

The effect of frame factors on (vocational) teacher educators' teaching work

A narrative study within short-track teacher education at a Swedish university

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Abstract

This study is about six teacher educators' descriptions of their teaching of (vocational) subject-specific didactics to teacher students at a university in Sweden. The analysis has been carried out categorically on the basis of material from two focus group interviews and with a narrative approach. Central to the narrative approach is the basic assumption that narratives are constructed together with and in relation to other people. The theoretical approach in the study is based on the concept of frame factors. We have assumed Hiim's (2010) didactic relationship model, but use only the frame factors in her model. The study tries to answer the research question: What categories of teaching-related frame factors appear in the teacher educators' descriptions of their teaching? The results comprise four categories and show that time, authorities, evaluation, and student base, aspects that are related to other factors in Hiim's relationship model, govern their teaching. The conclusion is that the teacher educators try to create opportunities for their students, who are prospective teachers, to acquire teaching skills alongside an ongoing societal development, but this attempt is governed by frame factors that they themselves are unable to change.

Keywords: Teacher educators, Vocational teacher educators, Short-track teacher education, Narrative research, Frame factors



Introduction

In Sweden, as in many other countries, there is a lack of qualified teachers. The Swedish government has therefore invested in future teachers who already have the required subject expertise (Johansson, 2019). These mature students can study for 3 years part-time or for 1.5 years full-time to earn teaching qualifications. The investigated short-track teacher education comprises 90 credits, of which 30 credits are earned through placements. In previous studies, we have analysed ninety study guides from a number of Swedish short-track teacher education programmes in order to investigate what subject-specific didactic knowledge the teacher educators consider to be particularly important (Andersén et al., 2018; Asghari et al., 2019). The results showed, among other things, that teachers' interpretation of learning objectives varied between different teachers and between different subjects. The studies also showed that teachers' previous professional and educational experiences could be important for their interpretation of learning objectives, handling of examinations and choice of course literature. Previous professional and educational experiences are considered important in the research field of teaching and learning (Ahlgren & Gillander-Gådin, 2011; Eiríksdóttir, 2018; Hiim, 2013, 2015), and can be seen as an integral part of the frame factors in Hiim's (2010, 2012, 2013, 2015) didactic relationship model. For this reason, we wanted to go deeper in this study and examine the frame factors that emerge from (vocational) teacher educators' narratives about their teaching experiences.

There is a great deal of research on teacher educators and these studies often focus on traditional teacher education. Previous research shows, for example, that university lecturers strive to conduct teaching in line with current research (Duch et al., 2021; Impedovo, 2021; Kitchen & Petrarca, 2016; Loughran & Hamilton, 2016) and immerse themselves in their subjects (Henriksson & Elmgren, 2015; Loo, 2020; Ping et al., 2018; Sakamoto, 2021). They also try to create and lead discussions in the classroom so that students can participate in the discussions and develop their knowledge (Mayer & Reid, 2016; Ping et al., 2018), but this requires time. The lecturers must also have time to create conditions for their students to be able to evaluate their learning in relation to policy documents and current research so that the students can reflect on, and take responsibility for, their learning (Leahy et al., 2005).

Loo (2020) writes that teachers see a need to develop their competence in parallel with scientific, social and technological development. Duch et al. (2021) also show the relationship between vocational teaching and teachers' participation in research, which develops teachers' teaching competence and raises the quality of education. Increasing the quality of teacher education can also be done in relation to the professional development of university teachers where teachers can identify themselves as competent in relation to their subjects (Impedovo, 2021).

The need to be able to meet new challenges and develop teaching based on the requirements that policy documents, research and students place on education seems to be important for university lecturers (Henriksson & Elmgren, 2015). Conditions must be created for university lecturers to be able to plan what is to be taught, why it is to be taught and how the teaching is to be done (Gibbs, 1992). In addition to good planning, university lecturers must have good subject knowledge, good teaching skills, and be clear to their students what the education requires, and how the students can achieve it (Richardson, 2008).

