

# New manifestations of the practice- theory dilemma – consequences of 'the practice turn' in teacher education

Sandra Jederud

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**NEW MANIFESTATIONS OF THE PRACTICE-THEORY  
DILEMMA – CONSEQUENCES OF ‘THE  
PRACTICE TURN’ IN TEACHER EDUCATION**

**Sandra Jederud**

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School of Education, Culture and Communication

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som för avläggande av filosofie doktorsexamen i didaktik vid Akademin för utbildning, kultur och kommunikation kommer att offentligens försvaras fredagen den 9 september 2022, 13.15 i A2-004, Mälardalens universitet, Eskilstuna.

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Akademin för utbildning, kultur och kommunikation

## Abstract

This thesis comprises four studies that concern the specific part of practicum within teacher education, its relation to the university-based components and how new organizational ideas entail different consequences for student teachers' opportunities for learning the profession. The overall purpose is to analyze policies related to learning in practice and shed light on what implications are involved when reorganizing Swedish teacher education within the 'practice turn'. More explicitly, the purpose is to illuminate two manifestations of a more practice-based teacher education – paired practicum within specific practice schools and work-integrated teacher education, where student-teachers are employed as teachers while attending courses at university. Two concepts of knowledge are used as the main theoretical framework; spectator knowledge and participant knowledge, and the concept of boundary crossing and enfolded learning mechanisms.

The data are extracted from policy documents regarding the two latest teacher education reforms in 2001 and 2009, as well as from interviews with different parties pertaining within the above two manifestations of the practice turn. Study I concerns whether there are signs of a practice turn in national policy regarding teacher education and how this is addressed in local policy. The study focuses on what is expressed regarding the opportunities student teachers are provided with in order to learn the profession of teaching. Study II explores how pre-school student teachers perceive their opportunities for learning within paired practicum at specific practice schools. Study III also addresses paired practicum within specific practice schools, but data is collected from mentors within upper secondary school regarding their perception of this way of organizing practice. Finally, Study IV concerns a work-integrated teacher education programme and how teacher educators perceive students' opportunities for learning when they move between the contexts of work and university.

The results mainly show that there is an ambivalence concerning what should be given the most value regarding student teachers' opportunities for learning. Findings also show that the manifestations of 'the practice turn' imply a shifting of positions for student-teachers as well as mentors and university teachers. The four studies also identify that the organizational structures of practice have implications for what opportunities for learning students are provided with. Thus, structural changes regarding practice within teacher education enfold that adequate curriculum changes are needed. Furthermore, changes at an organizational level at university, at the connected specific practice schools, and in the workplaces where work-integrated student-teachers are employed are needed.

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Keywords: specific practice schools, paired practicum, work-integrated teacher education, spectator knowledge, participant knowledge, boundary crossing



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When standing at the end of a research and education period of over seven years and looking back at what I have accomplished and what it has finally become, I can acknowledge that I have learned an incredible number of things. Things that I somewhat expected, and some things that I did not expect. I have done many things I am satisfied with, but there are also things I have learned along the way, where I today would have decided differently or embraced in other ways. Also, this path has not only been walked as a PhD student, it has been walked as a lecturer and as chair of the doctoral student council which makes this thesis not only theoretical work but a personal development of my own knowing-in-action.

There are, however, two things which make me especially proud today: First, and number one; I have finally completed my doctoral studies. Seven years ago, when I stepped into Mälardalen University to start my new career as a doctoral student and later on, also a lecturer, I had no idea what was ahead of me. Thank goodness for that. However, today, I am endlessly grateful for this opportunity that was given to me. Secondly, there have been a great deal of setbacks during these seven years, on a personal level as well as during my work on my thesis, which took place during the years of the pandemic. The lonely work of a doctoral student reached a whole different level. However, I worked through these setbacks, and here I am today.

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June, 2022



# List of Papers

This thesis is based on the following papers, which are referred to in the text by their Roman numerals.

- I Jederud, S. (2022) Learning to teach as a spectator or a participant – ideas of vocational learning in policy on teacher education. Submitted to *Education Sciences*.
- II Jederud, S. (2021) Learning as Peers in Practice – an Obstacle or Support for Student Teachers' Vocational Learning? *Educational Practice and Theory*, 43(1), 77–97.
- III Jederud, S.; Rytzler, J. & Lindqvist, P. (2021) Learning to teach as a two-sided endeavor: mentors' perceptions of paired practicum in initial teacher education. *Teaching Education*. Published online 210928.
- IV Jederud, S. (2022). "It almost feels like they want manuals" – University Teachers' Perceptions of Students Learning in a Work-Integrated Teacher education. Accepted (with major revision) in *Journal of Praxis in Higher Education*.

In study III, I wrote the majority of the text. I had sole responsibility for the empirical field work, and major responsibility for the parts of previous research, context and results besides coauthoring with the other authors.

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# 1. Introduction

An underlying assumption in all concerns of teacher education is that ‘teachers who know more, teach better’ (Cochran-Smith & Lytle, 1999, p. 249). This rather basic idea has directed numerous attempts at enhancing teacher education, however, many of these alterations are due to the substantially diverse opinions of what ‘knowing more’ and ‘teaching better’ actually mean. Different views and beliefs regarding students’ learning lead to different actions regarding the organization of teacher education. The relationship between theory and practice, as well as the connections between the two organizational contexts of university and schools, all support teachers’ opportunities for learning. However, the structure of how the contexts of theory and practice are organized and also how they are valued, have consequences for how students’ learning is provided for (Cochran-Smith & Lytle, 1999).

The different ways of organizing teacher education are focused on quality aspects regarding how students are to be best equipped for their future professional life. These aspects are, according to Liston, Whitcomb and Borko, (2006), often connected to the reality shock that newly educated teachers experience. A growing movement is therefore to prepare student teachers and to organize teacher education around school settings and ‘core practices’ (Dinkelman & Cuenca, 2020, p. 583). This ‘practice turn’ (Reid, 2011, p. 293) is far from new in the history of teacher education reforms. Teacher educators have addressed the context of practice in the curriculum of teacher education in various ways for decades (Forzani, 2014; Grossman & McDonald, 2008). At present, internationally, the promotion of the context of practice takes diverse directions, such as expanding the number of hours that student teachers spend in school settings or transferring traditionally university-bound methods courses into classrooms and other school communities (Darling-Hammond & Bransford, 2005; Zeichner & Bier, 2015).

Within Swedish teacher education, one manifestation of the practice turn that has gained attention, is specific practice schools (övningskolor) that student teachers are connected to throughout their education (SFS 2014:2). Here, students are placed in groups and many conduct paired practicum, that is they implement periods of practice together with another student, where they are provided supervision by



specially trained mentors. Another manifestation of the practice turn in Swedish teacher education is the implementation of work-integrated (from now on WI) teacher education, that is, where there is an intention to integrate courses with practice or increase the amount of practical experience that is provided for students (Swedish Government, 2020). Try outs are being pursued, for example, where students spend twice as much time in situations of practice (Gardesten & Nordänger, 2018). In recent times, researchers like Zeichner (2012) in the USA and Reid (2011) in Australia, have examined this return to practice, and the effects of teacher education programme structure on student learning (Zeichner & Conklin, 2008). Nevertheless, the idea of a practice-based teacher education is imprecise (Forzani, 2014). Many have argued that establishing practice-based teacher education may basically comprise the quantity of practice as in apprenticeship models (Forzani, 2014; Zeichner, 2012,) whereas others have emphasized the significance of establishing links between theory and practice (Ball & Forzani, 2009; Forzani, 2014; Grossman et al., 2009; Grossman, Hammerness, & McDonald, 2009; Cochran-Smith, 2010; Darling-Hammond, 2012).

The above-mentioned tendencies of strengthening practice and redistributing work-based time in teacher education, i.e., manifestations of ‘the practice turn’ raise questions of what new challenges and opportunities will appear for those participating in teacher education. Teacher students are expected to learn the profession through theory as well as practice. This is made possible by the fact that, during their education, they occupy different positions as participants in and spectators of teachers' work, and are participating in two different contexts, as prospective teachers in schools and as students in the university. Being in and moving between the different positions and contexts provides different opportunities to learn the profession. The research puzzle (Gustafsson & Hagström, 2017) in the present study takes its starting point in these opportunities and how the relationships between them are affected by the way that teacher education is organized. A research puzzle arises when things do not fit together as anticipated, challenging existing knowledge (Gustafsson & Hagström, 2017). The puzzle in the study revolves around the curiosity of and questions about how new ways of organizing education, where the practical parts are given more space and higher value, affect the different opportunities to learn the profession. What is made possible or hindered in such a change in teacher education? Will anticipated opportunities be promoted or will instead unexpected, or even undesirable consequences arise?

The present study will inquire the research puzzle above through a compilation thesis entailing four separate studies. The overall purpose is to analyze the consequences of ideas in policies on learning in practice and shed light on the implications involved when reorganizing

teacher education within the ‘practice turn’ of teacher education. More explicitly, the purpose is to illuminate two manifestations of the practice turn – paired practicum within specific practice schools and WI-teacher education – and how such manifestations can encompass implications regarding students’ opportunities for learning. All in all, the study explores and analyzes voices from different groups and contexts within these two manifestations.

The thesis will begin with a *Background* consisting of a description of the dilemma of the theory-practice gap in teacher education and of the practice turn of teacher education in order to provide a point of departure for the study. Following this, the *Aim and research questions* are presented to clarify what the thesis concerns, and thereafter *Previous research* regarding the main focuses of the study is surveyed. Proceeding from here, the *Theoretical framework* applied in the thesis is accounted for where two different knowledge forms, spectator and participant knowledge, are presented. The chapter also contains theoretical arguments regarding the transfer of knowledge between contexts. Following this, in the chapter on *Method*, a description is provided regarding how the research proceeded and what methods it comprised, trustworthiness as well as ethics and methodological reflections. In addition, a *Summary of studies* is provided to present a summary of the four studies and how they relate to each other, as well as major results. Also, a *Discussion* regarding the results is provided, and finally, a *Conclusion* regarding the implications for practice is presented.

## 2. Background

This chapter aims to provide an overview of the organization and general status of teacher education internationally as well as in Sweden, both from an historical as well as contemporary perspective. Since the studies have been conducted in Sweden, special attention is paid to Swedish teacher education. Also, a foundation is presented for understanding the dilemma regarding the relationship, or lack of relationship between the two major segments within teacher education: theory and practice. The final section portrays the international as well as national ‘practice turn’ movements within teacher education, an emphasis on the element of practice that has taken different directions. This, in order to provide a point of departure for the aim and research questions of the study which will follow this chapter.

### 2.1 The knotty dilemmas of the theory-practice gap

Learning at universities and workplaces are the two central components of vocational education. Students within vocational education have to develop their professional competences by constructing profound relations between knowledge and skills. However, there are some main concerns concerning the integration of learning in these two separate contexts as universities are predominantly founded on rationales of learning and theory, whilst workplaces are founded on the rationales of working and practice (Schaap, Baartman & De Bruijn, 2012). Teacher education is considered a professional education, and even if there are disparities in how such a vocational education is organized, there are specific features that characterize it – that there is a tension between the theoretical and practical elements (Brante et. al, 2015). Thus, a major challenge for professional education is to develop meaningful connections between theoretical and practical knowledge. This is fundamental, as a knowledge base stands on a weak foundation if it only consists of knowledge from one field (Grimen, 2008). The theory – practice dilemma has been a recurrent theme in teacher education reforms in Sweden. During the different reforms, practice has sometimes been addressed as detached from theory, at other times theory and practice have

been addressed as merged units (Linné, 2010). It has remained an unanswered question if, as well as how, theoretical and practical knowledge should be integrated within education (Morberg, Ahtiainen, Bejerot & Hasselbladh, 2020). A contextualization of teacher education concerns how the context of theory, which can be referred to as ‘knowledge of’, and the context of practice, which can be referred to as ‘knowledge to’, are to be combined and balanced. This contextualization is an ongoing process regarding what requirements are relevant and what a restructuring of practice within teacher education leads to (Hasselbladh, 2020). According to Hordern (2015), teacher education is particularly at risk of becoming a battlefield where different interests try to address the central problems, a struggle in which the state has considerable power to force or encourage the education field to embrace the ambitions and interests of the state. The complex act of balancing between theoretical affiliation and relevance of practice is described by Hordern (2015, p. 435) in the following way:

Professionals require the knowledge schema that enable ‘diagnosis’ of cases [...] meaning that the professional knowledge base must take account of the complexity and contextuality encountered in practice, and yet links must be sustained and iterated with a more distant abstract theoretical base of ‘distinctive concepts’ so that solutions can be developed to unforeseen problems arising in professional work. While horizontal discourse(s) may play only a marginal role in processes of professional judgement, they may enable understanding of the complexity in which professionals work and the efficacy of professional action.

The knowledge base of vocational education is a result of choices and priorities imposed over a long period of time that concern how different kinds of knowledge should be portrayed (Hasselbladh, 2020). Teacher education has always been highly prioritized by the Swedish state and is controlled in detail in a totally different way to other university educational programmes. Thus, political involvement has entailed frequent reforms with significant changes of direction. This development is further complicated by debates and reforms that express a desire for the teaching profession to become a ‘real profession’ (p.14), and that the praxis of the teaching profession should be based on research-based knowledge. This would grant a higher status to the profession. How this is to be conducted, is however, unclear (Bejerot & Hasselbladh, 2020).

Furthermore, the valuation of the context of practice is a recurrent central issue when organizing and structuring higher education, especially within professional education involving apprenticeships (Pettersen, 2005). Essentially, within teacher education, it reflects how organizers of teacher education view possible, as well as necessary links

between practice and theory. In the manner of how practice is placed, and which emphasis it is given, mirrors strategic priorities of what is considered central in the education of student teachers. The component of practice therefore becomes somewhat of a mechanism to shape the general orientation of education, guided by ideals on how relations between theoretical and practical elements in teacher education should be composed in order to contribute to vocational knowledge (Pettersen, 2005)

One might assume that a fundamental assumption of the division between theory and practice within teacher education is that the theoretical belongs to university course work and that the practical belongs to school-based placements. Often, teacher educators accentuate the conceptual tools for teaching within university coursework and believe that school-based placements are the settings where student teachers can integrate these concepts with specific strategies (Rosaen & Florio-Ruane, 2008). However, throughout the twentieth century, the connection, or rather the lack of connection, between the two different forms of knowledge, theory and practice, has been in focus and has continued to be put forward as the main problem of teacher education world-wide (Cheng, Cheng & Tang, 2010; Korthagen, 2007; Lanier & Little, 1986). Many studies reveal a huge gap between the two concepts of knowledge which leads to serious considerations regarding the effectiveness of teacher education (Korthagen, 2010). Student teachers perceive a lack of correlation between theory taught at university and practice implemented at schools (e.g. Hobson et al., 2009), and teaching theories developed during teacher education tend to be diluted already at the initial encounter with teacher practice (Zeichner & Tabachnick, 1981). Thus, this has become a 'knotty' dilemma – and attending to the so-called theory/practice gap has continued to receive attention through the years (e.g. De Florio, 2016; Korthagen, 2007; Knight et al., 2015; Plöger, Scholl & Seifert, 2018; Reid, 2011; Resch & Schritteser, 2021).

The dilemmatic character of the relation between theory and practice and the difficulty in reaching a solution, has its reasons, since dilemmas can, in contrast to problems, be managed but not solved. Cuban (2001) distinguished between problems and dilemmas in the following way: Problems are defined by disparities 'between what is and what ought to be' (p.4). Managing that disparity demands innovative thinking, new methods and resourcefulness. A dilemma, on the other hand, cannot be solved as it requires 'undesirable choices between competing highly prized values' (p.10) (here theory and practice). Therefore, as these choices cannot be simultaneously satisfied, dilemmas must be handled with unavoidable discontent. Schneider (2018) further brings forward the notion that these non-solvable dilemmas are the source of the history

of the relationship between theory and practice in teaching education which repeats itself over time.

The way the wind blows, or fluctuations regarding theory and practice in teacher education are, according to Stolz and Biesta (2018), due to the policies concerning competent teachers, and what they need to master, being formed in deeply rooted traditions. Cultural values and traditions from the past are brought forward and are, in certain ways, reshaped and renegotiated through generations of teacher students, depending on what skills that are considered important to master at that day and age. A variety of trends and phenomena, not only on a national level, but also on an international level, shape external as well as internal structures in teacher education (Stolz & Biesta). Teacher education has, over time, been adapted to the prevailing society as well as simultaneously having the ambition to contribute to a development of this society (Beach, 1999). This does not mean that teacher education has failed in improving over time, but rather that problems have been attended to, while dilemmas recur. Regarding processes of recontextualization within Swedish teacher education, different directions have shaped this education to what it is today. The knowledge base of teacher education and the elements of practice have been redefined from the 1970s. The effects of these directions, have through time, become significant and have shaped an education with an unclear identity and problematic relations to research as well as practice (Edling & Liljestrand, 2020).

The organization of the periods of practice within teacher education have changed over time, affected by each reform that has taken place, reflecting different assumptions about the student's path to becoming a competent professional. While for example the development in teacher education in Finland is characterized by stability and close links between, on the one hand, academic teacher training and its staff and, on the other hand, the Finnish school system and the professional teachers, Swedish teacher education has gone from a close link with specific practice schools to a deregulation and a distancing from the fields of practice, to again turning to a more practice-based teacher education (Bejerot & Hasselbladh, 2020).

## 2.2 The theory-practice dilemma within teacher education in Sweden

During the past 50 years a movement towards making professional education excessively theoretical, at the sacrifice of practice, has been seen. This has led to a gap between the expectations of academics and

practitioners which has in consequence affected the quality of education (Josefson, 2011). This gap has been noticed in policies for teacher education, for example in the Swedish Higher Education Act which came into force in 1992, where it is stipulated (SFS 1992:1434, chapter 1, § 2) that higher education should be based on a scientific foundation as well as proven experience (SFS 1992:1434). The concepts of scientific basis and proven experience are sometimes used as synonymous, with the concepts of theory and practice respectively. Between these two concepts there is a perspective of power where it sometimes is argued that teacher education should be based on a more academic perspective and sometimes that professional activity is the most central. However, professional activity or proven experience is, according to Gustavsson (2004), not generalizable and based on intuition, or a kind of practical wisdom where you know what best to do in different situations. It is complex and linked to good judgement and a practical touch where personal knowledge is of great importance.

Hartman (2005) describes proven knowledge as personal as well as situational, a kind of silent knowledge whose character results in intuitively controlled actions. In addition, Alsterdal (2016) shows that proven experience has taken on a subordinate position compared to a scientific basis, and that the concept has been appropriated to mean a focus on links to research. Such a distinct view of what it means to bridge theory and practice is, according to Alsterdal, a result of a view of knowledge that emphasizes scientific knowledge over practical knowledge, and this has not been problematized enough. If instead, experience gained in practice is recognized as a source of knowledge, student teachers could test the opportunities that scientific approaches and research links can provide, or not provide, in a more independent way (Alsterdal, 2016) Thus, the question is whether the interpretation of knowledge within higher education needs to be elaborated in order to create a context where different types of knowledge can meet (Josefson, 2001). The impact of the introduction of the concept of proven experience is perceived uncertain as it was never properly defined nor evaluated by The National Agency for Education (2022). Policy has tried to define proven experience in the following terms:

‘In order for experience to be called proven, teaching or activities must be problematized and tested in a structured way [...]. In work with proven experience, the process is essential, i.e. the way forward and also the attitude or approach to the ongoing work. It is of importance that teachers, principals and others active in education dare to reconsider and challenge their ways of working and organizing teaching’ (The National Agency for Education, 2022, para. 7).

Below follow three different identified ideals of learning to teach in a teacher education context that, according to Morberg et al. (2020) have historically governed Swedish teacher education. The third ideal is a contemporary idea of knowledge transfer that to a certain extent has been implemented in Swedish teacher education in recent years through, for example, the introduction of specific practice schools:

- The first ideal was prevalent at teacher seminars (1800 – 1968) where practical knowledge was seen to be embodied by experienced practitioners – masters who taught disciples through showing and instructing. Knowledge is conceptualized within simple recipes of action.
- The second ideal became prevalent when teacher education became a university-based education in 1977. Professional skills are expected to arise when the individual student teacher conducts an indirect transfer by contextualizing abstract models of theory and other concepts to situations of practice (Pettersen, 2005). Here it is up to the individual student teacher to translate conceptual knowledge into action. This means that practice is somewhat of a starting point into the profession and comprises indirect transfer, a situation that the student teacher will be struggling with their whole professional life.
- The third ideal is the one dominant within Finnish teacher education and has to a certain extent been reimplemented in Swedish teacher education since 2014 (Swedish Ministry of Education, 2014). Here, the transfer of knowledge takes place through long-term structured practice, where mentors at schools, to a large extent, share their view of knowledge with teacher educators (Jyrhämä, 2006; Toom et.al., 2017).

When the history of the modern Swedish teacher education is described, it usually takes its point of departure in the school commission of 1946, which is the context where the new school system for the first time is articulated in a coherent version. From the early 1960s until the end of the 1970s, a structure of teacher education was inaugurated where specific higher education establishments provided teacher education. The following period up until the new millennium, was, together with the introduction of nine-year primary school, the most intensive period of Swedish school history regarding reforms. Over the course of a few years, a new teacher education was established, founded on visions elaborated already in 1946 and further developed in later enquiries



(Bejerot & Hasselbladh, 2020). Swedish teacher education has been reformed basically every tenth year since the 1960s, and each reform has subsequently embodied implications regarding the content and shaping of practice. In other words, these reforms contain an implicit criticism of the quality within teacher education in general, that it has not met required needs (Edling & Liljestrand, 2020; Ringarp & Parding, 2018). Often, this criticism perceives teacher education to be all too academic or that it incorporates gaps between theory and practice (Carlgren & Marton, 2007; Edling & Liljestrand, 2020). Several previous studies suggest that problems of status are involved (Agevall & Olofsson, 2014; Arreman, 2005). This is due to the fact that it has been considered problematic to not only develop a teacher education that rests on a scientific foundation but also to integrate the theoretical and practical elements (Carlgren, 2010).

Consequently, the outlining of the connections between the theoretical and practical elements of teacher education have changed considerably through the reforms. In order to create an academic legitimacy, Swedish teacher education distanced itself from the elements of practice when it was placed at universities in the 1970s (Carlgren, 2010). This was an international trend within vocational training which meant that teacher education, together with nursing and social work education, became more closely linked to research. Previously, universities had training for, and foremost, for doctors, lawyers and priests, which unlike teacher education, were connected to their own research areas, and were not a questioned academic vocational education (Dimenäs, Gustavsson & Mitiche, 2016).

However, Morberg et. al (2020) claim that changes between the theoretical and practical elements within teacher education can basically be divided into four separate periods: Before 1968 this connection was implemented within integrated specific practice schools at teacher seminars. From 1968 to 1977, practice within teacher education was linked to experimental and demonstration schools as well as internships. During this time there was also an organization of part-time work for the student teachers including a salary. From 1977 up until today, the context of practice within teacher education has been placed in partner schools, and thereafter at field schools, with practice-based training (in Swedish – VFU), and from 2014 up until today, students at certain universities carry out their practice at specific practice schools that incorporate this training (Morberg et. al, 2020). Previously, all schools could be partner schools (field schools required an application and an acceptance), and all involved teachers could be mentors (Nilsson, 2016).

From 2014, the specific part of practice within teacher education in Sweden has been re-organized in 15 universities out of 27. In

connection with this, specific practice schools were chosen according to specific criteria. One of these criteria was that they have at least six further trained mentors, who have completed a mentor course of 7,5 ECTS, another criterion is that the specific practice schools accept several students conducting practice within the same period of time (Swedish Ministry of Education, 2014). Additionally, from 2020, as means to increase the number of applicants to teacher education and also to strengthen teacher education in Sweden, further efforts are invested in WI-teacher education programmes, where student teachers are employed as teachers at the same time as they study. 11 universities out of 27 received funding to conduct WI-teacher education. Funds can be used for, among other things, coordination with principals and for special efforts for the recruitment of students (Swedish government, 2020). This organization of teacher education means that the student alternates studies at the university with work in the school under special forms of employment based on the university having agreements with municipalities (UKÄ, 2022).

### 2.3 The ‘practice turn’ of teacher education

Internationally, over the past two to three decades, a number of ‘turns’ within teacher education have been identified. Examples of these are, ‘the university/research turn’, ‘the accountability turn’ and ‘the practice turn’ (Cochran-Smith, 2016). None of these are to be seen as being good or bad, rather they are examples of intentions for a better teacher education. Demanding that students implement additional time at university or spend more time in schools does not automatically enhance their teacher skills. Instead, the significance added by each of these is dependent on how the extra time is spent (Norwegian Agency for Quality Assurance in Education, 2020). The ‘university turn’ can be seen in for example Finland, Norway or Portugal where student teachers are required to write a thesis at a master’s level and acquire a master’s degree in order to earn a licensure as teachers. In other countries, such as Namibia, New Zealand and Scotland, universities and teacher training colleges have been merged, aiming to create fewer, but academically stronger research-based higher education institutions for teacher education. Additionally, in some countries, like Ireland and Wales, teacher education programmes for primary schools have been extended from three years to four, and in a number of countries, including Norway and New Zealand higher demands regarding requirements for teacher educators to have PhDs and/or enhanced expectations concerning the research productivity of teacher educators, have been introduced. Regardless of the differences in these manifestations of ‘the university/research

turn', what they have in common is the belief that existing teacher preparation is insufficient. This opinion is closely linked to the perception of the inadequacy of academic training of teacher educators, which is reflected in insufficient research capacity and a lack of research productivity (Norwegian Agency for Quality Assurance in Education, 2020).

A second teacher education trend in many developed countries in the past decades is the 'accountability turn', which concerns deliberate policies and practices to reform initial teacher education and enhance its quality. This is to be achieved by regulating and monitoring inputs, procedures and/or outcomes for which teacher education institutions are responsible. Many countries have developed and applied new requirements and procedures for universities that wish to offer initial teacher education programmes. In some countries such as Australia, England and USA, an increased accountability has been put on teacher education programmes regarding how teachers function in the classroom, programme impact, teacher retention etcetera. In other countries, such as New Zealand, Portugal, Austria and Norway, stress is more on accountability for processes and inputs than outcomes. However, regardless of whether the focus is on inputs or outcomes, processes or practices, accountability has become to be considered a highly influential policy tool for the reform of initial teacher education (e.g. Cochran-Smith et al, 2017; Mayer, 2021).

