

MARVI REMMIK

Novice University Teachers' professional development and learning as a teacher: Opportunities and Conditions at Estonian Higher Education Institutions



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Higher Education Institutions



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Dissertation is accepted for the commencement of the Degree of Doctor of Philosophy (in Pedagogy) on October 22, 2013 by the Doctoral Committee of the Faculty of Social Sciences and Education, University of Tartu, Estonia

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Commencement: December 6, 2013, at 10.00

The publication of this dissertation is granted by the Faculty of Social Sciences and Education, Institute of Education, by the Doctoral School of Education and Behavioural Sciences and by a Primus grant from European Social Fund.



ISSN 1406–1317
ISBN 978–9949–32–427–9 (print)
ISBN 978–9949–32–428–6 (pdf)

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University of Tartu Press
www.tyk.ee

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LIST OF ORIGINAL PUBLICATIONS

This dissertation is based on the following original publications which are referenced in the text by their Roman numerals:

- I Remmik, M., Karm, M., Haamer, A., & Lepp, L. (2011). Early-career academics learning in academic communities. *International Journal for Academic Development*, 16(3), 187–199.
- II Remmik, M., & Karm, M. (2012). Novice university teachers' professional learning: to follow traditions or change them. *Studies in the Learning Society*, 2–3, 121–131.
- III Remmik, M., & Karm, M. (2013). From teaching to guiding learning: novice university teachers' conceptions of teaching. In E. Saar, & R. Mõttus (Eds.), *Higher Education at the Crossroad: The Case of Estonia*, (199–216). Frankfurt am Main: Peter Lang Verlag.
- IV Remmik, M., & Karm, M. (2013). Learning and Developing as a University Teacher: Narratives of Early Career Academics in Estonia. *European Educational Research Journal*, 12(3), 330–341.

The author contributed to the publications as follows:

For Paper I: designing the study, formulating the research questions, creating the instrument for the study, participating in data collection and analysis, writing the paper as the main author.

For Paper II: designing the study, formulating the research questions, participating in data collection and analysis, writing the paper in cooperation with Mari Karm.

For Paper III: designing the study, formulating the research questions, participating in data collection and analysis, writing the paper in cooperation with Mari Karm.

For Paper IV: designing the study, formulating the research questions, participating in data collection and analysis, writing the paper as the main author.

I. INTRODUCTION

The quality of teaching in higher education has become a global issue in recent years, and the need to improve both pedagogical thinking and teaching skills is now acknowledged to be essential (Postareff, Lindblom-Ylänne, & Nevgi, 2008). Although research studies recognize that excellent teaching, based on scholarship and skills, maximizes deep learning, as Scott (2003) points out, the global attainment of teaching excellence requires a cultural change in higher education institutions.

Changes in higher education (the wider intake of higher education, changes in the student body, including a growing number of adult learners, changes in higher education institutions, curricula, financing principles, etc.), which have occurred in the world and in Estonia over the past few decades, have also changed the work of university teachers and are presenting new challenges (Debowski, 2012; Karm, Remmik, & Haamer, 2013; Knight & Trowler, 2000). According to Ylijoki (2005), universities are undergoing a “second academic revolution” (p. 557). During the first revolution, research was brought into universities. Now, however, universities are increasingly focusing on supporting economic development.

Changes in higher education have been accompanied by a change of the university teachers’ identity and their increased duties. University teachers are expected to teach well and produce considerable results in research (Knight & Trowler, 2000; Tynan & Garbett, 2007). Consequently, university teachers have sensed a degree of conflict – expectations from them were high, whereas institutional support remained modest (Billot, 2010). Knight and Trowler (2000) felt even more critical about the changes. According to them, universities became greedy, setting increasing demands on their employees while offering nothing in return. The complexity of the changed circumstances has resulted in a situation in which a large number of university teachers showed signs of a growing identity crisis and disappointment with altered academic values (Ylijoki, 2005). Manathunga and Brew (2012) used the metaphor of the ocean, which was “wild, vast, unpredictable, unhomely, life-giving, powerful, and invigorating” to describe the work of a contemporary university teacher (p. 56).

The impulse for this research arose from earlier studies which have stated that novice university teachers often experienced loneliness and isolation in their occupation (Adams & Rytmaster, 2000; Barrett, Ballantyne, Harrison, & Temmerman, 2009; Jauhiainen, Jauhiainen, & Laiho, 2009; Walker, Gleaves, & Grey, 2006; Åkerlind, 2005). The possible insecurity of early-career status and position could be influenced by workload, vague work assignments, insufficient feedback, and lack of support (Tynan & Garbett, 2007). Moreover, as novice university teachers needed to cope with different roles in a university (teaching, research, etc.), research, especially into their adaptation to the role of a teacher and their acquiring of teaching skills, became important. What was more, previous research (Norton, Aiyegbayo, Harrington, Elander, & Reddy,

2010; Tynan & Garbett, 2007) has demonstrated that they sensed a conflict between teaching and doing research, since research work was valued in the context of an academic career, while a heavy teaching load, with the involved pre-teaching preparation, consumed much time that could be allocated for research work. Vardi (2011) has found that some important questions that higher education faced were related to questions of how to get academic staff and how institutions can take teaching as seriously as research, how to reward staff for teaching well and how to acculturate 'new blood' into the academy. Involving new university teachers in the work of higher education institutions was an issue also faced by Estonia.

In 2008, as the present study was being planned and earlier studies analyzed, it became evident that studies focusing on novice university teachers were few in number (this particular need for more research has also been expressed by Sadler, 2012a). There was a need to conduct a thorough empirical research study. During their first years of practice, university teachers were exposed to the challenges and pressures of developing effective teaching and research skills, becoming a part of the university teachers' and researchers' community, and forming an identity as a university teacher. Novice university teachers are expected to cope with various tasks, including teaching, early into their career whereas they usually have no teaching-related preparation.

Therefore, it is important to find out how novice university teachers give meaning to their activities in a university, on which teaching conceptions their activities are based, and how they develop themselves as university teachers. Comprehending the differences among novice university teachers enables universities to develop support systems for facilitating the professional learning of university teachers.

1.1. The context of the study

The Estonian higher education system is binary and consists of universities and professional higher education institutions. In the last decade, the processes happening in Europe have influenced the Estonian higher education system. Since the year 2000, reforms in the Estonian higher education system have been influenced by the Bologna Process (Vaht, Tüür, & Kulasalu, 2010); for instance, the Bologna Process influenced a thorough reformation of the curricula. As a result, the Bachelor's degree program in Estonian universities lasts for three years and the Master's degree program for two years. These programs can be followed by a four-year cycle of the doctoral program.

University teachers are expected to undertake research work as well as teach. In professional higher education institutions, more emphasis is focused on teaching, although the pressure to carry out research in professional higher education institutions is also gradually increasing.

In 2004, Estonia joined the European Union. This accession gave Estonia the opportunity to apply for funding from the European Social fund for developing substantial areas nationally and a systematic approach towards the development of university teachers' teaching skills was adopted in 2005. Resources for developing both the overall quality of higher education and academics' teaching skills were given a priority status in the field of education, and for which programs with detailed plans of action were developed. The receipt of EU funding "has meant increased cooperation among higher education institutions and enabled academic developers to approach the process of upgrading university teachers' teaching skills in a more systematic and consistent manner" (Karm et al., 2013, p. 88–89).

In 2008, the European Union Primus program (2008–2015) was implemented, which allocated 3.9 million Euros specifically for activities aimed at improving university teachers' teaching skills. The main aim of the program was to develop university teachers' teaching skills through the design and implementation of pedagogical courses. Within this program, a number of mentors have been trained to support novice university teachers in higher education institutions and the foundation has been laid for scholarships in teaching and learning. Various pedagogical handbooks for university teachers (including handbooks on supervision, teaching methods, assessment) have been published (e.g. Karm, 2013; Kärtner, 2010; Pilli, 2009).

While university teachers have been recommended to participate in the courses and other activities, participation remained highly voluntary. Although several opportunities to participate in a variety of activities have been created for university teachers, setbacks were also encountered. Due to the project-based nature of the program, the potential for sustainability of the activities after the completion of the program remained unclear. Despite the completion of a large number of pedagogical courses, a system of supporting novice university teachers' careers in universities and professional higher education institutions has still not been widely established. In addition, the activities in which university teachers participated depended mainly on their own preferences and initiatives and not necessarily on their individual needs for activities in supporting of their professional practices.

1.2. The focus of the study

The aim of this study is to examine novice university teachers' professional development, such as identity formation and their learning of teaching skills.

The study had the following goals:

1. To map the current situation in novice university teachers' professional development and learning by exploring which learning sources are mainly used by novice university teachers for developing their teaching skills.
2. To explore how novice university teachers' professional identity forms and which factors affect its formation the most.

Based on the aim and goals of the study, the following research questions were proposed:

1. How do novice university teachers describe and interpret their learning, and thus, changing and growing as university teachers?
2. What are the teaching conceptions of novice university teachers and how are these expressed in the teaching practices described by them?
3. How do novice university teachers describe and interpret the meaning of being a university teacher?

The answers to these questions should provide information to the administrations of higher education institutions, academic developers and researchers as well as arguments for making decisions concerning the creation of support systems that would contribute to the professional development and learning of teaching skills of novice university teachers.

The dissertation consists of four internationally published interrelated articles and an analytical review article, which analyses teaching conceptions of novice university teachers, their professional development and learning and the forming of their professional identity from different methodological and theoretical perspectives.

The research questions are addressed in the following original publications.

Paper I explores research questions 1 and 2. In Paper I, it is examined how novice university teachers have interpreted their teaching experience, assessed their learning and teaching skills, and developed their professional identity through learning in community during the first years of their careers.

Paper II explores research question 1. In Paper II, the first years' teaching experience of novice university teachers, the effect of this experience on their learning process and their consequent change as a university teacher are analyzed.

Paper III explores research questions 3 and 2. In Paper III, the novice university teachers' interpretation of teaching is analyzed and the factors affecting these interpretations are explained. Besides, some learning sources used by novice university teachers in developing their teaching practice and the most common obstacles met in implementing theory in practice are discussed.

Paper IV explores research questions 1 and 3. In Paper IV, the narratives of novice university teachers serve as the source for analyzing what it means to be a novice university teacher in a higher education institution and how they perceive their future perspectives as university teachers based on their current experience.

2. LITERATURE REVIEW

2.1. University teachers' professional development

Coping with teaching requires expertise by novice university teachers and a willingness to develop professionally as a teacher. According to Evans (2002), professionalism involves a person's ideological, attitudinal, intellectual and epistemological beliefs, which are influenced by work context and which in return affect the person's professional activities. Evans (2010) believes that professionalism is revealed by action in the work environment and how this is carried out as well as by their knowledge, skills and notions of where and how they acquire their knowledge. What is more, professionalism can be seen in professionals' apprehension of their attitudes and behavior, their understanding of their way of functioning and the purpose and quality of their activities. In order to clarify the contexts of university teachers' professional development, a number of basic conceptual ideas in this field are discussed. This involves a consideration of questions such as the meaning of professional development, and how it can be described and characterized.

In the literature, the concept of professional development is defined unclearly and ambiguously (e.g. Dall'Alba & Sandberg, 2006). This dissertation regards professional development in the same way as Knapp (2003), who points out professional development is a process of learning that causes changes in a person's reflection processes, knowledge, skills and conceptions, and through which teachers carry out their professional practice.

The professional development of a university teacher has intrigued researchers for decades and two main approaches can be traced. The first describes university teachers' professional development as passing through different stages, and according to this view, professionalism is achieved by active practice. These stage theories (e.g. Kugel, 1993; McKenzie, 2003; Sherman, Armistead, Fowler, Barksdale, & Reif, 1987; Åkerlind, 2003a, 2003b, 2007) view the development of the teaching skills of university teachers as a step-by-step process proceeding from novice to expert. Changes in the ways of experiencing the process are associated with the stages of development through which university teachers' progress as they gain more experience. For example, according to Kugel (1993), a university teacher passes through 5 stages in the development of their teaching skills.

Stage 1: Focus on self. At the beginning of their career, university teachers focus mostly on survival. They have mastered the content of their subject but not the necessary skills for teaching it. When teaching, these university teachers rely heavily on how they have been taught. University teachers at the first stage often talk too fast or incoherently. They can be disorganized in addition to having a great amount of material to learn about constructing a syllabus, preparing for study work and conducting and evaluating the study process.

Their concerns are related to their doubts whether they know enough, have read enough, can comprehend the material and whether the presentation of this material is on a good enough level.

Stage 2: Focus on subject. University teachers at this level focus on the content of their subject. They read a lot and comprehend the depth and richness of their domain. According to Kugel (1993), such university teachers are “crisper, sharper and more powerful” (p. 318). They expect their students to be as enthusiastic about their domain as they are. This particular stage is characterized by excessive material and a frequency of occasions when not able to cover much of it by the end of a lecture. At this stage, “teaching is telling and learning is listening” (ibid, p. 318). Teaching is characterized by teaching to an invisible audience. University teachers at this stage often consider the students to be responsible for poor study results (not motivated or prepared enough).

Stage 3: Focus on the students. At this stage, university teachers notice that students are not merely an undifferentiated mass of identical people, but rather individuals with different interests and abilities. University teachers start to realize that students learn differently, some more by listening, others by visuals or practical work, and thus, the university teacher starts to look for and use various strategies to conduct study work. At the same time, the university teacher still remains on the active side and students on the passive side.

Stage 4: Students as active participants. The university teacher starts to perceive themselves more as a coach rather than the expert. Coaches are content when they can do less and the players (the students) do more. “If the university teacher wishes for the student’s leg muscles to grow, they do not run themselves but let the student run” (ibid, p. 322). At this particular stage, it is important for the university teacher to develop their coaching skills and learn to better support students to do things for themselves. University teachers experiment with different strategies, e.g. some continue with lectures, but start to ask more questions during the lectures, or provide more challenging homework, ask for minute papers, etc. Others may use more discussions in addition to other methods of engaging students.

Stage 5: Students as independent learners. What Kugel (1993) considers to be one of the most challenging aspects of teaching is how to turn students into independent learners – letting them learn how to learn on their own. To do so, a teacher needs both patience and sensitivity. University teachers at this stage pay attention not only to their subject but also supporting the development of students’ learning skills. Moreover, they worry less about the transmission of the whole content of the subject (Kugel, 1993).

Although stage models have been widely used to better understand the professional development of both teachers and university teachers, these models have also been criticized (Dall’Alba & Sandberg, 2006). According to them, the emphasis on progressivity distracts attention from what is being developed. Dall’Alba and Sandberg (2006) offer a new model that takes into account both the horizontal (relates to the progression of skills that accompanies experience) and the vertical (refers to variation in embodied understanding of practice) dimensions. Their model allows for a range of development trajectories, albeit within particular practice contexts. They point out that some professionals progress extensively along the horizontal dimension without changing much in the vertical one, while others are able to change in both dimensions. At the same time, they note that the applicability of their model requires empirical, longitudinal studies that focus on both professional skill (what this constitutes) and how its development occurs against time.