In relation to the student base, teachers also use different teaching strategies to get a better result regarding students' learning (Agricola et al., 2021). Collaboration with others is considered

important for university lecturers to be able to help students in their learning (Johansson, 2019). For a working collaboration, teachers must be aware of their teaching and students' learning. Through this awareness, teachers can also make better decisions about their own competence development, both in terms of subject knowledge and in terms of pedagogical knowledge (Sakamoto, 2021). Teaching planning is context-bound. For example, teaching during the Covid-19 pandemic has been planned as more online and digital than campus-based (Impedovo, 2021; Phelan & Morris, 2021).

Despite the importance of research on teacher education (Janssen et al., 2014; Jensen et al., 2018), there are very few studies that concern short-track teacher education. In addition, we have not found any study that foregrounds (vocational) teacher educators' descriptions of their teaching in the short-track teacher education, and frame factors in their teaching work. That is what we do in this study.

In this study, six teacher educators with teaching degrees and a great deal of experience of teaching teacher students in general teaching skills as well as in vocational subject-specific didactics at a university in Sweden were interviewed in two focus group interviews. The focus of the interviews has been on the frame factors that emerge from the teacher educators' descriptions of their teaching experiences. Listening to what the interviewees (in our study, the teacher educators) say about their teaching experiences contributes to knowledge about the teacher education in general (Polkinghorne, 2007) and to the ongoing conversation about teaching in teacher education. Lindberg (2003) writes that in a Nordic perspective, vocational education is something between school and work, a hybrid which cannot be identified as either school or work. This also applies to teacher education in Sweden, a hybrid form of education in which university studies and placements go hand in hand. Since teacher education is a vocational education, we will start from Hiim's (2015) explanation of the concept of didactics and process the teacher educators' descriptions of their teaching by means of Hiim's didactic relationship model.

Didactic relationship model for teacher education

Didactics can be seen as a process that takes place in an interaction between practical teaching work, reflection, and theory development in the profession (Hiim, 2015). In that context, teaching in teacher education can also be seen as a practical-theoretical process of theorising and reflecting on the concepts of practical teaching. Teacher educators' teaching includes how teaching professions can be perceived as meaningful, how teacher students can improve their teaching knowledge and teaching skills, and also how teaching knowledge can be further developed through systematic education and research processes (Emanuelsson & Sahlström, 2008; Hiim, 2010). Hiim (2010, p. 19) presents a didactic relationship model that includes interaction between evaluation, learning ability, *frame factors*, goals, knowledge content, learning process, planning, reflection and implementation. A further development of Hiim's didactic relationship model in a teacher education context means that the goals of the education are based in teaching knowledge, and teaching knowledge is context-bound and develops and changes in interaction with working life, working methods, evaluation methods, social life, and research.

As a continuation of the study described above, an analysis of two focus group interviews from a *narrative perspective* has been conducted. We will be interested in six teacher educators' *des-*

criptions of their teaching in short-track teacher education. A special interest lies in *the frame factors* that exist in Hiim's (2010, p. 19) didactic relationship model, and that guide the teacher educators' teaching. Studying frame factors is important because they limit and determine the teaching situation. In addition, short-track teacher education has a special place among regular teacher programmes. This type of teacher education contains learning objectives and course content tailored for students who will become teachers in a short time, that is, in 3 years part-time or in 1.5 years full-time. Students should not only acquire knowledge about the teaching profession but also be able to identify with the teaching profession and become part of the teaching community (Impedovo, 2021). In other words, it makes sense to try to ascertain whether the influence of frame factors appears in any particular way in the teaching that is part of this specific teacher education. The present study is based on the assumption that enhanced knowledge of the frame factors can be relevant both for the teacher education programmes and for the teaching profession as a whole. Thus, the purpose of the study is to contribute with knowledge of the frame factors that are important for teacher educators' teaching. The research question that we raise in this context is: *What categories of teaching-related frame factors appear in the teacher educators' descriptions of their teaching?*