In addition to the 'university/research turn' and the 'accountability turn', a third teacher education trend is the 'practice turn', where new emphasis is on student teachers' school experience and on the significance of tighter and more beneficial professional relations between teacher education programmes and schools. In many countries, such as the UK, Ireland and Sweden, in the past decades, closer ties have been inaugurated between universities and partner or practice schools (Murray, 2016).

In the traditional example of teacher education, university-based courses form the core and supply student teachers with instruments and know-how regarding how to approach their task as teachers. However, the actual preparation for teaching takes place at school during practice (Janssen, Westbroek, & Doyle, 2014). Thus, there are a number of practices that students need to acquire as well as improve on during their education (Conway & Munthe, 2014). The way of structuring teacher education based on university courses as a core, has often been criticized. One of the possible consequences when the link between teacher education and practice is insufficient, is the praxis shock that beginner teachers can be subject to after graduation (e.g. Cochran-Smith & Zeichner, 2006). That is, they experience a feeling of instability, disbelief or shock due to a divergence between their expectations and reality when they enter the profession (Ballantyne, 2007; Kelchtermans &

Ballet, 2002; Stokking et al., 2003). This could also further be due to the bare presumption that students can enhance their ability to teach through their knowledge of theory, which according to Jank and Meyer (2011) is a much more complicated process than it seems.

To implement theoretical assumptions and concepts into practical actions in teaching is, according to Jank and Meyer (2011), for a beginner almost impossible. This is due to various reasons such as that action and experience is not just a depiction of some didactic theory or of a lesson plan. Rather, it is something completely new – a physical and holistic design of learning and teaching situations. Thoughts, feelings and actions in learning and teaching situation are characterized by a knowledge of didactic theory, but also other factors have influence. These are, for example, the teacher's personality, ingrained patterns of action, students' previous experience in teaching, methodological knowledge, knowledge of the relationships of the teaching and learning process, institutional framework conditions, available materials and media or the ability to express oneself verbally and physically (Jank & Meyer, 2011). This allegation that teacher education programmes fail to produce new teachers equipped for the job, due to the theory – practice gap, is one of the reasons for actions that all together are manifestations of the ‘practice turn’ of teacher education (Reid, 2011). The aim should be to assist students to develop the knowledge as well as required skills prior to becoming a certified teacher (Cochran-Smith & Zeichner, 2005).

In several countries a new significance is placed on the time student teachers spend in school or on the relevance of near collaboration between teacher education institutions and schools/partner schools (Beauchamp et al., 2015). There are a number of examples within the reforms in different countries that reflect ‘the practice turn’; however, there is a broad variation in what the ‘turn’ actually entails. This is because the various attempts at reform are founded on different perceptions of, not only what practice should encompass in itself, but also what it means to learn to teach and how teacher preparation is characterized (e.g., Reynolds et al., 2014; Whitty, 2008). This is exemplified by the following international ‘practice turn’ movements that are chosen to illustrate different directions; university student practice schools that are actively engaged in research (e.g., Finland), demands that student teachers pass an assessment in teaching in classrooms before being able to acquire licensure (e.g. Australia, USA), teacher education based on school-based models where a significant amount of time is spent on preparation in schools (e.g. USA, England), regulations that universities and schools have joint responsibility for teacher education (e.g. Wales) and demands that mentors acquire professional development connected to the supervision of student teachers (e.g. Israel, Norway, Sweden)

(Norwegian Agency for Quality Assurance in Education, 2020). In Norway and Ireland a renewed prominence on the context of work-placements is apparent across both countries and focused on the extensive qualities of the experience gained in it. Prominently, in both countries, work-placements are anticipated to provide a gradual assignment with the complexities of the profession of teaching so that learning comprises more of the features of what Lave and Wenger (1991) labeled legitimate peripheral participation. In focusing on a work-place approach, practice for teaching is envisioned as more extensive than focusing on classroom experiences, it also embraces experiences with other teachers, parents and other professionals as well as activities such as reflective log-book writing, portfolios, etc (Conway & Munthe, 2014).

Nationally, in Sweden, 'the practice turn' has taken several different forms. One of them is the introduction of specific practice schools where student teachers implement their practice throughout the teacher education programme. This manifestation of the 'practice turn' has involved an increased cooperation between higher education and these schools. It also entails that specific practice schools have accepted a higher number of students which has led to students often being in pairs in the classroom where they conduct paired practicum (Swedish Higher Education Authority, 2017). This way of structuring practice within teacher education is supposed to enable students to 'cooperate and discuss questions concerning teaching, about the organisation and their period of practice from joint experiences and common frameworks, which strengthens and enforces student development' (Swedish Higher Education Authority, 2017, p.52).

Additionally, another manifestation of 'the practice turn' in Sweden is the implementation of WI-teacher education, which is, in terms of content, the same as ordinary teacher education programmes, but where student teachers spend more than double the amount of time at schools than ordinary programme students do. An example of WI teacher education is that students are employed as teachers at a specific school at the same time as they conduct university studies. They are employed as teachers at the beginning of their education and alternate work as teachers with university courses (Programme syllabus, 2018). These WI-teacher education programmes are government initiatives which are further described as 'good examples of ways to combine theory and practice and by these means prepare students well for their work at school and in the classroom' (Swedish Government, 2020).

### 3. Aim and research questions

With the previous background as a point of departure for the study, the overarching aim of this thesis is to contribute to the understanding of what implications are involved when restructuring teacher education in line with ‘the practice turn’ of teacher education. Specifically, it concerns student teachers’ opportunities for learning the profession when they during their period of education, are situated in as well as move between the different positions of participants in, and spectators of, teachers’ work, as well as between the two different contexts of school-work and the university educational context.

This is done by studying the consequences of two manifestations of the phenomena: specific practice schools (övningsskolor) and WI-teacher education (arbetsintegrerad lärarutbildning) and by analyzing ideas in policy decisions on teacher education. More explicitly, the object of study is student teachers’ and mentors’ perceptions of implementing practice in paired practicum within specific practice schools and teacher educators’ perceptions of WI-student teachers’ opportunities for learning within campus courses. As main tools of analysis, Saugstads’ (2002; 2005) two concepts of knowledge; spectator knowledge and participant knowledge, with its associated learning processes, and Akkerman and Bakker’s (2011) concept of boundary crossing and inherent learning mechanisms, are made of use. These are consequently accounted for in the theoretical framework. The following research questions guide the study:

1. How are ideas on school-based education within teacher education described in national policy in the years between 1999 and 2014, and how is it configured at a local teacher education?
2. How is the organization of paired practicum within specific practice schools perceived by student teachers and mentors?
3. How are work-integrated teacher education students’ opportunities for learning at university perceived by teacher educators?

4. What implications and consequences are involved regarding student teachers' opportunities for learning when restructuring the school-based elements of teacher education?

The papers that constitute this thesis, one through four, provide answers to the research questions, where the papers embody various arenas. The fourth research question is also analyzed and discussed in the thesis based on a comparison between all four studies.

## 4. Previous research

This chapter mainly summarizes empirical results regarding becoming a teacher within the practice turn as well as organizational structures involved in it. Empirical results regarding students' learning within practice-based teacher education, paired practicum and WI teacher education are presented in relation to their relevance of how the 'practice turn' affects students' learning. Empirical results regarding student teachers' learning in practice and student teachers' learning between contexts are presented with regard to the relevance of the manner in which learning takes place, not only within the context of practice, but also how it is affected by moving between the campus-based elements and school-based elements of teacher education.

### 4.1 Practice-based teacher education – potentials and pitfalls

The global categorization of practice-based teacher education is an umbrella label taking on many identities (e.g. professional development schools, WI-teacher education, practice schools) and structures for learning (e.g. apprenticeships, internships, shadowing) (Hendrikse, 2013). All of the different organizations of teacher education where practice is emphasized, have the ambition to promote opportunities for learning where student teachers are offered practical experience. This is assumed to be achieved through partnerships between teacher education programs and schools and enhanced learning opportunities in an authentic environment (e.g. Hanney, 2005; Matsko & Hammerness, 2014).

Practice-based teacher education programmes is not a new concept, it can be traced back in Sweden to the integrated specific practice school at the teacher seminars before 1968 and in the United States already to schools in the early 19th century. These programmes are still ongoing and in recent years, additional teacher education programmes have changed towards practice-based teacher programmes as means to improve teacher education quality, in many circumstances because of the gap between theory and practice (Darling-Hammond et al., 2017;



Forzani, 2014; Zeichner, 2012; Zeichner & Bier, 2012). According to a comparative study of teacher education programmes in developed countries with established systems, these programmes try to attach theory to practice by the outlining of reflective work and the integration of superior clinical work (Darling-Hammond et. al, 2017). Other teacher education programmes have amplified the provision of practical experience for student teachers to learn important pedagogical skills (Dalinger et al., 2020). Teaching is a complex activity which is assumed to be learned effectively in an authentic context (Howey & Zimpher, 1994) and positive experiences from students as well as teacher educators could be a worthy argument for preparing for the profession by being based on practice, through, for example, work-based teacher education.

The significance of establishing firm links between theory and practice by enhancing the value of practice and more tightly relating coursework to practice, has further been accentuated in research (e.g. Ball & Forzani, 2009; Forzani, 2014; Grossman et al., 2009; Grossman, Hammerness, & McDonald, 2009). Thus, practice-based teacher education has received extensive support concerning its efficiency in preparing student teachers for their coming profession (Abdal-Haqq, 1998; Darling-Hammond, 2005; 2006). Studies show that teachers at schools as well as in teacher education perceive that learning within practice-based teacher education enhances teacher education by functioning as a channel between theory – the university-based preparation, and practice – the practical demands of the teaching profession (Gravett & Ramsaroop, 2015). Also, on an individual level, student teachers' communication skills, their ability to organize and sense of confidence are enhanced, as well as their problem-solving skills and professional knowledge (Brown, 2010). Basically, the most significant aspect of practice-based teacher education is the authenticity, and the provision of actual work in authentic environments incorporating real-life challenges (Bosco & Ferns, 2014; Smith, 2012; 2014). Or as Lampert (2005) expresses:

'Learning about a method or learning to justify a method is not the same thing as learning to do the method with a class of students, just as learning about piano and musical theory is not learning to play the piano. Because teaching is situated in instructional interaction, learning how to teach requires getting into relationships with learners to enable their study of content. It is here that one learns how to teach as students 'act back' and responses must be tailored to their actions' (Lampert, 2005, p.36).

When it comes to the other manifestation of the practice turn that is in focus for this study, WI-teacher education, a profound number of studies show positive effects on student teachers' learning, such as growing in confidence, thinking like a teacher (Giles, 2010; Samaras &

Gismondi, 1998; Sheehan, 2020), or boosting the apprehension of belonging in a school community by introducing students into professional communities of practice over a prolonged period of time (Ladson-Billings, 1995; Sheehan, 2020). This, according to Sheehan (2020), cultivates student teachers' knowledge and provides them with the means to function as analytically reflective and self-assured practitioners who align practice and theory in their pedagogical choices.

As shown above, there are many potentials involved in enhancing the value of practice in teacher education, however, researchers such as Zeichner (2012) in the United States and Reid (2011) in Australia have debated this resumption to practice as vague and that there is a shortage of significant empirical evidence connecting practice-based education with preparing student teachers for their coming profession (Capraro, Capraro & Helfeldt, 2010). Several critics have claimed that inaugurating practice-based teacher education should basically involve extending the quantity of fieldwork for student teachers, for instance such as apprenticeship models (Forzani, 2014; Zeichner, 2012; 2016). Additionally, according to Gravett, Petersen and Ramsaroop (2019), questions should be raised whether practice-based learning in fact meets the demands of getting student teachers ready for the realities of the teacher profession, as practice-based learning is sometimes perceived as demotivating, especially in dysfunctional schools. A risk is that the obvious blatancy of teaching as a practical activity can conceal significant complexities in the context of practice (Conway & Munthe, 2014). The relationship between the methods of the mentors at a particular school is at times off balance with the methodology provided from the university. Receiving these mixed messages can lead to confusion. Also, this problem is magnified by older teacher-centered approaches used by many mentors, rather than innovative student-centered approaches often taught at university (Botha & Rens, 2018). Other issues that studies show, is that within practice-based teacher education, student teachers are learning by watching mentors illustrating *how* to teach in the classroom, which is similar to the traditional apprenticeship model. However, the question of *why* teachers practice in a certain way remains silent as the mentor's thinking is not observable to the student teachers. The stress seems to be on *knowing how* or '*techne*' (Eisner, 2002) and the value of feedback from mentors is in accordance with what Clarke, Triggs and Nielsen (2014, p. 175) describe as 'narrow, particularistic, and technical' as student teachers are not stimulated to rethink and alter.

Concerns regarding school-based teacher education also embrace concerns that whilst there are opportunities for enhancing student teachers' preparation for their coming profession, the busy work environment typically focuses on the teaching moment and most often, student teachers do not get the chance to reflect upon their performances on a

profound level. Neither do they get the opportunities to implement intended altered plans or strategies (Doolan et al., 2019). Rather, what is learned occurs through imitating other teachers or adapting to the workplace, that is, an unremarkable pedagogy of ‘showing and telling’ (Buitink, 2009, p.118). This acquisition of pedagogy is referred to as common place and that simply reflects a culture of traditional teaching. Implicit principles repeatedly remain unaddressed and are not always reinforced theoretically. This way of learning the profession constitutes a noteworthy aspect of work-place learning where students learn how to teach without being aware of how or reflecting on in what way they mastered the skill (Stones, 1994; Sundli, 2001).

Further, studies show that teachers at schools and teacher educators lack a clear idea of in what way connected partnership schools, where student teachers are placed, could improve value in teacher education. Therefore, much thought and consideration are required from stakeholders regarding the purpose and possibilities of integrating workplaces in teacher education, otherwise this intended bridge between theory and practice may remain an abstract ideal (Gravett & Ramsaroop, 2015). Joram (2007), also determines that there is a noticeable epistemological ambiguity between school teachers’ and teacher educators’ viewpoints regarding what is considered legitimate knowledge within teacher education and how that knowledge can be acquired. The above stakeholders appear to have trouble in seeing and distinguishing between each other’s perceptions of knowledge. According to Hatch and Grossman (2009), when students are given many opportunities to study and learn the practice from more experienced teachers, the features and quality of the teaching that can be studied in these situations can vary broadly. Also, teacher educators have little control over what learning student teachers have access to in practice and limited opportunities to experience the same practice that their students participate in.

Additionally, according to Heggen and Raaen (2014) and Heggen and Thorsen (2015), studies show that linking places between university and workplaces are too uncommon, in fact scarce, in order to improve the collaboration that is needed to generate a sufficient, coherent education. Raaen and Thorsen (2020) further show that there are restricted opportunities for student teachers’ professional learning on, as well as between, the learning domains of teacher education, and in order to specify what this could look like, further understanding is required of what it is necessary to change and in accordance with what principles (Raaen & Thorsen, 2020).

Further, studies show, according to Joram (2007), that student teachers in WI-teacher education teach by themselves or are guided by placement teachers which means that they might have difficulties in perceiving teacher educators’ understandings of what is regarded as valid

knowledge in teacher education and how this knowledge should be acquired.

## 4.2 Student teachers practicing as peers

One of the manifestations of ‘the practice turn’ in Sweden is the introduction of specific practice schools (övningskolor), where several students are placed at the same school when conducting practice (Swedish Ministry of Education, 2014). According to Roth and Lee (2006), earlier improvement initiatives within teacher education were primarily focused on the learner as an individual. This was altered by the early 1990s after a growing number of teacher educators took to the idea of learning together. Sociocultural learning and ideas such as groups of people practicing together in order to learn, became common, as well as enhancing learning communities, where knowledge is built in affirmation with others. One of these ideas is paired practicum which can be defined as a context where student teachers draw on mutual approaches of teaching and learning alternately (Wenger, 1998). Moreover, the expression reciprocal paired practicum applies to when students alternately take the learning position as well as the teaching position and is an activity which should be equally advantageous and include a communication of ideas regarding planning, reflecting and sharing knowledge (Boud, Cohen & Sampson, 2001).

Students learn a great deal, not only by listening to, discussing with and explaining their ideas to others, but also by reflecting over their own choices (Boud, Cohen & Sampson, 2001). Studies also show that student teachers in paired practicum achieve higher levels of performance in tasks, as this way of structuring practice, promotes critical reflection and dares pairs to reevaluate their methods as well as generates new ideas (Sörensen, 2014). Other advantages are that these benefits are not only restricted to practice but reach further to having a general positive impact on student teachers’ learning (Gula & Sharjeel, 2019). McKerr, Stanton and Turner (2010) further verify in studies conducted regarding paired practicum that ‘two heads are better than one’ and that received feedback from a student teacher on the same level boosts students’ confidence to try out innovative ideas and teaching methods.

However, some studies show that the compatibility of student teachers in paired practicum is essential to enable both students to benefit from the arrangement. Incompatibility can cause disagreements and misunderstanding between two student teachers which can then rather suppress students’ learning than enhance it (Gula & Sharjeel, 2019). Other studies in fact show that peer observation and feedback do not

contribute to any further extent to improve the individual student's pedagogical practice (Butler, 1992; McFaul & Cooper, 1984), or as Hawkey (1995) stated, 'Studies on clinical supervision suggest that peers contribute more support than development to each other' (p.179). Also, paired practicum is not perceived as authentic as this arrangement does not prepare the student for the individual situation in an authentic classroom (Bullough et al., 2002).

Regarding mentors' perception of paired practicum, advantages that can be seen are that students are perceived to gain access to new educational methods and ideas. This is perceived as especially beneficial when students begin to teach, as they can profit from watching each other teach, and have reflective discussions following each classroom performance (Baker & Milner, 2006; Heidorn & Jenkins, 2015). Also, mentors supervising paired practicum perceive that students who are placed in paired practicum experience enhanced support and additionally, they tend to try to solve problems between themselves before contacting their mentor (Heidorn & Jenkins, 2015). Furthermore, mentors perceive that student teachers attain increased feedback, from fellow students as well as from mentors, and that they can provide feedback or communication to students simultaneously which can save valuable time (Baker & Milner, 2006).

However, there are also perceived disadvantages from mentors regarding paired practicum, such as weaker relationships with student teachers and complex situations of assessment (Walsh & Elmslie, 2005). Further, difficulties are identified regarding organizing situations for planning as three people are involved instead of two (Smith, 2002). Mentors have reported that providing feedback to two student teachers is challenging, as well as mentoring student teachers with different capabilities (Walsh, Elmslie & Tayler, 2002). Also, mentors held back individual feedback regardless of whether it was positive or negative, as it is more complex to communicate when other student teachers are present (Simons & Baeten, 2016). Time here becomes an issue, as mentors have the ambition to address discussions individually, but they are not able to dedicate sufficient time to each student (Baker & Milner, 2006). Apprehensions are also expressed regarding how authentic the organization of paired practicum actually is for student teachers (Bullough et al., 2002; Lang et al., 2015). However, one of the greatest concerns regarding paired practicum is the reduction in teaching opportunities for the individual student, as time is to be shared, this involves fewer lessons as well as fewer organizational issues from which student teachers can learn (Heidorn & Jenkins, 2015).

### 4.3 Student teachers' learning between contexts

Addressing the gap between theory and practice has been the foundation of many research projects over the years (e.g. Korthagen, 2007; McGarr, O'Grady & Guilfoyle, 2017), and subsumed under the concept of work-integrated learning (WIL) is an international repositioning focusing on an integration between theory and practice and thereby bridging the gap (e.g. McRae & Johnston, 2016; Zegwaard et al., 2019). When it comes to the connection between academic studies at university and practical experience at school, many student teachers do not easily see this, and studies show that acquired knowledge in the different contexts is not linked to the expected extent (Jedemark, 2015). Basically, students have difficulties in transforming subject-academic knowledge into subject-didactic knowledge (Nilsson, 2008). They also have difficulties in applying knowledge attained within academic studies when addressing a problem in a new context (Ramsden, 2003). Several studies that address this problem, show that the lack of integration between theory attained at university and practice attained at workplaces, has created a base in which to explain the absence of the expected transfer of knowledge (Kelterchmans & Ballet, 2006). Students seem to perceive that it is the work-place element of education that develops their professional skills, and they attribute most value to this context as of being most important for their future profession (Jordell, 2006; Korthagen & Kessels, 1999; Nordänger & Lindqvist 2012; Zeichner & Gore, 1990).

Practice within workplaces, which is essentially designed to encourage teaching pupils, is considered a more informal learning context (Billett, 2011), however as there are certain formalized factors such as feedback from mentors, it cannot be seen as a completely informal learning forum (Zeichner, 2010). This perspective of learning is further criticized by Guile and Young (2003) who mean that it seldom pays attention to what student teachers actually know from the beginning, what they learn and how this earlier acquired knowledge is given the opportunity to merge with new knowledge to a new unity. Additionally, Horvath and Stenberg (1995) pay attention to the fact that mix ups easily occur regarding a) taking part of and gaining experience from different types of organizations and b) developing professional knowledge that comprises different types of expert knowledge. They distinguish between the two and claim that experience is important as it creates necessary, but thus not adequate prerequisites to develop expert knowledge. Jedemark (2015) further makes use of Dewey (1997) when explaining the dual content of experience, that experience can be gained merely by being situated in a context, but it can also be gained by deliberately taking action and trying something.

According to Waitoller and Kozleski (2013) it is the actual movement between different contexts and the very experiencing of discontinuity and effort involved with the unfamiliar that can develop into a critical phase. This phase consists of learning, exploring or experimenting as the student tries to connect the contexts that he or she moves between. It is first when reflections and connections are made between earlier experiences and one's actions and the consequences of these, that a learning situation arises. Therefore, experience in itself is not enough to acquire expert knowledge. This is also acknowledged by Gardesten and Nordänger (2018), who address the issue of what a successful relationship between theory and practice actually looks like, as the relation between the two does not necessarily become strengthened by moving specific concepts of knowledge to new contexts. On the contrary, these central aspects of knowledge can be worked against when they are merely assumed to work in new contexts, affect practical knowledge as well as theoretical knowledge and can according to Lindqvist and Nordänger (2007), be lost in translation when moved between the different organisations.

Additional studies take their point of departure in the opportunities for learning that are actually created by the mere fact that students implement an education within different contexts. This provides students with the possibilities to combine attained competences from these different contexts and create an entirety that would not be possible if the education was implemented entirely at university or was entirely work-based. Rather, it is the differences between the two educational contexts that is seen as a source for development (Tuomi-Gröhn & Engeström, 2003). Therefore, instead of dismissing boundaries between contexts, they can be made use of in exercises to assist students to contextualise their knowledge in relation to the requirements of collaborative work (Andersson, 2016). Other studies regarding WIL in fields such as technology and transport, social services and health care, commerce and administration, show that concrete integration between campus studies and workplaces is crucial for learning. That is, the closer the integration was established between the two contexts, the better the students perceived their work-readiness (Virtanen, Tynjälä & Eteläpelto, 2014).

Regarding the above, indications are that relational work demands contemplation as well as action. The idea that students can learn the profession of teaching only in classrooms is challenged by the concept that performance can take their place in teacher education by activities such as rehearsal. Also, Zeichner and Bier, (2015) show that wrapping coursework around practice and interaction between the two, does not automatically lead to the cohesiveness and joint vision which signifies good teacher education. Rather, there is reason to believe that excessive

congruency between academy and workplace can constrain the possibilities for students to envision alternatives to prevailing practices.

In the USA, there are widespread perceptions that practice-based teacher education is the key element in providing high quality teacher preparation. However, this is, according to Banks et al., (2005) and Hammerness et. al (2005), a naive way of uncritically taking for granted that simply moving over teacher education to schools is beneficial for students. Instead, there is a risk that this structural change will provide for a weakening rather than a strengthening of teachers' capabilities. Sawchuk (2013) further shows that WI-teacher education does not necessarily solve the theory/practice dilemma as there are no one-size-fits-all-techniques that assist student teachers to overcome the praxis-shock, as this way of structuring teacher education pays little, or no attention to individuality. Gustafsson Nyckel, Lander and Thång (2020) argue that, for example, pre-school student teachers in WI-programmes show limited abilities when it comes to critically reflecting on their practices.

## 4.4 Conclusion

Initially, it can be said, that there is to a great extent, a lack of studies in the field that concerns Swedish teacher education. Therefore, the object of study, a Swedish version of two manifestations of the practice turn of teacher education, may add unique findings to the international body of accumulated knowledge in the field.

Findings from the international studies are not all in agreement concerning the consequences of practice-based teacher education. On one hand, a profound number of studies show positive effects on students' learning. On the other, these findings are debated, and claims are risen that there is a shortage of significant empirical evidence connecting practice-based teacher education to improved teaching. Research findings indicate that student teachers do not get the chance to reflect, that teachers at schools and teacher educators lack a clear idea how a practice-based teacher education could improve value in teacher education. Thus, the intended bridge between theory and practice may remain an abstract ideal and the opportunities for student teachers' professional learning on, as well as between, the learning domains of teacher education are restricted.

There is clearly a need for further understanding of how a practice-based teacher education can promote opportunities for student teachers' learning of the profession and which decisive principles that are in play. Findings indicate that the relation between learning the profession in



practice and theory does not necessarily become strengthened by simply facilitating for students to move between different contexts. On the contrary, central aspects of theoretical and practical knowledge can be worked against when they are merely assumed to work in new contexts. Research also warns of the risks of uncritically taking for granted that simply moving teacher education to schools is beneficial for students. Such a structural change may as well provide for a weakening rather than a strengthening of teachers' capabilities.

## 5. Theoretical framework

In this section, the theoretical framework operating in the studies and the thesis will be presented. First Saugstad's (2002; 2005) categories of knowledge will be introduced, followed by Akkermann and Bakker's (2011) identified learning mechanisms through boundary crossing.

