. This was called *personalization of studies*. The teacher's task was to guide and evaluate students' expertise and recognize it or ask to complement their expertise (see Kepanen 2018). The competence-based training model was co-constructed with the representatives of work, such as nearby vocational special education teachers, rectors, and multiprofessional workgroups. These representatives participated in curriculum planning when the first competence-based curriculum was designed at Oulu University of Applied Sciences.

The purpose of the training was to create such high-quality competence-based education that enabled working as a vocational special education teacher and comprehensive expertise and development of this profession during the studies and when employed. When it comes to its learning theoretical basis, the competence-based model leans on socio-constructivism that views learning as a reconstructive process in interaction with others. The viewpoint also emphasizes the human being's ability to learn and develop continuously by knowledge, skills, and attitudes.

The students comprised the very first student group studying in this kind of competence-based education, and they are the research participants of this research. They all were working as teachers and wished to complete the qualification for a special education teacher's work alongside their work. All students had pedagogical qualifications, and they had served as teachers for several years (3–25 years, app. 8.5 years). All had also experience of special education teacher's tasks. Of these students, 15 were women and five were men. Their average age at the beginning of training was 45 years.

As the purpose was to study the study process from the students' perspective, a narrative approach was considered the best to reach their experiences of the new type of study path. The narrative approach is qualitative research by nature and uses narratives to describe human actions (Polkinghorne 1995). Riessman (2008) points out that the concept of narrative has many meanings, but often, it is a synonym to word "story." In daily oral interaction, the one who tells a story combines events so that these events provide explanation to what happens later and that the ones listening to the study gets what the narrator wants them to get from it. The narrative is useful only when it provides its audience with a deeper insight of life in a familiar context. It can make the familiar strange and the strange familiar (Clough 2002). Bruner (1997) uses the concept of "narrative" to narrative thinking and linguistic structures produced through thinking; that is, stories and metaphors. The narrative is the form and narrative thinking is then a process. In the research at hand, the students' narratives thus constituted constructed descriptions of the study process, each narrative including those experiences the students considered the most meaningful to describe.

Narrative research is socio-constructivist in nature. It means that knowledge is understood as socially constructed in people's minds (see Bruner 1987). Hänninen (2004) distinguishes three types of narratives: the told narrative, the inner narrative, and the lived narrative. These various forms of narrative are viewed in relation to each other and to the social-cultural reality in which the person lives (see Salmela and Uusiautti 2017). Narrative research provides information about peoples' lives and may focus on the life span as a whole or on certain events or processes. In this research, the focus was on the competence-based training process and the purpose was to obtain information about student experiences and meaningful events and factors during the process.

The research data consisted of their personal interviews at the beginning of the training in which students had to make their self-evaluations about their expertise, their written narratives during the training, and final interviews at the end of the training. The written narratives were prompted with the heading "Describe your own study path in the competence-based special education teacher training including all successes and challenges".

The first interview focused on the challenges, benefits, objectives, and meaningfulness of self-evaluations as a part of personalized study process. Interviews were conducted as thematic, personal interviews. The final interview was unstructured narrative interview that had features of active and episodic interviews. These interviews were also based on the students' written narratives and themes arising from these narratives. The final interviews were also conducted as personal interviews.

Information provided by this research is subjective in nature: competence-based studies are viewed as described by students, and this information was produced through interaction between the researcher and research participants. According to the idea of narrative research, those experiences included in their narratives can be considered the most valued or significant to them. Students who participated in the research revealed their experiences in competence-based training quite openly, and thus, their self-reflection skills increased. On the other hand, new information is reconstructed during studies individually, which means that it has formed in the social context. In the narrative research, the researcher is interested in those meanings that people give their experiences, not in how truthful these descriptions are (Jovchelovitch and Bauer 2000). Thus, a central task of narrative research is to highlight the research participants' voices and give them a chance to express their conceptions of the phenomenon under investigation (Lieblich et al. 1998).

Work with narrative research data necessitates three types of dialogical listening: listening to the narrator, theoretical framework that provides tools to interpret the narratives, and reflective observation between reading and interpretation (Josselson 1996). Here, the researcher's theoretical understanding about the principles of competence-based education can be seen as theoretical framework that guided the narrative content analysis. However, narrative research rarely is theory-led because the emphasis is on the contents and meanings included in narratives. Therefore, previous theoretical information provides merely tools to understand the contents in the narrative data.