Theoretical approach - frame factors in teaching

Theoretical perspective is about choosing a starting point for the study and a way of understanding the research material (Kvale & Brinkmann, 2009), and in this study the theoretical approach is about understanding the educators' descriptions of their teaching with a focus on the concept of frame factors in teaching. Teacher educators have a number of different laws, rules and regulations to adhere to (Biggs & Tang, 2011). These include the Higher Education Act and Higher Education Regulations. The regulations that guide the teaching and learning of teachers and students are called frame factors by researchers such as Broady and Lindblad (1999), Gustafsson (1999) and Lundgren (1972). According to Dahllöf (1967), the frame factors influence the teachers' work in practice, that is, the guidelines, goals, and results of teaching. This can also in some cases mean that the individual teaching that the teacher has planned does not work in practice and that the individual student does not receive the help they need from the teacher. Dahllöf writes that teaching is a process that leads to results, but the process as described by Lundgren (1981) is limited by constitutional, organisational and physical frame factors.

We have assumed Hiim's (2010, p. 19) didactic relationship model which is a teaching and learning model, but in this study, we are studying only frame factors in her model. Frame factors in Hiim's model are related to other factors in the model. Therefore, we believe that we cannot see frame factors that emerge from educators' descriptions of their teaching as isolated from other factors. Hiim (2013) views the concept of frame factors as neutral. The frame factors do not determine the content or form of teaching in detail. Instead, the frame factors set the general frames for the teaching work. Teacher education, like other vocational education, is related to different knowledge traditions (cf. Hiim, 2010), and teacher educators have the task of linking their teaching to knowledge traditions and established teaching skills. Knowledge traditions can also be seen as frame factors that govern what types of knowledge should be more prominent

than some others, what is important in education and how the education should be carried out (Hiim, 2010).

Frame factors in teacher educators' teaching work

Teaching takes place in different stages depending on the learning process and learning ability of each student (Hiim, 2013). Teacher educators' teaching work is also affected by frame factors that can be beyond the individual teacher's direct control (Hiim, 2010, 2013). Becoming a teacher educator is a long-term process in which the teacher educator develops professional identities in interaction with students and their surroundings (Timmerman, 2009). Teachers' professional, educational and teaching experiences are important for the decisions that they make about teaching in the classroom (Hiim, 2013).

Based on Hiim (2013), we claim that the interaction between teacher students and teacher educators, as well as the collegial collaboration between teacher educators, are important in relation to the frame factors that influence the teacher educators' teaching work. Timmerman (2009) writes that teacher students try to emulate the positive qualities of their teacher educators. Based on our understanding, the responsibility to be good role models for their students places great demands on the teacher educators. The norm of what a good role model is can also be discussed in this context. We believe that the norm is related to the individual teacher educator's own perceptions. Hence, the norm of what a good role model is differs from one teacher educator to the other. Since Hiim (2013) looks at professionals' own perceptions of the profession and the meaning of the profession as frame factors which affect the professionals' work, we also assume that the teacher educators' own perceptions of what a good role model is can be a frame factor that affects teacher educators' teaching work.

Teacher educators' professional knowledge is developed in the process when they reflect on and analyse their theoretical and practical knowledge about teaching and learning (Toom, 2017). Teacher educators' reflections on their teaching and the frame factors in teaching are part of the teaching process (Erbilgin, 2019). By telling us about their teaching, the teacher educators started to reflect on the frame factors and the significance of them for teaching, as well as how these factors should be handled in a teaching situation.

In most studies that are based on frame factor theory, the researcher establishes a definition of frame factors in advance (Gustafsson, 1999), but this is not the case with our study. In our study, the frame factors emerge from the teacher educators' descriptions of their teaching.