### 5.1 Spectator and participant knowledge

Saugstad (2005) makes use of Aristotle's broad concept of knowledge as a central point of departure when it comes to understanding disparities between learning in schools and learning in practice. The philosopher's classification of knowledge – 'the theoretical, the productive and the social-ethical' (Saugstad, 2005, p. 347) can help to distinguish and enhance contemporary understandings of knowledge, theory and practice. In the *Nicomachean Ethics* (Aristotle, 1994), the philosopher deliberates on three diverse types of knowledge: episteme connected to the theoretical and techne and phronesis connected to the practical. Aristotle can thus enhance our understanding that the practical forms of knowledge subsist separately and with their own features, i.e, the context of practice is neither lacking knowledge nor equivalent to theoretical knowledge that is simply conveyed to practical knowledge (Saugstad, 2005). Aristotle's possibly utmost influence in the modern educational debate is that he maintains that learning in practice and learning in school are substantially different ways of acquiring knowledge, as learning in practice demands experience with authentic practical circumstances (Saugstad, 2012).

Saugstad (2002; 2005) makes use of the terms spectator knowledge and participant knowledge as a way of explaining the Aristotelian relationship between theory and practice. By making use of these terms, Saugstad emphasizes that opportunities for learning encompass two separated contexts of knowledge, each of which have relevance and bearing on their own. Spectator knowledge has more of a general character and is not directly connected to practical life. This knowledge is mainly of a need to shed light on, provide reasons and explanations rather than direct action. Spectator knowledge provides an understanding

of the circumstances for action and outlines the space where the activity proceeds. Spectator knowledge further provides the means to reason about situations being different, to make tentative plans and to enquire about conceptual ideas, but it will only, to a small extent, apprehend the diversity and irregularity of practice, as it is not ascribed to practical life. Therefore, spectator knowledge makes space for academic bounciness.

Participant knowledge, however, concerns how to take part in practical life. As human beings take action in specific situations, participant knowledge is both about how to perform as well as respond in accordance with the everchanging situations of practical life. As participant knowledge concerns specific situations, it can never be a universal theory on how to perform as this is determined in each and every situation. Participant knowledge materializes in two different ways, to begin with as a *techne*, or managing skill in association with the practice one is connected to, and secondly as an instinctive feeling of the situation and the capability to comprehend a specific situation in the correct manner. It is 'doxa knowledge' (Saugstad, 2002, p. 357), that is experience-based knowledge of the imaginable and the plausible. Participant knowledge therefore shares components with *techne* as well as *phronesis*. The difference between spectator knowledge and participant knowledge is reflected in Aristotle's observation that the expression 'to know' can be applied in two ways: 'when a person has knowledge without using it, and when a person applies his knowledge' (Saugstad 2002, p.357).

Aristotle (Saugstad, 2012) recognizes that general theoretical knowledge and particular practical knowledge serve different functions, they have different potentials and are learned differently. General theoretical knowledge attends reason and provides the ability to outline and recognize the place in which proceedings come about. Practical knowledge, however, serves the proceedings in specific situations, which also collaborates with general knowledge. These different types of knowledge are joint preconditions when the practitioner needs to acknowledge the opportunities and the limitations within the boundaries of the action with the purpose of becoming successful within them.

To avoid uncertainty, Saugstad (2002) substitutes the concept of theory with the term 'spectator knowledge' and the concept of practice with 'participant knowledge'. Saugstad's use of these concepts is inspired by Aristotle's system of categorizing knowledge, the theoretical – *episteme* and the two practical – *techne* and *phronesis*. *Phronesis* is, according to Saugstad's (2002) interpretation of Aristotle, what is of use for a human being. A person that has *phronesis* knowledge comes to the correct conclusion at the correct time and these conclusions are grounded in the right arguments. This requires experience of

comparable concrete situations, and as it is founded on judgement, familiarity and personal know-how, it can only be learned by accomplishing the right actions. It is connected to acting in specific situations. *Techne* is the knowledge that concerns production and making. Good *techne* is connected to the outcome of the activity, rather than the activity performed. *Techne* can be learned as a type of vocational education while *phronesis* can only be learned by living in the world. What separates *phronesis* from *techne* is, according to Aristotle, that *phronesis* combines the general as well as the particular whereas *techne* only concerns knowledge of the specific condition, and not knowledge of universal laws and values. Theoretical knowledge, *episteme*, exposes itself as an academic, managing skill that contains a reflective, analytic and argumentative activity. For this purpose, it can be acquired at school, which favours this type of learning.

An important assumption of this categorization of knowledge, is the possibility to clarify the difference between the practical and the theoretical which is regarded as two considerably diverse types of knowledge. In study II, I did not, following Saugstad (2002; 2005), connect spectator knowledge solely to *episteme*. I primarily associated spectator knowledge to *phronesis* but with attachments to *techne* and *episteme*. However, during my progression of thought throughout the studies and working on my thesis, it has become clear that it is connections to *episteme* that are read into the spectator perspective. To learn in accordance with a spectator perspective, it is of importance to be able to distance oneself from the practical situation so as to be able to identify what values that govern, when given the opportunity to observe and try out typical situations that the profession entails. These then constitute examples and are used as a basis for further reflections (*episteme*) (Saugstad, 2005). This is in accordance with Raelin (2007), who describes reflective practitioners as practitioners who question why things are done in a certain manner, who certify informal knowledge that has been obtained on the subject at hand and who consider the processes that influence their decision making.

However, to provide for learning in the participant perspective, is instead to be in the midst of the professional practice and the professional community where learning is based on implementing practice (*techne*) and experience that is grounded on reflections connected to the practical experience (*phronesis*). Learning in this context is best done by being active in the circumstances where it is to be made of use (Saugstad, 2005). Learning from participant knowledge takes time, as it is not only a procedure of acquiring skills but it is also a procedure of socialization into the professional identity. This learning takes place organically by participating in realistic, everyday situations and is nurtured by imitation and experienced role-models. It is by participating that this

knowledge can be encompassed and used in a tacit and instinctive way. Participant knowledge can also be described as tacit knowledge, that is, our knowing is in our action, implicit in our patterns of actions and in the feel for the matter with which we are dealing. The workday life of the professional is dependent on a tacit knowing-in-action, it is performed spontaneously and is difficult to describe in words (Kinsella, 2007a; Schön, 1983). Another contribution to the concept of tacit knowledge is that it is explained as knowledge that is not easily communicated in words, instead it is transmitted by showing or exemplifying, basically know-how (Bohlin, 2009). Tacit knowledge is conveyed by the body, traditions and actions (Molander, 2015). Learning through a participant perspective is in alignment with Raelin (2007) who describes a significant part in learning practical knowledge as being to learn from experts or mentors who show in their actions how their way of adjusting cognitive patterns is a response to the changes that take place.

The above categorizations of knowledge are relevant for this thesis, as by restructuring teacher education, in this case through introducing a more practice-based teacher education, where practice is given a higher value, generates implications. Spectator knowledge and participant knowledge can be seen as two different types of knowledge that require different processes to acquire learning (Saugstad, 2005). In order to provide effective support for student teachers to have access to both processes of learning requires a systematic organization and also a coordination of the two (Gardesten & Nordänger, 2018). By making use of this theoretical framework, and these two perspectives of learning a profession, it is possible to acknowledge how the restructuring of a practice-based teacher education implies an emphasis on either one of the two knowledge forms. The theoretical perspective was therefore relevant for the analysis of data in study I, II and III.

Saugstad (2002; 2005) conceives the two separate types of knowledge as incommensurable, they are learned in different ways but are equally significant when learning how to teach. However, there are others, for example Schön (1983), who instead emphasize the importance of bridging the theory-practice gap by accentuating the importance of educating reflective practitioners. Reflection is a fundamental aspect of learning and the ambition should be to teach the student to become a reflective practitioner in specific situations, in order to cultivate an understanding of how to use theory in practice and therefore enhance understanding of a situation. It is during reflection that theory can be connected to previous experiences to generate an individual repertoire of knowing-in-action (Schön, 1983). Schön's theory is characterized by his creation of an entirety in his theory from his epistemology of practice, by defining the competence of students in practice

(knowing-in-action), but also defining the reflective practicum, that is how to teach the reflective practitioner.

Others, that are in line with Schön put forward the argument that theory is something that can be inserted in practice (Kearsley, 2001) or even inserted in practitioners (Jackson, 2015). Some, such as Smagorinsky, Cook and Johnson (2003) and Beyer (1996), argue that theory and practice should be integrated and that if word and world are to be integrated, then changes need to be initiated in the discourse of theory as well as practice. Others, such as Korthagen and Wubbels (2001) claim that practice is what should be prioritized as student teachers only make use of a small part of the theory taught and are not adequately prepared for a number of the problematic situations that they encounter in schools. All of the above, however, place theory and practice as detached domains where theory is the more otherworldly and authoritative whereas practice is the more pragmatic. Also, despite the fact that it seems that theory can jump the rift to enhance practice, it however seems as if practice has a minor effect on theory (e.g., Mohr, 1994). Grimen (2008), further claims that there is not only one type of relationship between theory and practice and that vocational education is characterized by the complexity between them. He further puts forward the idea that there is no clear and principled distinction between theoretical and practical knowledge and that it is rather about a continuum. It is about avoiding simplified notions regarding for example that practice is only translated theory. In vocational education, it is common to read about regrets that theory and practice are not well integrated. However, Grimen claims that maybe we should appreciate that many theories are not put into practice as, although the integration of theory and practice is important, no theory can be completely translated into practice and many theories should not be translated at all.

## 5.2 Transfer of knowledge between contexts

The first study regarding how the organization of practice is defined in policy documents, was somewhat of a starting point for further studies. The second and third studies concern one of the manifestations within the practice turn that is in focus in this thesis— specific practice schools and the accumulation of students who are to implement practice in pairs. In these first three studies, it has been of value to use Saugstad's theoretical perspectives discussed above, as these envisage two different ways of acquiring knowledge, through a participant perspective or through a spectator perspective within the context of practice (Saugstad, 2002; 2005). The underlying hypotheses is that ideas on learning to

teach from a spectator or participant perspective are revealed in the periods of practice. Hence, to understand experiences of learning opportunities as a two-sided coin, can provide a deeper understanding and hopefully contribute to teacher educators making more knowledgeable decisions when structuring students' practicum.

In study IV, which concerns the other manifestation of the practice turn that is in focus in this thesis – WI-teacher education, where students work as teachers at the same time as they study, an additional theoretical perspective was needed. This was necessary in order to illuminate students' opportunities for learning between the boundaries and contexts of university and practice rather than within the context of practice. Therefore, Akkerman and Bakker's (2011) concepts of brokers, boundary crossing and the four identified potential learning mechanisms *identification*, *coordination*, *reflection* and *transformation* were made of use. This, to conceptualize what WI-students' boundary crossing entails for their opportunities for learning at university. According to this perspective, vocational learning and teaching should be perceived as a dialogical procedure of a crossing of boundaries between different socio-cultural customs. These ranging beyond the one-dimensional view of integrated learning simply being a matter of linking theory and practice (Akkerman & Bakker, 2011; Middleton & Baartman, 2013), and the transfer of knowledge and skills between universities and workplaces should be understood as a knotty process of recontextualization and transformation (Schaap, Baartman & de Bruijn, 2012).

The above four learning mechanisms can occur at the level of practice when action and interaction between contexts are determined. *Identification* takes place when people define or redefine the differing characteristics of intersecting practices, and how they can coexist in relation to each other. *Coordination* can take place when cooperative and routinized interactions are established between contexts. *Reflection* can occur when new aspects are learned about one context when appropriating the perspective of the other context, and finally the learning mechanism of *transformation* takes place when a new in-between practice is created or a change of context in response to the other (Akkerman & Bakker, 2012). Knowledge of these four learning mechanisms is of value as all learning across separate contexts involves boundaries, and especially in apprenticeship programmes such as teacher education, students come to face these boundaries between university and workplaces (Andersson & Andersson, 2008; Edwards & Mutton, 2007).

Akkerman's theoretical reasoning is influenced by Tuomi-Gröhn and Engeström (2003), who move the discussion from whether education is structured in order to meet the requirements of professional skills in work, to what possibilities for learning and construction of knowledge that are created through students implementing their education in

different contexts. By participating in different contexts, student teachers are provided with the opportunity of obtaining diverse competences, and also to unite these competences. This is not possible if teacher education is solely implemented by universities or solely work based. Tuomi-Gröhn and Engeström (2003), in fact show that student teachers' professionalism is developed and enhanced by taking part in and transferring between these contexts, and the bare essence is that the actual differences between these contexts is the main source of professional development. The concept of transferring becomes a significant issue as one's skills and capability of fruitfully crossing these boundaries reflects one's ability of becoming a productive participant in several contexts.

However, transferring between two contexts requires effort from student teachers who, as described as translators or brokers, face a complex situation that is psychologically demanding (Akkerman & Bruining, 2016). Wenger (1998), from whom Akkerman and Bruining also take their lead, emphasizes that brokers are indeed in a delicate position where they are required to connect contexts, by enabling transactions between them by bringing about learning through presenting elements from one practice to another. This often results in ambivalent multi-membership relations that are not always comfortable. Brokers need to be able to construct new links between communities of practice and facilitate coordination. Thus, new opportunities are only provided if they are effective brokers. This is a complex phenomenon that requires special skills. By bringing elements from one context to another, the broker's ability to translate creates prerequisites that can alter the relation between the contexts or even between the participant and the context. By these means, possibilities are given to provide new significance or meaning to knowledge within the context that is already fortified. Akkerman and Meijer (2011) further develop the difficulties that brokers face by showing that workplaces and university not only characterize different epistemic traditions but they also require different identity positions. WI student teachers are, according to Tanggaard (2007) and Akkerman and Bakker (2011), in an exclusive situation of acting as mediators, bringing along their new reflections and understandings from their workplace into university and from the university to the workplace. Therefore, they have the possibility of introducing elements of one context to the other. However, this position can also lead to insecurity as they are in a peripheral position in both contexts and encounter situations of either belonging to both slightly or not belonging at all. This is in alignment with Beach's (1999) description of transfer that involves the movement where a person carries a product of learning from one situation, or context, to another. Beach speaks here of lateral



and collateral transitions that encompass persons moving between established social activities.

Akkerman and Bakker's (2011) perspective of boundary encounters, is of use when analyzing different types of boundary crossings, however it is not sufficient to further explain the underlying forces of learning and change. Regarding these forces, Beach (1999) speaks of encompassing and mediational transitions that have persons repositioning within the boundaries of a solitary activity or into the construction of a new activity. Further, Beach makes use of the expression consequential transitions (p.114) when explaining alterations between a participant and his/her social contexts. A change in relations can take place and these are consequential when they are intentionally reflected upon and the results changes one's opinion of oneself and one's social standing.

### 5.3 Significance

Using the above theoretical framework can have the potential to contribute to the research field described earlier in several ways. Firstly, the study can, with help of these theoretical tools, provide nuanced images of how new practice-based approaches to teacher education promote or prevent students' professional learning. A significant part of the research dealing with the consequences of how teacher education is organized are often conducted by the educational institution itself as simply evaluations where data contribute to superficial descriptions and where the risk of the results becoming self-fulfilling is obvious (Cliff & Brady, 2005; Staal Jensen, 2018; Zeichner & Conklin, 2008). Various reform initiatives have given rise to discussions about how teacher education should be designed and to the introduction of different types of teacher education models and arrangements. However, these initiatives are rarely characterised by empirical mandates (Cochran-Smith, 2005), which is due to the fact that there is a paucity of findings from research on what goes on in 'the black box of the programme' (Darling-Hammond, 2006, p. 4), i.e. in the experiences that students, mentors and university teachers have of the processes in the practice and campus-based parts of the programme and how these processes cumulatively affect the opportunities for students' professional learning (Darling-Hammond, 2006).

Secondly, the theoretical framework has the potential to contribute new knowledge to a field of research that largely rests on a relatively unproblematised ideal of coherence and integration of practice/school and theory/campus (Hammerness & Klette, 2015). The theoretical starting points of the project are that general theoretical knowledge and particular practical knowledge serve different functions, have different

potentials and are learned differently. Tensions and contradictions are an inherent part of human activity, and differences, discontinuities, and boundaries between different contexts in a teacher education, should not primarily be seen as barriers to be torn down, but as interesting meeting places that can promote learning and development, and can provide scope for alternative findings.

## 6. Method

In this section, I outline the methodological deliberations constituted in this thesis. In order to show transparency, I describe how the research proceeded and what methods it comprised. Furthermore, I justify the steps taken for acquiring trustworthiness in the study and describe how ethics was a consistent part of the research process. Finally, I present my considered methodological reflections.

### 6.1 Methodological framework

Within this thesis, four qualitative studies have been conducted, each one of these can be seen as exploring different propositions and accessing knowledge in relation to the research questions in the study. All of the studies in this thesis concern the relationship between different types of knowledge and contexts within teacher education. However, acquiring knowledge regarding student teachers' opportunities for learning has throughout the entire research process encompassed the notion of interpretation. In the case of these studies, this involves the interpretation of policy documents and interviews.

There are numerous questions that can be asked of a text in an analysis which can lead to different meanings. One of the reasons for different meanings can be due to a researcher's preunderstanding that is inserted into the questions posed to a text and therefore codetermine the subsequent analysis (Brinkmann & Kvale, 2015). This is in accordance with Gadamer's perspective (1989), of not looking upon interpretation as something that the researcher chooses or does not choose to do in a certain way. Rather, the researcher, as a human being, must be seen as a constantly interpretive being who has a preunderstanding that to some extent will always contribute to the interpretations that it is possible to make. Therefore, it is important to account for my preunderstanding here.

During the 1990s, I was a student teacher and after that I worked within the profession of teaching for almost 20 years before I started working as a teacher educator at university half-time in 2015. During my work as an upper-secondary teacher, I also mentored student

teachers within my subjects. After this, since the beginning of my research education, in 2015, I have, in my role as a teacher educator, visited students during their practice periods. There, I have taken part in discussions with students and their mentors. Therefore, in reference to the above, I have experience of the situation of being a student, a teacher, a mentor and a teacher educator. I have however, in my role as student, mentor or teacher educator, no experience of paired practicum. According to Gadamer (1989), the above preunderstandings provide conditions for the interpretations that have occurred, though, it can be difficult to establish in what way. However, it has been my ambition to keep this process as transparent as possible by repeatedly reflecting on my background and on unconventional analyses of findings.

When it comes to the construction of scientific knowledge, this can be established in many different ways. These different ways are traces to the kind of world the researcher seeks knowledge of, and the kind of knowledge sought (Åsberg, 2001). In the first study, a qualitative content analysis that was focused on content and meaning was conducted on documents from the two latest teacher reforms and from a local level. The reason for why a content analysis was chosen for the first study is that a text or a document is a linguistic object where language is used as means of expression or a tool for communicating information for describing a desired reality (Gustavsson, 1999). Thus, a content analysis was implemented in order to first ascertain how changes in practice within TE are implied by certain expressions and further how they are interpreted on a local level.

Studies II, III and IV were conducted through semi-structured interviews. This qualitative method was chosen as I was interested in personal perceptions from different parties within teacher education who could answer questions regarding paired practicum and WI-teacher education. A reason to implement interviews is that the respondents have knowledge about the area of attention and can in an interview, provide their perspective on it (Beitin, 2012). According to Weiss (1994), through interviewing, we can learn about peoples' inner experiences, what they perceive and how they understand their perceptions. Thus, semi-structured interviews were made of use to make sense of life, that is to 'learn about places we have not been and could not go and about settings we have not lived' (Gubrium & Holstein, 2012, p. 30).

The interview according to Kvale (1996) is quite exactly an *interview*, that is an exchange of views and a confidential and privileged conversation with another person. Well performed, the *interview* can provide admission, understanding and information to the other person's life or situation within a context. Further, Brinkmann and Kvale (2015) illustrate two different epistemological concepts of the interviewer as a 'miner' or a 'traveler', and where the interviewing process is a course

of action of ‘knowledge collection’ or a ‘knowledge construction’ (p. 57). In a miner metaphor, the interviewer extracts valuable nuggets (however objective facts) from a subject’s experiences, whereas in a traveler metaphor, the interviewer enters into conversations with people he or she comes across. Through studies I–IV, my methodological approaches have been those of a miner where valuable nuggets were extracted through a contextual understanding of the study object. Through studies II–IV, my methodological approaches have also been those of a traveler where material was constructed together with those that I have interviewed. Knowledge has been generated in these dialogues. Further, a guiding, illustrative concept of theory was used to generate new concepts of knowledge.

## 6.2 Context of the study

Before the four data collections are described, it is of value to provide an overview of practice (VFU in Swedish) within teacher education programmes, as well as the models studied of practice schools and WI teacher education. In addition, it is also of value to present a picture of the different groups of respondents. One way of describing Swedish teacher education is to separate the parts that take place outside of the university (practice) from the elements that take place within the university (theoretical courses). Another way is to place practice as one of three areas of education, the other two being subject knowledge/subject didactics (or studies within the early years pedagogical area for student teachers within the early years teacher education programme) and educational science. A total of 30 ECTS of practice within the relevant organization and subject area are required for a teacher’s degree (SFS 2010:541) and it is up to each and every university how these credits are divided throughout the teacher education programme. Some universities, for example, have two periods of practice consisting of 7.5 ECTS and a third longer period of 15 ECTS. Others, for example, have four periods of 7.5 ECTS.

Lately, it seems that the context of practice within teacher education has been given special attention. Since 2014, an introduction of specific practice schools in teacher education has taken place (Promemoria U2013/4305/S, 2013), and 15 of 23 Swedish universities were allocated funds in order to develop the context of practice within their programmes. They have entered into agreements with schools in municipalities that have become specific practice schools within teacher education programmes (Swedish Government decision, U2018/01943/UH, 2018). These are schools to which students return throughout their years of teacher education to become teachers. By

organising practice in this way, it is emphasized that practicum should become a natural part of teacher education. Also, mentors should have a high level of competence so as to promote student learning development. This is achieved by the requirement of mentors having a further 7.5 ECTS education in order to supervise student teachers. Like many other professions, learning to teach is a kind of apprenticeship, where beginners learn from those more experienced and skilled. However, it differs from many other professions in that when they are in practice, it is implied that many student teachers in Sweden are now not only supposed to benefit due to guidance from further experienced mentors, but also from being many students implementing practice at the same school where they are expected to exchange experiences with each other. This has been organized as placement in paired practicum together with fellow students.

Regarding WI-teacher education, the Swedish government has invested 30 million SEK per year during 2020-2026 in order to create more opportunities for student teachers to conduct WI-teacher education. WI-teacher education entails student teachers, during their education, contributing in school from day one. The Swedish government claims that it is a good example of how it is possible to 'combine theory and practice and thus prepare the students well for their work in school and in the classroom' (Swedish government, 2020). Some universities organize WI-teacher education so that student teachers are employed at a school 75 % and conduct studies 50 % on a parallel basis. Some arrange it in the opposite way with 75 % studies and 50 % employment. Some have an equal amount of 50 % studies and 50 % employment after two years of full-time studies. In this thesis, one type of WI-teacher education is in focus, whereby the student teachers study at university 75 % of the time at the same time as they are employed as teachers 50 %. During a period of 5½ years, student teachers have full responsibility for teaching from day one, with various degrees of support from mentors three days a week and implement university studies two days a week.

### 6.3 Data collections and informants

In Study I, a content analysis was conducted where data was extracted from policy documents regarding the two latest teacher education reforms in 2001 and 2011, a local course syllabus (2007) and local programme curriculums (2012; 2014), and a memorandum of an invitation to universities to participate in a pilot project comprising specific practice schools (Promemoria U2013/4305/S, 2013). Finally a local SBE handbook (2013) and local application (2014) to take part in the project

were examined. These documents were chosen as each one is part of the argumentative process that has led up to changes in teacher education on a local level. SOU (1999:63) and SOU (2008:109) are government commissions of inquiry consisting of parliamentary committees appointed by the Swedish ministry of education. These committees submitted proposals for new directives, suggesting necessary changes which then developed into two propositions (1999/2000:135; 2009/10:89). These are government bills that were sent to parliament with suggestions for reforms of teacher education which led to the reforms of 2001 and 2011. The extracts of the data concerned the specific elements of practice within teacher education and especially expressions in the documents regarding ideas of the opportunities provided for student teachers to learn the profession of teaching during practice. Thereafter, data was extracted from local policy decisions to illustrate the implementation of national policy regarding the above points of interest.

In Study II, twelve students, from one Swedish initial pre-school teacher education programme, who were conducting practice at 12 different specific practice preschools, during their third and final period of practice, were interviewed regarding their participation in paired practicum within their periods of practice. As the student teachers were in the midst of implementing their third and final period of practice, none of them had access to separate rooms where we could conduct the interviews. None of them was either willing to have the interviews elsewhere as they had fully scheduled days, therefore the interviews were conducted by telephone. Individual semi-structured interviews were made of use. The interviews lasted between 31 and 51 minutes and were recorded on a dictation machine and then transferred to a computer. They were then listened to several times and further transcribed word by word.

In Study III, five further educated mentors in three upper-secondary specific practice schools, who had experience in supervising single-placed students as well as students in pairs were interviewed regarding how they perceived and experienced their role when supervising student teachers in single- as well as paired practicum. The five mentors who volunteered had been teaching in upper secondary schools for periods between 16 to 22 years. They had experience of being mentors for student teachers in the time span of 4 to 5 years. Qualitative data were gathered through semi-structured individual interviews. One of the interviews was conducted person to person, the others were conducted through internet-based meetings due to the Covid-19 situation. The interviews lasted between 30 and 39 minutes, were recorded on an Iphone, and then transferred to a computer where they were listened to several times and transcribed word for word.