McAlpine, Amundsen, Clement, and Light (2009) regard professional development as involving two interrelated elements: the focus development and the process development. In their description of the professional development of university teachers they rely on the model designed for clarifying the professional development of a teacher by Clarke and Hollingsworth (2002).

According to Clark and Hollingsworth’s (2002) model, change occurs through the mediating processes of “reflection” and “enactment” in four distinct domains that encompass the teachers’ world: the personal domain (espoused theories), the domain of practice (theories in use), the domain of consequence (salient outcomes), and the external domain. Multiple pathways among the domains are possible. For example, a university teacher may experiment with a new teaching method after attending a training session on teaching skills. If the university teacher reflects on his/her practice, including the impact of the new teaching method on the learning of the students, it can lead to a change in the university teacher’s conceptions of teaching. Nonetheless, a contrary situation, where there is a change in the university teacher’s conception of teaching conditions, new and different teaching methods are also possible.

The way in which professionals understand and carry out their practice forms the basis for professional skills and their development. Several studies about university teachers’ professional development and growth focus on how university teachers understand teaching and learning and how their conception of teaching and learning changes during professional practice (McKenzie, 2003; Postareff, Lindblom-Ylänne, & Nevgi, 2007, 2008; Sadler, 2012a; Åkerlind, 2003a, 2003b). University teachers’ teaching conceptions have an important role in the teaching process since research has shown that university teachers’ teaching conceptions influence their teaching practice (Trigwell & Prosser, 1996).

Numerous earlier studies have focused on university teachers’ teaching conceptions (what university teachers believe about teaching) and their approaches to teaching (how university teachers teach) (e.g. Kember, 1997;

Kember & Kwan, 2000; Postareff & Lindblom-Ylänne, 2008; Prosser & Trigwell, 1999; Samuelowicz & Bain 1992, 2001; Sadler, 2012a). Kember (1997) claims that teaching conceptions can generally be regarded as being along the axis of two main conceptions: teacher-centered, which concentrate on transferring content or knowledge, and student-centered, which concentrate on supporting students' learning process.

Several subsequent studies on teaching conceptions and approaches (e.g. Postareff et al., 2007, 2008; Sadler, 2012a) generally rely on Kember's (1997) interpretation. For instance, Postareff and Lindblom-Ylänne (2008) have analyzed university teachers' descriptions of their teaching process and have found that their descriptions can be divided into two – content-centered and learning-centered teaching approaches. The basis of distinction between the two approaches is the difference in the teaching process (the planning of teaching, teaching process, assessment), in developing the learning environment (the roles of a teacher and a student, interaction, atmosphere) and in teaching-related development (development of teaching skills, pedagogical awareness).

However, the findings of some studies have shown that university teachers might not act in accordance with their teaching conceptions (e.g. Murray & McDonald, 1997; Mälkki & Lindblom-Ylänne, 2012; Samuelowicz & Bain, 2001). Therefore, they might have “ideal conceptions” and “working conceptions” (Samuelowicz & Bain, 1992). Different reasons have been given to explain the nonconformity to the conceptions, e.g. lack of skills, students' resistance, choosing an easier way if, for example, the physical conditions do not support learning-centered teaching and teaching traditions of the discipline. The formation of novice university teachers' teaching conceptions as well as the manifestation of these in the teaching practice has been described in Paper III.

The formation of a university teachers' teaching conception is frequently associated with their professional development. For example, some studies (Sherman et al., 1987) demonstrate that at the beginning of their career, university teachers' teaching conceptions tend to be teaching-centered. However, as they gain more experience and participate in different pedagogical courses, their conceptions become more learning-centered. On the other hand, some studies (Norton, Richardson, Hartley, Newstead, & Mayes, 2005; Remmik & Karm, 2013; Richardson, 2005) show that at the beginning of their career, novice university teachers may stand at any point along the axis of content-centered – learning-centered conceptions, and various circumstances (individual teaching and learning experience, pedagogical courses, teaching traditions of the community, students' feedback) can cause the change in teaching conceptions towards either end of the axis – towards the content-centered or learning-centered end.

Since there are several important roles to fulfill in university teaching, the most significant of which are the roles of being a teacher and a researcher, Åkerlind (2008, 2011) criticizes earlier studies, which have only examined one aspect of university teachers' professional development, i.e. the teaching

development. In her study, she examines both aspects and finds that the opinions that university teachers have about development as a teacher and their development as a researcher overlap remarkably. Academics who concentrate on developing their comfort and confidence as teachers also tend to concentrate on developing their confidence and recognition as researchers. Therefore, their focus of development is on academics' feelings about themselves as teachers and researchers. Academics who concentrate on developing teaching skills and learning outcomes also tend to concentrate on developing research productivity and sophistication, and in both cases the focus of development is on the academics' performances and outcomes as teachers and researchers (Åkerlind, 2003a, 2003b, 2008).

Professional development is one aspect of learning and a way that helps understanding of the need to change. McAlpine et al. (2009) perceive professional development as a dynamic interplay between individual and organizational elements. Within particular contexts, a participant's personal knowledge, perspectives and actions play a role in this process. Professional development depends on person's ability to be situationally responsive and the ability to continuously analyze and evaluate one's practice. Research on professional development has concluded that a university teacher needs time to develop, absorb, discuss and practice new knowledge (Debowski, 2012). Various formal and informal opportunities have been provided to support the professional development of a university teacher.

2.2. University teachers' professional learning

This dissertation regards professional development to be the result of professional learning. Professional learning can involve changes in one's capacity for practice (i.e. changes in professionally relevant thinking, knowledge, skills, and habits of mind) and/or changes in the practice itself. Professional learning can take place in a variety of formal and informal activities (Knight, Tait, & Yorke, 2006). Therefore, it is highly important that the learning process supporting professional development creates opportunities to reflect on the connection of new knowledge and skills with practice, and integrates new knowledge into existing practice and disciplinary traditions.

It is widely accepted that learning depends on interaction between the learner, the context, and what is learned (Jarvis & Parker, 2005). Personal factors, such as individuals' capacities, subjectivities and agency, shape how professionals interpret and engage with what they experience and, consequently, how they learn and remake practice throughout their working life. Billett (2008) finds that individuals actively and constantly construct knowledge that they need in their work. There are two possible outputs: individual change (i.e. learning) and remaking of culturally-derived practices constituting work. These arise through a relational interdependence between the contributions and the

personal and social agency. According to Marton and Booth (1997), learning poses two important questions: how to learn and what to learn.

Learning is usually associated with formal education and, therefore, working and learning processes are frequently regarded as separate. According to Eraut (2004), the majority of things learned at a workplace have been acquired in the course of work rather than outside it. He finds that one of the main differences between learning in the formal educational system and learning at work is that the former is based on formal, intentionally planned educational activities, while the latter is mostly informal, unplanned and implicit in nature, as learners do not often even realize they have learned something. Informal learning is often collaborative and highly contextualized; besides, the outcomes of learning can be unpredictable (Tynjälä, 2008). She finds that workplace learning can also be intentional, whereas informal learning activities are related to work, and formal activities involve training and courses both at work and outside.

Workplaces in different fields have different working cultures. Learners in the workplace come from different age groups, different educational and professional backgrounds and different positions in organizations. Sheeres, Solomon, Boud and Rooney (2010) find that work brings together the individual, the social and the organizational agency to produce effects. Therefore, workplace learning does not merely involve acquiring work-related skills, but learning to understand the roles related to the job, the culture, traditions and power relations of the institution, etc. The workplace culture is implicated in the continuing construction of the self and identity.

According to Trowler and Knight (2000), novice university teachers' adaptation process in a university is not defined by the culture of the institution, but by its sub-cultures – faculties, institutes, and departments. Sub-cultures determine the quality of the opportunities to adapt to academic life and the amount of support offered to novices. At the same time, other studies on workplace learning (e.g. Billett, 2008) emphasize the role of the social context in which expertise is developed. Billett (2008) finds that in acquiring necessary knowledge for work, the main emphasis lies on the relationship between the individual agency and the social agency. Therefore, learning through work can be regarded as participating in work-related activities and can be conceptualized as a negotiated interdependence between the social and personal factors.

Different researchers have made use of different approaches when analyzing and interpreting how university teachers learn or acquire their teaching skills, including workplace learning (Boyd, 2010; Kugel, 1993), learning from experience (e.g. Boud & Walker, 1998), learning in a community (e.g. Bolander Laksov, Mann, & Dahlgren, 2008; Warhurst, 2006, 2008), learning through pedagogical courses (e.g. Gibbs & Coffey, 2004; Postareff et al., 2007, 2008; Sadler, 2012a), mentoring (e.g. Duda, 2004; Marable & Raimondi, 2007), and scholarship of teaching and learning (e.g. Roxå, Olsson, & Mårtensson, 2008). On the basis of the results of the empirical part of the dissertation, the above mentioned approaches are described in the following section.

2.2.1. Learning from experience

Since learning from experience is considered one of the main ways of learning for adults, it can be claimed that learning from experience plays a substantial role in the development of university teachers' teaching skills. University teachers bring both past experience and beliefs to their teaching and learning, and their beliefs are mainly shaped by the kind of teaching they experience as students (e.g. Kugel, 1993; Sherman et al., 1987). In the process of learning, experience is transformed into knowledge, skills, attitudes, values, emotions, feelings and beliefs. Experiential learning is described as an integrated approach stemming in social constructivist perspectives. According to this view, experience is both a base and an incentive for learning and learners actively interpret and construct their experience filtered through the social-emotional context in which it is taking place (Heikkinen, 2002).

Experiential learning is mostly described on the basis of Kolb's (1984, 2005) experiential learning cycle in which learning is depicted as a cyclic process involving active experience, observation and reflection, formulation of concepts, and applying and testing these in practice. Several researchers, including Boud, Cohen and Walker (1993) indicate the problems with Kolb's model, emphasizing that reflection is separate from action and context does not receive sufficient attention. According to Boud and Walker (1998), context is "perhaps the single most important influence on reflection and learning" (p. 196).

Eraut (2004) states that it is not always clear in which cases one can talk about learning from experience. When people talk about experience, they usually mean a single episode or event in their life. However, when talking about experience in learning usually a larger number of episodes on which the learning is based are referred to. As a problem of learning from experience, it has also been pointed out that people unfortunately do not always learn reasonable things from experience. Therefore, it is important to continuously reflect on one's experience and practice.

Considering that university teachers' learning relies on various sources and experience, reflection plays an important role. Learning takes place when experience is interpreted and reflected upon, i.e. reflection transforms experience into learning. Reflecting upon one's experience and therefore learning from it gives university teachers an opportunity to link personal experiences and the values given to them with theoretical positions and previous experiences so as to allow explanations and personal meaning to be attached to them.

A central idea in the research literature describes how university teachers understand and extend their professional activities better through reflection, and reflecting on teaching situations leads to new insights for practice (see e.g. Moon, 1999). McAlpine and Weston (2000) find that the use of the reflection process is essential for building knowledge, and greater knowledge increases one's ability to use reflection effectively and to develop as a university teacher.

Therefore, reflection plays an important role in university teachers' pedagogical growth (Kreber, 2004).

According to McAlpine and Weston (2000), reflection is important from the viewpoint of developing teaching since it helps university teachers to be more intentional and deliberate in their thinking about teaching. "Reflection helps lecturers to become aware of their personal teaching theories – conceptions of learning and teaching, approaches to teaching, values, beliefs, and sense of self as an academic" (Karm, 2010, p. 203). McAlpine and Weston (2000) and McAlpine et al. (2009), on the other hand, emphasize the role of teaching conceptions in the process of drawing conclusions while reflecting and learning from these reflections. They also claim that the changes in university teachers' teaching practices depend on their teaching conceptions. For instance, if a university teachers' teaching conception is teaching-centered, they may reflect and plan changes but only within the framework of the teaching-centered teaching conception.

In reality, reflection skills and learning from reflection does not come naturally; they require practice and acquisition. Therefore, teaching university teachers how to reflect and supporting their formation of reflection habits proves vital. Nicholls (2001) finds that reflection is one of the key elements of any professional development program. Reflection has an important role in learning from one's practical experience, interpreting new material learned through professional development programs, and implementing acquired knowledge in practice. Therefore, in the present study, learning is perceived as a process of participation in authentic practice and not regarded as an activity distinct from practice.

2.2.2. Learning in the community

Novices' learning in the workplace is often influenced by the community, its traditions, rules, values and norms. Lave and Wenger's (1991) concept of communities of practice depicts learning as occurring through social interaction. This approach has been widely used in professional learning literature and repeatedly used while analyzing university teachers' learning processes, identity formation and interpreting their learning experiences (Bolander Laksov, Mann, & Dahlgren, 2008; Cox, 2013; Tummons, 2012; Viskovic, 2006; Warhurst, 2006, 2008).

Lave and Wenger's (1991) notion of legitimate peripheral participation or socially based learning describes how novices are socialized into the practices of a social community.

They perceive learning as an integral dimension of social practice, from which follows that participation in social (communities of) practice will inevitably involve learning. In the beginning, novices work in peripheral, less critical areas of practice. When they gain more experience and become more competent in their discipline, they are given more responsibility.

An important part of learning in the community is interaction and cooperation with more experienced colleagues, observing their ways of doing the job, and participating actively in the community of practice. The role of more experienced colleagues is to be the facilitator of learning. Learning in the community also assigns a role to the novice university teacher who may provide the community with novel ideas, and thus, influence the regular practice of the community. Barret, Ballantyne, Harrison and Temmerman (2009) encourage novice university teachers to show determination and initiative and, when necessary, approach their more experienced colleagues for cooperation. Reciprocal sharing of experience may prove useful for both parties.

Wenger, McDermott and Snyder (2002) argue that the community needs to focus on values, as a key requirement, because communities of practice vary; they may be distributed across sites, for example, or they may be relatively new. These variations have implications for maintaining communities of practice, and in particular for supporting their host institutions.

The theory of learning in a community of practice has also been criticized. For example, McDonald and Star (2006) point out that although the concept of community of practice has worked successfully in the corporate sector as a strategic approach to knowledge management, the implementation of the same approach has not been equally successful in the context of universities. According to them, this outcome may be influenced by the emerging competitive nature of higher education and the traditional concept of 'academic freedom', which fosters a private and individual approach to academic teaching, rather than a collaborative, community approach. Similar criticism has been expressed in the studies of novice university teachers by Gourlay (2011b) and Shreeve (2011), whose findings prove that novice university teachers coming from practice (in medicine) do not feel as part of the community, but rather as being in isolation. Gourlay (2011b) finds that the university environment offers confusion, inauthenticity as well as isolation for novices. Novice university teachers perceive the difference between their professional practices and earlier roles and the new academic positions. In their earlier positions, novice university teachers witness collectivity and cooperation. Academic positions, on the other hand, prove to be individualistic and private. In the new context, „these new lecturers position themselves as outsiders and unsure amateurs, and seem to view this as a deficit“ (Gourlay, 2011b, p. 75).