Methodological approaches – narrative research

Teacher educators' narratives enable us to understand their view of teaching without limiting our understanding to pre-set categories (Brockmeier & Carbaugh, 2001; Riessman, 2008; Squire et al., 2008). We have a social constructionist perspective on narratives and look at narratives as social acts that do not take place in a social vacuum, but in specific social contexts (Denzin, 1988; Goodson & Sikes, 2001; Mishler, 1999; Plummer, 2006). We contend that the teacher educators' narratives cannot be seen as direct reflections of reality, nor as accurate descriptions of what actually happened in their teaching. Our view is that what the teacher educator tells us in a group interview

is a constructed reality (Asghari, 2014) that has been created together with interviewers (with us researchers) and other interviewees in interview situations. Teacher educators' narratives become both a meaningful process and a performative act when the educators, by telling us about their teaching, try to understand themselves and their surroundings (cf. Bruner, 1986). We also see the translation of the interview material from Swedish to English as part of this social constructionist approach. The descriptions of teacher educators will therefore be regarded as socially situated acts through which teacher educators make statements about themselves, and about how they construct boundaries in relation to teaching (cf. Langellier & Peterson, 2004; Mishler, 1999).

The interviewed teacher educators tell their experiences in various ways. During the interview they choose certain teaching experiences to talk about instead of others, look back on their teaching career, see what it looked like, and consequently conclude what made them treat their students the way they did (cf. Freeman, 2010). They take a step beyond themselves and construct the history of their teaching, and this may help them reach their students through a link that includes the past and the future in the present. Their reality is in the present, and in their descriptions, they draw their own conclusions about their previous experiences and how to teach the students based on them (cf. Freeman, 2010).

Selection and analysis of the teacher educators' descriptions

What teacher educators told us amounted to extensive material on 35 A4 pages of narratives about their teaching. Based on what is relevant to this study, as part of the constructive perspective on narratives (Mishler, 1999), we have selected a number of *descriptions* from the educators' *narratives*. For the choice of descriptions, we used two different approaches. First, we started from Lieblich et al. (1998) and chose the descriptions that contained unique events that were highlighted by the teacher educators as significant in relation to the frame factors that emerged from their descriptions of teaching. Secondly, we took into account Hiim's (2013) explanation of frame factors. In this case, we chose the descriptions that contained events that did not determine the form or content of teaching in detail, but still governed the teaching in a general sense.

In the analysis of teacher educators' told experiences of teaching, we obtained our analysis tool from Lieblich et al. (1998), who write that the researcher can read, interpret and analyse descriptions from two independent dimensions: "(a) holistic versus categorical approaches and (b) content versus form" (p. 12). In our categorisation, we used both *categorical approaches*, that is, we focused on different categories of teaching-related frame factors that appear from the teacher educators' descriptions of their teaching, and also on *content*, that is, what is being told, and not how the descriptions are told. Goodson and Choi (2008) believe that the researcher can understand each description in different ways and from different perspectives, and these descriptions can therefore be divided into different categories. The descriptions in our research are no exception, and can be understood in different ways. Lieblich et al. (1998) write that in a categorising approach, the respondents' narratives are broken into parts and sectioned. Individual words belonging to a defined category are collected from the entire description or from several descriptions of one or more respondents. In line with this approach, we categorised the teacher educators' descriptions of their teaching, that is, we used specific descriptions of frame factors or

searched for series of illustrative content in the description, for example: what have the teacher educators said so far that represents the most important aspects of their narratives? What is the description about?

Data collection via focus group interviews

Focus group interviews, where a group of teacher educators gather to talk about a given topic (Wibeck et al., 2007), were chosen as the data collection method. This was because we wanted to imitate everyday conversation as much as possible between the participants (Wilkinson, 2011). The purpose of focus group interviews, according to Krueger (2014), is to deepen the understanding of how people think about a particular subject area (in our case teaching (vocational) subject-specific didactics) which fits well with the purpose of our study.