In Study IV, six teacher educators at one university, who had experience from teaching WI-student teachers as well as ordinary programme students, were interviewed regarding their perception of WI students' learning within courses. The reason why teacher educators were chosen for the study was that they have experience of various forms of education and have a history as teachers themselves. The teacher educators who volunteered had been teaching at the university for 5 to 25 years. They also have experience from working as teachers in schools for 5 to 28 years. Qualitative data was collected through semi-structured interviews that were conducted individually via internet-based meetings due to the Covid-19 situation. The interviews were recorded on an Iphone and then transferred to a computer and listened to several times. They were then transcribed word for word. The interviews lasted between 17 and 46 minutes. An overview of the data collection is presented in table 1 below:



Table 1: An overview of the data collection from each study

	Data collection and informants		
<i>Study 1</i>	<p>Data was extracted from policy documents regarding the two latest teacher education reforms in 2001 and 2011. Also, data is extracted from local policy documents.</p> <table> <tr> <td> <b>Policy level</b>                      - SOU 1999:63                      - Prop. 1999/2000:135                      - SOU 2008:109                      - Prop. 2009/10:89                      - Prom U2013                      - SFS 2014:2                 </td> <td> <b>Local level</b>                      - Local course syllabus 2007                      - Local program curriculum 2012                      - Local program curriculum 2014                      - Local SBE handbook 2013                      - Local application pilot project specific practice schools 2014a                 </td> </tr> </table>	<b>Policy level</b> - SOU 1999:63 - Prop. 1999/2000:135 - SOU 2008:109 - Prop. 2009/10:89 - Prom U2013 - SFS 2014:2	<b>Local level</b> - Local course syllabus 2007 - Local program curriculum 2012 - Local program curriculum 2014 - Local SBE handbook 2013 - Local application pilot project specific practice schools 2014a
<b>Policy level</b> - SOU 1999:63 - Prop. 1999/2000:135 - SOU 2008:109 - Prop. 2009/10:89 - Prom U2013 - SFS 2014:2	<b>Local level</b> - Local course syllabus 2007 - Local program curriculum 2012 - Local program curriculum 2014 - Local SBE handbook 2013 - Local application pilot project specific practice schools 2014a		
<i>Study 2</i>	Semi-structured interviews with 12 ITE student teachers at one university who were implementing their third and final period of practice in paired practicum at 12 different specific practice pre-schools.		
<i>Study 3</i>	Semi-structured interviews with five further educated mentors from three different upper-secondary schools. The mentors have experience from supervising single-placed students as well as students in pairs.		
<i>Study 4</i>	Semi-structured individual interviews with six teacher educators at one university who had experience from teaching WI-students as well as ordinary programme students.		

## 6.4 Data analysis

In Study I, data was extracted from policy documents regarding the two latest teacher education reforms in 2001 and 2011, this in order to establish what was expressed in these policy documents regarding how student teachers should learn through the specific parts of practice within teacher education. The analysis is predisposed by Ball's (2016) context of influence meaning that any analysis of policy should reach beyond the idea of conceptualizing policy as a neutral text that is

transformed down in order to determine change. Ball rather states that new policy documents do not normally outline what to do, rather they generate circumstances where possibilities are established but also, accessible options are limited. Also, as Swedish universities have interpreted these ideas in national policy and then transformed them into local policy, a subsequent question was what this looks like when ideas in a national context are transformed to a local context. Therefore, data was also extracted from local policy documents. This method was in alignment with curriculum theory (Lundgren, 1989) where policy documents were analyzed from the arena of formulation and local documents were analyzed in the arena of realization, where the objectives are interpreted. After the first analysis of data regarding ideas on learning in practice, analytical steps were taken as to visualize whether these ideas indicate either opportunities for learning through a participant perspective or a spectator perspective or both (Saugstad, 2002; 2005). The analysis was conducted in relation to how ideas on learning in school-based education, connected to the spectator- or the participant perspectives, are visualized in national policy documents and further interpreted in local policy documents. I have focused on the explicit content and meaning, that is, what is expressed in words in the text (Flick, 2011), used Saugstad's (2005) categories of knowledge and have connected these expressions to the two perspectives of learning, through a spectator perspective and a participant perspective. Analytical steps were used such as looking for indications of ideas proposed in data that were in line with the two perspectives. Patterns were identified and presented in a timeline under the two categories 'How ideas on vocational learning in school-based education are described in policy and how these ideas change over time' and 'Changes on a local level and how policy ideas are configured at a local institution of teacher education'. Below are examples of how patterns were identified (my translations):

- Expressions such as 'students shall follow development during a longer period of time and get the opportunity to deepen their understanding', were connected to a vision of students learning through a participant perspective.
- Expressions such as '....gives the students opportunities to develop their professional skills as well as their abilities to reflect [...]. Such knowledge is obtained through experiences from many different situations', were linked to a vision of students learning through a spectator perspective.

In Study II, data from semi-structured interviews with 12 student teachers in initial pre-school teacher education was collected in the spring of

2017. To begin with, data was analyzed without a chosen theoretical perspective, which can be referred to as ‘the systematic examination of similarities within and across cases to develop concepts, ideas, or theories’ (Pascale, 2011, p.53). Analysts who use this strategy, code data inductively to distinguish patterns and communicate probable explanations of these patterns (Brinkmann & Kvale, 2015). However, in order to further understand these patterns that became visible, a theoretical perspective was needed. Therefore, a more abductive analysis approach was further used to analyze data where the two perspectives of learning through a participant perspective or spectator perspective were used to visualize what opportunities for learning were provided for in paired practicum. The data was then sorted into categories. Below are a few examples of how answers were sorted into patterns and what titles the categories were given:

- Patterns that were identified such as ‘not taking the initiative if learning together’ or ‘time can be scarce if you have the same mentor’ were sorted into the category ‘Authentic learning is obstructed’.
- Patterns that were identified such as ‘we both went off together and were going to reflect and we told our mentor that we would like to reflect together’ or ‘we have almost two hours a week that we sit down together. This time is allocated for reflections together’, were sorted into the category ‘Communication skills are enhanced’ (and so on).

In Study III, data from the semi-structured interviews with five further educated mentors was gathered in the autumn of 2020. This data was then categorized by searching for general tendencies as well as specific and noticeable findings in relation to the overall purpose. In this study, the abductive process between data and theory was further developed and more focus was placed on what is actually represented in the texts by looking for general tendencies as well as particular findings corresponding to the overall purpose. This entailed us interpreting the empiric material in relation to the notions of spectator knowledge/learning and participant knowledge/learning (Saugstad, 2002; 2005), at the same time as we kept an openness for findings that problematized the dualistic nature of these notions. This allowed us to take a different position and have a more open approach to the limitations of the theoretical framework. An example of this is that themes were generated according to what stood out in the data. Below are a few examples of how answers were sorted into patterns and what titles the categories were given:

- Expressions such as ‘there is a strength in that they can discuss with each other’ or ‘they had help from each other, absolutely, and they came to me when there was something in particular’, were sorted into the category ‘Seizing the opportunities of a spectator position’
- Expressions identified such as ‘I think it's better with one student than when you have two, as you always have one student who is more forward’ or ‘they identify themselves very much as student teachers’, were sorted into the category ‘Lingering in a peripheral position’ (and so on).

In Study IV, semi-structured individual interviews with teacher educators, who have experience from teaching student teachers within ordinary teacher programmes as well as WI-teacher education programmes, were implemented individually in the spring of 2021 where the respondents were asked questions regarding their perception of WI- students’ learning within courses at the university. The interviews were then transcribed and read several times to ascertain patterns. Data was compared and sorted into categories consistent with the overall purpose. Also in study four, this meant that the empiric material was interpreted in relation to the theoretical perspective, that is Akkerman & Bakker’s (2011) concept of boundary crossing and the four identified learning potentials identification, coordination, reflection and transformation, at the same time as an open mind was kept to other findings. This allowed a more open approach to the limitations of the theoretical framework. As in study three, themes were generated according to what stood out in the data. The following are some examples of the way answers were sorted into patterns and what titles the categories were given:

- Expressions such as ‘Those who become too much of a teacher too fast, they become so practice oriented’ or ‘students develop a self-image of being greater experts than they really are’ were sorted into the category ‘A lopsided teacher identification’.
- Expressions such as ‘WI students, they tested (things) straight away and then they came back and said, ‘When I did this, things worked out well, but when I did this, it didn’t work at all. How come?’ or ‘They are more involved, i.e. they have a lot more experience’ were sorted into the category ‘Not a teacher yet – a brokering position of coordination and reflection’ (and so on).

All of the data in the four studies were analyzed in alignment with abduction, that is, according to Sundberg (2015), an ongoing interaction

between theory and data that is founded on gradual conclusions which successively bring about the most probable explanation. There are required prerequisites connected to abduction, these are a context bound understanding of the studied object and a guiding explanatory interest. The aim is to reach beyond the contextual understanding and bring about more general requirements of knowledge. In my studies, I have, to begin with, tried to ‘attain a maximum openness to the texts as they present themselves’ (Brinkmann & Kvale, 2015, p. 273). After these first readings, I have adapted a theoretical reading, which Brinkmann & Kvale (2015) clarify as ‘suggesting the direction in which to look, rather than definitive, defining what there is to see’. The extracted data has been directed with the assistance of Saugstad’s (2005) theoretical views of knowledge, learning through a participant perspective or a spectator perspective (in Study I, II and III) and Akkerman and Bakker’s (2011) views of knowledge – four identified potential learning mechanisms within boundary crossing (in Study IV).

The theories were used in accordance with Alvesson and Sköldbberg (2008), ‘not as a mechanical appliance on individual cases, but as an inspiration for the discovery of patterns that provide understanding’. However, it is, according to Sundberg (2015), important to clarify that when it concerns didactics, there is often a multi-factorial explanation that does not have to concern causal connections. This research strategy coincides with the reconstructive approach to build general and coherent theoretical schedules to be able to systematically arrange as well as explain empirical facts. This reconstruction provides depth as well as generalizability.

The data was sorted according to what Timmermans and Tavory (2012) call ‘a creative inferential process’ (p. 5). The process goes back and forth between the empirical data and contemplations of theory, and for this process to be successful, it is necessary to have profound know-how of both of them. However, abduction is not merely about turn-taking, the process is more a mutual of coming close and standing back in the researcher’s examination of the data produced. This was done in my first two studies by analyzing data, looking for general tendencies as well as specific findings, and then considering the theoretical perspectives as what in these findings could be explained by these. In the third and fourth study, I went back to the data to look for other tendencies or specific findings that could not be explained by the theoretical perspectives but still were of interest as corresponding to the overall purpose. This is further outlined by Brinkmann (2014) who describes abduction as a method of reasoning about qualitative analysis that is not merely data-focused (phenomenological management) nor merely hypothesis-focused (theoretical framework management), but rather driven by ‘breakdowns in one’s understanding’ (p.722). When dealing with data

in the way that I have done, it is further explained by Brown (2019), that the researcher chooses what to include, which is, by all means, a subjective choice. The analytical procedure is conducted by the researcher's understanding and takes shape depending on views and expectations. This way of analyzing data is, according to Morgan (2018), not something that merely happens and thus themes do not simply emerge, these are specifically composed by the researcher to construct significance and meaning of data.

## 6.5 The progression between the studies

The first study can be regarded as somewhat of an initial starting point and a testing of a hypothesis. This by defining if and if so, how the implications of the practice turn are envisaged in policy documents regarding teacher education. National documents describe what teacher education is supposed to accomplish and through the two latest teacher education reforms, changes are seen regarding how the structure of practice is outlined. Study one concerns how student teachers' opportunities for constructing knowledge during practice is regarded in policy. Results show that this view in policy documents changes over time and that emphasis has gone from obtaining experience from different supervisors, to student teachers being placed at the same specific practice school throughout their education. Therefore, it was of interest to further study the implications when teacher education is reorganized towards more practice-based constituents and if and if so, how those involved are affected, such as student teachers, mentors and teacher educators.

Subsequently, the second study concerns how student teachers perceive their learning within paired practicum, which takes place within specific practice schools – one of the manifestations of the practice turn. Data in the first two studies were, at a first stage, collected without a previously assumed theoretical perspective and were analyzed through the process of induction which is according to Brinkman and Kvale (2015), conducted without too many preconceived ideas. Rather, it was an analysis process of finding out what Glaser (1978) expresses as the 'main concern', that is 'what is actually happening here?' (Fejes & Thornberg, 2019, p.47). As this categorization of data generated theoretical ideas of acquiring knowledge in two different ways within practice, this further lead to Saugstads' two theoretical perspectives: participant perspective and spectator perspective. The data in study one and study two were therefore reanalyzed where the theoretical arguments of Saugstad (2002; 2005), who makes use of Aristotle's concepts of knowledge as a central point of departure, was applied in order to make

visible what the different ways of organizing practice entails regarding consequences on students' acquisition of knowledge.

Having conducted the second study regarding student teachers' perspectives of paired practicum, it was of interest to obtain further knowledge by interviewing mentors who supervise within paired practicum. In this third study, Saugstad's (2005) concepts of acquiring knowledge through a participant perspective or a spectator perspective, were present through the whole research process.

The first three studies specifically concern the manifestation of practice schools. As results showed that restructuring practice in this manner within teacher education has its implications, it was of further interest to study the manifestation of 'the practice turn' regarding WI-teacher education, where student teachers spend even more time in school. However, when designing the fourth study, it became apparent that Saugstad's (2005) concepts of knowledge would not be adequate to conceptualize what WI-students' boundary crossing *between* university and schools entails for their opportunities for learning at university. Thus, the fourth study is theoretically operated by Akkerman and Bakker's (2011) concept of boundary crossing and the four identified potential learning mechanisms within.

## 6.6 Trustworthiness

Regarding credibility and validity, these are in interpretive studies measurements of trustworthiness, however they are most often made use of within quantitative studies. Bryman (2012), drawing on Guba and Lincoln (1994), outlines optional concepts of measurements for qualitative studies where the equivalent terms are within brackets. These are:

- credibility (internal validity)
- transferability (external validity)
- dependability (reliability)
- conformability (objectivity)

Qualitative analyses such as those in study two, three and four are often based on a smaller number of interviews and therefore seldom refer to generalizable conclusions or a determination of representativeness. The credibility (internal validity) within quantitative research concerns the connecting relationships between variables. Credibility in qualitative research concerns the choice of data collection and analysis (Brinkmann & Kvale, 2015).

The pre-school student teachers in study two were chosen because they were conducting their practice at specific practice schools and had *experience* of paired practicum (they were conducting their third period of practice). In this study 12 respondents participated and in the analysis of the transcripts it became clear that further interviews were not necessary as no further data was attained, and so-called saturation was reached (O'Reilly & Parker, 2012).

The respondents in study three were chosen because they were mentors that had experience from supervising single-placed students as well as students in pairs. Inquiries had been sent to additional schools and mentors regarding participation, but as data saturation was attained after five interviews and the point was reached of no new data or themes (O'Reilly & Parker, 2012), these were not further contacted.

A smaller number of respondents were chosen also in study four. Twelve teacher educators were contacted that presumably had worked as teacher educators in WI-teacher education as well as ordinary teacher education programmes. Four of them had not taught students within both of the education programmes and were therefore excluded. One of the teachers had not taught within the WI-programme for three years and declined participation for that reason. One of the teachers declined without giving a reason. Six met the requirements of having adequate experience from WI-teacher education as well as ordinary TE programmes. Experience was of importance in these two studies, so as to be able to say something about one variable, here, it was necessary to have another variable to compare to. There are certain limitations due to the number of respondents but despite these limitations, the material was adequate for an analysis that could answer the given research questions. This is what Burmeister and Aitken (2012) refer to as the depth of the data, that is, it was fully possible to make in-depth interpretations of the interviews.

Within qualitative research credibility also concerns how appropriately the theoretical frame corresponds with the empirical findings. In order to ensure credibility, I have applied an abductive analysis, where I have initially coded the data with an open mind, thereafter I have applied a theoretical perspective in compliance with the aim of the study. Regarding dependability, the corresponding term to reliability within quantitative studies, has to do with truth and how strong a statement can be said to be. A dependable argument is thorough, defensible, solid and believable. Validity has in social sciences referred to whether a method investigates what it intends to investigate and is demarcated by the question 'Are you measuring what you think you are measuring' (Kerlinger, 1979, p. 138). Thus, qualitative research could be seen as invalid if the results are not expressed in measurements. However, in a wider context, dependability refers to the extent to which a method studies



what it is envisioned to study, that is ‘to the extent to which our observations indeed reflect the phenomena or variables of interest to us’ (Cervone & Pervin, 2007, p. 48). Dependability should also be seen in a wider context than an isolated part of a study, moving the emphasis from the final product of results to an ongoing process validation. Quality control should be ongoing throughout the research process and the stages of knowledge production. (Brinkmann & Kvale, 2015). This examination has been further validated in communication which entails knowledge claims being discussed in a dialogue with other researchers (Mishler, 1990). These dialogues have been focused on methodological aspects as well as produced knowledge. Further, the studies were guided by the aim, questions and theoretical framework and certain thought was applied to how the interviews were to be analyzed before they were conducted, which according to Brinkmann and Kvale (2015) brings forward an analysis which leans on transparency as well as a firmer ground.

Means to ensure conformability (objectivity in quantitative research) were taken by applying a reflexive approach when it comes to the pre-understanding I had as a researcher of what I was studying. This was necessary as the individual's preunderstanding conditions the interpretation that is being made (Fejes & Thornberg, 2019). Therefore, I have in the beginning of the chapter clarified my preunderstandings. Finally, trustworthiness was sought for by upholding honesty, by reflecting on my interpretations of the results with colleagues as well as fellow researchers on a regular basis as well as presenting results and analysis of studies at international conferences.

## 6.7 Ethical considerations

Within the research process, ethical issues arise at a variety of stages. These issues cannot be ignored as they are directly related to the research disciplines that are involved. The following suggestions produced by Bryman (2012), drawing on Diener and Crandall (1978), revolve around four recurring issues that are comparable to those put forward by the Swedish Research Council (2021). These ethical principles were followed throughout the four studies and are as suggested by Bryman (2012) those that should be considered:

- whether there is harm to participants
- whether there is a lack of informed consent
- whether there is an invasion of privacy
- whether deception is involved. (p. 135)

To ensure that no harm was inflicted on the respondents, I made sure that no one could be identified. This was achieved by handling the question of anonymity with care. Regarding the second study with initial teacher education students and the third study with mentors, it was of importance that their answers could not be connected to them or any particular specific practice school. The reason for this was the concern if they expressed any critical remarks concerning paired practicum which could inflict negative publicity on their specific practice schools as well as their employers. Similar considerations were taken with regards to the teacher educators in study four, where unfavorable answers regarding WI teacher education could be in conflict with the intentions of their employers.

When it comes to informed consent, all respondents were given informed consent forms, with information concerning the study as well as contact information via e-mail or personally prior to the interview. The consent form clearly stated that their answers were anonymous, that their participation was voluntary, and that they could withdraw from the study at any time, should this be their wish.

Regarding the invasion of privacy, this is closely linked to the informed consent, as respondents were informed what their participation in the studies would entail, and therefore they have acknowledged that their right to privacy would be waived within this limited domain. Even though no questions asked in the studies were of private character, the respondents still answered from their personal perspective, hence the issue of invasion of privacy is closely linked to anonymity and confidentiality which is also clarified in the informed consent.

Lastly, regarding the ethical principle of deception, this was not involved, as the aim of the studies were presented in the information form and the representation of the work was nothing other than this. Therefore, the ethical guidelines were followed in accordance with the Swedish Research Council (2021) and Bryman (2012). However, ethics within research moves beyond guidelines and checklists, which is particularly appropriate when it comes to research within social sciences, and therein qualitative research such as interviews that have been the method used in three of the studies. Issues of ethics and research quality are closely connected as qualitative research can generate tensions between the wish to attain knowledge and ethical apprehensions. The researcher has an aspiration for the interview to be as deep as possible, with the risk of intruding on the interviewee, but also an aspiration to be as considerate as possible, thus running the risk of obtaining empirical material that merely scratches the surface (Brinkman & Kvale, 2015). This ethical issue I have constantly been negotiating, as well as the ethical issue of power asymmetry which is entailed in qualitative research interviews. These conversations are not ordinary ongoing

dialogues between partners in equal positions, they are rather a one-way dialogue where the researcher determines what questions are to be asked and when the conversation is to be terminated (Brinkman & Kvale, 2015). However, I have listened to and transcribed oral testimony and have not interpreted different meanings where ‘the interpreter goes beyond what is directly said to work out structures and relations not immediately apparent in a text’ (p.235). Thus, of course the aspect of asymmetry can affect how the respondents have answered questions. With consideration to these facts, that the interpretations are subjective (except for study 3 where two researchers were reading the transcripts), transparency has been a major objective.

Regarding collection and storage of data, it is the researcher that is responsible for managing the collected data in a manner that secures protection of the personal data of the participants as well as recorded material. Researchers should be explicit regarding why data is collected and how it is to be used, as not to waste time for the respondents, and also obtain consent from those taking part in the study (SFS 2018:218). Regarding the studies, all material has been treated confidentially and collected material has been used for the agreed purpose. Personal data has been handled with respect to GDPR (Codex, 2021), which means that such data has not be used, other than names, which has been fingerprinted when presenting results, so that it is not possible to identify which individuals participated in the study.

All those involved in the studies have been assured that no unauthorised persons will have access to the material collected and that it will be treated confidentially. This means that audio recordings of interviews and de-identified transcripts have been stored and presented in such a way that informants will not be identifiable by outsiders. All data material printed on paper has been stored in lockable cabinets at Mälardalen University and the digital material has been protected in my own work computer that require personal login.

## 6.8 Methodological reflections

In this subsection, I present further methodological reflections both regarding data collection as well as the interpretation of results. It has been noted on several occasions in this thesis that qualitative research is complex, and therefore I have tried to be reflective about my methods, values, biases and social context. I have also tried to be reflective on avoiding being a researcher, acting as someone who simply ‘extracts’ knowledge and ‘transmits’ it to readers. Instead, my ambition has been to be transparent regarding the construction of knowledge through my perspectives. However, study III and study IV display a

difference from study II regarding the questions that were asked during the interviews (see appendix). This arose from a process of progression throughout the studies regarding my experience as an interviewer. Mastering the craft of research interviewing is attained by practicing interviewing, and the skills and personal judgements necessary for conducting high quality interviews require training (Brinkmann & Kvale, 2015).

In the first study, the empirical material consists of government policy documents and local policy documents, that is what Van der Akker (2010) categorizes as 'Makro material' and 'Meso material'. However, during coding and analysis of data, my initial idea of focusing on 'the wanted teacher' shifted to what opportunities student teachers were given for learning within practice and Saugstad's (2002; 2005) categories of knowledge were chosen as a theoretical perspective, as possible ways of perceiving knowledge, and the data was reanalyzed.

In the second study, qualitative analyses were conducted through semi-structured interviews with 12 pre-school student teachers. Here the selection of interviewees was limited to respondents having conducted paired practicum. As the data to begin with was collected without a given theoretical perspective, some questions were focused on, how student teachers perceived that paired practicum should be organized or their perceptions of assessment. With further experience as a researcher, questions would rather have been posed as a wider discussion of paired practicum as such. However, the data gave sufficient answers as to what opportunities for learning student teachers were given in paired practicum and was therefore made of use with the further application of Saugstad's (2002; 2005) categories of knowledge.

In the third study, qualitative analyses were implemented in interviews with five respondents. The number of respondents is limited as they were chosen due to their experience of paired practicum. Additional respondents could possibly have been included, thus time-consuming as well as organizational considerations were a factor as this would involve other municipalities. However, as previously mentioned, saturation was attained as the material was so rich that it was fully possible to make in-depth interpretations of the interviews. Both study II and III concern the manifestation of paired practicum within specific practice schools, however study II concerns student teachers in pre-school settings whereas study III concerns mentors in settings within upper secondary school. These are two different settings when it comes to organization, where student teachers in paired practicum within the pre-schools implemented practice together in the same group of children during the day, whereas student teachers in upper secondary school implemented paired practicum in specific practice schools according to a schedule within their subject in different classes. These differences

are visualized in the results where the student teachers in preschools acknowledged a battle for time to be the student teacher in charge of the group, whereas mentors in upper secondary school struggled to provide hours in the specific subject for both of the student teachers. Time is a joint factor, however the different organization of pre-schools and upper secondary school can naturally be a cause of the different results.

Also in study four, the empirical data consisted of interviews with a smaller number of respondents. Six teacher educators took part in the study, and as in study two and three, limitations were a factor, as the respondents needed to have experience of student teachers in ordinary, as well as WI-teacher education programmes. However, saturation was perceived as attained. As, Guest, Bunce, and Johnson (2006, p. 1409) describe, general principles such as ‘no new data, no new themes, no new coding, and ability to replicate the study’ are required to claim data saturation. These levels of saturation were reached in this study.

The asymmetric power relations must be taken into consideration here also (Brinkmann & Kvale, 2015), however it must also be taken into consideration that the respondents are subject to expressing perceptions of the organization of their own workplace which can have an effect on their answers. Further, regarding the analysis of data, a general objection to analyses of interviews is often expressed as follows: ‘Different interpreters find different meanings in the same interview; the interview is thus not a scientific method’ (Brinkmann & Kvale, 2015, p. 239). And yes, different interpretations do occur, however undoubtedly less often than is generally assumed. Furthermore, this objection involves a request for objectivity and a statement that the objective is to locate this one and only true meaning. Opposed to this requirement, hermeneutical and postmodern traditions acknowledge a justifiable number of interpretations (Brinkmann & Kvale, 2015).

## 7. Summary of studies I–IV

In this thesis, I have analyzed ideas in policy on learning in practice. I have also studied the consequences of two manifestations of ‘the practice turn’; paired practicum within specific practice schools (övningssskolor) and WI-teacher education (arbetsintegrerad lärarutbildning). That is, I have analyzed some of the implications that are involved when restructuring teacher education in line with the ‘practice turn’. The focus has been on consequences regarding opportunities for learning the profession of teaching, where some of them can be interpreted as wanted and/or expected and some unwanted and/or unexpected. Below are the major results, where the research questions are answered.

In this chapter, Studies I–IV are summarized and furthermore contextualized in relation to each other. A joint discussion and conclusion of the results follow in chapter 8 and chapter 9. I had sole responsibility for the design and planning of studies I, II and IV, as well as responsibility for the empirical collection, analysis of data and arrangement of the manuscripts. In study III, I had sole responsibility for the empirical field work and had major responsibility for the parts of previous research, context and results, besides coauthoring with the other authors.