Likewise, Warhurst (2008), Knight and Trowler (2000), who have also studied social learning process that novice teachers have experienced at work, have expressed their doubts about the realization of community practice in a university context. For example, they pointed out that the physical environment of a university functioned as a possible obstacle to collegial cooperation (small, separate offices), which was also hindered by the peculiarities and traditions of disciplined, isolated, and loosely coupled communities. At the same time, lecturers themselves also valued autonomy and academic freedom in a university environment. According to Warhurst (2008), in a university context,

novice university teachers learned through the so-called incidental interactions through which the novices were involved in constructing pedagogical meanings with their colleagues. The learning of novice university teachers in community is tackled in Paper I.

2.2.3. Mentoring

The lack of support, guidance, and knowledge about educational system makes novice university teachers vulnerable to burnout and early resignations. Different studies (Dunham-Taylor, Lynn, Moore, McDaniel, & Walker, 2008; Hobson, Ashby, Malderez, & Tomlinson, 2009; Marable & Raimondi, 2007) show that mentoring is an effective form of supporting novice university teachers' professional learning as it helps to reduce feelings of isolation, increase confidence, self-esteem, and professional growth, and improve self-reflection and problem-solving capacities. Duda (2004) regards mentoring mainly as a partnership in which a more experienced colleague offers support and guidance on a professional or personal level. Mentoring also provides emotional and psychological support and enables novice university teachers to put difficult experience into perspective, and thus, increase their morale and job satisfaction (Bullough, 2005; Hobson et al., 2009).

According to Nakamura and Shernoff (2009), a mentor is a person who supports a novice university teacher (a mentee) in planning and directing the career, and in reflecting on their work. Mentors play an important role in the socialization of novice university teachers, helping them to understand the culture of the institution, telling them about rules and expectations and the academic profession in general (Duda, 2004). An understanding of the institutional culture can provide overall stability for the mentee's career, improve their performance, and promote the progression of their academic career.

2.2.4. Learning through pedagogical courses

In the past, being an acclaimed expert and a researcher in one's domain was enough to become a university teacher (Beaty, 2006), and teaching-related knowledge and skills did not receive that much attention (Brew, 2001). Now, under the conditions of decreasing resources and increasing competition among higher education institutions, university teachers' teaching skills and aspects related to the development of teaching skills gradually have become more significant. Therefore, an increasing number of universities have developed various formal supporting systems for developing university teachers' teaching skills, one of the most important of which was pedagogical courses. Several countries (e.g. Great Britain, Ireland, etc.) have declared participation in such training courses mandatory for lecturers during their first three years of practice, and have established national regulations for the content of respective pedagogical courses (e.g. Gibbs & Coffey, 2004).

Similar increase of interest can be detected in researchers' attempts to establish the extent of influence which pedagogical courses, focusing on teaching skills, have on university teachers' teaching practices. Different researchers have presented contradicting findings. For example, Norton, Richardson, Hartley, Newstead and Mayes (2005) and Richardson (2005), find that teaching conceptions are not altered by lecturers' participation in pedagogical courses. At the same time, studies show that as a result of participation in pedagogical courses, university teachers begin implementing student-centered approaches (Gibbs & Coffey, 2004; Postareff et al., 2007; Remmik & Karm, 2009; Sadler, 2012a). Similarly, studies show that pedagogical courses increase university teachers' pedagogical knowledge (Norton et al., 2010) and widen their teaching methods (Postareff et al., 2007), support initiation of discussion about teaching matters with colleagues (Cilliers & Herman, 2010), and boost lecturers' confidence in teaching (Postareff et al., 2007). Cilliers and Herman's (2010) study shows subjects admit that participating in pedagogical courses make university teachers more critical about their own teaching methods. The courses increase awareness about how people learn. In addition, the participants understand the importance of reflection and learn about different options for reflection and supporting students' reflection skills.

Researchers maintain different opinions as to what connects university teachers' teaching conceptions and teaching practices. Thus, Norton et al.'s (2005) study does not prove that participation in pedagogical courses changes the teachers' conceptions of teaching. However, Ho, Watkins and Kelly (2001) state that in order for the changes to happen in university teachers' teaching practice, teaching conceptions must change first. Stark's (2000) study points out that the majority of lecturers maintain similar teaching conceptions despite the nature of their target group (beginners, advanced learners). Yet, some lecturers see their subjects differently depending on the level of their students, allowing for the conclusion that teaching conceptions are context-dependent and one lecturer may have various teaching conceptions.

Evaluating the effectiveness of pedagogical courses has shown a connection between the length of courses and their effectiveness. Therefore, according to Gibbs and Coffey (2004) and Postareff et al. (2007), longer courses have a stronger effect on university teachers' teaching practice and were more meaningful for participants, whereas shorter pedagogical courses tended to cause confusion among university teachers and did not lead to changes in teaching practices (Gibbs & Coffey, 2004; Postareff et al., 2007).

Studies do not give an unequivocal answer to the question whether students' feedback reflects university teachers' participation in pedagogical courses and implementation of the knowledge acquired in these courses. There are studies where the changes in university teachers' teaching practices, as an outcome of pedagogical courses, can also be perceived by students. For example, in Gibbs and Coffey's (2004) study, students indicated that their lecturers' teaching skills

had improved, and thus, their surface approach to learning had decreased. In the study by Cilliers and Herman (2010), lecturers pointed out changes in students' feedback: students taught by lecturers participating in the pedagogical courses were more satisfied with the teaching, more enthusiastic, understood the lecturers' expectations better and were content with the increased interaction between the lecturer and students. At the same time, there are also studies which show that students' feedback does not reflect university teachers' participation in pedagogical courses (e.g. Kember, Leung, & Kwan, 2002).

Since pedagogical courses are mostly arranged by academic development units, the activity and content of the programs have also been criticized. For instance, Beaty (2006) claims pedagogical courses arranged by academic development units tend to be too general and not considering the various teaching traditions of the different disciplines and subject domains. Differences in academic background, however, lay the basis for academics' conceptualization of their teaching activities (Becher & Trowler, 2001), and thus, it is recommended that academic developers act as facilitators within any disciplinary base and cooperate with faculties in a disciplinary context (Beaty, 2006). Gourley (2011a) points out similar criticism of programs in the UK, emphasizing that they focus on topics that are broadly related to the learning and teaching process, while not considering novice university teachers' perceptions and interpretation of disciplinarity, scholarship and research at a sufficiently meaningful level.

All the same, pedagogical courses focusing on teaching skills prove insufficient for changing lecturers' teaching practices so that they support students' learning processes better. For example, Ginns, Kitay and Prosser (2010) find that after the courses, the work environment has the strongest impact on the attitudes, intentions and activities of the lecturers who participated in the courses. In faculties where teaching is valued and the content and methods of teaching thoroughly monitored, the lecturers use student-centered approaches more often (Prosser & Trigwell, 1997). Therefore, this suggests that the work environment and the extent to which learning is valued and how it is valued are of great importance to university teachers' professional learning and teaching practices.

2.2.5. Scholarship of teaching and learning

In the past decades, scholarship of teaching and learning (SoTL) has become an important strategy in the instructional development of university teachers (Roxå, Olsson, & Mårtensson, 2008). Often linked to the notion of professionalism in university teaching, the scholarship of teaching and learning is progressively associated with a form of knowledge about teaching and student learning that can be rationally verified through disciplined inquiry (Kreber, 2006).

Trigwell, Martin, Benjamin and Prosser (2000) found that SoTL is understood differently, and thus, provided their own interpretation of the notion. In their opinion, the aim of scholarly teaching was to increase transparency of how learning was made possible. To have met the aim, university teachers needed to be informed of the theoretical perspectives and literature of teaching and learning in their discipline, and to be able to collect and present rigorous evidence of their effectiveness from these perspectives as teachers. The above-mentioned process as a whole involved the following activities: reflection, inquiry, evaluation, documentation and communication. Kreber and Cranton (2000) suggested that scholarship of teaching and learning included both – ongoing learning about teaching and demonstration of teaching knowledge. The SoTL was understood as a process of knowledge construction whereby knowledge claimed was validated through reflection on teaching experience and educational theory (Kreber, 2006). Therefore, reflection could be considered a key process in the scholarship of teaching and learning.

Kreber and Cranton's (2000) model of SoTL includes instructional (knowledge about instructional design and the instructional process), pedagogical (knowledge about how students learn) and curricular (knowledge about the goals and purposes of teaching) knowledge. Trigwell et al.'s (2000) model of SoTL has four dimensions relating to the areas of (a) being informed about teaching and learning generally and in the teachers' own discipline; (b) reflection on that information, the teachers' particular context and the relations between the two; (c) the focus on the teaching approach adopted; and (d) communication of the relevant aspects of the other three dimensions to members of the community of scholars. All four dimensions are considered to be a necessary part of the scholarship of teaching.

Some institutions (e.g. Lund University in Sweden) are implementing a reward-system that has been developed to bring increased status to teaching and learning and to improve the overall pedagogical competence in the faculty. Scholarly approaches to teaching are rewarded by monetary payments to both individuals and departments for their efforts to increase the quality of student learning. The idea, from an organizational perspective, is that an intensified and informed pedagogical discussion among university teachers fosters educational development at all levels within the faculty and an increased engagement in the scholarship of teaching and learning (Mårtensson, Roxå, & Olsson, 2011; Roxå, Olsson, & Mårtensson, 2008).

In general, lecturers are provided with various opportunities to learn teaching skills, but specific opportunities and solutions are depending on a particular university, the choices and possibilities it offers, the work arrangements, the mindset of particular academic units and colleagues, and the lecturers' own preparedness and willingness.

2.3. University teachers' professional identity

Local practices within organizations suggest that there are culturally different ways to experience being an academic. These may be determined by ideologies and personal beliefs as well as local ways of working (Trowler & Cooper, 2002).

Most studies have seen professional identity as an ongoing process of integration of the 'personal' and the 'professional' sides of becoming an academic (Archer, 2008; Billott, 2010; Churchman & King, 2009; Henkel, 2000, 2005; Kogan, 2000; Smith, 2010; Winter & Donohue, 2012). As pointed out by King (2013): "Academic identity is concerned with how we see ourselves, and how others see us, within the higher education world" (p. 97).

Social constructivist approaches to identity view the development of self through interaction and communication with others (Lave & Wenger, 1991; Wenger, 1998), and define an individual as having several identities. Lave and Wenger (1991), the founders of the concept of learning in a community, offer the notion of situated learning in which individuals learn from their social environment creating and shaping their social identity, accepting the values established in the community and accommodating their social structures. Kaasila and Lauriala (2010) and Kogan (2000) find that social interaction and collaboration do not only have an impact on professional thinking and action, but on a person's identity as well.

Social context and membership in a group have a particular influence on a person's depiction of themselves and their choices. Therefore, identity perspectives focus on a teacher's understanding of "Who am I at this moment?" and "Who I want to become in the future?" (Beijaard, Meijer, & Verloop, 2004). Antonek, McCormik and Donato (1997) regard reflection as a key component associated with the concept of self. Learning to reflect and to develop reflection skills is important in order to develop oneself as a university teacher.

Academics are expected to undertake multiple roles, which identities they need to come to terms with in order to successfully negotiate their place in an academy. Therefore, in a university context, a teaching identity may occasionally conflict with research identity. Academics do not readily identify themselves as teachers, but see themselves rather as a part of a community of scholars (Beaty, 2006). University teachers who also have practices outside university, e.g. doctors, nurses etc. confirm the conflicts between different identities. Since identity is primarily associated with professional practice, the identity that a person accepts is the identity of a practitioner (Bolander-Laksov et al., 2008). The professionals who start teaching in a university without prior teaching experience discover contradiction between different identities in the new situation and the new context (e.g. Boyd & Harris, 2010; Gourlay, 2011a, 2011b; Shreeve, 2011; Smith & Boyd, 2012). Furthermore, Shreeve (2011) points out that for those who experience the relationship between practice and teaching as being in two camps, there is no shared vision: they are unable to see how they belong within academia as well as their professional practice (p. 87).

Henkel (2000) argues that academic identities are formed in association with both discipline and organizational location. Differences in disciplinary ways of thinking and acting also influence how one may experience being an academic (Becher & Trowler, 2001). Trowler and Knight (2000) and Billot (2010) find that the culture of a university as an institution does not play such an important role in the formation of novice university teachers' identity as the sub-cultures of the institution – faculties, institutes, departments, etc. Winter and Donohue (2012) and Shreeve (2011) point out the mutual influence of identity and culture of the institution as an important aspect of the process of identity formation. According to Shreeve (2011) “work practices need to provide ‘legitimacy’ in order for identity to be aligned to them and for those new to academia this may be lacking. Universities therefore have a responsibility to support both part-time and new academics to understand where and why they contribute to the common endeavor and that they are valued” (p. 89).

In summary, it can be claimed that the formation of professional identity is a continuous and dynamic process that is influenced by a personal life story, agency, social interactions, and cultural factors. Professional identity is formed on the basis of interpretations of one's experiences and professional knowledge, i.e. on the basis of learning (Henkel, 2005). Harrison and McKeon (2010) called the events that happened during the first three years of novice university teachers' practice, breaking points. As a result of these events, the novices either accepted or did not accept a teacher identity and a researcher identity in a university.

3. METHODOLOGY

3.1. Narrative research within a qualitative approach

A qualitative approach is justified in case of the present study since it enables observation of the phenomenon as a whole and the study of it from different aspects. Therefore, in the context of the present study, the focus of the study was on how academics perceive their formation as a university teacher, their acquiring of teaching skills, and how they interpret their experience.

The qualitative approach assumes that reality is socially constructed and is that which participants perceive it to be. The task of the researcher is to understand and interpret how different participants in a social environment construct the world around them (Bruner, 1986). One of the central ideas of constructivism claims that people construct their knowledge on the basis of their prior knowledge and experience, and our knowledge is actually the composition of narratives that have been constructed in the process of social interaction (Heikkinen, 2002; Lave & Wenger, 1991).

Bruner (1986) finds that narrative thinking, through which people interpret the world around them and themselves in that world, is manifested through storytelling. Similarly, Creswell (2008) and Heikkinen (2002) believe that telling stories is a natural part of life, “individuals make sense of the world and of themselves through narratives, both by telling them and listening to other people’s stories” (Heikkinen, 2002, p. 14). In addition, Sfard and Prusak (2005) point out that by telling stories, people shape their identity since connections between the past, present and future meet in narratives.

Narrative research has multiple forms. The present study makes use of a life history. According to Creswell (2008), a life history is a narrative story of the entire life experiences of a person. In education, as well as in the present study, a narrative study does not involve the account of an entire life, but instead focuses on an episode in the individuals’ life, the story of becoming a university teacher as well as developing and learning as a university teacher.