Based on the educators' willingness to participate in research and the times and opportunities they had for the interview, we conducted two focus group interviews, one with Dennis, Noel, Anna and Hanna and one with Christopher and Johanna at the university where they work. Each focus group interview was approximately 1.5 hours long. For each group interview, we used a Dictaphone to record what the teacher educators told us. This is because we wanted to be able to listen to the teachers' told experiences and transcribe the interview material afterwards.

The advantage of the focus group interviews in our study was the interaction between the participants when a discussion forum was created where one educator's speech triggered others to enter the conversation and tell what they thought was important (cf. Wibeck et al., 2007). The disadvantage could be that educators were influenced by each other and what they told was governed by the ongoing conversation in the group (cf. Krueger, 2014). Since we have a social constructionist perspective on narratives, we believe that this possibility of mutual influence between participants in a focus group interview does not clash with the perspective that what every educator tells in the interview is created in the interaction between him/her, other educators and the interviewer.

Information about the teacher educators in the study

The teacher educators who participated in this study are Christopher, Johanna, Anna, Hanna, Dennis and Noel. Christopher, Johanna and Anna are teacher educators at the university. They have extensive experiences of teaching students including vocational teacher students in general teaching skills as well as (vocational) subject-specific didactics. Hanna, Dennis and Noel teach most of the time in a vocational programme at upper secondary schools. They also teach vocational subject-specific didactics at the university a few times each term to students who will become vocational teachers.

Ethical approach

We adhere to the principles of good research practice according to the Swedish Research Council (2017) when it comes to protecting integrity and personal data in research. We informed the teacher educators about our study and provided them with consent forms. The consent forms were

signed and approved by the educators. We protected our data by anonymising the names of the teachers in the transcribed material. The anonymising process was based on code lists that each researcher created for their interviewees. We transferred the interview materials (raw materials) from the Dictaphones to hard drives. The interview material, the transcribed material and code lists will be kept in the security cabinet for 10 years (National Archives Collection, 2011). The hard drives have been stored in the security lockers at the university. After this storage, we deleted the interview recordings from the Dictaphones. Also, the transcribed material that is anonymised will not be preserved longer than necessary (Swedish Research Council, 2017), that is, only until we consider that the material no longer has any particular value or is no longer of great public interest.

Result

In this section, we present the frame factor categories that emerge from teacher educators' descriptions of their teaching. Prominent frame factor categories are: 1) *time*, 2) *authorities*, 3) *evaluation* and 4) *student base*.

Time as a frame factor

The framework for teachers' teaching work can be about the time and place of teaching, teaching materials, the goal of the teaching, teaching content, what the students are expected to learn, and so on (Hiim, 2010, 2013). Based on Hiim, we contend that time is important for educators' teaching work and for the students' learning, and that lack of sufficient time can affect more or less all the factors included in Hiim's didactic relationship model.

The category of *time* is one of the frame factors that appears from the teacher educators' descriptions when they tell about the time they need for their teaching, which may include the selection of literature, the completion of exam assignments and the preparation of new lectures. Since Hiim's (2010) didactic relationship model is about relations between different factors, our interpretation is that *time*, an aspect of teaching that in some cases may be beyond the educators' direct control, can also be related to the constituent factors in Hiim's model.

As can be seen from the educators' descriptions, it seems that *preparation for teaching for the first time* requires extra time. For example, Christopher talks about having time to remove and insert literature when he took over a course for the first time: « When I inherited these courses, the first term involved very much the same literature [as earlier]. I simply had no time to radically redo it, but gradually, I have removed and inserted literature.»

Johanna says the following about the time the teacher needs to give new lectures or examination assignments for the first time:

That is all about whether you have done it before or not. I would say that all new lectures or examination assignments, everything you do the first time at this university, takes so much more time. Then you use everything, before and after working hours, to complete the work.

Dennis also talks about the time he needs to learn about the course and what names and abbreviations are included in the course:

When you are going to run a course for the first time, it obviously requires a lot more time. I didn't even know how the courses were structured, and there were a lot of new names and abbreviations, and you know, you don't have much time to get acquainted with everything and learn.