### 7.1 Study I. Learning to Teach as a Spectator or a Participant – Ideas of Vocational Learning in Policy on Teacher Education.

This first study investigates signs of a practice turn in national policies through two teacher education reforms, one in 2001 and one in 2011, and how these are addressed in local policies. Focus is on how these reforms characterize and to some degree produce ideas of opportunities for learning the teaching profession in relation to the explicit context of practice and that the context relates to theoretical and practical knowledge. Also, focus is on what happens in the process when ideas of learning the profession in national policy is transformed into a local policy content.

The research questions posed are:

1. How are ideas on vocational learning in school-based education described in national policy?
2. Do the above ideas change over time and if so, how?
3. How are these ideas configured at a local institution of teacher education?

Since my first ambition was to study how teacher knowledge was expressed within new forms of teacher education, the first analysis of data regarded expressions concerning ‘the wanted teacher’. However, coding of initial data made me refocus on what opportunities that student teachers are given for learning within practice. Hence, the below theoretical perspective of knowledge was later applied as a tool of analysis. The analysis of the material is abductive. To begin with, the reading concerns the above documents and is focused on the specific parts where school-based-education is described in the texts. After that, an Aristotelian perspective of knowledge is used and more specifically Saugstad’s (2002) two concepts of spectator perspective and participant perspective are seen as epistemological positions where learning through a participant perspective is positioned in the very midst of practice whereas learning through a spectator perspective is positioned peripherally and characterized by theoretical reflections. By introducing the notion of spectator knowledge and participatory knowledge, two different versions of students’ opportunities for learning emerge in policy. The analysis of the documents points towards a tension between theory and practice. The results also show, that through the course of the two teacher education reforms, practice is given a higher value. This through, to begin with, the alteration of ‘partner schools’ to ‘field schools’ where ‘field schools’ now are to apply to be accepted as practice schools and only the most appropriate schools are selected. Additional value is further given to practice with the implementation of ‘specific practice schools’, that also are to apply to be accepted as practice schools. This as acceptance is now based on the requirement of at least six qualified mentors and the possibilities of accepting several students that conduct practice at the same time.

Regarding how ideas on learning a profession in school-based education are described in national policy and configured at a local institution, the results show that there is an ongoing balancing act between giving support for learning from a spectator perspective and a participant perspective and the two latest Swedish teacher education reforms deal with this see-saw in slightly different ways. When national policy is operationalized on a local level, the tension between theory and practice becomes more explicit. Emphasis has gone from obtaining

experience from different supervisors and being connected to teacher teams (SOU 1999:63), which indicates opportunities for learning from a spectator perspective – to student teachers being placed at the same specific practice school throughout their education under the guidance of the qualified supervisors (SOU 2008:109), thus indicating opportunities for learning from a participant perspective. Teacher education has earlier gone from a strong, vocational education to a more theoretical education (Agevall & Olofsson, 2014), but now results from the study indicate that it is tipping in the other direction. This is especially evident from 2014 where school-based education is given higher value through the introduction of specific practice schools with a requirement of qualified mentors (Promemoria, U2013/4305/S). Regarding how ideas on vocational learning are configured at a local institution, findings shows that when it comes to counterweighing opportunities for learning from a participant perspective with providing for opportunities of learning through a spectator perspective, organizational issues arise. Policy documents express ideas of specific practice schools, that student teachers should return to throughout their teacher education. At the same time, they should be provided with the opportunity to gain experience from learning situations with other prerequisites. This can create organizational issues as there are a limited number of specific practice schools for student teachers to acquire other teacher experiences from. Furthermore, specific practice schools are required to provide qualified mentors as well as receive several students implementing practice at the same time, which local policy interprets as organizing paired practicum. Therefore, opportunities for learning from a participant perspective (by returning to the same specific practice school), are counterweighed by providing opportunities for learning from a spectator perspective (by organizing paired practicum).

## 7.2 Study II. Learning as Peers in Practice – an Obstacle or Support for Student Teachers’ Vocational Learning?

As the first study shows an increased value of practice within teacher education through the introduction of specific practice schools, it was of interest to study this manifestation of the practice turn regarding the organization of paired practicum therein. The reason for this is that the first study implies that local policy tries to balance alterations in national policy. In national policy it is stated: ‘By having a high concentration of students and supervisors, possibilities should arise for an exchange of experiences between supervisor and student but also mutually between students and between supervisors’ (Swedish Ministry of



Education, 2014 p. 7). This policy statement has been one of the drives for the initiation of paired practicum in work-based teacher education. By restructuring the specific element of practice within teacher education, insertion of an organizational model such as paired practicum, encompasses ideas of what opportunities for learning that students are provided within this specific element of their education. Or as Lampert (2010) expresses it; ‘by constructing education in a certain manner indicates how students should learn the profession of teaching’ (p. 27).

In order for apprentices, in this case student teachers, to obtain knowledge and expertise, they are required to move towards complete participation in the sociocultural praxis. However, apprenticeship within education is not merely a fact of learning by doing, as learning in itself has a characterization of ‘situatedness’ (Lave & Wenger, 1991, p.31), and student teachers in practice, are located in a distant position, as they still are kept from participating more fully in the work of the school (Lave & Wenger, 1991). The introduction of specific practice schools was an attempt to make workshop of policy, with the result that closer cooperation was established with a fewer number of schools (Swedish Ministry of Education, 2014). These fewer schools received several students at the same time who therefore conducted paired practicum. As a follow-up from the first study, the focus of this study is to present an understanding of what this restructuring of practice entails. The aim of the study is to explore how pre-school student teachers within initial teacher education perceive their opportunities for learning within paired practicum where the ambition of placing students in groups of two to six is one of the arrangements used.

The research questions posed are:

1. How do Initial Teacher Education students perceive their vocational learning within paired practicum?
2. How does taking part in practicum as peers affect their vocational learning?

In the article, examples are given of how paired practicum is becoming an important factor in many organizations of teacher education around the world and is being used in various contexts. However, the article also problematizes the need for thought to be given to what should take place within paired practicum and how it should be organized. Qualitative data was gathered through individual semi-structured interviews with 12 pre-school student teachers concerning their perceptions of peer learning when implementing practice together. To begin with, data was analyzed regarding significant features concerning peer learning. Thereafter, a reanalysis was implemented from a more abductive approach as themes grounded on theory of learning through a spectator

perspective or a participatory perspective were drawn upon as a level of focus within the data. Results show that learning in paired practicum seems to emphasize opportunities for learning from a spectator perspective, by giving opportunities for a more distanced reflection together with peer students. This also entails that less time is made available for one-on-one time for the individual student with his/her supervisor, which reduces the opportunities for learning from a participant perspective. Through the organization of paired practicum, student teachers in practice are positioned in an even more distant 'situatedness' (Lave & Wenger, 2003, p.31), where they are even further from moving towards complete participation in the sociocultural praxis. Thus, the organization of paired practicum is perceived as non-authentic. An exception, where learning with peers is perceived as authentic is when it comes to acquiring experience to work in teacher teams and to enhance communication skills. This is perceived as an essential skill applicable to authentic pre-school teacher work. Furthermore, additional possibilities are provided to talk and reflect with each other, especially when the supervisor does not have the time.

Also, student teachers in pre-school perceive that interaction between student teachers and the supervisor become less hierarchical, as when the students conduct paired practicum they are able to attain a different level of authority and are less prone to uncritically adapt to the professional skills of the supervisor. Being in a situation with two students and one supervisor makes the students feel less vulnerable and they find support in each other, not only in discussions with their supervisor, but they also obtain the opportunity to discuss issues with each other prior to the group discussions. However, when it comes to the assessment of educational targets, student teachers in paired practicum express apprehension regarding the competitive situation that arises as time is restricted for them to show their practical knowledge, as well as their spoken knowledge in discussions. They are provided with the prerequisites to enhance their opportunities for reflective discussions and therefore become more prepared, however, in situations together with their supervisor, students perceive that they are compared to each other, or are put in the position where they feel the need to assert themselves to be prominent or be retiring to enable the other student to come forward. Thus, in order for paired practicum to be productive, it is perceived important that students who learn together have come equally far in their learning process. Otherwise, students who have come further tend to be the ones who assert themselves and are able to show their abilities whereas others are more retiring.

### 7.3 Study III. Learning to teach as a two-sided endeavor: mentors' perceptions of paired practicum in initial teacher education.

The third study addresses the same manifestation of the practice turn in teacher education as in the second article, paired practicum within specific practice schools, where several students are placed at the same school when conducting practice (Swedish Ministry of Education, 2014). As the second study, regarding student teachers' perceptions of paired practicum, shows that opportunities for learning are foremost provided from a spectator perspective, it was of interest to conduct a subsequent study regarding mentors' perception of this way of organizing practice. As a follow-up from the second study, the focus of this study was to present a nuanced understanding from 'the other side' and within another organization – that is how mentors in upper secondary schools perceive their role when supervising students in paired practicum.

The research questions posed are:

1. What potentials and pitfalls do mentors perceive of the paired practicum model?
2. How is this model perceived by mentors to affect the students' opportunities to learn?
3. How do mentors navigate to take advantage of the potential in what the model offers and get access to what is excluded?

Maintaining the inspiration of Saugstad's (2002; 2005) concepts of knowledge of participant knowledge and spectator knowledge, these are made of use to conceptualize how paired practicum affects students' opportunities to learn within the two different processes of obtaining knowledge. Bridging the theory-practice gap within teacher education is seen as fruitful in order to enhance vocational learning. However, Saugstad is an exception, asserting that actors within educational settings need to address the dissimilarities in order to handle them in a constructive way. Saugstad instead stresses the 'minding of the gap', which will have the potential to enhance quality in student learning within all professional education domains.

Qualitative data was gathered through semi-structured individual interviews with five qualified mentors. The process used to code and synthesize the data was abductive, that is a back and forth process between research data and contemplations of theory (Rinehart & Carlson, 2021). The study frames the problem by challenging research outlined by social constructivist paradigms, especially with references to the

Vygotskian notion of ZPD (zone of proximal development), however, where they rather seem to downplay the role of the mentor and instead refer to students thriving by contributing to the progress of each other's learning.

The pros and cons of the model of paired practicum were analyzed with a theoretical point of departure in Saugstad's (2002; 2005) notion of the incommensurability of theoretical knowledge and practical knowledge and reveals that, according to the mentors, paired practicum facilitates potential for learning predominantly a distanced and propositional spectator knowledge while the learning of a contextual, practical knowledge seems to be hindered. Mentors perceive a struggle to organize opportunities for each student to stand in the midst of practice in teaching situations, as they have a limited number of scheduled lessons. This means that they sometimes need to hand over the responsibility of mentoring to colleagues in order to provide lessons to teach for students. Other constraints perceived by mentors is the lack of proper situations for reflection, rather these took place briefly between lessons and therefore did not become detailed regarding student reactions etcetera, as wanted. Instead, mentors saw it as an advantage if the student pair took their own initiative to pursue didactical and other reflective discussions on their own.

A significant change in the role of the mentor is how paired practicum converts *mentoring* of one student, where they guide from a peripheral to a central position into a community of practice – to *instruction* of two students, where they struggle to provide both students with a central position. Also, differences in student participation and motivation become more noteworthy and pedagogically relevant in paired practicum. Difficulties are perceived in handling this divergent student motivation/capacity, and perceptions that paired practicum tends to place students in different 'roles' due to these factors or due to differences in personality. Thus, according to the findings, these are in opposition to previous research on paired practicum where student learning is often framed within social constructivist perspectives (cf. Guiterrez, 2016; King, 2006), where students construct knowledge together in a social context.

Research framed with reference to the Vygotskian notion of the zone of proximal development (ZPD) seems to restrain the role of the mentor or take it for granted. From a participant perspective, ZPD as a method becomes problematic, as according to the mentors, paired practicum means that they have to leave important matters to the students to handle themselves. Thus, they cannot supervise potential opportunities for learning, which diminishes ZPD as a method. In order to make use of ZPD, students need to be under mentor guidance or be matched appropriately to be able to generate dynamic learning relations. Thus, results

show that there is a divergence between the pedagogical intentions of paired practicum and concrete possibilities for realizing these in practice. Paired practicum seems to blur the borders between learning to teach from a participant or spectator perspective, but mostly it seems to favor learning to teach from a spectator position while a participant position becomes less accessible. Mentors seem to be put in a directorial position where they take a step back and leave students to discuss and reflect among themselves at the same time as they struggle to organize opportunities for both students to ‘step forward’. Thus, results show that to be able to facilitate for a productive paired practicum, reflections need to be processed regarding these changes in learning opportunities due to new structural factors.

#### 7.4 Study IV. ‘It almost feels like they want manuals’ – University Teachers’ Perceptions of Students Learning in a Work-Integrated Teacher education.

The fourth study concerns one type of WI-teacher education in Sweden, where students are employed as teachers half time at the same time as they conduct their studies at university. In my previous studies, it is indicated that the reorganization of teacher education regarding specific practice schools, entails implications for student teachers’ opportunities for learning, according to students and mentors. Thus, it was of interest to target this study towards another manifestation of the practice turn, a WI-teacher programme, where student teachers are employed and work three days a week and conduct campus studies two days a week. The study concerns how teacher educators perceive students’ opportunities for learning when student teachers move between the two contexts of work and university. An ongoing discussion in higher education concerns how students can be assisted in constructing successful transitions between university and work. This discussion has its foundation in the awareness of differences between the two contexts, especially in view of the gap between university studies and work requirements (Biemans et al., 2004; Finch et al., 2007).

Inspired by Akkerman and Bakker (2011), I make use of the concept of boundary crossing and the four identified learning potentials *identification*, *coordination*, *reflection* and *transformation* to conceptualize what WI students’ boundary crossing entails regarding their learning at university. A boundary crossing perspective opens up for a precise understanding of what new contextual relationships are required, as it is targeted at evaluating opportunities for learning where it is essential that different institutions cooperate (Akkerman & Bruining, 2016). This is

especially essential within professional education where apprenticeships are acknowledged as valued paths for inaugurating successful transitions between university and workplaces. However, apprenticeships are most often situated at the workplace without paying attention to what students learn at university (Akkerman & Bakker, 2011).

The research questions posed are:

1. What are teacher educators' perceptions of how WI-students' opportunities for learning at university is affected by being employed as teachers and simultaneously taking courses at the university?
2. How do teacher educators identify and negotiate the boundaries that WI-students meet between the two contexts of work and university?
3. What are teacher educators' perceptions of how they model WI-students' professional learning at university?

Qualitative data was gathered through semi-structured individual interviews with teacher educators. The analysis process was abductive and conducted with the aim, questions and theoretical framework of the study as a foundation. Results show that teacher educators perceive that WI-students have a different approach to their learning at university than ordinary teacher education programme students. The study acknowledges that all learning across separate contexts involves boundaries. However, boundaries need not only be obstacles for learning, they can also be resources for continuity (Akkerman & Bakker, 2011). This way of organizing TE is perceived as a double-edged sword, it offers additional opportunities for learning at university, as students boundary crossing provides a ground for further studies. Teacher educators perceive that some WI-students are able to coordinate and participate in both contexts which enhances their understanding of how theories can be put into practice. It also facilitates for teacher educators to illustrate such points of contact between the contexts. However, WI-student teachers that are employed at schools three days a week the same time as they are expected to be ordinary students, also generates a problematic situation. When these students become central participants in one community – their workplaces, it involves implications in the other community- the university. Some WI students tend to remain in their roles as teachers even when at university and thereby they take on a different hierarchical position from that of ordinary TE programme students. According to the teacher educators, they tend to identify themselves as teachers and de-identify themselves as students.

Teacher educators perceive that some WI-student teachers identify a need to make use of their time at university and require 'something else'

from their academic studies. WI-student teachers tend to demand academic studies that help them solve problems they will face in their ongoing occupation which has an impact on course content as teacher educators are struggling to meet their needs. Also, teacher educators have extensive experience of working as teachers in schools themselves which means that they can identify with the school as a workplace and seem to establish a kind of co-existence with the students and try to meet their needs. These practitioners are by Loughran (2014) described as expert-practitioners, a teacher educator who is valued by student teachers and commonly perceives them as more credible than teacher educators who lack recent school experience (Smith, 2005). These respected teacher educators can offer informed and practical solutions. However, they can also be expected by students to thus not over-endow them with theoretical knowledge (Manton et al., 2021). Teacher educators perceive that they have difficulties in implementing the same education content and they are grappling with issues such as how far they can proceed in their attempts to help WI-student teachers without completely restructuring planned university courses. Therefore, teacher educators are facing a balancing act between meeting the students' needs and upholding ordinary course content and aims.

## 8. Discussion

The starting point in this study regarded the puzzle of how student teachers are provided different opportunities to learn the profession by occupying the different positions as participants and spectators of teachers' work and moving between the two contexts of university and schools. Furthermost, it regarded how the relationships between these opportunities are affected by a reorganization of teacher education where practical parts are given more space and higher value. This regarding what is made possible or hindered and if anticipated opportunities are promoted, or if unexpected or even undesirable consequences arise. Such consequences are going to be discussed in the present chapter. This in line with the fourth research question: what implications are involved for student teachers' opportunities for learning when restructuring the school-based elements of teacher education? Finally, I will reflect upon the implications that the study brings to further research in the area.

### 8.1 Consequences of the organization of paired practicum at specific practice schools

In the first three studies, the theoretical point of departure is taken in Saugstad's (2002; 2005) concepts of acquiring knowledge through a participant perspective or a spectator perspective and the irreconcilability of the two. The aim is to explore how policy expresses in what way student teachers are to be provided opportunities for learning and also what prerequisites student teachers and mentors are offered in paired practicum. National policy has a vision of student teachers being provided with opportunities for learning through a participant perspective by giving opportunities for the students return to the same specific practice school. However, on a local level, when the policies of placing several students at the same school are interpreted and organized into paired practicum, the opportunities for learning through a participant perspective seem to be reduced or restricted.

When it comes to study II and III, and the focus on paired practicum, it is important to take into consideration that the prerequisites and



contexts differ in the studies. While paired practicum in preschools tends to lie closer to authentic preschool-practice since teachers in preschools often work together with the same group of children for a longer period of time, paired practicum in upper secondary school is more challenging, this due to the fact that mentors move between several different groups of pupils during the day. However, many similar results are seen in both of the studies. The student teachers are, by conducting practice in paired practicum, provided more opportunities for learning through a spectator perspective, and are thus provided less opportunities for learning through a participant perspective.

Results from the studies indicate that student teachers in preschool settings as well as in upper secondary school settings tend to be placed in peripheral positions that entail non-authentic situations. This, mostly due to time constraints that hinder students to take full advantage of being in the midst of teaching practice before entering the profession. However, the students in study II also expressed a value of opportunities for reflective discussions, thus being offered opportunities for learning through a spectator perspective. This can be due to the fact that it is common for preschool teachers to work together in a group of children, which opens up several possibilities to engage in common reflections. This is in accordance with other studies that show upon that it is of value for pre-school students to enhance their abilities to engage in reflective discussions (Öqvist & Cervantes, 2018; Hildén, Löfdahl Hultman & Ribaeus, 2021). Still, despite the value that the students expressed regarding reflective discussions, they also expressed a need for opportunities for learning in the midst of practice, alone with their mentor and a group of children.

Findings indicate that the intention in policy of ‘By having a high concentration of students and mentors, possibilities should arise for an exchange of experiences between mentor and student but also mutually between students and between mentors’ (Swedish Ministry of Education, 2014, p. 7), indeed provides opportunities for an exchange of experiences between students through the organization of paired practicum. However, when it comes to possibilities for an exchange of experiences between mentor and student, these opportunities tend to be reduced by the organization of paired practicum. This as findings show that less time is provided for the individual student with their mentor and that mentors struggle to facilitate opportunities for students to learn through a participatory perspective. Thus, paired practicum leads to unexpected and maybe undesirable implications regarding student teachers’ opportunities for learning.

Additionally, student teachers that implement paired practicum within pre-schools express apprehension regarding a competitive situation that arises when it comes to assessment. This is because time is

limited for the individual student to show their practical knowledge when this time is shared with a peer student. Also, students perceive that they are compared to each other and are put in the position of having to step one step forward or one step back depending on personalities or student motivation and what role they take. This dilemma is shared by mentors who perceive that they are put in a position of a director in order to facilitate for both students to be provided time 'in charge of the group'. Thus, the results indicate unexpected and perhaps unwanted consequences dealing with the occurrence of shifts in position for both students and mentors in paired practicum regarding their roles, in comparison to single-placed practicum.

The study also shows that when it comes to reflective discussions together with the mentor, there are hierarchal differences when being in paired practicum. The students in paired practicum are in a situation of two students – one mentor when in discussions, where they perceive to find support in each other and are strengthened in their ability to address issues. Therefore, the consequence is that the hierarchal situation of being a single-placed student with a mentor, where students refrain from questioning goals and values that guide the work, is reduced. This is in line with Hawkey (1995), who shows that students who conduct practice in pairs contribute more support than development to each other. The results are in accordance, as opportunities for learning in a spectator perspective provide support from a peer. Yet, for development to take place regarding learning as a social phenomenon, such as with reference to the Vygotskian notion of the zone of proximal development (ZDP), this becomes problematic as it demands mentor monitoring and leadership, or that the students are matched more accurately to provide for dynamic learning relations.

## 8.2 Consequences of the organization of WI-teacher education.

Whereas paired practicum, as a manifestation of the practice turn, entails certain specific implications for the organization of practice within TE, others arise in the other manifestation, work integrated teacher education. In study IV, where students are employed at the same time as they study, an additional theoretical perspective was of need. This in order to illuminate opportunities that students have for learning between the contexts of university and practice rather than within the context of practice. Therefore, Akkerman and Bakker's (2011) concepts of boundary crossing was made of use to conceptualize what WI students' movements between the contexts of university and workplaces entails for

their opportunities for learning at university. According to this perspective, vocational learning and teaching should be perceived as a dialogical procedure of a crossing of boundaries between different socio-cultural customs.

Results in the study show that this way of organizing teacher education gives potential for coordination processes to be established between the context of university and workplaces. However, university teachers perceive that WI-students can be divided into two groups based on how they identify with the different contexts and how they manage to coordinate the two. The difference seems to depend on whether students see upon themselves as teachers already or if they are able to establish a mindset of 'not a teacher yet'. The latter students are perceived to be able to take a step further than identification with one particular context and are capable of perspective taking, i.e., 'to look through the eyes of others to their own practices' (Bakker & Akkerman, 2017, p. 7). The teacher educators perceive that these WI-students are able to be more reflective in their discussions than ordinary teacher education programme students as they can relate to their work situations when attending campus studies. This can be explained with Beach's (1999) mediational transitions where students are repositioning in the construction of a new activity at university. Hence, for these students expected consequences seems to occur. However, teacher educators perceive that some of the WI-students are affected negatively by their employments as teachers, which seems to put them in a more non-reflective position when implementing campus studies. This could be due to that at their workplaces they are perceived as competent to work as teachers already. Studies show that student teachers are mostly left to make sense of the everyday business on their own with insignificant direction or correlation to university courses. Rather, it is taken for granted that effective teaching practices are caught sooner than taught (Darling-Hammond, 2009; Valencia et al., 2009). Being in such an exposed and vulnerable position can explain why some students seems to perceive campus courses as a help to cope with a demanding workday.

Also, Saugstad (2002; 2005) discusses two different ways of acquiring knowledge, through a participant perspective or through a spectator perspective and that these two contexts of knowledge are learnt in different ways. However, teacher educators perceive that some WI-students experience themselves as complete teachers and seem to take upon such a strong identification with their teacher role that the theoretical parts at campus seem unnecessary, which means that they tend to make use of opportunities for learning through a participant perspective but not of opportunities for learning through a spectator perspective. Thus, findings in the study show unexpected and undesirable consequences. The governmental assertion that WI-teacher education is 'a

good example of how theory and practice can be combined and by this prepare students well for their coming work in school and in the classroom' (Swedish Government, 2020), is accordingly not fulfilled.

The WI-students strong identification with their teacher role can further be explained by Grimen (2008) who claims that the most dominant model of understanding the relationship between theoretical and practical knowledge concerns practical knowledge as the application of theory. Theoretical knowledge then becomes primary. A problem with this model is that there most probably are large areas of practical knowledge that do not have a theoretical basis. Not everything we can do can be explained theoretically. An additional problem is that practice can hardly be understood solely as directed translated theory. In the process of application, theoretical knowledge is interpreted in specific ways. The practitioner must also choose which elements that are the most appropriate for the situation. Practice therefore has its own logic due to the fact that in every situation, one must explicitly and implicitly make a number of decisions that are in a more or less arbitrary relationship to the theoretical knowledge base on which one acts (Grimen, 2008).

### 8.3 Implications for future research

The study has had the ambition to contribute theoretically to the research field by making use of Saugstad's (2002; 2005) theoretical reasoning on knowledge forms to visualize how organizational structures of practice within teacher education have implications for the opportunities students are given to learn within this context. The attempt has showed some possibilities, but more studies are needed to both develop and challenge the theoretical framework. It can, for example, be brought into question if Saugstad's notions of knowledge only can apply to rather idealistic circumstances which are difficult to generate when paired practicum meets the realities of school and the situations for the students as well as the mentors. Saugstad's concepts of knowledge could be augmented with Schön's (1983) concept of reflection, where it becomes visible in the results that students are provided with situations of reflection-on-action, however together with peers where they can analyze together after teaching situations.

The results also point to interesting points of departure for further research. Firstly, I would like to call on further studies of the phenomena of shifting of positions for students as well as mentors in paired practicum, in comparison to single student placements. Students in paired practicum seem to remain in a peripheral position whereas mentors tend to be put in the position of organizing for both students to have access to teaching situations. Secondly, more research is needed

that connect student teachers' opportunities for learning to their future work situation. Students in for example preschool tend to benefit more from peer learning than students in upper secondary school, probably due to that this way of organizing opportunities for learning suit this way of working within the profession. Thirdly, more critical studies are needed on WI-programmes of teacher education. Findings in the present study show that learning the profession in practice and moving between different contexts does not necessarily strengthen the relation between practice and theory. Rather it seems to overemphasize the importance of practice and reduce the importance of theoretical studies, which tends to diminish students' possibilities of critically reflecting upon their capabilities on a broader perspective. These findings are in accordance with earlier research, such as Joram (2007), who determines that there is a noticeable epistemological ambiguity between what is considered legitimate knowledge by schools and within teacher education and how that knowledge can be acquired, or Hatch and Grossman (2009) who show upon that university teachers have minor control over what learning student teachers have access to in practice.