According to Polkinghorne (1995), the analysis can be performed as the *analysis of narratives* and *narrative analysis*. The narration is in the core of narratives, and the purpose is to categorize the narratives as such. The analysis of narratives does have similarities with qualitative content analysis, and this study employed the analysis of narratives focusing on categorical reading of narratives (Salmela and Uusiautti 2017). Excerpts from the data have

been added in “[Results](#)” to illustrate how the students described the study process in their narratives. The data excerpts were translated from Finnish to English.

Results

In the following chapters, the students’ study processes are described through themes that students emphasized in their narratives. They described their study processes all the way from applying phase to development and recognition of their expertise, and finally applying their skills at work.

Phases of Study Process

In this results section, the students’ experiences of various phases of their studies are described. First, the motives for starting the studies are introduced followed by perceptions of the start. After the somewhat challenging start of studies, the phases include reconstruction of one’s competences. During the path, personalized study plans appeared significant.

Motives to Apply for Training

When the students described the reasons and motives to applying in the training, the most important reason was that they were not qualified special education teachers and felt uncertain at work, caused negative attitudes in the workplace, and uncertain employment. On the other hand, they also had been encouraged to apply for training.

The diploma has a huge symbolic value... - - The border between qualified and unqualified teachers in the teacher community is quite deep. (Student no. 1)

The information about competence-based curriculum had also influenced the students’ decision to apply for vocational special education teacher training. They considered the planning and guidance of personal study processes skills that they wanted to learn in the first place. In addition, they appreciated the fact that their studies would be tailored and their previous experiences would be acknowledged. The multiform training program was also found motivating. The flexible practices of competence-based studies were noticed already during the application phase.

Even if I was not able to participate, they would not expel me. I would obtain expertise some other way. This fit my life situation well. (Student no. 19)

The Challenging Beginning

The beginning of studies was challenging for the most of students. The study method was different than before, and they had not analyzed their earlier experiences and knowledge this deeply before. They were hesitant about their competences and could even regret that they had applied in this training. Although the way of studying in the competence-based education was

new to students, little by little, they started to realize that they had to create their study processes by themselves and show emerging meta-learning.

I understood that I am facing a totally new way of studying. I understood that I could not survive with the quite convenient “reading to exam-take the exam-pass the exam” pattern that I had become used to perform my studies. They wanted us to find our own routes and to do things by ourselves. (Student no. 11)

As the students started to recognize their tacit knowledge and expertise, they become more enthusiastic about their studies and felt inspired to carry on.

As it is difficult to bring out your tacit knowledge. But then I noticed that I do know this thing, and can do that too. (Student no. 16)

Expressing explicitly tacit knowledge appeared difficult because the students had made decisions at work without reflecting the reasons, and therefore, their action had been unconscious and automated. Therefore, realizing the pedagogical competences needed in these everyday solutions turned out to be challenging.

The concepts of competence-based education were quite strange at the beginning. Students found concepts such as “self-evaluation,” “recognition of expertise,” “illustration of expertise,” and “acknowledgment of expertise” appeared confusing. They had to change their way of perceiving themselves as students—thus, the new training made familiar strange to students. As the concepts became familiar, the students started to perceive them as a natural part of their study processes. When doing their self-evaluations, the special education teachers started to study these areas they considered needing more knowledge and skills.

Insightful Reconstruction Phase

Reconstruction of competences means a process through which already possessed competences are being re-built through analytical reflection, reconstructed in other words (Karjalainen 2016; see also Billett 2017). Reflection makes an important part of the reconstructive process (Korthagen et al. 2001). In reconstructive education, competences are built from experience: through reflection, the theoretical construction of earlier experience is possible leading to profound recognition and documenting of one’s competences (Karjalainen 2016).

As the students entered the reconstruction phase of their expertise, they could recognize their existing expertise and reflect it on their work. Only after that, they could create their personal study processes. Some of the students started to supplement and illustrate their expertise immediately, while some others needed more time to deliberate and start their study processes. Other special education teacher students helped their progress as well as teachers’ guidance and their own familiarization with the new study process. Social recognition was an important part of learning.