In the field of education, several trends have influenced the development of narrative research. Cortazzi (1993) suggests three factors: increased emphasis on teacher reflection, growing emphasis on teachers’ knowledge – how they think, develop professionally and make their decisions in a classroom –, and voicing the teacher so that they would narrate their experiences.

Telling stories helps to adjust to new situations, cope with these situations in terms of our past experiences, and give tools to plan the future. Cortazzi (1993) finds that stories related to professional activities reflect the nature of people’s professional worlds, show who they are and who they would like to become as professionals.

3.2. Design of the study

3.2.1. Selection of participants

The target group was a purposeful sample of voluntary novice university teachers ranging from 25 (in Paper I) to 41 (in Papers III and IV) (see table 1). The following criteria were used for the selection process: (1) university teachers with teaching experience up to three years (Norton et al., 2005); (2) application of maximum variation principles related to differences in age, discipline, institution, background. In the first paper the sample consisted of 25 novice university teachers and the number of participants was increased until the answers to the interview questions started to recur. The sampling logic was not based on statistical representativeness, but rather undertaken based on theoretical saturation, whereby recruitment continued until no new categories emerged during data analysis (Mowbry & Halse, 2010). Since in different articles the data was analysed based on different perspectives (articles have different research questions), increasing the sample was justified drawing on the nature of the study. According to the research question, either a need to elaborate on existent information or collect supplementary information (e.g. about teaching practices, teaching conceptions and different roles of a university teacher) arose.

Table 1. The sample, the instrument used, and data analysis methods

Paper	Sample	Instrument	Data analysis
Paper I	N=25 humanities and arts (4), social sciences (8), exact and natural sciences (11), medicine (2).	Semi-structured interview	Thematic and qualitative content analysis
Paper II	N=30 (incl. participants from Paper I) humanities and arts (4), social sciences (9), exact and natural sciences (13), medicine (4)		Thematic and qualitative content analysis
Paper III	N=41 (incl. participants from Paper I and Paper II) humanities and arts (6), social sciences (14), medicine (5), exact and natural sciences (16)		Qualitative content analysis
Paper IV	N=41 humanities and arts (6), social sciences (14), medicine (5), exact and natural sciences (16)		Narrative analysis

In order to solicit suitable participants for the study, the personnel offices of universities and applied higher education institutions were contacted. On the basis of received contacts, e-mails were sent to prospective participants. Furthermore, some participants were recruited from among the participants of university teacher pedagogical courses while two subjects approached the researcher with a wish to participate, after hearing about the study on novice university teachers. The participants came from four major domains (see table 1). The total sample included 9 novice university teachers who were working also in practice at the time of involvement in the study, 25 were in doctoral studies and 4 in Master's studies.

Prior to participating in the study, the subjects were contacted via phone or e-mail, soliciting their formal agreement to participate, specifying the purpose of the study and indicating other matters related to fulfilling confidentiality requirements.

3.2.2. Instrument and data collection

A semi-structured interview was used as the method of data collection. The interview was preferred as it offered flexibility in collecting data, a variety of details and an opportunity for thorough research of the matter, as well as the possibility to address the topics depending on how they emerge during specific interviews (Kvale, 2006). In qualitative research, an interview is used to reach scientific interpretations by unfolding the mindset of the interviewee and giving notional meaning to the experienced events (Kvale & Brinkmann, 2009).

The relatively open, flexible, and interactive approach to interview structure was chosen with the aim of generating interviewees' accounts of their own perspectives, perceptions, experiences, understandings, and interpretations of becoming a university teacher, as well as developing and learning teaching skills. The interview guide was used to ensure that the interview addresses themes identified in advance as relevant to the research.

Previous studies on the professional development and learning of university teachers (e.g. Kane, Sandretto, & Heath, 2002; Postareff & Lindblom-Ylänne, 2008; Åkerlind, 2003a, 2003b) were used in constructing the interview questions. The aim of this study was to examine novice university teachers' professional development, such as identity formation and their learning of teaching skills. Interview questions were compiled in cooperation with Mari Karm, the co-author of the articles. Throughout the process of constructing interview themes and questions, many potential interview questions were examined and discussed with academic colleagues. Interview questions are given in Appendix 1.

The overall interview procedure was the same for all participants. Unstructured follow-up questions were used to solicit further information about the key topics that the interviewees had brought up while answering the questions. The follow-up questions mainly related to "Could you tell me a bit more about

that?”, “Could you give me an example?”, “Could you explain that further?”. However, the follow-up questions differed depending on how extensively the participants had answered the questions.

All the interviews were transcribed in detail and the subjects were given a chance to add facts if they so wished.

The interviews were undertaken in the environment chosen by the interviewees (at the interviewer’s workplace, at the interviewees’ workplace, or outside the everyday work environment). The interviews lasted from 40 to 120 minutes. In presenting the collected data, the names and specialties of the subjects were not revealed in order to guarantee their anonymity.

The context of conducting the interviews

A narrative approach assumes that the material used in any kind of analysis is deeply influenced by the researcher. Therefore, it is important to explain the influence a researcher may have in the context of data collection.

The interviewers and the interviewees both came from the same environment: from a university or an applied higher education institution, meaning that the interviews were conducted as professional conversations between two academics. At the same time, it was likely that the specifics of a particular faculty or institute had to be explained. Self-control was maintained in the interviews, during which other people were mostly discussed without naming any names (a colleague, a professor, a fellow doctoral student, a supervisee). When sharing more complex stories, including more explicit details, interviewees were reassured, if requested, of confidentiality in portraying the content of the interview.

3.2.3. Data analysis

In the process of analyzing the interviews, thematic analysis (Lieblich, Tuval-Mashiach, & Zilber, 1998), qualitative content analysis (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005), and narrative analysis (Crossley, 2007) were used. The goal was not to generalize the results to the population of novice university teachers, but to arrive at a better understanding and description of how novice university teachers participating in this study interpreted the process of becoming a university teacher, the development of their teaching conceptions, professional practice, professional development and learning.

In Paper I and Paper II, the data was analyzed on the basis of the holistic-content perspective focusing on the integral content of the interview. Narrative researchers Lieblich, Tuval-Mashiach and Zilber (1998) recommended analyzing an interview as a whole since doing so enabled the highlighting of implications the interviewees attributed to their career, and allowed understanding of how they interpreted single events in the context of a whole. During the integral analysis of each interview, the most important themes and events were outlined, and each interviewee’s becoming a university teacher, the

course of recent teaching practice and professional learning of teaching skills were schematically mapped out.

Qualitative content analysis was used to analyze the data (Paper I, Paper II, Paper III), which was used for the subjective interpretation of research results through a systematic coding and classification process undertaken by identifying themes or regularities in the topics (Hsieh & Shannon, 2005). During coding, the researchers took advantage of using an inductive approach, allowing the deriving of categories from the data obtained through the research without any influence from pre-existing categories at the time of making coding-related decisions. According to Elo and Kyngäs (2008), this process provided the researcher with a more elaborate overview of the phenomenon.

Following transcription, the interviews were re-read repeatedly and a unit of meaning, based on which the coding decisions were made, was selected. Next, open coding was conducted, during which notes were added to the interview text during reading (Elo & Kyngäs, 2008). Based on the unit of meaning, summarizing sentences – codes – were written next to the transcribed text. An example of initial coding is given in Appendix 2. After all interviews were coded, the codes were placed in a single file and a codebook was created.

After the initial coding process, the codes were grouped based on the research questions and sub- and main categories emerged.

In Paper IV, the logic of narrative analysis and an inductive approach was followed (Crossley, 2007). According to Riessman (2005), narrative analyses have different typologies – thematic, structural, interactional and performative analysis. In this research, thematic analysis was used. The emphasis is on the content of the text. “The thematic approach is useful for finding common thematic elements across research participants and the events they report.” (Riessman, 2005). According to Chase (2005), the role of the researcher in narrative research was very crucial, as the researcher was also a narrator. Therefore, research reports of narrative analysis would always be seen as the researchers’ understanding or interpretation of the text (Josselson, 2007).

In the analysis, the researchers centered their focus on how the novice university teachers interpreted what it meant for them to be university teachers (including such themes as their teaching practice, research, professional development and learning, future perspectives as a university teacher). Each interview was summarized as a story. As Chase (2005) recommended, instead of locating distinct themes across interviews, the authors listened to the voices within each narrative. After reading the interviews, each interviewee’s story was summarized and the principal elements of the personal narrative were defined: narrative tone, themes and significant people.

Based on the initial reading and re-reading of the novice university teachers’ stories, university teachers’ stories were divided into four groups based on the following categories: tone towards teaching, tone towards being a university teacher, a conception of good teaching, professional development and learning. These groups were then rewritten again, representing the general narrative of

each group. These four groups (in Paper IV) did not only represent each personal story, but together they represented the whole research material of this research.

3.2.4. Trustworthiness of the study

In qualitative research, the concepts of credibility, dependability and transferability have been used to describe various aspects of trustworthiness. Graneheim and Lundman (2004) suggested separating the aspects of trustworthiness while regarding them as intertwined and interrelated.

3.2.4.1. Ensuring the credibility of the researcher

Ensuring credibility in qualitative research is associated with a lens established using the views of people who conduct, participate in, or read and review a study. The most frequently used procedures for ensuring credibility of the researcher in a qualitative analysis are: member checking, triangulation, detailed description, peer reviews, and external audits (Creswell & Miller, 2000). Creswell (2007) recommends using at least two procedures for ensuring the credibility of each study.

In the present dissertation, the following procedures were used for ensuring credibility:

Triangulation – in order to ensure credibility, different methods of analysis were used (qualitative content analysis, thematic analysis, narrative analysis). Credibility of the study was supported by a pilot study conducted in 2008, when the use of interview as a research method was tested and the researcher's eligibility to conduct interviews and interpret data was checked.

Disconfirming evidence – first, primary topics were defined on the basis of the data, and evidence sought from the fragments of the interviews to either comply with the topic, or to disprove it.

Researcher reflexivity – in case of a narrative study, the researcher is an active participant in the research process and it thus becomes essential for the researcher to understand the extent to which their own personality influences the whole process (Erkkilä & Mäkelä, 2002). During the research process, the researcher's personal feelings and emotions prior to and following each interview, as well as other notes and topical observations, personal opinions, beliefs and prejudices of the researcher, were recorded in a diary. The research diary contained precise data about conducting the interviews, notes about data analyses and interpretations.

Erkkilä and Mäkelä (2002) emphasize that a researcher should never forget that people are inclined to see the world through their own eyes and might be tempted to ignore some aspects of their study. The process of conducting the interviews affected the author of this dissertation as a researcher and academic

developer. Meeting the representatives of different universities and different fields helped the author to broaden her horizon and change her attitudes.

Member checking – a selection of participants were given the interview transcriptions to read in order for them to check the answers and add to them if they found them inadequate. In all the cases, the answers were not changed; only information added where necessary.

Collaboration – during the research process, another researcher was constantly collaborating. The research questions were compiled, data collected and analyzed and the results compared in cooperation. In cases of different opinions, argumentation was used as long as a joint agreement had been reached and coordinated.

Peer debriefing – in the research process, another PhD candidate was constantly consulted in order to get feedback and advice on the analyzing process. The candidate read the manuscripts of articles, commented on them, and posed complicated questions.

3.2.4.2. Ensuring transferability

Graneheim and Lundberg (2004) find that in case of qualitative research, the author of the study can give advice on how the present study can be transferred into another context. At the same time, the reader can decide if the findings are transferable to another context or not. In order to guarantee transferability, giving clear and distinct descriptions of culture and context, selection and characteristics of participants, data collection and process of analysis is essential. A rich and vigorous presentation of the findings, together with appropriate quotations also enhances transferability.

In order to guarantee transferability of the present study, notes were constantly taken and recorded in a research diary. In addition, the interviews were transcribed in detail. To present the findings (see Papers I, II, III, IV), quotations from the interviews were used to describe and confirm the interpretations.

3.2.4.3. Dependability

According to Long and Johnson (2000), reliability in qualitative research can be called dependability, since the objective of dependability is “to ensure that data collection is undertaken in a consistent manner free from undue variation which unknowingly exerts an effect on the nature of the data“(p. 31). They also recommend three approaches for testing reliability: stability – asking an informant the same questions at different times to check consistent answers; consistency – different topics in the interview are included so that the answers comply with each other; equivalence – asking different types of questions about the same topic (Long & Johnson, 2000). In the present study, all the above-mentioned recommendations were followed to compile the questionnaire and to conduct the interviews.

In order to increase dependability, the researchers conducted independent inquiries into the data separately. Throughout the process, the authors met to discuss, compare and decide on topics, codes, sub-categories and finally main categories until they reached an agreement.

The researchers in this study participated in the process of conducting the interviews and in the process of analyzing and interpreting the collected data. Furthermore, the researcher's job was closely related to the research topic – by developing pedagogical training for university teachers and participating in the training process as a mentor. Since the researcher undertook different roles, the course of the study could have been influenced by the researcher's personal experience as a student and an academic developer, as well as by her beliefs, viewpoints, attitudes and prejudices about a university as an institution and about the requirements of being a university teacher.

The researcher has substantial experience in working in a university (for 13 years), during which she has held different positions and gained diverse experience of the university as an institution, its traditions, and power relations. As an academic developer, the researcher was particularly interested in how novice university teachers perceived being a university teacher during their first years of practice, what difficulties they faced, who helped and supported them, and how they learned. The collected information has also been used to initiate the design of various pedagogical courses. As a mentor of peer-observation groups in pedagogical courses, the researcher had an opportunity to observe the work of novice university teachers and hear their reasons for choosing teaching methods and other activities. This information helped to both compile the questionnaire for the interviews and ask follow-up questions about the teaching process during the interview. Occasionally, the researcher noticed how difficult it was separating the roles of a researcher and an academic developer while conducting the interview. For example, the researcher was tempted to offer solutions for complicated teaching situations that an interviewee had described. Since the interviewees were informed about the background of the researcher, some of them tried to ask for advice about solving specific teaching and learning situations.

The research process also influenced the interviewees. A number of novice university teachers who participated in the study admitted that this participation gave them their first opportunity to share their experience of what being a novice university teacher meant. Besides, the interview gave them their first opportunity to reflect on their interpretation of learning and teaching.

3.2.4.4. Ensuring confirmability

In a qualitative study, the researcher's role in the process is highly important. Therefore, it is necessary to show how the researcher's background might influence the process of the study. Confirmability can be revealed in various ways. In the present study, the whole process of the study was recorded in a research diary as an on-going process.

4. FINDINGS AND DISCUSSION

The next section provides an overview of the main findings that are based on the research questions of the current study. A more thorough account of the study results is provided in articles (in Paper I, Paper II, Paper III and Paper IV).