Methodically, a way forward for future research could be to implement observation studies of students in paired practicum to further investigate how the structure of practice provides to the professional development of future teachers. Another productive research initiative could be to follow students who have implemented paired practicum into their first independent teaching assignment as to relate their perceptions of their given prerequisites to handle this new situation. Further, one potential point of departure could be to interview student teachers in WI-teacher education moving between the two contexts of university and their workplaces as to learn more about their perceptions of opportunities for learning within this 'third space'.

## 9. Conclusion

Within the thesis, different movements have appeared as topics of interest. To begin with, the concrete contextual movement between campus and practice or workplaces, secondly, the conceptual movements between different forms of knowledge, and thirdly, the movement within the progression of the study where thoughts were evolved regarding the relationship between knowledge forms, both in terms of contextual movements and conceptual movements. In the conclusive part of this study I will however pay attention to a fourth movement, the shifting of positions for students, teachers and mentors taking part in the reorganization of teacher education, a movement that was expressed in the analysis of data and appeared as the core finding in relation to the research puzzle of the study. Finally, I will reflect upon the implications that the study brings to practice.

With the introduction of specific practice schools in Swedish teacher education (Swedish Ministry of Education, 2014), the importance of student teachers returning to the same specific practice school throughout their teacher education, was specifically emphasized. However, this has led to the organization of paired practicum which entails consequences for the students of staying a prolonged time in the position as beginners where they partake as peripheral practitioners during their practicum (e.g. Lave & Wenger, 2003). Their peripheral position seems to thereby reduce the potential of learning practical teaching, which is in accordance with other studies (e.g. Fuller et al, 2005; Cuddapahl & Clayton, 2011), that newcomers, or beginners are hindered from obtaining full knowledge and expertise. This is problematic, as to be able to proceed towards complete participation in the sociocultural praxis of the community, this is required. The initiative in policy regarding specific practice schools thus displays practical and organizational solutions that can give unexpected or even unwanted consequences for student teachers' opportunities to learn, such as a shifting of positions for students, from a participant position to a peripheral position when in paired practicum.

A shift in positions is also seen for the mentors in paired practicum, where they instead of being positioned in the role of a supportive and collegial mentor, are put in the position of an instructor/constructor in

their search to facilitate opportunities for student teachers to learn the profession. The shifting in positions continuously, is a consequence that is further seen in results regarding the study of the other manifestation of ‘the practice turn’ – work-integrated learning. Through this way of restructuring education, teacher educators perceive that some students shift to the most central position of teachers, from the very beginning, which has consequences for their opportunities for learning as students. Furthermore, they are situated in this position without the possibility of getting there gradually, from a peripheral position and with the guidance from a mentor.

When WI-students shift positions, not only from students to teachers, but also to actually identifying themselves as teachers, teacher educators perceive that some of them demand something else from university studies. In this context, they are moving as ‘brokers’ across two contexts on a regular basis and are trying to coordinate in order to benefit from both. This leads to teacher educators also shifting positions, as they, in a transformation process, where they identify the mutual problem and outline new ideas, are redoing and reevaluating how far they can move towards meeting WI-student teachers’ acute needs. Theory is disputed and teacher educators are challenged in their role of expertise, where they need to leave the academic jargon and have difficulties in motivating pedagogy and didactics that require reflection. Thus, teacher educators find themselves in a balancing act between meeting course objectives on a scientific basis and meeting WI-students’ needs. Therefore, it seems to be that a hidden curriculum is created between the contexts of practice and university studies that needs to be attended to.

Consistently in this thesis, the above results show that structural changes regarding practice within teacher education require changes that need to be implemented on an organizational level at university as well as at the connected specific practice schools, or workplaces where WI-student teachers are employed. The results point to a number of issues that need to be deliberated on in order to provide for opportunities for student teachers’ productive learning. On an individual level, students as well as mentors need to be provided contextual conditions from the university as well as together with fellow students or mentors prior to practice. This so that they can reflect upon and organize according to changes in learning opportunities in paired practicum and WI-teacher education. That is, further thought needs to be given regarding organizational structures, as to provide guidance on how to benefit from the different opportunities for learning. Also, thought needs to be given to whether opportunities for learning through a spectator perspective through the organization of paired practicum, should be emphasized in certain periods of practice whereas opportunities for learning through a participant perspective as a single-placed student should be provided

for in other periods. Thereby, students would be given the opportunities to shift their positions from peripheral to central during the periods of practice and still be given prerequisites to attain the different types of knowledge (Haggard & MacIntyre, 2006). The analysis of the thesis are in line with studies concerning the importance of universities' development of approaches, which draw them closer to schools and work more attentively with mentors. Furthermore, they are in line with Sorensen (2014) and Nokes et al., (2008) who show that it is important for mentors to understand their role. Further, thought is needed regarding if it is prosperous to organize practice in the same way in all teacher education programmes. This as the work as, for example, a pre-school teacher differs from the work as teacher in compulsory school level or upper secondary school level and therefore appropriate prerequisites should be provided depending on what programme student teachers are attending. This is in accordance with Zeichner (2006, p. 334), who advocates that practicum needs to be 'as carefully planned as any other college or university course'.

The other manifestation of the practice turn within this thesis, WI-teacher education, faces similar complexity as paired practicum. It has the potential of comprising an essential role in student teachers' opportunities for learning, however, the study shows that the position as a WI-student and a WI-teacher educator is different to the position of an ordinary program student and teacher educator. The basis of WI-teacher education is to provide students with authentic learning situations. However, the results indicate a lack of a sharing of central ideas regarding this way of organizing teacher education, which further strengthens the need for a curriculum specifically structured for WI-teacher education. This is supported from studies such as Barends and Nel (2017), that in order for WI-teacher education to be prosperous, universities need to apply mechanisms to fortify it, which requires an identification of key role players, what assets are needed and further, including it into curricula (Barends & Nel, 2017). The findings in my study, as in others (Ball & Forzani, 2009), indicate that a work-based teacher education demands a work-based curriculum that not only pays attention to what knowledge students need to acquire, but to the responsibilities and activities comprised in the profession. A work-based curriculum as such, would accentuate repetitive opportunities for students to practice the interactive work of teaching and not just involve reflective discussions about that work. Drawing on their own as well as other studies, Ball and Forzani (2009) outline the essential task that teacher educators need to address in order to create a curriculum and pedagogy for practice when this aspect is the basis for teacher training. To place practice as a fundament of the curriculum of teacher education demands a shift from a target of 'what teachers know and believe to a greater focus on what



teachers do' (p. 503). This does not mean a degradation of knowledge and beliefs, rather that the specific knowledge that matters for practice is the knowledge that is required for work. Constructing a work-based curriculum demands a specification of this content – what teachers are required to become skilled at and compels a development of instructional guidelines to assist students to acquire this competence for specific purposes in context. Otherwise, the intention 'to strengthen teacher education' will not be fulfilled and neither can WI thus be considered 'a good example of combining theory and practice' (Swedish Government, 2019).

## 10. Sammanfattning

Denna sammanläggningsavhandling består av fyra separata studier som rör den verksamhetsförlagda utbildningen och dess relation till universitetsbaserade delar. Det övergripande syftet är att belysa implikationerna och konsekvenserna av lärarutbildning som blivit alltmer praktikbaserad, ett fenomen som i den internationella litteraturen benämns som 'the practice turn of teacher education'. Närmare bestämt står två manifestationer av 'the practice turn' i fokus; särskilda övningsskolor där lärarstudenter genomför praktik tillsammans och arbetsintegrerad lärarutbildning där lärarstudenter anställs som lärare under tiden som de läser lärarutbildningen vid universitetet. I studien analyseras data huvudsakligen med hjälp av Saugstads (2002; 2005) två kunskapsbegrepp; åskådarkunskap och deltagarkunskap, med tillhörande lärprocesser samt Akkerman and Bakkers (2011) koncept 'boundary crossing' och de innefattande lärandemekanismerna: identifikation, koordination, reflektion och transformation. Följande frågeställningar föreligger:

1. Hur beskrivs idéer om verksamhetsförlagd utbildning i lärarutbildning i nationell policy och hur konfigureras dessa i lokal policy?
2. Hur uppfattas organisationen av att göra praktik i par inom specifika övningsskolor av lärare och mentorer?
3. Hur uppfattas arbetsintegrerade lärarstudenters möjligheter till lärande på universitetet av lärarutbildare?
4. Vilka implikationer och konsekvenser för lärarstudenters möjligheter till lärande ger en mer praktikbaserad lärarutbildning?

Det empiriska materialet består av data som hämtats från policydokument om de två senaste lärarutbildningsreformerna 2001 och 2011, och från lokala styrdokument vid en lärarutbildning, samt av semistrukturerade intervjuer med studenter som gör praktik i par, mentorer som handleder studenter som gör praktik i par samt universitetslärare som undervisar studenter som genomför arbetsintegrerad lärarutbildning.

## Studie I

I den första studien utreds huruvida det finns tecken på en 'practice turn' i nationell policy och hur detta sedan hanteras i lokal policy vid en lärarutbildning. Fokus ligger på de två senaste lärarreformerna (2001, 2011) och hur dessa reformer karakteriserar och till viss del producerar idéer om möjligheter att lära sig läraryrket i relation till praktikens explicita sammanhang, och att sammanhanget relaterar till teoretisk och praktisk kunskap. Fokus ligger också på vad som händer i processen när idéer om att lära sig yrket i nationell politik, omvandlas till lokal policy. Metoden är kvalitativ och en innehållsanalys görs av empiriskt material som består av statliga policydokument samt lokala policydokument. Analysen av materialet har en abduktiv karaktär. Till att börja med uppmärksammas de specifika delar som behandlar verksamhetsförlagd utbildning och möjligheter till lärande under dessa delar som beskrivs i texterna. Därefter analyseras materialet med hjälp av Saugstads tolkning av Aristoteles kunskapsperspektiv; åskådarperspektiv och deltagarperspektiv. Dessa ses som epistemologiska positioner där lärande genom ett deltagarperspektiv kännetecknas av att befinna sig som central deltagare i yrkesutövningen där reflektioner kopplade till den praktiska erfarenheten ständigt görs. Lärandet i detta sammanhang genomförs genom att vara aktiv under de omständigheter där kunnandet ska användas. Lärande genom ett åskådarperspektiv kännetecknas däremot av att befinna sig i periferin av den sociala gemenskapen för att kunna reflektera teoretiskt. Det är här av vikt att kunna distansera sig för att kunna identifiera vilka värderingar som styr och sedan pröva typiska situationer som yrket innebär. Dessa utgör sedan exempel och används som underlag för vidare reflektioner.

Analysen av dokumenten pekar mot en spänning mellan teori och praktik. Studien visar även att verksamhetsförlagd utbildning ges ett alltmer högre värde under de två lärarutbildningsreformerna. Till exempel, när begreppet "partnerskolor", där studenterna genomför praktik, ändras till "fältskolor", måste dessa nu ansöka om att bli godkända som övningsskolor och endast de lämpligaste skolorna väljs ut. Ytterligare värde ges till praktiken i och med introduktionen av "särskilda övningsskolor", vilka också måste ansöka om att bli accepterade som övningsskolor. Antagningen baseras på ett krav på minst sex vidareutbildade mentorer och möjligheter att ta emot ett antal studenter som genomför praktik samtidigt.

När det gäller hur idéer om att lära sig ett yrke i den verksamhetsförlagda utbildningen beskrivs i nationell politik och konfigureras vid ett lokalt lärosäte, visar studien att det finns en pågående balansakt mellan möjligheter för lärande ur ett åskådarperspektiv och ett

deltagarperspektiv och att de två senaste svenska lärarutbildningsreformerna hanterar denna balansgång på lite olika sätt. Tonvikten har dock gått från att erhålla handledning från olika mentorer och att vara knutna till lärarteam (SOU 1999:63), till att lärarstudenter placeras på samma specifika skola under hela sin utbildning under ledning av vidareutbildade handledare (SOU 2008:109). Lärarutbildningen har tidigare gått från en stark, yrkesinriktad utbildning till en mer teoretisk utbildning (Agevall & Olofsson, 2014), men i studie 1 finns dock indikationer på att en sådan inriktning har försvagats. Detta är särskilt tydligt från 2014 där verksamhetsförlagd utbildning ges högre värde genom införandet av särskilda övningsskolor med vidareutbildade handledare (Prom U2013/4305/S).

När det gäller hur idéer om yrkeslärandet konfigureras vid en lokal lärarutbildning visar studien att det uppstår organisatoriska frågor. Nationell policy uttrycker idéer om specifika övningsskolor, som lärarstudenter bör återvända till under hela sin lärarutbildning. Samtidigt bör de ges möjlighet att få erfarenhet från att lära sig yrket under andra förutsättningar. Detta skapar organisatoriska problem eftersom det finns ett begränsat antal specifika övningsskolor för lärarstudenter att införskaffa andra lärarerfarenheter från. Vidare krävs särskilda övningsskolor för att tillhandahålla vidareutbildade mentorer samt för att ta emot flera studenter som genomför sin verksamhetsförlagda utbildning samtidigt, vilket lokal policy tolkar som att organisera så att studenterna genomför den verksamhetsförlagda utbildningen i par. Därmed blir spänningen mellan teori och praktik ännu tydligare när den nationella politiken operationaliseras. Detta då följden kan bli att förväntade möjligheter att lära sig yrket ur ett deltagarperspektiv (genom att återvända till samma övningsskola) kan motverkas genom att åskådarperspektivet tar överhanden (genom att organisera praktik i par).

## Studie II

Eftersom den första studien visade hur praktiken inom lärarutbildningen gavs ett ökat värde inom policy, var det av intresse att studera hur detta manifesterade sig. En sådan manifestation är organisationen av verksamhetsförlagd utbildning vid så kallade övningsskolor. Eftersom praktiken koncentrerats vid dessa skolor blir också mängden lärarstudenter större vid skolorna och praktiken får ofta genomföras i par. Genom införande av en organisation där praktik görs i par, åskådliggörs idéer om vilka möjligheter studenter ges att lära sig yrket inom denna specifika del av sin utbildning. Lampert (2010) uttrycker det på detta sätt; 'by constructing education in a certain manner indicates how students should learn the profession of teaching'(s. 27). Syftet med denna

studie är att undersöka hur lärarstudenter inom förskolläraryrket uppfattar sina möjligheter till lärande i en situation där de genomför verksamhetsförlagd utbildning i par.

I artikeln problematiseras vikten av att reflektera om vad praktik i par ska innefatta och hur det ska organiseras. Metoden i studien är kvalitativ, där semistrukturerade intervjuer genomförs med 12 lärarstudenter som genomför sin tredje och sista praktikperiod. Analysprocessen är abduktiv, det vill säga forskningsdata tolkas först öppet, utan teoretiska perspektiv, sedan analyseras tolkningen inom en teoretisk ram baserad på indikationer huruvida praktik i par upplevs hindra eller främja lärande av ett yrke ur ett åskådarperspektiv eller ett deltagarperspektiv. Detta genom att använda en modifierad version av Saugstads (2002; 2005) kunskapskategorier. Ett åskådarperspektiv på yrkeslärande definieras som att utrymme ges för dekontextuell och propositionell kunskap som specificeras av reflektioner och verbal kunskap. Ett deltagarperspektiv på yrkeslärande definieras däremot som att handlings- eller procedurkunskap främjas där lärarstudenten utvecklar en förmåga att agera i praktiken.

Resultaten visar att en situation som präglas av att lärarstudenterna genomför praktik i par tycks betona möjligheter till lärande ur ett åskådarperspektiv, främst genom att ge möjligheter till reflektioner tillsammans med samlärande studenter. En sådan situation innebär att mindre tid görs tillgänglig för enskild tid för studenten med sin handledare, eller att den enskilda studenten ges färre tillfällen att vara ansvarig för aktiviteter. Genom att organisera praktiken i par, befinner sig lärarstudenterna i en mer avlägsen "situatedness" (Lave & Wenger, 2003, s.31) än om de skulle genomföra den ensam. De ges färre möjligheter att gå mot fullständigt deltagande i den sociokulturella praxisen. Således uppfattas situationen med praktik i par som icke-autentisk. Ett undantag, där samlärande med kamrater uppfattas som autentiskt är när det gäller att förvärva erfarenhet för att arbeta i läroplan och för att förbättra kommunikationsförmågan. Detta uppfattas som en väsentlig färdighet som är tillämplig och som dessutom ses som autentiskt förskolläraryrke. Därutöver betraktas ytterligare möjligheter att prata och reflektera med andra studenter som utvecklande, särskilt när handledaren inte har tid. Dock, för att praktik i par ska vara produktiv uppfattas det som viktigt att studenter som gör praktik tillsammans har kommit lika långt i sin inlärningsprocess. Studenter som har kommit längre i sin yrkesutveckling tenderar annars att vara de som kliver fram och kan visa sina förmågor medan de andra tar ett steg tillbaka.

## Studie III

Den tredje studien behandlar samma manifestation av 'the practice turn' i lärarutbildningen som i studie II, specifika övningsskolor, där flera studenter genomför praktik i par. Eftersom studie II, avseende forskollärostudenters uppfattningar om praktik i par, visar att möjligheter till yrkeslärande främst ges ur ett åskådarperspektiv, var det av intresse att genomföra en efterföljande studie om mentorer uppfattning om detta sätt att organisera praktik. Fokus inom studie III var att presentera en nyanserad förståelse från "andra sidan" och inom en annan organisation. Den övergripande frågan var hur mentorer i gymnasieskolan uppfattar sin roll när de handleder studenter som genomför praktik i par. Studien försöker utmana forskning som, ur ett socialkonstruktivistiskt paradig, särskilt med hänvisningar till den Vygotskianska uppfattningen om ZPD (zon för proximal utveckling), uppmärksammar det positiva i att studenter lär tillsammans men undviker att problematisera mentorns roll i yrkeslärandet.

Saugstads (2002; 2005) två begrepp om kunskap – deltagarkunskap och åskådarkunskap, används även i denna studie för att förstå hur praktik i par påverkar studenternas möjligheter att lära. I artikeln görs en poäng av att aktörer inom utbildningsmiljöer behöver adressera olikheterna mellan teori och praktik för att hantera dem på ett konstruktivt sätt. Saugstad betonar att ett beaktande av dessa olikheter kan skapa potential att förbättra kvaliteten i studenternas lärande inom alla yrkesutbildningar.

Kvalitativ data samlades in genom semistrukturerade individuella intervjuer med fem kvalificerade mentorer. Processen som användes för att koda och analysera data var abduktiv, det vill säga en process som präglades av ständiga övergångar mellan forskningsdata och teori (Rinehart & Carlson, 2021). Studien visar att praktik i par, enligt mentorerna, underlättar förutsättningar för lärande av främst en distanserad och propositionell åskådarkunskap medan lärandet av en kontextuell, praktisk deltagarkunskap verkar hindras. Mentorerna uppfattar att de för en kamp för att organisera möjligheter för varje lärarstudent att befinna sig i centrum av undervisningssituationer. Mentorerna har ett begränsat antal schemalagda lektioner, vilket innebär att de ibland behöver lämna över mentorskapet till kollegor för att kunna förse studenterna med tillräckliga tillfällen att undervisa. Andra begränsningar som mentorer upplever är bristen på sammanhängande situationer för reflektion, inte sällan skedde dessa i all hast mellan lektionerna. Istället såg mentorerna det som en fördel om studentparet tog egna initiativ till att driva didaktiska och andra reflekterande diskussioner på egen hand.

Data visar att mentorskapet kring praktik i par innebär en instruerande roll, där ansträngningar görs för att ge båda studenterna en central position, till skillnad från mentorsrollen i individuell praktik där mentorn guidar studenten från en perifer till en central roll i praktikgemenskapen. Skillnader i studenternas deltagande, motivation, kapacitet och personlighet blir också mer anmärkningsvärda och pedagogiskt relevanta i en situation där praktik görs i par. Studenterna tenderar till exempel att placeras i olika "roller" på grund av dessa faktorer. Resultaten står till viss del i motsats till tidigare forskning om praktik i par där studenternas yrkeslärande ofta är kopplat till socialkonstruktivistiska perspektiv (jfr Guiterrez, 2016; King, 2006), och där studenternas konstruktion av kunskap tillsammans i ett socialt sammanhang betonas. Studien visar att praktik i par, enligt mentorerna, innebär att de inte i samma utsträckning som i individuell praktik kan övervaka potentiella möjligheter till lärande, vilket begränsar möjligheten att utnyttja zonen för proximal utveckling. Resultaten visar således att det finns en diskrepans mellan de pedagogiska avsikterna med praktik i par och konkreta möjligheter att förverkliga dessa i praktiken.

## Studie IV

I den fjärde studien riktas intresset mot en annan manifestation av 'the practice turn', en arbetsintegrerad (AI) lärarutbildning, där studenter är anställda och arbetar tre dagar i veckan och genomför studier på campus två dagar i veckan. Studien handlar om hur lärarutbildare på campus uppfattar studenternas möjligheter till lärande när lärarstudenter rör sig mellan arbete vid en skola och studier vid universitetet. En pågående diskussion inom högre utbildning handlar om hur studenter kan få hjälp med att konstruera framgångsrika övergångar mellan universitet och arbete. Denna diskussion har sin grund i medvetenheten om skillnader mellan de två sammanhangen, särskilt med tanke på klyftan mellan universitetsstudier och arbetskrav (Biemans m.fl., 2004; Finch m.fl., 2007).

I de första tre studierna var det av värde att använda Saugstads (2002; 2005) teoretiska perspektiv som diskuterats ovan, eftersom dessa visar på två olika sätt att förvärva kunskap, genom ett deltagarperspektiv eller genom ett åskådarperspektiv inom ramen för praktiken. I studie IV, behövdes däremot ytterligare ett teoretiskt perspektiv. Detta var nödvändigt för att belysa studenternas möjligheter till lärande i övergångar mellan universitetets och praktikens gränser och sammanhang snarare än inom ramen för praktiken. Inspirerad av Akkerman och Bakker (2011) används därför begreppet

gränsövergångar och de fyra identifierade inlärningspotentialerna identifiering, samordning, reflektion och transformation för att konceptualisera hur AI-studenters gränsövergångar påverkar deras möjligheter till lärande vid universitetet.

Kvalitativa data samlades in genom semistrukturerade individuella intervjuer med lärarutbildare. Analysprocessen var abduktiv och genomfördes med studiens syfte, frågeställning och teoretiska ramar som grund. Resultaten visar att lärarutbildare upplever att många AI-studenter har ett annat förhållningssätt till sitt lärande på universitetet än vanliga lärarutbildningsstudenter. Studien visar även att ett korsande av gränser inte behöver vara ett hinder för lärande, det kan också vara resurser för kontinuitet (Akkerman & Bakker, 2011). Att organisera AI-läroinnehåll där studenter arbetar vissa dagar i veckan och bedriver studier andra dagar i veckan uppfattas som ett tveeggat svärd. Lärarutbildare menar att vissa AI-studenter kan samordna de båda kontexterna vilket ökar deras förståelse för hur teorier kan omsättas i praktiken. Det underlättar också för lärarutbildare att illustrera sådana kontaktpunkter mellan kontexterna. Dock genererar även denna organisation av läroinnehåll en problematisk situation. Eftersom dessa studenter verkar bli centrala deltagare i den ena kontexten - sina arbetsplatser, innebär detta konsekvenser i den andra kontexten - universitetet.

Vissa AI-studenter tenderar att identifiera sig starkt med sina roller som lärare även när de är på universitetet och därmed upplevs de inte en annan hierarkisk position än de studenter som går det ordinarie läroinnehållet. Lärarutbildare upplever att många AI-studenter blir kvar i sin roll som lärare och har svårt att anta rollen som student. Lärarutbildare uppfattar även att de utmanas att möta AI-studenters behov då dessa vill utnyttja sin tid på campus för att lösa problem som de möter på arbetsplatsen vilket påverkar kursinnehållet. Lärarutbildarna har själva lång erfarenhet av att arbeta som lärare i skolan vilket gör att de kan identifiera sig med skolan som arbetsplats och anstränger sig därmed för att möta studenternas akuta behov. Dessa lärarutbildare, med lång erfarenhet av skolan som arbetsplats, beskrivs av Loughran (2014) som expertutövare, en lärarutbildare som uppskattas av studenter och som uppfattas som mer trovärdiga än lärarutbildare som saknar skolerfarenhet (Smith, 2005). Dock upplever dessa lärarutbildare det som problematiskt att genomföra samma utbildningsinnehåll som ordinarie programstudenter och de brottas med frågor kring hur långt de kan gå i sina försök att hjälpa AI-studenter utan att helt omstrukturera universitetskurserna.



## Diskussion och konklusion

Två manifestationer av en alltmer praktikbaserad lärarutbildning har studerats i avhandlingen. Artiklarna om införandet av övningsskolor med en högre koncentration av lärarstudenter och genomförande av praktik i par visar att en sådan organisation skapar andra situationer för yrkeslärande, där vissa kunskapsformer ges mer företräde än andra, än när praktik görs enskilt. Ett sådant resultat antyder att lärarutbildare uttryckligen behöver åskådliggöra olika potentialer med detta sätt att organisera praktik, för lärarstudenter såväl som mentorer, för att det ska vara produktivt. Mer tid för eftertanke och reflektion behöver ges kring organisationsstrukturer när lärarstudenter genomför praktik i par, eftersom resultaten visar att såväl studenter som mentorer saknar vägledning om hur man kan dra nytta av de olika möjligheterna till lärande. Resultatet visar att det skulle kunna vara framgångsrikt att betona olika perspektiv på lärande under olika praktikperioder. Kanske kan ett åskådarperspektiv uppmärksammas under vissa praktikperioder medan möjligheter till lärande genom ett deltagarperspektiv, där bland annat studenterna placeras enskilt, bör tillhandahållas under andra perioder. Därmed skulle studenterna ges möjlighet att förflytta sina positioner från perifera till centrala deltagare under praktikperioderna samtidigt som de ges förutsättningar att uppnå ett reflexivt förhållningssätt till praktiken.