The whole process started to roll forward, and as it was puzzling in my mind all the time unconsciously, the process went forward. This happened to everyone with whom I have discussed this topic. (Student no. 7)

The Importance of Personalized Studies

The adult students appreciated the opportunity to perform their studies in their own pace, which is called *personalized studies*. As mentioned in the theoretical review, this is one of the core ideas of competence-based training. In the students' opinion, personalization also enhanced the prompt progress of their studies. Personalization was thanked in narratives: it meant that their own expertise and experience were acknowledged, which on the other hand inspired to study more.

When you realized that hey, I have done this too and that this is something that it's good to bring out as a part of you expertise -- but you have not thought that those—have been something that have developed your own work. That is where you often get the experience to yourself, through the successes. (Student no. 8)

The benefit of personalization was that the students could change the original study plan. They were able to show their expertise faster if they had obtained some of the required expertise already beforehand. The special education student teachers were encouraged to look for their own ways to obtain and illustrate their expertise. There were not ready models for this, which made the personalized training flexible.

It made it possible to graduate faster and studying was more fluent. When you are studying alongside your work, it becomes important. (Student no. 8)

Personalization was also referred in the opportunities to arrange participation in contact teaching in study groups physically at the campus. In other words, they tried to organize their work so that they could come to the campus to study. The students emphasized the importance of contact teachings for their personalized study processes. They were able to maintain their study pace better and clarify their goals as discussions with teachers and other students opened their eyes for various options. In addition, they could apply the skills that they had learned in these contact teaching meetings with the group also in their own work.

I noticed quite quickly that I can perform my studies as I wish, and what I do not have, I will get through these studies. I have been able to study from home, I do not have to travel all the time. Yet, it is nice to be there always. Without that group, my own professional identity would not have developed this much. (Student no. 10)

The students also thanked the competence-based education for making all of them feel welcome and valuable. The students did not have to feel themselves worse or nuisance if they could not progress as fast as others did in their studies.

Challenges and Benefits of Competence-Based Studies

Another important topic in this research was to find out which challenges and benefits the students mention in their narratives. Three categories were found that were reflection at work, importance of contact teaching and study group, and illustrating and applying one's expertise.

Reflection at Work

All students had long work experience as teachers and they did their training alongside their work. They reported that the competence-based education had developed and increased their theoretical understanding. As their theoretical knowledge accumulated during training, their abilities to evaluate their own action at work become better. The students could apply their new competences at work immediately, and on the other hand, this also made them re-evaluate their skills and attitudes at work as their competences expanded:

You kind of had to deal with the obvious and theorize, expand your conception from pure experiences. You had to shake your old views. (Student no. 20)

Their ability to identify the key elements of their own expertise increased. This caused a variety of feelings (see also Kiely 2005; Lüftenegger et al. 2016). Positive emotions (e.g., enjoyment) appeared as new understanding of one's competences and skills increased. However, they also faced negative emotions (e.g., anxiety) when they had to question their skills. However, they realized that it was an important part of the learning process. As their self-cognizance increased, their expertise seemed to strengthen. The students became aware of the same elements that their own students had when they had been working as teachers. They could better recognize the different needs of their own students, too. The research participants noticed how difficult self-evaluation was, and that this was the case for their own students as well. This experience helped them to develop their teacherhood so that they could support their own students' learning better.

When I started working in the fall, I got a feeling that I cannot teach. I became an outsider watching and evaluating my own work and I would find flaws in my teaching style all the time. It was like I was having a conversation with myself. I think that the formal information really clung to the information I had gathered earlier in practice. (Student no. 12)

Yet, as their perception of their competences became better and understanding about the learning process deepened, they also reported prospective (e.g., hope) and retrospective (e.g., pride) emotions as they became optimistic about their ability to successfully perform their studies and be proud of their current and forthcoming competences.

The Importance of Contact Teaching and Study Group

Most of the studies could be performed via online connections and independently. However, the training included some contact teaching periods, which meant that the students participated in seminars at the campus. According to students' narratives, these 2-day contact teaching periods once a month promoted their learning. The students considered these meetings inspiring and useful. Although all students advanced in their studies according to their personalized study plans, learning together in the group was also important and the group was meaningful to the students. Peer feedback was encouraging and helped in recognizing one's expertise in areas that one had not thought. Discussions with fellow students gave new perspectives to work as a vocational special education teacher.