From Christopher's, Johanna's and Dennis' descriptions above, it appears that time is needed for selection or re-selection of literature for the courses, for the preparation of new lectures, for the construction of new assignments, and for actions required to start and finish a new course.

Time also seems to be important for educators when it comes to *going deeper into subject knowledge and learning goals*. For example, Christopher says the following about his desire to go deeper into the knowledge requirements of courses and subject plans:

The learning goals are too big for the existing teaching time, I feel. It takes time to catch up on the learning goals. Especially if you want them to do something practical as well. [...] I feel, I would like to go much deeper into the knowledge requirements that course and subject plans entail.

Johanna also tells below that she needs time to get closer to the learning goals in her teaching:

The learning goals change from time to time, and it takes time for me to be able to familiarise myself with the learning goals and create tasks based on them for the students, while you also have a lot of other tasks that you have to keep up with.

Noel similarly talks about the time that teachers need to immerse themselves in what they are going to teach. «You must have time to immerse yourself in what you are to teach, I must have time to read the course literature and be prepared, but you don't always have that time.»

In summary, it appears from Christopher's, Johanna's and Noel's descriptions above that teacher educators need time to be able to prepare and carry out their teaching, and construct tasks based on the learning goals. They also need time to go deeper into subject knowledge by reading the literature included in the course.

The descriptions indicate that time is also important for educators to *teach and meet their students*. In this context, Christopher says that time is needed for practical work, for changing tasks and literature, as well as for individual meetings and discussions with students about the subject.

It doesn't get as solid as I would like. There are things that the students need to do practically, but you have two hours to both discuss and do something practical. [...] The smallest thing about changing a task or exchanging literature takes much more time than you actually have. [...] You need to have time to meet the students, and sometimes individually, and discuss with them about the subject.

Johanna also talks about the lack of time for teaching after changes have been made, and for listening to one of her students about her placement.

We changed the literature because new study guides came, and it takes time and it's stressful. I'm supposed to do the study guide, and think about a new task and change the literature. It takes a lot of time that I don't have. [...] I must also have time for listening to my student what she says about her placement.

From what Christopher and Johanna tell above, it appears that the teacher educators need time to discuss with their students about the subject and literature, to tell them about the changes made in the education, and to talk to them about their placements.

The category *time* shows that teacher educators' teaching is governed by the time at their disposal for teaching, especially as regards teaching the subject for the first time, selecting literature, preparing examination assignments, reading and understanding learning goals, implementing course and subject plans, and writing study guides.

Authorities as a frame factor

In the short-track teacher education at the university in question, a teacher educator can also be a course co-ordinator, programme director or course examiner. The category authorities emerges when the teacher educators talk about how their teaching work is controlled and influenced in different ways. According to Hiim (2010), teachers' teaching and students' learning are related to the goal of teaching, what knowledge should be taught, and how teachers should create conditions (implementation) for their students to learn the content of knowledge. Hiim's model is about relationships between different factors. We consequently believe that the factors of course goals and knowledge content can, for example, be related to authorities as a frame factor that is beyond the educators' direct control.

From Hanna's and Christopher's descriptions, it appears that study guides and literature govern their teaching work. Although Hanna and Christopher talk about study guides and literature specifically, we chose to include these texts in *laws, regulations, rules and policies*. This is because the content of the study guides is decided by more than one person and has to be consistent with the laws, ordinances, rules and policies that regulate the education, and study guides in turn determine what literature is selected.

Hanna says the following about the study guide that governs her task construction and her choice of literature, and points out that it works, but it is not always easy:

The study guide is written by the programme leader and course leader, but I have to write an appendix to the study guide and adapt the tasks to the study guide and the literature in the study guide. It works, but it's not always easy.

Christopher also talks about the study guides that determine his decision to change some of the course literature.

I feel that I'm very guided by the guidelines given to me as a teacher educator, for example study guides. It gives a lot of direction. Now I have changed some literature because there are some things that I usually emphasise and put emphasis on, but the frame is already set in the study guide.