1. How do novice university teachers describe and interpret their learning, and thus, changing and growing as university teachers?

Novice university teachers have different opportunities to develop their teaching skills and learn new methods, e.g. learning from their previous work and learning experience (e.g. Kugel, 1993), learning from colleagues and in the community (e.g. Bolander Laksov et al., 2008), attending pedagogical courses (e.g. Cilliers & Herman, 2010; Sadler, 2012a), and learning from students' feedback (e.g. Kember et al., 2002). The different aspects of a novice university teacher's professional development and learning are analyzed in Papers I, II, III.

Earlier studies (Gibbs & Coffey, 2004; Postareff et al., 2007, 2008) have demonstrated that university teachers with learning-centered teaching conceptions are more open to being influenced to develop their teaching skills than university teachers with teacher-centered teaching conceptions. The results of the present study supported that idea. University teachers whose teaching conceptions were more inclined towards being learning-centered approached their professional learning consciously and constantly reflected on their teaching practice and personal development (see also Paper III). University teachers with learning-centered teaching conceptions looked for different opportunities to develop their teaching skills and used formal (pedagogical courses, mentoring) as well as informal (discussions with their colleagues) ways for learning. University teachers with content-centered teaching conceptions did not emphasize a need to develop their teaching skills in the interviews, rather it was noted that mastery of the subject was the basis for a well-conducted teaching process.

The results of the study showed that novice university teachers' previous learning experience was an important source for learning teaching skills. On a similar point, Kugel (1993) also noted that novice university teachers have been taught a lot about the subject they are about to teach, but little about how to teach it – "Most of what they have learned, they have learned from watching others" (p. 317). Depending on the meaning novice university teachers attached to their previous learning experience, i.e. whether these were in accordance with the novice university teachers' conceptions of learning and teaching, either the teaching strategy used by their university teachers was adopted or new methods were sought. Since the teaching conceptions and teaching practices of the university teachers participating in the study differed, they also learned differently and needed different support for their further teaching practice.

Since earlier studies (e.g. Adams & Rytmeister, 2000) have demonstrated that novice university teachers tend to feel lonely and isolated, Paper I paid attention to the perceptions novice university teachers had of the community around them and the learning opportunities it provided. The results indicated that the learning opportunities in the community that were offered to novice university teachers depended largely on a particular community and its traditions. The importance of informal ways of learning in the development of novice university teachers' teaching skills has also been stressed by Bolander, Laksov et al. (2008), Kreber (2000) and Roxå and Mårtensson (2009) who found that university teachers' learning about teaching and about the discipline was related to interaction with colleagues. This might suggest that these university teachers conceived such learning as a communicative process that occurred within a community of peers. At the same time, a number of participants of the present study highlighted lack of support and feedback to their teaching practice at the beginning of their career. Particularly at the beginning of their career, novice university teachers expected more attention from their colleagues and heads of departments. If they did not receive such support from the start, the attention paid later felt more irritating than supporting. In their discussions about the reasons for such lack, they came to a conclusion that talking about teaching is not a general custom in universities. Nevertheless, they pointed out that they never really asked for such interactions either, since they were afraid of seeming incompetent in the eyes of their colleagues. Novice university teachers assumed that once they were employed by the university, they had to cope with their tasks independently.

Another issue of the community that was pointed out was related to contradictions between different generations – according to the interviewees, elder colleagues did not trust younger ones and there were discords based on academic hierarchy since novice university teachers, who were often also doctoral students, were not taken seriously by their more experienced colleagues. Based on the results of the study, support for the earlier critics of learning in a community (e.g. Warhurst, 2006, 2008; Gourlay, 2011a) can be agreed since they state that a university context does not support learning in a community and teaching is not seen as teamwork. Despite the noted issues, a community and learning in a community are important in the learning of a novice university teacher (see also Paper I). The possibilities of learning in a community are dependent on the attitudes of colleagues towards novice university teachers as well as on how teaching and teaching skills are valued.

In order to acquire teaching skills, the formal ways of learning most frequently adopted by novice university teachers were pedagogical training in teaching skills (see also Paper I, Paper II and Paper III). The studies of Postareff et al. (2007, 2008) and Sadler (2012b) demonstrated that as a result of attending such training, university teachers became more learning-centered. The study by Cilliers and Herman (2010), conducted seven years after the attendance of training, also confirmed the university teachers' teaching practice had become

more learning-centered. The results of the current study also demonstrated that the experience gained from pedagogical courses may function as an incentive to change one's teaching practice. However, the dimension of time is also of importance and while a university teacher may make a few changes in their practice shortly following the training, whether the teaching conceptions and practice are actually altered as a result of attending the training requires further study during a longer period of time.

Gibbs and Coffey (2004) found that the impact training had on the teaching skills of university teachers was closely tied to the length of training programs. In their study, changes in university teachers' teaching conceptions were noted only when training had lasted for at least 18 months. At the moment, programs offered to university teachers in Estonia have not included such extensive training. The longest training consisted of 6 ECTS and took place during one semester. In addition, based on the results of the current study, it could also be said that when changes in university teachers' teaching practices as a result of training were discussed, it was also stressed that longer trainings have proved more useful for novice university teachers. Several participants were skeptical of one-day or two-day training sessions, claiming that these might create confusion and provide insufficient options to reflect on the content of the training. Nevertheless, some university teachers, after having taken part in a long-term training, also stated that the training had proven useless. Reasons for such claims included an opinion that the methods discussed at the training were not suitable in the context of their subject (e.g. a university teacher from exact and natural sciences could not see any way of applying group work methods in their subject). Such instances confirmed that merely training as such was not sufficient in supporting the professional learning of university teachers, but that, first, support systems through which novice university teachers could get advice and support in implementing what they have learned at trainings was important, and secondly, consultations in case there have been setbacks in teaching were needed. Setbacks (including the resistance of students to changed teaching practices; the attitudes of colleagues) were something both teacher-centered and learning-centered university teachers had experienced.

Similarly to acquiring teaching skills, attitudes towards training or applying the methods learned in training sessions were closely related to the beliefs of the community. Trowler and Cooper (2002) have argued that university teachers' attitudes towards pedagogical training focusing on teaching skills were influenced by the shared culture of their particular department. Although the sample of the study did not allow for distinctions between disciplines, the findings of the study showed that the professional learning of a novice university teacher depended on colleagues' attitudes, especially on the attitude of the heads of the department towards teaching in general and towards novice university teachers. The interviews revealed the tendency of university teachers to return to traditional teaching methods if the teaching process and the development of teaching were not valued in the academic unit. At the same

time, the sample included novice university teachers whose views contrasted with the present teaching traditions and who tried to change these by launching various activities (see also Paper II and Paper IV).

Various studies (e.g. Duda, 2004; Roxå et al., 2008; Trigwell et al., 2000) have emphasized the importance of other formal ways of learning besides training (e.g. mentoring and scholarship of teaching and learning) in the professional development process of a novice university teacher. The study revealed that a mentoring system supporting the professional development of university teachers in Estonia was still in the phase of development as in the present study only two novice university teachers had had the opportunity to receive the required support from their mentor, although none of the university teachers participating in the study had experience of SoTL. At the same time, several novice university teachers had, during their practice, reached an understanding that looking into their teaching practice would help more in giving meaning to their teaching and understanding why some methods gave better results than others. Since university teachers and their needs for development differed, different formal learning opportunities needed to be developed.

Sadler (2012b) found in his study that lecturers' interaction with students had a critical influence upon university teacher's development and learning, as the feedback (one aspect of interaction) received could prompt a change in the purpose and nature of university teachers' future interactions with students. The present study showed, however, that novice university teachers did not emphasize the role of their students' feedback to any degree. The interviewees appeared content with the general feedback that the institutions collected from students. Teachers with learning-centered teaching conceptions valued students' feedback, used different ways of collecting feedback throughout the study process and saw it both as a means of achieving better results in their future teaching practice and as a source of learning for themselves. Several Estonian higher education institutions (e.g. University of Tartu, Tallinn University, etc.) have applied a central feedback system for courses and teaching. However, the results of the study indicated that not all novice university teachers comprehended the aims of collecting feedback centrally, nor was this seen as being useful in the development of their teaching practice. This would suggest that when developing their feedback system, higher education institutions could make a greater effort to introduce its aims to university teachers. In addition, the system of collecting feedback and the support system of developing teaching skills should be more intertwined and supportive of each other.

2. What are the teaching conceptions of novice university teachers and how are these expressed in the teaching practices described by them?

Papers II, III and IV identified the development of novice university teachers' teaching practice and teaching conceptions. The results of the study indicated that the formation of teaching conceptions and their implementation into practice were influenced by the university teachers' experience as a student,

their process and trajectory of becoming a university teacher, knowledge of the domain, personal agency, as well as by the attitudes of colleagues and teaching traditions of the particular discipline.

The present study showed that novice university teachers' knowledge of the discipline as well as their teaching skills differed and depended on the process of becoming and developing as a university teacher. Novice university teachers who had become university teachers directly after their graduation or even during their studies felt more concerned about their knowledge of the subject (see Paper III and Paper IV). Furthermore, they perceived difficulties in creating connections between the subject they were teaching and everyday practice, since they lacked sufficient work experience in the domain. When describing their teaching practice, it was emphasized that teaching practices were mostly based on their own learning experience as students as well as on the teaching traditions in their discipline. Moreover, distress related to the beginning of the teaching practice was acknowledged, e.g. students' questions, communication with students and conveying the impression of themselves as insecure and incompetent university teachers were feared. The university teachers who taught besides their professional practice or research work were not concerned about the knowledge they had of the domain. On the contrary, they stressed that as experts of the domain who are in touch with the real life, it was easy for them to create links, give examples and present relevant cases.

The present study also revealed that when starting to teach a new subject, novice university teachers were provided with study materials (e.g. lecture notes, slides) by the former university teacher of the particular subject and also former methods of assessment (e.g. tests, exam questions) were adopted. This may account for the adoption of the former university teacher's teaching methods, however, it might not be sensible from the standpoint of supporting students' learning and might not match the novice university teacher's own understanding of learning and teaching. Novice university teachers are more likely to reach an understanding of what the most suitable teaching methods for themselves and students are and in which direction they wish to develop by teaching, reflecting and analyzing.

University teachers' descriptions of their teaching practices as well as their own doubts concerning the rationality of their actions point out the issue of higher education institutions – novice university teachers start teaching without any teaching-related preparation. In addition, higher education institutions fail to pay sufficient attention to the initial needs of novice university teachers and to offer later support. University teachers lack opportunities to receive feedback on their teaching from colleagues since they lack the courage and initiative to ask for advice. Based on the interviews, it can be said that teaching-related discussions are rare in higher education institutions, due to which a novice university teacher may have to face their challenges alone. Such functioning is in contrast to the theory of communities of practice which assumes that people learn and become who they are through interaction with other people (Lave &

Wenger, 1991) and that people who are part of a community are not just a group of people but they are group who share an overall view of the domain in which they practice and have a sense of belonging and mutual commitment to this (Wenger, 1998).

The interviews showed that even a little teaching experience boosted the university teachers' confidence in teaching. In the descriptions of their teaching practices, novice university teachers already noted some changes in their teaching compared to their early teaching practice. With the gaining of more experience, the university teachers' focus gradually shifted from the content of the subject to the activities that they were using in the teaching process (they started reflecting on the teaching methods more thoroughly). Besides, the learner as well as the interaction process with students was noticed and valued more frequently. These results are in accordance with the study results by Sadler (2012a), whereby novice university teachers started paying more attention to reflection on their practice as their teaching experience increased and planning changes as well as valuing communication with students in the study process more.

The effect of the local context and subject domain on university teachers' teaching conceptions has been shown by several earlier studies (e.g. Lindblom-Ylänne, Trigwell, Nevgi, & Ashwin, 2006; Luedekke, 2003). For example, Lindblom-Ylänne et al. (2006) have showed that university teachers from exact and natural sciences are more likely to report a more teacher-focused approach to teaching, whereas those teaching humanities and social sciences are more student-focused. On the basis of the present study, disciplinary differences could not be highlighted since the study was designed to involve representatives of as many different disciplines as possible. Nevertheless, a number of participants described the teaching traditions of their subject domain and expressed their attitudes towards these traditions. In some cases, where a university teacher's teaching conceptions differed from the prevalent traditions of the discipline, novice university teachers were prepared to contrast themselves with the traditions and launch activities to change the traditions of the domain (including initiating discussions focusing on the teaching process, sharing their positive experience). Possible disciplinary distinctions in support of the literature quoted would need to be clarified in the course of further studies.

Earlier studies (e.g. Cilliers & Herman, 2010; Gibbs & Coffey, 2004) have mentioned the attendance at pedagogical training programs in teaching skills as an influential factor in the formation of university teachers' teaching conceptions. Based on the results of the current study, it could be said that attending such courses enabled novice university teachers to share their experience, reflect on their teaching practice and plan changes. Moreover, the participants in the study considered the opportunity to gain new ideas, receive feedback from mentors, as well as be part of a newly-formed university teachers' community to be important.

Although several earlier studies (e.g. Kugel, 1993; Åkerlind, 2003a, 2003b) have demonstrated that the development of a university teacher's teaching skills is a gradual process and at the beginning of their teaching practice, novice university teachers tend to be more content-centered (e.g. Sadler, 2012a), the results of the current study indicated that novice university teachers' teaching conceptions were situated along a content-centered or learning-centered axis, with the position on the axis not being fixed as it remained rather fluid. The further development of novice university teachers may take various directions. Novice university teachers may become more teaching-centered due to tiredness, opposition from students or the pressure of disciplinary traditions. Nevertheless, they may become more learning-centered provided they succeed in acquiring the necessary skills, teaching methods or finding a supportive environment (collegial support).

3. How do novice university teachers describe and interpret the meaning of being a university teacher?

As one part of professional development, the enhancement of a professional identity takes place. While forming their professional identity, university teachers make choices according to their perception of themselves as university teachers and according to their perception of how others see them. An academic's interpretation of expectations about an identity as a university teacher and the perception of the kind of university teacher to be in the future play an important role in the formation process of a university teacher's professional identity.

University teachers' identities have been viewed through activities that establish connections between the past, present and future (McAlpine & Amundsen, 2009; McAlpine, Amundsen, & Jazvac-Martek, 2010).

The development process of a novice university teacher's identity was analyzed in Papers I and IV.

Barkhuizen (2002) in his study noted that novice university teachers experienced conflicts between their expectations and their academic life in reality. The problems they indicated were related to teaching practice, departmental politics, and affirmative action. As one of the main reasons for these problems, he stated that for a novice, everything was new: the environment, the people, relationships, etc. The current study elicited the distinctive features of Estonian higher education institutions. Mostly, Estonian university teachers were familiar with the environment, and they were also familiar with the people, as in most cases they started teaching at the same institution where their colleagues were the same university teachers who had been teaching them. Among the respondents, there were only four university teachers who mentioned that they started teaching in an educational institution where they had not studied themselves. Nevertheless, the participants of the study still experienced issues as mentioned by Barkhuizen (2002). Since the role was new, a

familiar environment took on a new meaning not necessarily safe and supportive of university teacher's adaption and development (see also Paper IV).