You learn the most from the group. The teachers' lectures and presentations were good and all practices, but those other students who had even more that substance knowledge, who had been with those students, that is where you learned the most, as well as from doing together and having group discussions. Indeed, we also discussed these things during breaks too. (Student no. 5)

In addition to group and peer feedback, guidance from tutors was considered important for studies. The students had found tutoring discussions and constructive feedback beneficial.

It strengthens your self-esteem and desire to learn when they highlight the positive things. I have seen that to happen [to my own students]. (Student no. 16)

Illustrating and Applying One's Expertise

The students learned to understand that expertise could be illustrated in many ways and that they could choose how they wanted to show their expertise in order to get credits from courses. The students could show their expertise in many ways. For example, they could write a blog about their activities and learning, they could video shoot their own working, or they could give exemplary lessons to other students of competence-based training. It was also possible to show expertise orally in the group or in discussions with teachers. The students could choose how they wanted to illustrate their competences.

The students mentioned also other benefits. They emphasized that it was important to apply at work what they had learned. It could even improve the atmosphere at their workplaces.

You can see the difference with your own workplace. Encounters and everything. I can influence at my workplace, trivial squabbling has ended. I have means to face these situations. I worked with and learned dialogical encounters the whole spring. (Student no. 13)

As the studies progressed, the students perceived how their confidence as teachers increased, networks widened, and the competence-based model became familiar. In practice, it meant that they were more initiative at work when working with their colleagues and networks and had the courage to consult others and express their opinions more openly than before. Their experience from competence-based training increased their own understanding and helped their work with their own students.

Luckily, there are dozens of ways of showing your expertise. I do think that competence-based education supports various learners and the implementation of inclusion. Everyone can show their expertise from the basis of their strengths. Nor does teaching support just the stereotypical reader-writer student, certain type of learning, and uniform learning paths. (Student no. 9)

After the first illustration of expertise and getting positive feedback from it, the process took an important step forward. The students could illustrate their expertise during their contact teaching days to other students. Many of them described that this was a good experience, and they had received encouraging and constructive peer feedback.

I also changed during these 1.5 years in my way of encountering students. I will always listen through the positive now. Even though sometimes my student has been touchy, but in the future, we calm down and notice that this issue will be turned into victory. (Student no. 3)

Discussion

In this research, students told that they had benefitted from the competence-based education model because their earlier expertise was fully acknowledged. Their study processes become shorter as they did not have to study something that they already mastered. This finding is supported by earlier research. Among others, Schaap et al. (2012) noted in their research how competence-based education increased students' motivation and, on the other hand, improved their learning results (see also Runhaar 2017).

The competence-based approach in this research could be seen as flexible studies that enhanced study motivation in vocational special education teacher students. Still, we agree with Mulder and Winterton (2017) who noted that there are many questions in competence-based education that are yet to be answered. It is important to continue research that highlights the benefits of competence-based education but also critically points out the challenges. Integrative and holistic approaches are valuable but challenging, too (see also van der Klink et al. 2007).

The implementation of competence-based education has been criticized because the definitions and interpretations of what competence-based is are not congruent enough (Wesselink et al. 2010a). On the other hand, research has increased considerably, which will enhance the creation of common definitions and practices (e.g., Garrett and Lurie 2016; Johnstone and Soares 2014; van der Klink et al. 2007).

Mulder and Winterton (2017) describe the principles of competence-based curriculum in vocational education. According to them, vocational core expertise could form the baseline of curriculum. Thus, education would prepare students more comprehensively to meet the challenges of work and enable more reliable assessments. However, vocational development and change happen fast. We need increasing information and ability to foresee what kind of vocational expertise is needed in the society and work in the future (Franklin and Lytle 2015). Although the competence-based approach may, indeed, provide support to change and people's ability to change, it is reasonable to ask what the core skills required at work are and who defines them? What will be the learners' role in all this?

When developing the competence-based model, it is necessary to pay attention to the means that secure manifold expertise but avoid fragmented pieces of information and skills (cf., Johnstone and Soares 2014). Therefore, the competence-based model should be introduced in various educational phases. The existing expertise should be acknowledged at all levels of education so that every child's, youth's, and adult's learning would become optimal (Baker 2015). Already in early childhood education, the ability to recognize one's own expertise strengthens learning new skills (e.g., Fenton and McFarland-Piazza 2014): a child learns to evaluate his or her learning when supported by the teacher. The teacher can help the student to recognize certain things in learning and how to advance by noticing his or her skills and abilities. Experiences of successes promote learning and enhance courage to tackle new

learning challenges. The study at hand showed that competence-based training can be empowering and positively ignite learning.