Resultaten ligger i linje med flera andra studier, bland annat studier från Hagggar och MacIntyre (2006) om vikten av universitetens utveckling av förhållningssätt, som för dem närmare skolan och arbetar mer uppmärksammat tillsammans med mentorer. Vidare är de i linje med Sörensen (2014) och Nokes m.fl., (2008) som visar på betydelsen av att mentorer ges förutsättningar att förstå sin roll. Resultaten manar också till eftertanke om huruvida det är framgångsrikt att organisera praktiken på samma sätt i alla lärarutbildningar. Yrkesutövningen som förskollärare skiljer sig till exempel från arbetet som lärare på grundskole- eller gymnasienivå, därför kan yrkeslärandet vinna på att organisera praktiken olika beroende på vilket program lärarstudenter går. Detta i enlighet med Zeichner (2006, s. 334), som förespråkar att praktiken måste vara 'as carefully planned as any other college or university course'.

I artikeln som berör den andra manifestationen av 'the practice turn' - en arbetsintegrerad (AI) lärarutbildning, där studenter är anställda och arbetar tre dagar i veckan och genomför studier på campus två dagar i veckan indikeras en förbättringspotential vad gäller utbytet av centrala idéer om detta sätt att organisera lärarutbildningen. Resultatet talar för ett stärkt behov av en läroplan specifikt strukturerad för AI - lärarutbildning. Detta stöds av studier som Barends och Nel (2017), som visar att det krävs stärkande mekanismer för att en AI -

lärarutbildning ska bli välfungerande, vilket kräver att nyckelrollsaktörer och avgörande tillgångar identifieras samt att de inkluderas i läroplaner (a.a). Detta kräver i sin tur åtgärder i linje med studier som Zegward, Coll och Hodges (2003) som visar att en organisation som AI - lärarutbildning är som mest effektiv när den förstärks av partnerskap där roller och förväntningar tydligt kommuniceras.

# Reference list

- Abdal-Haqq, I. (1998). *Professional development schools: Weighing the evidence*. Corwin.
- Agevall, O., & Olofsson, G. (2014). Tensions between academic and vocational demands. In Smeby, J. C. & Sutphen, M. *From vocational to professional education: Educating for social welfare*. (p. 26–49). Routledge.
- Akkerman, S. F. & Bakker, A. (2011). *Boundary crossing and boundary objects*. *Review of Educational Research*, 81(2), 132–169. DOI-org.ep.bib.mdh.se/10.3102/0034654311404435
- Akkerman, S. F. & Bakker, A. (2012). *Crossing Boundaries Between School and Work During Apprenticeships*. *Vocations and Learning*, 5, 153–173. DOI:10.3102/0034654311404435
- Akkerman, S. F., & Meijer, P. C. (2011). *A dialogical approach to conceptualizing teacher identity*. *Teaching and Teaching Education*, 27, 208–319. DOI.org/10.1016/j.tate.2010.08.013
- Akkerman, S., & Bruining, T. (2016) Multilevel Boundary Crossing in a Professional Development School Partnership. *Journal of the Learning Sciences*, 25(2), 240–284. DOI: 10.1080/10508406.2016.1147448
- Alsterdal, L. (2016). Säkerhet och osäkerhet i rörelse – tankar om förskolepraktik och förskolläraryrket. [Safety and uncertainty in motion – thoughts on preschool practice and preschool teacher education]. In Alsterdal, L. & Pröckl, M. *Inifrån och utifrån – om praktisk kunskap i förskolan [Inside and out – About practical knowledge in preschool]*. Elanders Sverige AB.
- Alvesson, M., & Sköldbäck, K. (2008). *Tolkning och reflektion: vetenskapsfilosofi och kvalitativ metod*. Studentlitteratur.
- Andersson, I., & Andersson, S.B. (2008). Conditions for boundary crossing: Social practices of newly qualified Swedish teachers. *Scandinavian Journal of Educational Research*, 52, 643–660. DOI-org/10.1080/00313830802497307
- Andersson, A. (2016). Boundaries as mechanisms for learning in emergency exercises with students from emergency service organizations. *Journal of Vocational Education & Training*, 68(2), 245–262. DOI: 10.1080/13636820.2016.1166450
- Aristotle: *Nicomachean Ethics*. Books II-IV: Translated with an Introduction and Commentary Oxford University Press, Incorporated, 2006. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/malardalen-ebooks/detail.action?docID=431317>.
- Arreman, I. E. (2005). Research as power and knowledge: struggles over research in teacher education. *Journal of education for teaching*, 31(3), 215–235. DOI-org/10.1080/02607470500169055.
- Baker, R. S., & Milner, J. (2006). By Complexities of Collaboration: Intensity of Mentors' Responses to Paired and Single Student Teachers. *Action in Teacher Education*, 28(3), 61–72. Doi-org.ip.bib.mdh.se/10.1080/01626620.2006.10463420

- Ball, D. L., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, *60*, 497–511. DOI:10.1177/0022487109348479
- Ballantyne, J. (2007). Documenting praxis shock in early-career Australian music teachers: the impact of pre-service teacher education. *International Journal of Music Education*, *25*(3), 181–191. DOI-org/10.1177/0255761407083573
- Banks, J., Cochran-Smith, M., Moll, L., Richert, A., Zeichner, K., LePage, P., Darling-Hammond, L., & Duffy, H. with McDonald, M. (2005). Teaching diverse learners. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (p. 232–274). Jossey-Bass.
- Barends, Z., & Nel, C. (2017). Work-integrated learning within the reading literacy component of foundation phase teacher preparation programmes. *South African Journal of Childhood Education (SAJCE)*, *7*(1), 1–13. DOI:https://doi.org/10.4102/sajce.v7i1.435
- Beach, K. (1999). Consequential Transitions: A Sociocultural Expedition beyond Transfer in Education. *Review of Research in Education*, *24*, 101–139. DOI-org/10.2307/1167268
- Beauchamp, G., Clarke, L., Hulme, M., & Murray, J. (2015). Teacher education in the United Kingdom post devolution: convergences and divergences, *Oxford Review of Education*, *41*(2), 154–170. DOI-org.ep.bib.mdh.se/10.1080/03054985.2015.1017403
- Beitin, B. K. (2012). Interview and sampling: How many and Whom. In Gubrium, J., Holstein, J.A., Marvasti, A.B. & McKinney, K.D. *The SAGE handbook of interview research: The complexity of the craft*. Sage Publications Ltd.
- Bejerot, E., & Hasselbladh, H. (2020). Inledning [Introduction]. In Bejerot, E & Hasselbladh, H. *Professionalisering av lärarutbildningen. [The Professionalization of Teacher Education]*. Studentlitteratur.
- Beyer, L. (1996). *Creating Democratic Classrooms: The struggle to integrate theory and practice. The practitioner enquiry series*. Teachers college press.
- Biemans, H., Niewenhuis, L., Poell, R. F., & Mulder, M. (2004). Competence-based VET in the Netherlands: Background & pitfalls. *Journal of Vocational Education and Training*, *56*(4), p. 523–538. DOI:10.1080/13636820400200268
- Billett, S. (2011). Workplace curriculum: Practice and propositions. In F. Dorchy & D. Gijbels (Eds), *Theories of learning for the workplace*. Routledge.
- Bohlin, H. (2009). Tyst kunskap: ett mångtydigt begrepp [Tacit knowledge: an ambiguous concept]. In L. Alsterdal, J. Bornemark, & F. Svenaeus (Eds.), *Vad är praktisk kunskap? [What is practical knowledge?]* (pp. 55–84). Södertörn University.
- Boud, D., Cohen, R., & Sampson, J. (2001). Peer Learning in Higher Education: Learning from and with Each Other. Kougan Page.
- Bosco, A., & Ferns, S. (2014). Embedding of authentic assessment in work-integrated learning curriculum. *Asia-Pacific Journal of Cooperative Education*, *15*(4), 281–290.
- Botha, C. S. & Rens, J. A. (2018). Are they really “ready, willing and able”? Exploring reality shock in beginner teachers in South Africa. *South African Journal of Education* *38*(3), 1–14. DOI-org/10.15700/saje.v38n3a1546
- Brante, T., Johnsson, E., Olofsson, G. & Svensson, L. G. (2015). *Professionerna i kunskapsamhället. En jämförande studie av svenska professioner. [The professions in the knowledge society: A comparative study of Swedish professions]*. Liber

- Brinkmann, S. (2014). Doing without data. *Qualitative Inquiry*, 20(6), 720–725. DOI-org.ep.bib.mdh.se/10.1177/1077800414530254
- Brinkmann, S. & Kvale, S. (2015) Interviews: *Learning the Craft of Qualitative Research Interviewing*. 3rd Edition, Sage Publications.
- Brown, N. (2010). WIL[ing] to share: an institutional conversation to guide policy and practice in work-integrated learning. *Higher Education Research & Development*, 29(5), 507-518. DOI-org/10.1080/07294360.2010.502219
- Brown, N. (2019). “Listen to your gut”: A reflexive approach to data analysis. *The Qualitative Report*, 24(13), 31–43. DOI-10.46743/2160-3715/2019.4119
- Bryman, A. (2012). *Social research methods*. Oxford University Press.
- Buitink, J. (2009). What and how do student teachers learn during school-based teacher education. *Teaching and Teacher Education*, 25, 118–127. DOI-org/10.1016/j.tate.2008.07.009
- Bullough, R. V., Young, J., Erickson, L., Birrell, J. R., Clark, D. C., & Egan, M. W. (2002). Rethinking field experience: Partnership teaching versus single placement teaching. *Journal of Teacher Education*, 53(1), 68–80. DOI-org.ep.bib.mdh.se/10.1177/0022487102053001000
- Burmeister, E. & Aitken, R. N. (2012). Sample Size: how many is enough? *Australian Critical Care*, 25, 271–274. DOI-org/10.1016/j.aucc.2012.07.002
- Butler, J. (1992). Teacher professional development: An Australian case study. *Journal of Education for Teaching*, 18(3), 221–238. DOI-org/10.1080/0260747920180302
- Capraro, M. M.; Capraro, R. M & Helfeldt, J. (2010). Do Differing Types of Field Experiences Make a Difference in Teacher Candidates’ Perceived Level of Competence? *Teacher Education Quarterly*, 37(1), 131–154.
- Carlgren, I., & Marton, F. (2007). *Lärare av imorgon*. Lärarförbundets förlag.
- Carlgren, I. (2010). Den felande länken. Om frånvaron och behovet av klinisk utbildningsvetenskaplig forskning. [The missing link. About the absence and need for clinical educational research]. *Pedagogisk forskning i Sverige*, 15(4), 295–306.
- Cervone, D., & Pervin, L. A. (2008). *Personality: Theory and Research*. John Wiley and sons.
- Cheng, M. M., Cheng, A. Y., & Tang, S. Y. F. (2010). Closing the Gap between the Theory and Practice of Teaching: Implications for Teacher Education Programmes in Hong Kong. *Journal of Education for Teaching*, 36(1), 91–104. DOI-10.1080/02607470903462222
- Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education: A review of the literature. *Review of Educational Research* 84(2), 163–202. DOI-org/10.3102/0034654313499618
- Cliff, R. T., & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith & K. Zeichner. (Eds.), *Studying teacher education: The report of the AERA Panel on research and teacher education*, (p. 309–424), Mahwah, NJ: Erlbaum.
- Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of Knowledge and Practice: Teacher Learning in Communities. *Review of Research in Education*, 24, 249–305. DOI-org/10.2307/1167272
- Cochran-Smith, M. (2005). Studying Teacher Education. What we know and need to know. *Journal of Teacher Education*, 56(4), 301–306. DOI-org.ep.bib.mdh.se/10.1177/0022487105280116
- Cochran-Smith, M., & Zeichner, K. (2005). *Studying teacher education: The report of the AERA panel on research and teacher education*. Mahwah, NJ: Lawrence Erlbaum.

- Cochran-Smith, M. (2010). The Future of Teacher Education: Framing the questions that matter. *Teaching Education*, 11(1), 13–24. DOI: 10.1080/10476210050020327
- Cochran-Smith, M. (2016). Foreword. In G. Beauchamp, L. Clarke, C. Daly, M. Hulme, A. Jephcote, G. M. Kennedy, I. Menter, T. Murray, T. Mutton, T. O’Doherty & G. Peiser (Eds), *Teacher Education in times of change—Responding to challenges across the UK & Ireland* (pp. x-xiii). Policy Press.
- Cummings Carneya, M., Fernándezc, M. B., Stringer Keefed, E., Millere, A.F, & Sáncheza, J. G. (2017). The accountability era in US teacher education: looking back, looking forward. *European Journal of Teacher Education*, 40(5), 572–588. DOI-org/10.1080/02619768.2017.1385061
- Codex. (2021). *Codex regler och riklinjer för forskning*. [Codex Rules and Guidelines for Research]. Retrieved from: <https://codex.uu.se/nytt/>
- Conway, F. & Munthe, E. (2014). The practice turn. Research-informed clinical teacher education in two countries. In Smeby, J.C. & Sutphen, M. *From Vocational to Professional Education*. (p. 146-163). Routledge.
- Cuban, L. (2001). *How can I fix it? Finding solutions and managing dilemmas: An educator’s road map*. Teachers College Press.
- Cuddapahl, J. L., & Clayton, C. D. (2011). Using Wenger’s Communities of Practice to Explore a New Teacher Cohort. *Journal of Teacher Education*, 62(1), 62–75. DOI-org/10.1177/0022487110377507
- Dalinger, T., Thomas, K. B., Stansberry, S., & Xiu, Y. (2020). A mixed-reality simulation offers strategic practice for pre-service teachers. *Computers & Education*, 144. p. 103696. DOI-org/10.1016/j.compedu.2019.103696
- Darling-Hammond, L. (2005). *Professional development schools: Schools for developing a profession* (2nd ed.). Teachers College Press.
- Darling-Hammond, L., & Bransford, J. (2005). (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. John Wiley.
- Darling-Hammond, L. (2006). Constructing 21st century teacher education. *Journal of Teacher Education*, 57(3), 300–314. DOI-org/10.1177/0022487105285962
- Darling-Hammond, L. (2009, February). Teacher education and the American future. *Journal of Teacher Education* 61(1-2), 35–47.
- Darling-Hammond, L. (2012). *Powerful Teacher Education. Lessons from Exemplary Programs*. Jossey-Bass.
- Darling-Hammond, L., Burns, D., Campbell, C., Goodwin, A.L., Hammerness, K., Low, E. L., McIntyre, A., Sato, M., Zeichner, K. (2017). *Empowered Educators: How High-Performing Systems Shape Teaching Quality Around The World*. Josey Bass.
- De Florio, I. (2016). *Effective Teaching and Successful Learning: Bridging the Gap between Research and Practice*. Cambridge University Press. DOI-org/10.1017/CBO9781316285596
- Dewey, J. (1997). *Demokrati och utbildning*. Daidalos
- Dimenäs, J., Gustavsson, T., & Mitiche, A. (2016). Att bli lärare – argument för en integrerad lärarutbildning. *Högre utbildning*, 6(2), 121–137). Retrieved from: <https://hogreutbildning.se/index.php/hu/article/view/745>
- Dinkelmann, T. & Cuenca, A. (2020). A turn to practice: Core practices in social studies teacher education. *Theory & Research in Social Education*, 48(4), 583–610. DOI-org/10.1080/00933104.2020.1757538
- Doolan, M., Piggott, B., Chapman, S., & Rycroft, P. (2019). The Benefits and Challenges of Embedding Work Integrated Learning: A Case Study in a University Education Degree Program. *Australian Journal of*

- Teacher Education*, 44(6). 91–108. DOI-org/10.14221/ajte.2018v44n6.6  
Retrieved from <https://ro.ecu.edu.au/ajte/vol44/iss6/6>
- Dreyfus, H. L., & Dreyfus, S. E. (2004). The ethical implications of the five-stage skill-acquisition model. *Bulletin of Science Technology & Society*, 24(3), 251–264. DOI-org/10.1177/0270467604265023
- Edling, S. & Liljestrand, J. (2020). Let’s talk about teacher education! Analysing the media debates in 2016-2017 on teacher education using Sweden as a case. *Asia-Pacific Journal of Teacher Education*, 48(3), 251–266. DOI-org/10.1080/1359866X.2019.1631255
- Edwards, A., & Mutton, T. (2007). Looking forward: Rethinking professional learning through partnership arrangements in initial teacher education. Oxford Review of Education, 33, 503–519. DOI-org/10.1080/03054980701450928
- Eisner, E.W. (2002). From episteme to phronesis to artistry in the study and improvement of teaching, *Teaching and Teacher Educational* 18(4), 375–385. DOI-org/10.1016/S0742-051X(02)00004-5
- Fejes, A., & Thornberg, R. (2019). *Handbok i kvalitativ analys*. Liber.
- Flick, U. (2011). *Introducing research methodology: a beginner’s guide to doing a research project*. Sage.
- Forzani, F. M. (2014). Understanding “core practices” and “practice-based” teacher education: Learning from the past. *Journal of Teacher Education*, 65(4), 357–368. DOI-org/10.1177/0022487114533800
- Fuller, A., Hodkinson, H., Hodkinson, P., & Unwin Source, L. (2005). Learning as Peripheral Participation in Communities of Practice: A Reassessment of Key Concepts in Workplace Learning. *British Educational Research Journal*, 31(1), 49–68. DOI-org/10.1080/0141192052000310029
- Gadamer, H. G. (1989). *Truth and method*. London Sheed and Ward.
- Gardesten, J. & Nordänger, U. K. (2018). Gör det någon skillnad? Universitetslärares erfarenheter av en verksamhetsintegrerad lärarutbildning. *Utbildning & Lärande*, 12(2), 25–40.
- Giles, W. (2010). Teacher Education in a remote community: Learning on the job. *Asia-Pacific Journal of Cooperative Education*, 11(3), 57–68.
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in methodology of grounded theory*. Sociological Press.
- Gravett, S. & Ramsaroop, S. (2015). Bridging theory and practice in teacher education: teaching schools - a bridge too far? *Perspectives in Education*, 33(1). 131–146.
- Gravett, S., Petersen, N., & Ramsaroop, S., (2019), A University and School Working in Partnership to Develop Professional Practice Knowledge for Teaching. *Frontiers in Education*, 3, 118. DOI-org/10.3389/educ.2018.00118
- Grimen, H. (2008). Profesjon og kunnskap [Professional knowledge]. In A. Molander and L. I. Terum (Eds), *Profesjonsstudier [The study of professions]* (p. 71–86). Universitetsforlaget.
- Grossman, P., & McDonald, M. (2008). Back to the future: Directions for research in teaching and teacher education. *American Educational Research Journal*, 45(1), 184–205. DOI-org/10.3102/0002831207312906
- Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. (2009). Teaching practice: A cross-professional perspective. *Teachers College Record*, 111(9). 2055–2100. DOI-org/10.1177/016146810911100905
- Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching, re-imagining teacher education. *Teachers and Teaching: theory and practice*. 15(2). DOI-org/10.1080/13540600902875340

- Gubrium, J. F. & Holstein, J. A. (2012). Narrative Practice and the Transformation of Interview Subjectivity. In Gubrium, J., Holstein, J. A., Marvasti, A.B. & McKinney, K. D. *Interview and sampling. The SAGE handbook of interview research: The complexity of the craft*. Sage Publications Ltd.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. DOI-org/10.1177%2F1525822X05279903
- Guile, D. & Young, M (2003). (Transfer and transition in vocational education: some theoretical considerations. In T. Tuomi-Gröhn & Y.Engeström. *Between School and Work: New Perspectives on Transfer and Boundary Crossing*, (p. 63-81). Emerald Group Publishing Limited.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (p. 105–117). Sage Publications, Inc.
- Gula, F. & Sharjeel, M. Y. (2019). Perception of Pre-service Teachers Pertaining to Effectiveness of Pair Teaching and Mentoring During Practicum. *Journal of Social Sciences and Media Studies*, 3(1), 80–87.
- Gustafsson, K., & Hagström, L. (2017). What is the point? teaching graduate students how to construct political science research puzzles. *European Political Science*, 17, 634–648. DOI-org/10.1057/s41304-017-0130-y
- Gustafsson Nyckel, J., Lander, R., & Thång, P. O. (2020). A work-based pre-school teacher education. *Journal of Praxis in Higher Education*, 2(2), 82–105.
- Gustavsson, M. (1999). Text och textobjekt. [Text and text object]. In Säfström A. & Östman, L. *Textanalys* [Text analysis], (p. 37–57). Studentlitteratur.
- Gustavsson, B. (2004). *Kunskap i det praktiska*. [Knowledge in the practical]. Studentlitteratur.
- Haggar, H., & McIntyre, D. (2006). *Learning Teaching from Teachers*. McGraw-Hill Education.
- Hammerness, K., Darling-Hammond, L., Bransford, J., Berliner, D., Cochran-Smith, M., McDonald, M., et al. (2005). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do?* (p. 358–389). John Wiley.
- Hammerness, K., & Klette, K. (2015). Indicators of quality in teacher education: Looking at features of teacher education from an international perspective. Promoting and Sustaining a Quality Teacher Workforce. *International Perspectives on Education and Society*, 27, 239–277. DOI-org/10.1108/S1479-367920140000027013
- Hanney, R. (2005), Competence or capability: Work-based learning and problem-based learning. *Journal of Media Practice*, 6(2), 105–112. DOI-org/10.1386/jmpr.6.2.73/3
- Hartman, S. G. (2005). *Det pedagogiska kulturarvet: traditioner och idéer i svensk undervisningshistoria*. [The pedagogical cultural heritage: traditions and ideas in Swedish educational history]. Natur och Kultur.
- Hasselbladh, H. (2020). Lärarutbildning – styrning och professionalisering. [Teacher education – governance and professionalisation]. In Bejerot, E & Hasselbladh, H. *Professionalisering av lärarutbildningen*. [Professionalization of teacher education]. (p. 45–54). Studentlitteratur.
- Hatch, T., & Grossman, P. (2009). Learning to look beyond the boundaries of representation: Using technology to examine teaching (Overview for a digital exhibition: Learning from the practice of teaching). *Journal of Teacher Education*, 60(1), 70–85. DOI-org/10.5617/adno.2646



- Hawkey, K. (1995). Learning from peers: The experience of student teachers in school-based teacher education. *Journal of Teacher Education*, 46(3), 175–183.
- Heggen, K., & Raaen, F. D. (2014). Koherens i lærerutdanninga [Coherence in teacher education]. *Norsk Pedagogisk Tidsskrift*, 98(1), 3–13.
- Heggen, K. & Thorsen, K. E. (2015). Praksisopplæring-et felles prosjekt mellom høyskole og praksisskole? [Placement training – A joint project between university college and placement school?] *Norsk Pedagogisk Tidsskrift*, 99(05), 362–374.
- Heidorn, B., & Jenkins, D. B. (2015). Supervision in Physical Education Teacher Education Programs: Making the Case for Paired Placements, Strategies. *A Journal for Physical and Sport Educators*, 28(2), 44–48. DOI-org.ep.bib.mdh.se/10.1080/08924562.2015.1002349
- Hendrikse, J. V. (2013). *Teacher education by means of internship*, MEd dissertation, University of South Africa.
- Hildén, E., Löfdahl Hultman, A., & Ribaeus, K. (2021). *Teaching as a new mission: Swedish preschool teachers' collegial discussions*. Early Years. DOI-org.ep.bib.mdh.se/10.1080/09575146.2021.1880374
- Hobson, A. J., Ashby, P., Malderez, A., & Tomlinson, P. D. (2009). Mentoring beginning teachers: What we know and what we don't. *Teaching and Teacher Education*, 25(1), 207–216. DOI-org/10.1016/j.tate.2008.09.001
- Hordern, J. (2015). Higher apprenticeships and the shaping of vocational knowledge. *Research in Post-Compulsory Education*, 20(1), 17–34. DOI-org.ep.bib.mdh.se/10.1080/13596748.2015.993867
- Horvath, J. A., & Sternberg R. J. (1995). A Prototype View of Expert Teaching. *Educational Researcher*. 24(6), 9–17. DOI-org/10.3102/0013189X024006009
- Howey, K. R., & Zimpher, N. L. (1994). Nontraditional contexts for learning to teach. *The Educational Forum*, 58, 155–161. DOI-org/10.1080/00131729409335319
- Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in higher education*, 40(2), 350–367. DOI-org/10.1080/03075079.2013.842221
- Jank, W., & Meyer, H. (1997). Sambandet mellan didaktisk teorikunskap och handlingskompetens [The connection between didactic theoretical knowledge and competence of action]. In Uljens, M. *Didaktik*. [Didactics]. Studentlitteratur.
- Janssen, F., Westbroek, H., & Doyle, W. (2014). The Practical Turn in Teacher Education: Designing a Preparation Sequence for Practice Frames. *Journal of Teacher Education*, 65(3), 195–206. DOI-org/10.1177/0022487113518584
- Jedemark, M. (2015). Studenter i gränzonen mellan högskoleförlagd och arbetsplatsförlagd utbildning. Är kunskapstransferering möjlig mellan olika utbildningssammanhang? [Students in the border zone between university-based and work-based education. Is knowledge transfer possible between different educational contexts?]. *Pedagogisk Forskning i Sverige*. 20(3–4), 221–246.
- Joram, E. (2007). Clashing epistemologies: Aspiring teachers', practicing teachers', and professors' beliefs about knowledge and research in education. *Teaching and Teacher Education*, 23(2), 123–135. doi.org/10.1016/j.tate.2006.04.032
- Jordell, K. Ø. (2006). *Learning to teach: a review and a discussion*. (Report no 1, 2006). Institute for educational research: University of Oslo.
- Josefson, I. (2001). Teori och praktik - hur skapas ett möte mellan olika kunskapsformer? [Theory and practice - how does one create a meeting between different forms of knowledge?]. In Högskoleverket (Ed.), *Ribban på rätt nivå: sju*

- inlägg om högskolemässighet [The bar on the right level: seven contributions on university education]* (p. 29–35). Högskoleverket.
- Josefson, I. (2011). Omdömet skolning [The development of discretion]. In A. Burman (Ed.), *Våga veta: om bildningens möjligheter i massutbildningens tidevarv. [Dare to know: about the educational possibilities in the era of mass education]* (Vol. 2, p. 117-126). Södertörns university.
- Jyrhämä, R. (2006). The function of practical studies in teacher education. In R. Jakku-Sihvonen & H. Niemi (red.), *Research-based teacher education in Finland: Reflections by Finnish teacher educator*. Åbo:Finnish Educational Research Association, (p. 51–69).
- Kearsley, G. (2001). *Levels of processing. Theory into practice*. Jacksonville State University.
- Kelchtermans, G., & Ballet, K. (2002). The micropolitics of teacher induction. A narrative-biographical study on teacher socialisation. *Teaching and teacher education*, 18(1). DOI-org/10.1016/s0742-051x(01)00053-1
- Kerlinger, F. N. (1979). *Behavioral research*. Holt, Rinehart and Winston.
- Kinsella, E. A. (2007). Embodied Reflection and the Epistemology of Reflective Practice. *Journal of Philosophy of Education*, 41(3), 395–409.
- Knight, S., Lloyd, G., Arbaugh, F., Gamson, D.A., McDonald, S.P., Nolan, J., & Elrod Whitney, A. (2015). Taking Stock in 2015. *Journal of Teacher Education*, 66(1), 3–6
- Korthagen, F. A. J., & Kessels, J. P. A. M. (1999). Linking theory and practice: changing the pedagogy of teacher education. *Educational researcher*, 28(4), 4–17. DOI-org./10.3102/0013189X028004004
- Korthagen, F. A. J. and Wubbels, T. (2001). “Learning from practice”. In Korthagen, F. A. J. *Linking practice and theory: The pedagogy of realistic teacher education*, (p. 32–50). Lawrence Erlbaum.
- Korthagen, F. A. J. (2007). The Gap between Research and Practice Revisited. *Educational Research and Evaluation* 13(3), 303–310. DOI-org/10.1080/13803610701640235
- Korthagen, F. A. J. (2010). How teacher education can make a difference. *Journal of Education for teaching*, 36(4), 407–423.
- Kvale, (1996). *Interviews: an introduction to qualitative research interviewing*. Sage DOI-org/10.1080/02607476.2010.513854
- Ladson-Billings, G. (1995). Toward a Theory of Culturally Relevant Pedagogy. *American Educational Research Journal*, 32(3), 465–491. DOI-org/10.3102/00028312032003465
- Lampert, M. (2005). *Preparing teachers for ambitious instructional practice: Learning to listen and to construct an appropriate response*. Paper presented at the AERA-conference. Montreal, Kanada.
- Lampert, M. (2010). Learning Teaching in, from, and for Practice: What Do We Mean? *Journal of Teacher Education*, 61(1–2) 21–34. DOI-org/10.1177/0022487109347321
- Lang, C., Neal, D., Karvouni, M., & Chandler, D. (2015). An embedded professional paired placement model: ‘I know I am not an expert, but I am at a point now where I could step into the classroom and be responsible for the learning’. *Asia-Pacific Journal of Teacher Education*, 43(4), 338–354. DOI-org/10.1080/1359866X.2015.1060296
- Lanier, J. and Little, J. W. (1986). Research in teacher education. In *Handbook of research on teaching* (3rd ed, p. 527-560). MacMillan.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press.