Novice university teachers' identity as a teacher is still in the process of development and this is affected by the journey towards becoming a university teacher. The participants of the current study had mostly become university teachers following the completion of their studies and while starting out as a university teacher, studies in doctoral or master's program were continued. McAlpine and Åkerlind (2010) have shown that attention needs to be paid to university teachers' coping with academic life prior to their first academic appointment, such as during their doctoral studies, in the course of which the doctoral students construct their perception of a university teacher's identity and their own beliefs and efficacy, compare and contrast their interpretations and expectations with the values set in their university and their subject domain, and evaluate their future career prospects. McAlpine and Amundsen (2009) find that the doctoral experience may be filled with tensions and challenges due to a sense of isolation, lack of clarity about doctoral expectations, incomplete understandings of academic life and uncertainty as to whether one's own values can be aligned with those of the academy. During the present study, several interviewees hinted at the connection between the novice university teachers' expectations of being an earnest and equal partner to their colleagues and the defense of their doctoral thesis. Obtaining a doctoral degree is seen as a quality mark and sign of standard that helps feeling more confident among colleagues. At the same time, university teachers who had recently defended their degree admitted that obtaining the degree was not accompanied by the expected change in their colleagues' attitudes. They came to an understanding that being an earnest and equal partner depended largely on their own capability of adapting to academic life, their personal agency, the number of publications, and the resources they were able to find for their research work.

According to university teachers, being a student and a university teacher at the same time also brought on several problems. For instance, it was mentioned that they had sensed a lack of collegial relationship of trust caused by their double role. In some situations they were seen as students (in an institute), in some as colleagues (at a conference), which induced insecurity in the development of a university teacher's identity. Similarly, having double roles caused problems in the relationships with other students and it was perceived that ideas related to teaching and learning were not shared openly in their presence.

Earlier studies (Norton et al., 2010) identified contradictions between different roles (teacher and researcher) in a university teacher's duties. Beaty (2006) has argued that lecturers preferred to belong to a community of researchers rather than to a community of teachers. However, Malcolm and Zukas (2009) claimed that contrasting teaching and research work and the identities of a teacher and a researcher is incorrect since an identity should be perceived as a whole. The current study, however, did not identify such a contradiction. The reasons could be that the majority of university teachers who

participated in the study had not yet defended their degree, and thus, they had no direct obligation to publish articles and apply for research grants as independent researchers. At the same time, defending the degree was regarded critical from their future perspectives. If a university teacher aimed at a career in a university, a doctoral degree was considered important by the participants. Similarly to Norton et al.'s (2010) study, the current study showed that the time-consuming nature of being a teacher had resulted in novice university teachers' modest research work since they had been occupied with coping with teaching. The complicated and time-consuming nature of teaching was also seen as a reason for prolonged doctoral studies.

The sample in the study contained a number of practitioners (e.g. banking, medicine, law) who were also professionally active and all of them still wished to continue with both practice and their academic positions in the future (see also Paper IV). Professional practice helped to stay informed about the important trends and provided examples from practical life, while the position as a university academic gave an opportunity to contribute to educating younger generation of the subject domain, which was spoken about with dignity and as an accomplishment of one's mission. Gourlay (2011a) indicated reasons given by practitioners as novice university teachers for their decision to quit their position in a university: they had sensed their lowered status, lack of competence and lack of knowledge and expertise related to it; they had missed a caring community and sensed invisibility and isolation in the university, in contrast to a strong emphasis on teamwork. Nevertheless, practitioners as university teachers who had participated in the current study did not point out similar problems. However, all practitioners admitted that they associated their identity primarily with their professional practice (e.g. a doctor, an engineer, a lawyer), which could be considered a jeopardy to the quality of teaching from the viewpoint of universities. For this reason, higher education institutions should pay more attention to developing support systems aimed at practitioners as university lecturers and involve them in the study, research and development processes.

In conclusion, the developmental process of a university teacher's identity is a continuous process that is influenced considerably by the environment surrounding the university teacher, the values and traditions set in that environment, and personal agency. Although the participants were mainly positive about their future in a university, there were also university teachers who indicated doubts about their further career after their brief experience in a university. Their lack of future perspective in a university stemmed mainly from not feeling equal in the community as compared to their more experienced colleagues and by the lack of interest and support from the administrative staff. In some cases, the reason for quitting university teaching was a lack of motivation and reaching the decision that university teaching was not an area to which to dedicate their lives.

5. CONCLUSIONS

The first years of practice are of significant importance from the viewpoint of the formation of a university teacher's professionalism since the foundation of the formation of a university teacher's identity is laid, the academic community is joined, its prevalent values and traditions are either embraced or contradicted with. In addition, the teaching skills of a university teacher develop and conceptions of learning and teaching clarify.

Adcroft and Taylor (2011) have claimed that the most reasonable opportunities for the universities to support the career of novice university teachers are: managing the expectations of newcomers to academia, short and long-term career management, especially in balancing the demands arising from the complex relationship between teaching and research, the role of mentoring, and professional development mechanisms.

The results of the study indicated that novice university teachers as a group cannot be approached in a simplified manner as they differed both in the attitude towards research and teaching as well as their teaching conceptions. What is more, their willingness to change, develop and learn teaching skills vary.

The teaching conceptions of novice university teachers have not formed yet, thus, university teachers were in the process of seeking for a teaching method conforming to their personalities and understandings.

The teaching conceptions of novice university teachers were either teaching-centered or learning-centered. The study confirmed the results of previous studies according to which novice university teachers may have a learning-centered conception but may experience difficulties in implementing it in practice (Mälkki & Lindblom-Ylänne, 2012) due to lack of necessary skills, methods of work, teaching methods or a suitable environment (collegial support).

The results of the study indicated that novice university teachers learned teaching skills primarily from their personal experience as students (based on the teaching model they had experienced), from their work experience (teaching practice) and informal interaction with colleagues (their community). The formal way of learning that was used most frequently involved attending training programs on teaching skills, which helped to shape practical knowledge and skills as well as form a teaching-related community. Other formal ways of learning (e.g. mentoring, scholarship of teaching and learning) were less used. Novice university teachers were in need of systems for receiving support and advice after training and while implementing new perceptions into their practice.

Doctoral studies influence the formation of a university teacher significantly as during the studies, a doctoral student forms an understanding of the identity of a university teacher as well as their own values and efficacy: they compare

their understandings and expectations to the values of the university or their subject domain and assess the possibilities of their future career.

The results of the study demonstrated that the professional practice and teaching conceptions of novice university teachers also reflected the image of a university teacher they hoped to be presently and the direction in which they wished to develop in the future.

Novice university teachers were only in the stage of learning to understand the meaning associated with being a university teacher. The routes to becoming a university teacher differed (e.g. becoming a university teacher while studying by attending doctoral studies simultaneously with teaching, after the completion of studies, working as a practitioner and teaching in addition to it, etc.). Therefore, the issues that were experienced in the early stage of teaching in a university, as well as the support needed, differed. Their perception and development of being a university teacher depended on personal agency, the local workplace culture and the attitude of colleagues towards them. Problems were as follows: setting limits in their interaction with students; contradictory feelings about their relationship with colleagues (feelings that they were not regarded as equal, feelings of a patronizing attitude or being completely ignored the lack of or modest interest of the department head towards the actions and adaption of the novice university teacher).

The further development of novice university teachers may take various directions. Novice university teachers may become more teaching-centered due to tiredness, opposition from students or the pressure of university traditions. Nevertheless, they may become more learning-centered provided they succeed in acquiring the necessary skills, methods of work and learning methods or finding a supportive environment (collegial support).

Comprehending the differences among novice university teachers enables universities to develop support systems to foster the professional development and learning of university teachers. As university teachers differ, the support provided should also be diverse.

Some limitations of the study

One limitation of the study could be as follows: the present study was based on self-reports of university teachers and their own evaluation of their teaching practice. Further research should focus on observation and analysis of the actual teaching practice of the university teachers in the lecture hall.

A second limitation of the study is: the study sample did not provide opportunities to point out differences between domains. Therefore, the study could be continued and the sample expanded in certain domains. The heterogeneous sample of the study only provided an overview of differences between novice university teachers in Estonian higher education institutions and their conceptions of being and developing as university teachers.

Sadler (2012a) has criticized earlier research on university teachers' teaching conceptions and pointed out that these are mainly based on just one interview

and, thus, convey an inadequate perception of how the teachers' teaching conceptions have changed through time and how the teacher has developed. Therefore, a third limitation could be pointed out, namely, in order to examine the change in teaching conceptions, a longitudinal study should be conducted. A repeat study of the same target group in five years' time would be an option.

APPENDICES

Appendix I. The Interview Questions

1. Describe your route to becoming a university staff member (including your studies, degree program, previous work experience, working in the university).
2. Describe your initial work experience in the university (including How did you understand what the standards and procedures were? How were you supervised? From whom and how much feedback did you get in your work?)
3. How would you describe yourself as a university staff member?
4. What have you taught and in what way? Why have you taught the way you described?
5. Have you changed your teaching compared to how you taught at first? If so, how?
6. Describe the traditional teaching within your domain. How has this impacted on your own teaching?
7. Describe the opportunities you have had to develop your teaching skills. What support in developing your teaching skills do you feel you would need in the future?
8. What is the relationship between research and teaching in your own case? How do you combine these in your work?
9. How would you describe yourself as a university staff member in e.g. five years' time?

Appendix 2. An example of a transcript and preliminary coding

Transcript	Preliminary codes
<p>Could you please describe your regular teaching activities?</p> <p>14.40. I would like to be, one of my subjects is almost a core subject. Since my subject is the first one they learn, they should master some things by taking it. So I tried highlighting the most important for them to learn by heart as they can't in any way do without these things. I emphasized this throughout the lecture, you must learn this by heart. It is important. Yet still they confuse some things and you can easily see that the person who has learned the material, can do the things, but there were still people who just don't feel like it or for some reason do not go through the material carefully, and it shows.</p> <p>Could you please describe what your regular lecture looks like?</p> <p>14.41. Mostly I have keywords on slides or it often happens that there are some concepts with their definitions because it is also study material and should thus contain most of the information. I do explain the rest during the lecture and give as many examples from real life as I can, based on my work experience. So yes, that's about it. That's the best I can do at the moment (laughter).</p> <p>Have you ever felt the need to ask someone for advice on how to do things differently when teaching and explaining something?</p> <p>14.42. (long consideration) If yes, then it has been minimal. Rather I feel I don't know as much as I should. For example, there is some aspect of theory and I know that I know what it is, but when I have to explain it, I can't convey it as well as I should. I mean, the better you know something, the better you are at explaining it. This is mostly where the bottleneck is. The problem lies within oneself.</p>	<p>Students must master the material A university lecturer brings out the important points A student must learn the important things by heart A university teacher emphasizes the important things and things to learn by heart during the lecture Despite the efforts of a university teacher, some students still may not master everything If a student goes through the material carefully, they will master it</p> <p>Keywords on slides, concepts with definitions</p> <p>Slides function as study materials, which means slides have to include most of the information</p> <p>A university teacher explains, gives realistic examples (based on their work experience)</p> <p>The university teacher has not felt the need to discuss their teaching practice with colleagues</p> <p>Possible problems in teaching arise from the subject knowledge – if the material is mastered, it is easier to explain</p>

<p>Have you by now received any feedback on your teaching from the students? 14.43. No, I haven't. At the beginning of the week, I think we got the e-mail that the students were sent the questionnaire through the University Feedback System.</p> <p>But you haven't asked the students yourself? 14.44. No, I haven't had the chance. I haven't encountered them that much. For me, it's like, I teach so few subjects and so it's hard to get the feedback (...)</p> <p>Now, looking back at the soon ending semester, what has been most difficult for you in teaching and doing the work of a university teacher? 14.45. The most difficult thing at first was the great work preparing the study material, I mean, a lot more time is spent on preparing the material than on presenting it.</p>	<p>Has not received feedback on teaching from students</p> <p>Teaches few subjects which makes receiving feedback complicated</p> <p>Preparing study material is complicated and time-consuming</p> <p>Teaching = presenting the material</p>
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REFERENCES

- Adams, M., & Rytmeister, C. (2000). Beginning the academic career: How can it best be supported in the changing university climate? Paper presented at 'Flexible learning for a flexible society', 23rd annual HERDSA conference, Toowoomba, Queensland, Australia. Retrieved October 9, 2010, from http://www.herdsa.org.au/?page_id=179.
- Adcroft, A., & Taylor, D. (2011). Support for new career academics: an integrated model for research intensive university business and management schools. *Studies in Higher Education*, DOI:10.1080/03075079.2011.599378. To link to this article: <http://dx.doi.org/10.1080/03075079.2011.599378>, p. 1–14.
- Antonek, J. L., McCormik, D. E., & Donato, R. (1997). The Student Teacher Portfolio as Autobiography: Developing a Professional Identity. *The Modern Language Journal*, 81(1), 15–27.
- Archer, L. (2008). Younger academics' constructions of 'authenticity', 'success' and professional identity. *Studies in Higher Education*, 33(4), 385–403.
- Barkhuizen, G. (2002). Beginning to Lecture at University: A Complex Web of Socialisation Patterns. *Higher Education Research & Development*, 21(1), 93–109.
- Barrett, M., Ballantyne, J., Harrison, S., & Temmerman, N. (2009). On building a community of practice: reflective narratives of academic learning and growth. *Reflective Practice*, 10(4), 403–416.
- Beaty, L. (2006). Towards professional teaching in higher education: the role of accreditation. In P. Ashwin (Eds.), *Changing Higher Education. The Development of Learning & Teaching*. London and New York. Taylor & Francis. Routledge.
- Becker, T., & Trowler, (2001). *Academic tribes and territories*. (2nd ed.). Buckingham: Open University Press.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20, 107–128.
- Billett, S. (2008). Learning throughout working life: a relational interdependence between personal and social agency. *British Journal of Educational Studies*, 56(1), 39–58.
- Billot, J. (2010). The imagined and the real: identifying the tensions for academic identity. *Higher Education Research and Development*, 29(6), 709–721.
- Bolander-Laksov, K., Mann, S., & Dahlgren, L. O. (2008). Developing a community of practice around teaching: a case study. *Higher Education Research & Development*, 27(2), 121–132.
- Boud, D., Cohen, R. & Walker, D. (Eds). (1993). *Using Experience for Learning*. The Society for Research into Higher Education & Open University Press.
- Boud, D., & Walker, D. (1998). Promoting Reflection in Professional Courses: the challenge of Context. *Studies in Higher Education*, 23(2), 176–188.
- Boyd, P. (2010). Academic induction for professional educators: Supporting the workplace learning of newly appointed lecturers in lecturer and nurse education. *International Journal for Academic Development*, 15(2), 155–165.
- Boyd, P., & Harris, K. (2010). Becoming a university lecturer in teacher education: expert school teachers reconstructing their pedagogy and identity. *Professional Development in Education*, 36(1–2), 9–24.