The competence-based approach makes one ask what learning is. It is necessary to deepen and revise the theory of learning toward student-centered understanding and simultaneously create foundations to the development of new learning practices. Each student should be given enough time to make the process truly individual. Students need time to think in order to learn. Likewise, the self-evaluation phase is important. In all, students have to create a holistic picture of expertise that is required, and after that, they should be able to plan their own learning processes as they recognize their expertise and needs for learning (see Mulder 2017). Although learning is a personal process and self-direction increases along the competence-based process, still, no one is likely to progress in his or her studies alone. This showed that the need for and importance of guidance is great for adult students, too. Learning is social too. At its best, through proper guidance, competence-based education provides an opportunity to create personalized learning processes.

In addition to self-evaluations, it would be necessary to focus on competence-based assessment: what it is, what it is based on, how teachers perceive it, and what students think about assessments (see Straka 2002). Similarly, it is crucial to analyze personalization by asking how different stakeholders perceive it and which personalization practices serve each student the best. If the process of personalization becomes defined by outsiders, it does not then comply with the competence-based thinking. It is not axiomatic that all students perceive the process similarly. In the competence-based education that was in focus in this research, evaluation happened through showing of expertise. Teachers of the student group and work representatives served as evaluators. Each student created his or her own learning path toward learning goals, and their abilities and backgrounds vary and influence the learning process as well.

Teacher training should also be developed according to the future requirements of expertise so that it provides teacher students with models of implementing competence-based approaches. Prospective teachers can transmit their expertise forward to their students (Johnstone and Soares 2014). The development of competence-based models requires research-based information. The research at hand provided one new perspective as it highlighted the competence-based study process from the students' perspective. The competence-based education can be developed based on the feedback given from teaching and the learning process. Therefore, in teacher training, it is important to emphasize the teacher's role in students' study paths.

Conclusion

Qualitative research makes the world visible through the researchers' interpretations. These interpretations change the world as they turn it as a series of representations (Denzin and Lincoln 2000). This interpretive manner of approaching the world illustrates what kinds of meanings the research participants give to the research topic (Clough 2002). The data in this research consisted of written narratives and interviews. Did they make the world visible, changed it, and made it a series of representations? In our opinion, the findings show what the special education teacher students described and how we as researchers interpreted these descriptions. The research showed that the competence-based education changed the students, their action, and way of thinking, as well as their competence to perceive their own

competences. It also provided us, and hopefully to readers too, new perspectives of teacherhood in competence-based educational activities. The teachers' role turned into advisor and supporter of learning. In addition, the teacher's role in identifying competences, spotting them from the student's earlier experience, became emphasized. The teacher has to hand the power to the students so that they can lead their own learning processes, and therefore, also the teacher's trust and caring in students is central (see also Määttä and Uusiautti 2018).

A good question is whether the new study model that has emphasis on students and their learning, ownership of the learning process, and students' responsibility over their learning processes represents emancipatory approach. The competence-based thinking cannot be fully reached if one has not participated in one way or another in it during studies. This notion was made by the research participants who described that only during their study processes they started to understand their own action and thinking.

In narrative research, reliability has a twofold nature. First, research should represent a feeling of being in between: it opens the connection between the researcher and topic as well as between narrative and the contents of the narrative. Second, the narrative must be credible and resonate with the audience. In addition, decoding and recoding processes have to be carefully reported (Blumenfield-Jones 1995). Indeed, the qualitative research process leans greatly on the researcher's intuition, interpretation, reasoning, and categorization abilities. There are many ways to make conclusions, and in qualitative research, conclusions made from one set of data can be contradictory (Richardson 1994). The researchers have to do their best to introduce findings as credibly and transparently as possible. To ensure validity in this research (see also Salmela and Uusiautti 2017), we have pursued to describing the context of the research as openly and carefully as possible. The purpose has been a hermeneutical conception of truth, optional way of revealing the world (Freeman 2011).

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