- Lindqvist, P. & Nordänger, U-K. (2007) "Lost in translation?": Om lärares praktiska yrkeskunnande och professionella språk. *Pedagogisk forskning i Sverige*, 12(3), 177–193.
- Linné, A. (2010). *Lärarutbildning i historisk belysning. Lärarnas historia*. [Teacher training in historical illumination. *The history of teachers*]. Retrieved from [www.lararnashistoria.se](http://www.lararnashistoria.se).
- Liston, D., Whitcomb, J., & Borko, H. (2006) Too little or too much: Teacher preparation and the first year of teaching. *Journal of Teacher Education*, 57(4), 351–358. DOI-org/10.1177/0022487106291976
- Local application pilot project specific practice schools (2014a). *Ansökan om deltagande i försöksverksamhet med övningskolor och övningsförskolor*. [Application concerning participation in the pilot project regarding specific practice schools and specific practice pre-schools].
- Local course syllabus (2007). *Keyword utbildningsplan 2001*. [Programme syllabus 2001].
- Local program curriculum (2012). *Keyword utbildningsplan 2011*. [Programme syllabus 2011].
- Local program curriculum (2014b). *Keyword utbildningsplan 2014*. [Programme syllabus 2014].
- Local SBE handbook (2013). *VFU-handbok för Förskolläraryrket, Grundläraryrket f-3, Grundläraryrket 4-6, Ämnesläraryrket gymnasiet vid högskola, reviderad 2019*. [SBE handbook for pre-school teacher training, teacher education 4-6, teacher education upper secondary school at University, revised 2019].
- Loughran, J. (2014). Professionally Developing as a Teacher Educator. *Journal of Teacher Education*, 65(4), 271–283. DOI-org/10.4324/9780203019672
- Lundgren, U. (1989). *Att organisera omvärlden: en introduktion till läroplansteori*. [Organizing the Outside World: An Introduction to Curriculum Theory]. Utbildningsförlaget på uppdrag av Gymnasieutredningen, 1989.
- Manton, C., Heffernan, T, Kostogriz, A., & Seddon, T. (2021). Australian school–university partnerships: the (dis)integrated work of teacher educators, *AsiaPacific Journal of Teacher Education*, 49(3), 334–346, DOI-org/10.1080/1359866X.2020.1780563
- Matsko, K., & Hammerness, K. (2014). Unpacking the “Urban” in Urban Teacher Education: Making a Case for Context Specific Preparation. *Journal of Teacher Education*, 65(2) 128–144. DOI-org/10.1177/0022487113511645
- Mayer, D. (2021). *Teacher Education Policy and Research Global Perspectives*. Springer. DOI-org/10.1007/978-981-16-3775-9
- McFaul, S. A., & Cooper, J. M. (1984). Peer clinical supervision: Theory vs. reality. *Educational Milner*, 41(7), 4–9.
- McGarr, O., O’Grady, E., & Guilfoyle, L. (2017). Exploring the theory-practice gap in initial teacher education: moving beyond questions of relevance to issues of power and authority. *Journal of Education for Teaching*, 43(1), p. 48–60. DOI: 10.1080/02607476.2017.1256040.
- McKerr, L., Stanton, J., & Turner, G. (2010). *Two Heads are Better Than One: A study of collaborative working in Initial Teacher Training*. International Association for Scientific Knowledge Teaching and Learning Conference, Seville, Spain
- McRae, N., & Johnston, N. (2016). The Development of a Proposed Global Work-Integrated Learning Framework. *Asia-Pacific Journal of Cooperative Education*, 17(4), 337–348.

- Middleton, H., & Baartman, L. K. J., (2013). *Transfer, Transitions and Transformations of Learning*. Edited by H.E. Middleton, Brill. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/malardalen-ebooks/detail.action?docID=3034909>.
- Mishler, E. G. (1990). Validation in inquiry-guided research: The role of exemplars in narrative studies. *Harvard Educational Review*, 60(4), 415–442. DOI-org/10.177763/haer.60.4.n4405243p6635752
- Molander, B. (2015). *The Practice of Knowing and Knowing in Practices*. Peter Lang Edition. DOI-org/10.3726/978-3-653-06131-4
- Mohr, M. M. (1994). *Teacher-researchers at work*. The National Writing Project. DOI-org/10.2307/820256
- Morberg, Å., Ahtiainen, R., Hasselbladh, H., & Bejerot, E. (2020). Yrkeskunskap och akademisk skolning. [Professional knowledge and academic education]. In E. Bejerot & H. Hasselbladh (Eds), *Professionalisering av lärarutbildningen – reformer i Sverige och Finland*. [The professionalisation of teacher training – reforms in Sweden and Finland]. Studentlitteratur.
- Morgan, D. L. (2018). Themes, theories and models. *Qualitative Health Research*. 28(3) 339–345. DOI-org/10.1177/1049732317750127
- Murray, J. (2016). Teacher education and higher education. In G. Beauchamp, L., Clarke, C., Daly, M., Hulme, A., Jephcote. In G. M. Kennedy, I. Menter, T. Murray, T. Mutton, T. O’Doherty & G. Peiser (Eds), *Teacher Education in times of change – Responding to challenges across the UK & Ireland* (p.179–200) Policy Press.
- Niklasson, L. (2016). *A sustainable teacher*. In Lorist, P & Swennen, *A Life and work of teacher educators*. (p. 17–19). University of Utrecht.
- Nilsson, P. (2008). *Learning to teach and teaching to learn. Primary science student teachers’ complex journey from learners to teachers*. [Doctoral dissertation, Linköpings university].
- Nokes, J., Bullough, R., Egan, W., Birrell, J. & Hansen, J. (2008) The paired-placement of student teachers: An alternative to traditional placements in secondary schools. *Teaching and Teacher Education*, 24(8), 2168–2177. DOI-org/10.1016/j.tate.2008.05.001
- Nordängers U. K., & Lindqvist P. (2012). Att skärpa den praktiska blicken – handledares erfarenheter av försök att förstärka kvaliteten i VFU genom att rikta uppmärksamheten mot det egna kunnandet. *Utbildning och Lärande*, 6(1), 80–97.
- Norwegian Agency for Quality Assurance in Education. (2020). *Transforming Norwegian Teacher Education: The Final Report of the International Advisory Panel for Primary and Lower Secondary Teacher Education*.
- O’Reilly, M., & Parker, N. (2012). ‘Unsatisfactory Saturation’: A Critical Exploration of Notion of Saturated Sample Sizes in Qualitative Research. *Qualitative Research*, 13, 190–197. DOI-org/10.1177/1468794112446106
- Peirce, C. S. (1955). Abduction and induction. In Justus Buchler (Eds.), *Philosophical writing of Peirce* (p. 150–156). New York: Dover Publications
- Pettersen, R. C. (2005). *Kvalitetslärande i högre utbildning: Introduktion till problem och praktikbaserad didaktik*. Studentlitteratur.
- Plöger, W., Scholl, D., & Seifert, A. (2018). Bridging the gap between theory and practice – The effective use of videos to assist the acquisition and application of pedagogical knowledge in pre-service teacher education. *Studies in Educational Evaluation*, 58, 197–204. DOI-org/10.1016/j.stueduc.2017.12.009
- Promemoria U2013/4305/S. (2013). *En försöksverksamhet med övningskolor och övningsförsökolor*. [A pilot project concerning specific practice schools and

- specific practice preschools*]. Stockholm.  
[https://www.regeringen.se/49b725/content-tassets/c9d0d634670b4bfd9fc9d78c77398a25/en-forsoksverksamhet-med-ovningsskolor-och-ovningsforskolor](https://www.regeringen.se/49b725/contentassets/c9d0d634670b4bfd9fc9d78c77398a25/en-forsoksverksamhet-med-ovningsskolor-och-ovningsforskolor)
- Raaen, F. D. & Thorsen, K. E. (2020). Student teachers' conditions for professional learning on and across the learning arenas of teacher education: A theoretically grounded account. *Nordic Journal of Comparative and International Education* 4(3), 105–116. DOI-org/10.7577/njcie.3736
- Raelin, J. A. (2007). Toward an epistemology of practice. *Academy of Management Learning & Education*, 6(4), 495–519. DOI-org/10.5465/amle.2007.27694950
- Ramsden, P. (2003). *Learning to teach in Higher Education*, 2:nd edition. Routledge DOI-org/10.4324/9780203507711
- Reid, J-A. (2011). A practice turn for teacher education? *Asia-Pacific Journal of Teacher Education*, 39(4), 293–310. DOI: 10.1080/1359866X.2011.614688.
- Resch, K., & Schrittmesser, I. (2021). Using the Service-Learning approach to bridge the gap between theory and practice in teacher education. *Journal of Inclusive Education*, 1(1), 1–15. DOI-org/10.1080/13603116.2021.1882053
- Reynolds, D., Sammons, P., De Fraine, B., Van Damme, J., Townsend, T., Teddlie, C., & Stringfield, S. (2014). Educational effectiveness research (EER): a state-of-the-art review. *School Effectiveness and School Improvement*, 25(2), 197–230. DOI-org/10.1080/09243453.2014.885450
- Rinehart, E. K., & Carlson, L. D. (2021). Abductive Analysis in Qualitative inquiry. *Qualitative Inquiry*, 27(2), 303–311.
- Ringarp, J., & Parding, K. (2018). I otakt med tiden?: Lararprofessionens ställning sett via lärarutbildningens utveckling i Sverige, 1962-2015 (At odds with time? The position of the teaching profession seen through the development of teacher education in Sweden). In M. Buchardt, J.E.Larsen, & K.B. Staffensen (Eds.), *Udannelsehistorie: Professionerne og deres uddannelsen*. [*The professionals and their education*], (p. 49-68). Selskabet for skole- og uddannelseshistorie.
- Rosaen, C., & Florio-Ruane, S. (2008). The metaphors by which we teach: Experience, metaphor, and culture in teacher education. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre, & K. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed., p. 706–731). Routledge.
- Roth, W-M. & Lee, Y-J. (2006). Contradictions in theorizing and implementing communities in education. *Educational Research Review*, 1(1), 27–40. DOI-org/10.1016/j.edurev.2006.01.002
- Samaras, A. & Gismondi, S. (1998). Scaffolds in the field: Vygotskian interpretation in a teacher education program. *Teaching and teacher education*, 14(7), 715–733. DOI-org/10.1016/S0742-051X(98)00024-9
- Saugstad, T. (2002) Educational Theory and Practice in an Aristotelian Perspective, *Scandinavian Journal of Educational Research*, 46(4), 373–390. DOI-org/10.1080/0031383022000024561
- Saugstad, T. (2005). Aristotle's contribution to scholastic and non-scholastic learning theories. *Pedagogy, Culture & Society*, 13(3), 347–366. DOI: 10.1080/14681360500200233
- Saugstad, T. (2012). The Importance of Being Experienced: An Aristotelian Perspective on Experience and Experience-Based Learning. *Studies in philosophy and education*, 32(1), 7–23. DOI-org/10.1007/s11217-012-9329-0

- Sawchuk, S. (2013). Teacher-prep programs zero in on effective “practice.” *Education Week*, 32(26), 20–12.
- Schaap, H., Baartman, L., & de Bruijn, E. (2012). Students’ learning processes during school-based learning and workplace learning in vocational education: A review. *Vocations and Learning*, 5(2), 99–117. DOI-org/10.1007/s12186-011-9069-2
- Schneider, J. (2018). Marching forward, marching in circles: A history of problems and dilemmas in teacher preparation. *Journal of Teacher Education*, 69(4), 330–340. DOI-org/10.1177/0022487117742904
- Schön, Donald. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Taylor & Francis Group.
- Sheehan M. (2020) Learning by Doing: The Challenge of Aligning Theory and Practice in School-Based, Post-graduate, Teacher Education Programmes. In: Fox J., Alexander C., Aspland T. (eds) *Teacher Education in Globalised Times*. Springer. DOI-org/10.1007/978-981-15-4124-7\_14
- Simons, M., & Baeten, M. (2016). Student Teachers’ Team Teaching during Field Experiences: An Evaluation by their Mentors. *Mentoring & Tutoring: Partnership in Learning*, 24(5), 415–440, DOI-org/10.1080/13611267.2016.1271560
- Smagorinsky, P., Cook, L., & Johnson, T. (2003). The twisting path of concept development in learning to teach. *Teachers College Record*, 105(8), 1399–1436. DOI-org/10.1177/016146810310500801
- Smith, J. (2002). The development of teaching tandem placements. *Mentoring and Tutoring*, 10(3), 253–274. DOI-org/10.1080/1361126022000022507
- Smith, K. (2005). Teacher educators’ expertise: what do novice teachers and teacher educators say? *Teaching and Teacher Education*, 21, 177–192. DOI-org/10.1016/j.tate.2004.12.008
- Smith, C. (2012). Evaluating the quality of work-integrated learning curricula: A comprehensive framework. *Higher Education Research & Development*, 31(2), 247–262. DOI-org/10.1080/07294360.2011.558072
- Smith, C. (2014). Evaluating the Quality of WIL. In S. Ferns (Ed.), *HERDSA Guide Work Integrated Learning in the Curriculum*. HERDSA.
- SOU 1999/63. *Att lära och leda - En lärarutbildning för samverkan och utveckling [To Teach and to Lead – a Teacher Education Program for Cooperation and Development]*. Stockholm. Retrieved from: <http://www.regeringen.se/rattsdokument/statens-offentliga-utredningar/1999/05/sou-199963/>
- SOU 2008:109. *En hållbar lärarutbildning. [A Sustainable Teacher Education]*. Stockholm. Retrieved from: <https://www.regeringen.se/contentassets/d262d32331a54278b34861c44df8dbad/en-hallbar-lararutbildning-hela-dokumentet-sou-2008109>
- Staal Jensen, I. (2018). Researching practice-based teacher education: Trends, challenges and recommendations for future research. *Acta Didactica Norge*, 12(3), 1–23. DOI-org/10.5617/adno.5933
- Stokking, K., Leenders, F., De Jong, J. & Van Tartwijk, J. (2003). From student to teacher: reducing practice shock and early dropout in the teaching progression. *European Journal of Teacher Education*, 26, 329–350. DOI-org/10.1080/026197603200012875.
- Stolz, S., & Biesta, G. (2018). Gert Biesta on thinking philosophically about education; thinking educationally about philosophy in education and educational research: In dialogue with Steven Stolz. In J. Quay, J. Bleazby, S. Stolz, M.

- Toscano & Webster (Eds.), *Theory and Philosophy in Education Research. Methodological Dialogue* (p. 52-67). Routledge.
- Stones, E. (1994). *Quality teaching: a sample of cases*. Routledge.
- Sundberg, D. (2015). *Pedagogik som vetenskap: Analys och argument*. [Pedagogy as a Science: Analysis and Arguments]. Linné university, Faculty of Social Sciences.
- Sundli, L. (2001). *Veiledning i lærerutdanningens praksis—mellom refleksjon og kontroll*. [Supervision in teacher education's practice—between reflection and control]. HiO-rapport nr.15
- Swedish Government decision U2018/01943/UH (2018). *Regleringsbrev för budgetåret 2020 avseende anslag 2:64 inom utgiftsområdet 16 Utbildning och universitetsforskning*. [Appropriation bill for the financial year 2020 regarding funding 2:64 within the expenditure area 16 Education and university research]. Retrieved from: <https://www.esv.se/statsliggaren/regleringsbrev/?RBID=20450>
- Swedish Government. (2020). *Regeringens politik/regeringen åtgärder för fler lärare/så arbetar regeringen för att lösa lärarbristen*. [Governmental measures for attracting more teachers/how the Government is working to solve the shortage of teachers]. Retrieved from: <https://www.regeringen.se/regeringens-politik/regeringens-atgarder-for-fler-larare/sa-arbetar-regeringen-for-att-losa-lararbristen/>
- Swedish Higher Education Authority. (2017). *Uppföljning och utvärdering av försöksverksamhet med övningskolor och övningsförskolor inom lärar- och förskolläro-utbildningar*. Delrapport 2017:13. [Follow-up and evaluation of a pilot project concerning specific practice schools within teacher education programs; in Swedish]. Stockholm. Retrieved from <https://www.uka.se/download/18.1694555316021105ce41ada/1513007975354/rapport-2017-12-12-ovningskolor-delrapport.pdf>
- Swedish Ministry of Education. (2014). *En försöksverksamhet med övningskolor och övningsförskolor* [A pilot project concerning specific practice schools and specific practice preschools; in Swedish]. Stockholm. Retrieved from <http://www.regeringen.se/rapporter/2013/07/u20134305/>
- Swedish Research Council. (2021). *Ethics*. Retrieved 2021-09-14 from: <https://www.vr.se/english/mandates/ethics.html>
- Sörensen, P. (2014). Collaboration, dialogue and expansive learning: The use of paired and multiple placements in the school practicum. *Teaching and Teacher Education*, 44, 128–137. DOI-org/10.1016/j.tate.2014.08.010
- Tanggaard, L. (2007). Learning at trade vocational school and learning at work: boundary crossing in apprentices' everyday life. *Journal of Education and Work*, 20, 453–466. <https://doi.org/10.1080/13639080701814414>
- Tannebaum, R. P., Hall, A. H., & Deaton, C. M. (2013). The development of reflective practice in American education. *American Educational History Journal*, 40(1/2), 241.
- The National Agency for Education (2022). *Vetenskaplig grund och beprövad erfarenhet*. [Scientific basis and proven experience]. Retrieved from: <https://www.skolverket.se/skolutveckling/forskning-och-utvarderingar/utbildning-pa-vetenskaplig-grund-och-beprovad-erfarenhet/det-har-ar-vetenskaplig-grund-och-beprovad-erfarenhet>
- Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, 30(3), 167–86. DOI-org/10.1177/0735275112457914

- Toom, A., Pietarinen, J., Soini, T., & Pyhältö, K. (2017). How does the learning environment in teacher education cultivate first year student teachers' sense of professional agency in the professional community? *Teaching and Teacher Education*, *63*, 126–136. <https://doi.org/10.1016/j.tate.2016.12.013>
- Tuomi-Gröhn, T. & Engeström, Y. (2003). Conceptualizing transfer: From Standard Notions to Developmental Perspectives. In T. Tuomi-Gröhn & Y.Engeström. *Between School and Work: New Perspectives on Transfer and Boundary Crossing*. (p. 19–39). Emerald Group Publishing Limited.
- Turney, C., Eltis, K., Towler, J., & Wright, R. (1985). *A new basis for teacher education: The practicum curriculum*. University of Sydney Press.
- UKÄ (2022). Swedish Higher Education Authority. *Om lärarutbildning* [About teacher education] Retrieved 15 May 2022 from <https://www.uka.se/fakta-om-hogskolan/om-lararutbildning.html>
- Valencia, S., Martin, S., Place, N., & Grossman, P. (2009). Complex interactions in student teaching: Lost opportunities for learning. *Journal of Teacher Education*, *60*(3), 304–322.
- Van der Akker, J. (2010). Curriculum Design Research. In Plomp, T. & Nieveen, N. (Red). *An Introduction to Educational Design Research*. (p. 37–53). Netzdruk, Enschede
- Virtanen, A., Tynjälä, P. & Eteläpelto, A. (2014). Factors promoting vocational students' learning at work: study on student experiences. *Journal of Education and Work*, *27*(1). DOI-org.10.1080/13639080.2012.718748.
- Waitoller, F. R., & Kozleski, E. B. (2013). Working in boundary practices: Identity development and learning in partnerships for inclusive education. *Teaching and Teacher Education*, *31*, 25–45. DOI-org/10.1016/j.tate.2012.11.006
- Walsh, K., Elmslie, L., & Tayler, C. (2002). *Pairs on practicum (Trial): Early childhood students collaborate with peers in preschool/kindergarten*. Paper presented at the Australian Association for Research in Education (AARE) Conference , Brisbane, Queensland.
- Walsh, K., & Elmslie, L. (2005). Practicum pairs: an alternative for first field experience in early childhood teacher education. *Asia-Pacific Journal of Teacher Education*, *33*(1), 5–21. DOI-org/10.1080/1359866052000341098
- Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. Free Press.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge. University Press.
- Whitty, G. (2008) Changing modes of teacher professionalism: traditional, managerial, collaborative and democratic. In B. Cunningham (Ed.), *Exploring Professionalism* (p 28–49). Institute of Education.
- Zegwaard, K. E., Johansson, K., Kay, J., McRae, N., Ferns, S., & Hoskyn, K. (2019). Professional development needs of the international work-integrated learning community. *International Journal of Work-Integrated Learning*, *20*(2), 201–217.
- Zeichner, K. M., & Liston, D. P. (2013). *Reflective teaching: An introduction*. Routledge. DOI-org/10.4324/9780203771136
- Zeichner, K., & Tabachnick, B. R. (1981). Are the effects of university teacher education washed out by school experiences? *Journal of Teacher Education*, *32*, 7–11. DOI-org/10.1177/002248718103200302
- Zeichner, K. M., & Gore, Y. J. (1990). *Teacher Socialization*. In Handbook of Research on Teacher Education (p. 329–348). MacMillan.



- Zeichner, K. M. (2006). Reflections of a University-Based Teacher Educator on the Future of College- and University-Based Teacher Education. *Journal of teacher education*, 57(3), 326–340. DOI-org/10.1177/0022487105285893
- Zeichner, K. M., & Conklin, H. (2008). Teacher education programs as sites for teacher preparation. In M. Cochran-Smith, M. S. Feiman-Nemser, D. McIntyre & K. Demers (Eds). *Handbook of Research on Teacher Education: Enduring questions in changing contexts*. (p. 269–289). New York: Routledge.
- Zeichner, K. M. (2010). Rethinking the Connections Between Campus Courses and Field Experiences in College- and University-Based Teacher Education. *Journal of Teacher Education*, 61(1–2), 89–99. DOI-org/10.1177/0022487109347671
- Zeichner, K. M. (2012). The Turn Once Again Toward Practice-Based Teacher Education. *Journal of Teacher Education*, 63(5), 376–382. DOI-org/10.1177/0022487112445789
- Zeichner, K. M., & Bier, M. (2015). Opportunities and Pitfalls in the Turn Toward Clinical Experience in US Teacher Education. In E. Hollins. *Rethinking Field Experiences in Preservice Teacher Preparation*. (p. 20–46). Routledge.
- Åsberg, R. (2001). Det finns inga kvalitativa metoder – och inga kvantitativa heller för den delen. Det kvalitativa-kvantitativa argumentets missvisande retorik. [There are no qualitative methods – and no quantitative ones either, for that matter. The misleading rhetoric of the qualitative-quantitative argument]. *Pedagogisk Forskning i Sverige*, 4, 270–292.
- Öqvist, A., & Cervantes, S. (2018). Teaching in Preschool: Heads of Preschools Governance Throughout the Systematic Quality Work. *Nordic Journal of Studies in Educational Policy*, 4(1), 38–47. DOI-org/10.1080/20020317.2017.1419040