- Brew, A. (2001). *The nature of research: Inquiry in academic contexts*. London: Routledge Falmer.
- Bullough, R.V. Jr. (2005). Being and becoming a mentor: School-based lecturer educators and lecturer educator identity. *Teaching and Teacher Education*, 21(2), 143–155.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge: Harvard University Press.
- Chase, S.E. (2005). Narrative inquiry. Multiple lenses, approaches, voices. In N.K. Denzin & Y.S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., 651–679). Thousand Oaks: Sage.
- Churchman, D., & King, S. (2009). Academic practice in transition: hidden stories of academic identities. *Teaching in Higher Education*, 14(5), 507–516.
- Cilliers, F. J., & Herman, N. (2010). Impact of an educational development programme on teaching practice of academics at a research-intensive university. *International Journal for Academic Development*, 15(3), 253–267.
- Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and Teacher Education*, 18, 947–967.
- Cortazzi, M. (1993). *Narrative Analysis*. London, Washington, D. C.: The Falmer Press.
- Cox, M. D. (2013). The impact of communities of practice in support of early-career academics. *International Journal for Academic Development*, 18(1), 18–30.
- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design. Choosing Among Five Approaches*. Thousand Oaks. Sage Publications.
- Creswell, J. W. (2008). *Educational Research. Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Pearson Education International.
- Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory into Practice*, 39(3), 124–130.
- Crossley, M. (2007). Narrative analysis. In E. Lyons, & A. Coyle (Eds.), *Analysing Qualitative Data in Psychology* (pp. 131–145). Thousand Oaks, London, New Delhi: Sage Publications.
- Dall’Alba, G., & Sandberg, J. (2006). Unveiling Professional Development: A Critical Review of Stage Models. *Review of Educational Research*, 76(3), 383–412.
- Debowski, S. (2012). *The New Academic. A Strategic Handbook*. Open University Press.
- Duda, R. B. (2004). Mentorship in Academic Medicine: A Critical Component for All Faculty and Academic Advancement. *Current Surgery*, 61(3), 325–327.
- Dunham-Taylor, J., Lynn, C. W., Moore, P., McDaniel, S., & Walker, J. K. (2008). What Goes Around Comes Around: Improving Faculty Retention Through More Effective Mentoring. *Journal of Professional Nursing*, 24(6), 337–346.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advance Nursing*, 62(1), 107–115.
- Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247–273.
- Erkkilä, R., & Mäkelä, M. (2002). Face to Face. Human Dimensions in Biographical Interviews. In R. Huttunen, H.L.T. Heikkinen, L. Syrjälä (Eds.), *Narrative Research. Voices of Teachers and Philosophers*. Jyväskylä: SoPhi, Jyväskylän Yliopisto, (pp. 45–55).
- Evans, L. (2002). What is Teacher Development? *Oxford Review of Education*, 28(1), 123–137.
- Evans, L. (2010). *Academic professionalism in the UK context: a new conceptual model*. Paper presented at European Conference on Educational Research, within

- the symposium Adapting to circumstances and changing with the times? Is this the dawn of a new academic professionalism in Europe? Helsinki.
- Gibbs, G., & Coffey, M. (2004). The impact of training of university teachers on their teaching skills, their approach to teaching and the approach to learning of their students. *Active Learning in Higher Education*, 5, 87–100.
- Ginns, P., Kitay, J., & Prosser, M. (2010). Transfer of academic staff learning in a research-intensive university. *Teaching in Higher Education*, 15(3), 235–246.
- Gourlay, L. (2011a). „I’d landed on the moon“: a new lecturer leaves the academy. *Teaching in Higher Education*, 16(5), 591–601.
- Gourlay, L. (2011b). New lecturers and the myth of „communities of practice“. *Studies in Continuing Education*, 33(1), 67–77.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24, 105–112.
- Harrison, J., & McKeon, F. (2010). Perceptions of beginning teacher educators of their development in research and scholarship: identifying the “turning point” experiences. *Journal of Education for Teaching*, 36(1), 19–34.
- Heikkinen, H. L. T. (2002). Whatever is Narrative Research. In R. Huttunen, H. L. T. Heikkinen, L. Syrjälä (Eds.), *Narrative Research. Voices of Teachers and Philosophers*. (pp. 13–28). Jyväskylä: SoPhi, Jyväskylän Yliopisto.
- Henkel, M. (2000). *Academic identities and policy change in higher education*. London: Jessica Kingsley.
- Henkel, M. (2005). Academic identity and autonomy in a changing policy environment. *Higher Education*, 49, 155–176.
- Ho, A., Watkins, D., & Kelly, M. (2001). The conceptual change approach to improving teaching and learning: An evaluation of a Hong Kong staff development programme. *Higher Education*, 42, 143–169.
- Hobson, A.J., Ashby, P., Malderez, A., & Tomlinson, P.D. (2009). Mentoring beginning lecturers: What we know and what we don’t. *Teaching and Teacher Education*, 25(1), 207–216.
- Hsieh, H., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15, 1277–1288.
- Jarvis, P., & Parker, S. (Eds.) (2005). *Human Learning: a holistic perspective*. London: Routledge.
- Jauhiainen, A., Jauhiainen, A., & Laiho, A. (2009). The dilemmas of the ‘efficiency university’ policy and the everyday life of university lecturers. *Teaching in Higher Education*, 14(4), 417–428.
- Josselson, R. (2007). The ethical attitude in narrative research. In D.J. Clandinin (Ed.), *Handbook of narrative inquiry. Mapping the methodology* (pp. 537–566). Thousand Oaks: Sage.
- Kaasila, R., & Lauriala, A. (2010). Towards a collaborative, interactionist model of teacher change. *Teaching and Teacher Education*, 26, 854–862.
- Kane, R., Sandretto, S., & Heath, C. (2002). Telling Half the Story: A Critical Review of Research on the Teaching Beliefs and Practices of University Academics. *Review of Educational Research*, 72(2), 177–228.
- Karm, M. (2010). Reflection tasks in pedagogical training courses. *International Journal for Academic Development*, 15(3), 203–214.
- Karm, M. (2013). *Öppemeetodid kõrgkoolis*. Sihtasutus Archimedes. [Teaching methods in a higher education institution].

- Karm, M., Remmik, M., & Haamer, A. (2013). Combining International Experience with the Local Context. Designing and Improving Instructional Development in a Post-Soviet Setting. In E. Simon, & G. Pleschová (Eds.), *Teacher Development in Higher Education. Existing Programs, Program Impact, and Future Trends*. Taylor & Francis. Routledge.
- Kember, D. (1997). A Reconceptualisation of the Research into University Academics' Conceptions of Teaching. *Learning and Instruction*, 7(3), 255–275.
- Kember, D., & Kwan, K. (2000). Lecturers' approaches to teaching and their relationship to conceptions of good teaching. *Instructional Science*, 28, 469–490.
- Kember, D., Leung, D.Y.P., & Kwan, K.P. (2002). Does the Use of Student Feedback Questionnaires Improve the Overall Quality of Teaching? *Assessment & Evaluation in Higher Education*, 27(5), 411–425.
- King, V. (2013). Self-portrait with mortar board: a study of academic identity using the map, the novel and the grid. *Higher Education Research & Development*, 32(1), 96–108.
- Knapp, M. S. (2003). Professional Development as a Policy Pathway. *Review of Research in Education*, 27, 109–156.
- Knight, P., Tait, J. , & Yorke, M. (2006). The professional learning of teachers in higher education. *Studies in Higher Education*, 31(3), 319–339 .
- Knight, P. T., & Trowler, P. R. (2000). Department-level Cultures and the Improvement of Learning and Teaching. *Studies in Higher Education*, 25(1), 69–83.
- Kogan, M. (2000). Higher education communities and academic identity. *Higher Education Quarterly*, 54(3), 207–216.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. *Academy of Management Learning & Education*, 4(2), 193–212.
- Kolb, D. A. (1984). *Experiential learning. Experience as a source of learning and development*. Englewood Cliffs: Prentice Hall.
- Kreber, C. (2000). How teaching award winners conceptualize academic work: Further thoughts on the meaning of scholarship. *Teaching in Higher Education*, 5(1), 61–78.
- Kreber, C. (2004). An analysis of two models of reflection and their implications for educational development. *International Journal of Academic Development*, 9(1), 29–51.
- Kreber, C. (2006). Developing the Scholarship of Teaching through Transformative Learning. *Journal of Scholarship of Teaching and Learning*, 6(1), 88–109.
- Kreber, C., & Cranton, P. A. (2000). Exploring the scholarship of teaching. *Journal of Higher Education*, 71, 476–496.
- Kugel, P. (1993). How professors develop as teachers. *Studies in Higher Education*, 18(3), 315–328.
- Kvale, S. (2006). Dominance Through Interviews and Dialogues. *Qualitative Inquiry*, 12(3), 480–500.
- Kvale, S., & Brinkmann, S. (2009). *Interviews. Learning the Craft of Qualitative Research Interviewing*. Sage Publications.
- Kärtner, P. (2010). *Üliõpilaste uurimistööde juhendamise ja tagasisidestamine*. Sihtasutus Archimedes. [The supervision and feedback of students' research].
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press.

- Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative Research*. Thousand Oaks, London, New Delhi: Sage Publications.
- Lindblom-Ylänne, S., Trigwell, K., Nevgi, A., & Ashwin, P. (2006). How approaches to teaching are affected by discipline and teaching context. *Studies in Higher Education, 31*, 285–298.
- Long, T., & Johnson, M. (2000). Rigour, reliability and validity in qualitative research. *Clinical Effectiveness in Nursing, 4*(1), 30–37.
- Luedekke, G. R. (2003). Professionalising teaching practice in higher education: A study of disciplinary variation and ‘teaching-scholarship’. *Studies in Higher Education, 28*, 213–228.
- Malcolm, J., & Zukas, M. (2009). Making a mess of academic work: experience, purpose and identity. *Teaching in Higher Education, 14*(5), 495–506.
- Manathunga, C., & Brew, A. (2012). Beyond Tribes and Territories: New Metaphors for New Times. In P. Trowler, M. Saunders, & V. Bamber (Eds.), *Tribes and Territories in the 21st Century. Rethinking the significance of disciplines in higher education*. London and New York: Taylor & Francis. Routledge.
- Marable, M.A., & Raimondi, S.L. (2007). Lecturers’ perceptions of what was most (and least) supportive during their first years of teaching. *Mentoring and Tutoring: Partnership in Learning, 15*(1), 25–37.
- Marton, F., & Booth, S. (1997). *Learning and awareness*. Lawrence Erlbaum Associates. Mahwah, New Jersey.
- McAlpine, L., & Amundsen, C. (2009). Identity and agency: pleasures and collegiality among the challenges of the doctoral journey. *Studies in Continuing Education, 31*(2), 109–125.
- McAlpine, L., Amundsen, C., Clement, M., & Light, G. (2009). Rethinking our underlying assumptions about what we do and why we do it: academic development as a case. *Studies in Continuing Education, 31*(3), 261–280.
- McAlpine, L., Amundsen, C. & Jazvac-Martek, M. (2010). Living and Imagining Academic Identities. In L. McAlpine & G. Åkerlind (Eds.), *Becoming an Academic: International Perspectives* (pp. 125–153). Hampshire, New York: Palgrave Macmillan.
- McAlpine, L., & Weston, C. (2000). Reflection: Issues related to improving professors’ teaching and students’ learning. *Instructional Science, 28*, 363–385.
- McAlpine, L., & Åkerlind, G. (2010). Academic Practice in a Changing International Landscape. In L. McAlpine, & G. Åkerlind (Eds.), *Becoming an Academic: International Perspectives* (pp. 1–15). Hampshire, New York: Palgrave Macmillan.
- McKenzie, J. A. (2003). Variation and change in university teachers’ ways of experiencing teaching. Doctoral dissertation, University of Technology, Sydney.
- Moon, J. (1999). *Reflection in Learning and Professional Development. Theory and Practice*. Kogan Page.
- Mowbray, S., & Halse, C. (2010). The purpose of the PhD: theorising the skills acquired by students. *Higher Education Research & Development, 29*(6), 653–664.
- Murray, K., & McDonald, R. (1997). The disjunction between lecturers’ conceptions of teaching and their claimed educational practice. *Higher Education, 33*, 331–349.
- Mälkki, K., & Lindblom-Ylänne, S. (2012). From reflection to action? Barriers and bridges between higher education teachers’ thoughts and actions. *Studies in Higher Education, 37*(1), 33–50.

- Mårtensson, K., Roxå, T., & Olsson, T. (2011). Developing a quality culture through the Scholarship of Teaching and Learning. *Higher Education Research & Development*, 30(1), 51–62.
- Nakamura, J., & Shernoff, D.J. (2009). *Good Mentoring: Fostering Excellent Practice in Higher Education*. San Francisco, CA: John Wiley & Sons.
- Nicholls, G. (2001). *Professional Development in Higher Education. New dimensions and directions*. Kogan Page.
- Norton, L., Aiyegbayo, O. , Harrington, K. , Elander, J., & Reddy, P. (2010). New lecturers' beliefs about learning, teaching and assessment in higher education: the role of the PGCLTHE programme. *Innovations in Education and Teaching International*, 47(4), 345–356.
- Norton, L., Richardson, J. T. E., Hartley, J., Newstead, S., & Mayes, J. (2005). Teachers' beliefs and intentions concerning teaching in higher education. *Higher Education*, 50, 537–571.
- Pilli, E. (2009). *Väljundipõhine hindamine kõrgkoolis*. Sihtasutus Archimedes. [Outcome based assessment in higher education institution].
- Postareff, L., & Lindblom-Ylänne, S. (2008). Variation in teachers' descriptions of teaching: Broadening the understanding of teaching in higher education. *Learning and Instruction*, 18, 109–120.
- Postareff, L., Lindblom-Ylänne, S., & Nevgi, A. (2007). The effect of pedagogical training on teaching in higher education. *Teaching and Teacher Education*, 23, 557–571.
- Postareff, L., Lindblom-Ylänne, S., & Nevgi, A. (2008). A follow-up study of the effect pedagogical training on teaching in higher education. *Higher Education*, 56, 29–43.
- Prosser, M., & Trigwell, K. (1997). Relations between perceptions of the teaching environment and approaches to teaching. *British Journal of Educational Psychology*, 67, 25–35.
- Prosser, M., & Trigwell, K. (1999). *Understand learning and teaching: The experience in higher education*. Buckingham: SRHE and Open University Press.
- Remmik, M., & Karm, M. (2009). Koolituse mõju õppejõudude õpetamisoskustele – väljakutsed ja võimalused [Impact of training on teaching skills of university lecturers – challenges and opportunities]. *Haridus*, 11–12, 20–26.
- Remmik, M., & Karm, M. (2013). From teaching to guiding learning: novice university teachers' conceptions of teaching and learning. In E.Saar, & R. Mõttus (Eds.), *Higher Education at the Crossroads: the Case of Estonia* (pp. 199–216). Frankfurt am Main: Peter Lang Verlag.
- Richardson, J. T. E. (2005). Students' approaches to learning and teachers' approaches to teaching in higher education. *Educational Psychology*, 25, 673–680.
- Riessman, C. K. (2005). Narrative analysis. In N. Kelly, C. Horrocks, K. Milnes, B. Roberts, & D. Robinson (Eds.), *Narrative, Memory & Everyday Life*. University of Huddersfield, Huddersfield.
- Roxå, T., & Mårtensson, K. (2009). Significant conversations and significant networks – exploring the backstage of the teaching arena. *Studies in Higher Education*, 34(5), 547–559.
- Roxå, T., Olsson, T., & Mårtensson, K. (2008). Appropriate use of theory in the scholarship of teaching and learning as a strategy for institutional development. *Arts and Humanities in Higher Education*, 7(3), 276–294.

- Sadler, I. (2012a). The challenges for new academics in adopting student-centred approaches to teaching. *Studies in Higher Education*, 37(6), 731–745.
- Sadler, I. (2012b). The influence of interactions with students for the development of new academics as teachers in higher education. *Higher Education*, 64, 147–160.
- Samuelowicz, K., & Bain, J. D. (1992). Conceptions of teaching held by academic teachers. *Higher Education*, 24, 93–112.
- Samuelowicz, K., & Bain, J. D. (2001). Revisiting academics' beliefs about teaching and learning. *Higher Education*, 41, 299–325.
- Scott, P. (2003). Challenges to Academic Values and the Organization of Academic Work in Time of Globalization. *Higher Education in Europe*, 28 (3), 295–307.
- Sfard, A., & Prusak, A. (2005). Telling Identities: In Search of an Analytic Tool for Investigating Learning as a Culturally Shaped Activity. *Educational Researcher*, 34(14), 14–22.
- Sheeres, H., Solomon, N., Boud, D., & Rooney, D. (2010). When is it OK to learn at work? The learning work of organisational practices. *Journal of Workplace Learning*, 22(1/2), 13–26.
- Sherman, T. M., Armistead, L. P. Fowler, F., Barksdale, M. A., & Reif, G. (1987). The Quest for Excellence in University Teaching. *The Journal of Higher Education*, 58(1), 66–84.
- Shreeve, A. (2011). Being in two camps: conflicting experiences for practice-based academics. *Studies in Continuing Education*, 33(1), 79–91.
- Smith, C., & Boyd, P. (2012). Becoming an academic: the reconstruction of identity by recently appointed lecturers in nursing, midwifery and the allied health professions. *Innovations in Education and Teaching International*, 49(1), 63–72.
- Smith, J. (2010). Forging identities: the experiences of probationary lecturers in the UK. *Studies in Higher Education*, 35(5), 577–591.
- Stark, J. S. (2000). Planning introductory college courses: Content, context and form. *Instructional Science*, 28, 413–438.
- Trigwell, K., & Prosser, M. (1996). Congruence between intention and strategy in university science teachers' approaches to teaching. *Higher Education*, 32, 77–87.
- Trigwell, K., Martin, E., Benjamin, J., & Prosser, M. (2000). Scholarship of Teaching: a model. *Higher Education Research & Development*, 19(2), 155–168.
- Trowler, P., & Cooper, A. (2002). Teaching and learning regimes: Implicit theories and recurrent practice in the enhancement of teaching and learning through educational development programmes. *Higher Education Research and Development*, 21(3), 221–240.
- Trowler, P., & Knight, P. (2000). Coming to know in higher education: Theorising faculty entry to new work contexts. *Higher Education Research & Development*, 19(1), 27–42.
- Tummons, J. (2012). Theoretical trajectories within communities of practice in higher education research. *Higher Education Research & Development*, 31(3), 299–310.
- Tynan, B. R., & Garbett, D.L. (2007). Negotiating the university research culture: collaborative voices of new academics. *Higher Education Research & Development*, 26(4), 411–424.
- Tynjälä, P. (2008). Perspectives into learning at the workplace. *Educational Research Review*, 3, 130–154.
- Vaht, G., Tüür, L., & Kulasalu, Ü. (2010). *Higher Education in Estonia*. Archimedes Foundation. Estonian Academic Recognition Information Centre.

- http://www2.archimedes.ee/enic/File/Higher_Education_in_Estonia_2010.pdf.
Retrieved April 12th, 2013.
- Vardi, I. (2011). The changing relationship between the scholarship of teaching (and learning) and universities. *Higher Education Research & Development*, 30(1), 1–7.
- Viskovic, A. (2006). Becoming a tertiary teacher: learning in communities of practice. *Higher Education Research & Development*, 25(4), 323–339.
- Walker, C., Gleaves, A., & Grey, J. (2006). A study of the difficulties of care and support in new university lecturers' work. *Teachers and Teaching: Theory and Practice*, 12(3), 347–363.
- Warhurst, R. (2006). “We Really Felt Part of Something”: Participatory learning among peers within a university teaching-development community of practice. *International Journal for Academic Development*, 11(2), 111–122.
- Warhurst, R. (2008). “Cigars on the flight-deck’: new lecturers’ participatory learning within workplace communities of practice’. *Studies in Higher Education*, 33(4), 453–467.
- Wenger, E. (1998). *Communities of Practice. Learning, Meaning, and Identity*. Cambridge University Press.
- Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating community of practice*. Boston: Harvard Business School Press.
- Winter, R. P., & Donohue, W. O. (2012). Academic identity tensions in the public university: which values really matter? *Journal of Higher Education Policy and Management*, 34(6), 565–573.
- Whitchurch, C. (2012). Expanding parameters of academia. *Higher Education*, 64(1), 99–117.
- Ylijoki, O. (2005). Academic nostalgia: A narrative approach to academic work. *Human Relations*, 58(5), 555–576.
- Åkerlind, G. S. (2003a). Academic growth and development – How do university academics experience it? *Higher Education*, 50, 1–32.
- Åkerlind, G. S. (2003b). Growing and developing as a university teacher – Variation in meaning. *Studies in Higher Education*, 28, 375–390.
- Åkerlind, G.S. (2005). Academic growth and development – How do university academics experience it? *Higher Education*, 50, 1–32.
- Åkerlind, G. S. (2007). Constraints on academics’ potential for developing as a teacher. *Studies in Higher Education*, 32, 21–37.
- Åkerlind, G. S. (2008). Growing and developing as a university researcher. *Higher Education*, 55, 241–254.
- Åkerlind, G. S. (2011). Separating the ‘teaching’ from the ‘academic’: possible unintended consequences. *Teaching in Higher Education*, 16(2), 183–195.

SUMMARY IN ESTONIAN

Algaja õppejõu professionaalsuse kujunemise võimalused Eesti kõrgkoolides

Esimesed tööaastad omavad olulist tähendust õppejõu professionaalsuse kujunemisele, siis pannakse alus õppejõu identiteedi kujunemisele, liitutakse ülikooli kogukonnaga, võetakse omaks või vastandutakse selles valitsevate väärtuste ja traditsioonidega, samuti arenevad õpetamisoskused. Viimaste aastakümnete muutused kõrghariduses (muutunud on üliõpilased, õppekavad, kõrgkoolide rahastamine jm) mõjutavad ka õppejõudude tööd kõrgkoolides.

Õppejõudude töös põimuvad akadeemilised ja mitte-akadeemilised ülesanded (uurimistöö, õpetamine, projektikirjutamine ja -administreerimine, õppekava juhtimine, akadeemilise struktuuriüksuse juhtimine (Whitchurch, 2012)). Iga õppejõud võib käsitleda ja tõlgendada vastavaid akadeemilise töö tahke ning rolle erinevalt ning siin määravad rõhuasetuse õppejõu personaalne võimekus ja eelistused ning organisatsiooni kontekst (Debowski, 2012). Järjest enam õppejõude tajub konflikti kõrgkoolide poolt õppejõule suunatud ootuste ning vähese institutsionaalse toetuse vahel (Billot, 2010). Vardi (2011) on leidnud, et üks olulisemaid küsimusi kõrghariduse ees on, kuidas saavutada, et õppejõud ja ülikoolid suhtuksid õpetamisesse sama tõsiselt kui teadustöösse, kuidas tunnustada hästi õpetavaid õppjõude ning kuidas kaasata uusi õppejõude ülikoolide töösse?

Doktoritöö eesmärk oli kirjeldada ja analüüsida algajate õppejõudude kohanemist õppejõutööga, nende õpetamisarusaamu ja õpetamisarusaamade avaldumist õpetamispraktikas. Samuti oli doktoritöö eesmärgiks selgitada, kuidas algajad õppejõud õpivad õpetamisoskusi ning mida tähendab nende jaoks õppejõuks olemine ja õppejõuna arenemine.

Metodoloogilise raamistikuna kasutati uurimuses kvalitatiivset, narratiivset lähenemisviisi. Uurimuse andmestik koguti poolstruktureeritud intervjuudega.

Uurimuse tulemustest selgus:

Algajat õppejõudu kui rühma ei või käsitleda lihtsustatult, kuna nad ei ole ühesugused. Algajad õppejõud võivad erineda nii oma identiteedi määratlemise poolest, teadustöösse ja õpetamisse suhestumise poolest, õpetamisarusaamade poolest ning valmisoleku poolest muutuda, ennast arendada ja õppida.

Uurimuse tulemused näitasid, et algajate õppejõudude õpetamisarusaamad on veel välja kujunemata ning praktikas alles katsetatakse oma tõekspidamistega kooskõlas olevaid strateegiaid. Õppejõudude õpetamisarusaamasid võib vaadelda paiknevana õppejõukeskse-üliõpilaskeskse arusaama teljel. See, millises suunas oma praktikat edaspidi arendatakse, sõltub nii õppejõust kui keskkonnast, milles ta tegutseb ja valdkonna õpetamistraditsioonidest.

Algajad õppejõud juhinduvad õpetamisel peamiselt oma isiklikest kogemustest üliõpilasena. Vastavalt sellele, kas saadud kogemused on kooskõlas isiklike arusaamadega õppimisest ja õpetamisest või mitte, järgivad nad seda või vastanduvad oma professionaalses praktikas.

Algajate õppejõudude õpetamisoskuste õppimisel on olulisel kohal mitteformaalsed õppimisviisid (kolleegide eeskuju, mitteformaalne suhtlemine ja nõustamine, valdkondlikud õpetamistraditsioonid). Formaalsetest õppimisvõimalustest kasutasid uurimuses osalenud kõige sagedamini õpetamisoskuste koolitusi.

Uurimuse tulemused osutasid, et algajatele õppejõududele võib valmistada raskusi koolitusel kogetu praktikasse rakendamine. Seetõttu on oluline kõrgkoolidel välja arendada tugisüsteemid, mis võimaldaksid õppejõududel nõu ning tuge saada ka koolituse järgselt, õpitu rakendamisel praktikasse. Algajatel õppejõududel on oht pöörduda tagasi traditsioonilise ja turvalisema õpetamise juurde, kui koolitusel õpitu rakendamist ei toeta kogukond, milles tegutsetakse.

Algajate õppejõudude õpetamispraktika edasises arengus on eeldusi muutuda erinevates suundades: algaja õppejõud võib muutuda õpetamiskesksemaks iseenda väsimise, üliõpilaste vastuseisu või ülikooli traditsioonide surve all. Samas võib algaja õppejõud muutuda õppimiskesksemaks, kui tal õnnestub omandada vajalikud oskused, töövõtted, õppemeetodid või leida toetav keskkond (kolleegide toetus).

Uurimuse tulemused näitavad, et algajad õppejõud alles õpivad aru saama, mida tähendab õppejõuks olemine. Kuna enamik uurimuses osalenuid olid uurimuse toimumise ajal erinevates rollides (samaaegselt nii üliõpilased kui õppejõud), toodi välja sellega seotud probleeme: kolleegid ei võta tõsiselt, väike vanusevahe üliõpilastega teeb keeruliseks piiride paika panemise ja suhtlemise üliõpilastega. Probleemide lahenemist suhetes kolleegidega loodeti doktorikraadi kaitsmisest (kraadi kaitsmine aitab tunda ennast võrdväärse partnerina kolleegide hulgas). Samas tõid mitmed värskest doktorikraadi omandanud välja, et loodetud suhtumise muutust ei ole kraadi kaitsmine siiski kaasa toonud ning on aru saadud, et võrdväärseks saavad nad ennast tunda siis, kui on ette näidata saavutusi iseseisva uurijana (artiklite publitseerimine, teadusrahade taotlemine). Üliõpilastega seotud probleemides loodeti lahendusi kogemuste kasvamisest.

Uurimuse tulemustele tuginedes võib välja tuua, et enamik uurimuses osalenuid soovib hästi õpetada ning jätkata akadeemilist karjääri kõrgkoolides, samas oli intervjuueeritute hulgas ka neid, kes olid kahtleval seisukohal oma tuleviku suhtes kõrgkoolis. Kahtluste põhjustena toodi välja vähest tagasisidet oma tööle, ülemuste vähest huvi algaja õppejõu töö ja tulevikuvaljjavaadete suhtes ning motivatsioonipuudust ja väljakutseid praktikuna.

Käesoleva doktoritöö tulemused näitavad, et algajate õppejõudude professionaalse arengu toetamisel on oluline võtta arvesse õppejõudude arusaamu õppimisest ja õpetamisest ning õppejõud olemisest. Algajate õppejõudude erinevuste mõistmine võimaldab kõrgkoolidel luua tugisüsteeme, mis arvestavad õppejõudude erinevate vajaduste ja õppimise allikatega õpetamisoskuste õppimisel.

ACKNOWLEDGEMENTS

I am grateful to everyone who has supported and inspired me during my doctoral studies.

My greatest gratitude goes to my good friend, colleague and mentor Mari Karm, with whom we have planned and carried out the present study, discovered, discussed and written articles.

I wish to express my warmest thanks to my good colleague Liina Lepp, for sharing the joys and sorrows of the thesis writing and for her friendship. Without her, this journey would not have been as educative as it has been.

I am grateful to prof Miia Rannikmäe, senior researcher Äli Leijen and prof Jack Holbrook for their valuable notes and for the language revision.

My deep gratitude goes to all the novice university teachers, who participated in the study and who were willing to share their first experiences as a university teacher.

Finally, I would like to thank my family for their endless patience and support during the whole period of my doctoral studies.

Over the years, the research project was supported by a Primus grant from the European Social Fund.

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