From Hanna's and Christopher's descriptions, it appears that, laws, ordinances, rules and policies govern teacher educators' teaching in terms of the learning goals and literature included in the courses.

Other actors that can guide the teacher educators' teaching work are the *education leaders*. For example, Christopher tells about how the teacher educators are guided by programme leaders and course leaders:

As a teacher, you are guided by the demands that the education leaders place on you, and there is nothing wrong with that. It's just that the system is so structured. It's the course leader who writes the study guide, creates assignments, selects literature for the assignments, and the

teacher must adapt accordingly. How the education is to be carried out, which days and how often our students are to come to Campus is also decided by the programme leader.

Johanna also talks about *education leaders*, who control the structure of the study guide, the number and length of teaching opportunities, and when the students can meet her for the first time.

I'm both a teacher educator and a course leader in my course and I myself write the study guide for my course, but the structure of the study guide is determined by the education leaders, the literature must be discussed with the examiner. [...] Number of campus days, length of each teaching opportunity, number of students, when the students can meet me for the first time. There is a lot that I as a course leader and teacher educator can't control.

The descriptions above indicate that the *education leaders* (programme leaders and course leaders) control the educators' teaching work. They determine the number, the dates and the length of the campus meetings. The teacher educators follow the regulations in the study guides, create tasks based on the regulations, and examine their students.

From the educators' descriptions, it also appears that the *trade association* sets some of the frame factors for their teaching work. For example, Anna says about her students who will become vocational teachers and the importance of the trade association in their education: «Our students will become vocational teachers. The trade association is, of course, very important to them. They must also take into account what the trade association requires.»

Dennis also says the following about his students who will become vocational teachers, and indicates the importance of the trade association in their education:

If we talk about my vocational subject there, you have many parts there that you have to relate to trade association, and trade association that are represented so, there it may be more about seeing, highlighting those parts then, so that you can see educational situations in them.

It appears from Anna's and Dennis' descriptions above that the trade associations control the teaching of teacher educators. The reason for this control is that the educators' students will become vocational teachers, and these prospective vocational teachers must take into account the trade associations in their teaching in vocational upper secondary schools.

The category *authorities* shows that not only educational leaders at different levels (programme director, course leaders and examiners) but also laws, ordinances, rules and policies, and even the trade association, control the teacher educators' teaching.

The evaluation of their own teaching as a frame factor

Evaluation is one of the factors in Hiim's (2010) relationship model, but *evaluation* as a frame factor emerges when it is beyond the educators' direct control and sets the framework for educators' teaching work. According to Hiim (2010), teachers continuously evaluate their teaching planning and reflect on what should be taught, and why, and how and when the teaching should take place. Based on the fact that Hiim's model is about relationships between different factors, educators' evaluation of their own teaching can also be seen as a frame factor that is, for example, inherent in planning, implementation and reflection.

There are different types of evaluation that may influence teaching. For example, *evaluation based on the requirements of the trade association* seems to be important for educators' teaching work in teacher education for future vocational teachers. In that regard, Noel describes the stud-

ents' knowledge based on the trade association of the technical professions: « In my experience, some students I had. They have, based on trade association requirements, knowledge of their profession, and then they know exactly what it takes to carry out the profession.»

Dennis also teaches prospective vocational teachers. He talks about the trade association and that he must be aware of its requirements in his teaching: «The trade association also has its own way of thinking about the profession and I also have to think about their requirements when I teach my [vocational teacher] students.»

It appears from Noel's and Dennis's description above that the teacher educators, in their teaching evaluation, take into account that their students will become vocational teachers after completing teacher education. In their teaching, these educators also seem to plan, implement and reflect on their planning and implementation by take into account that these students must have knowledge of the requirements of trade association in their future teaching.

It also appears from Noel's description that evaluation can be done based on the *requirements of laws, regulations, rules and policies* when he compares the trade associations with the National Agency for Education. Noel explicitly mentions the National Agency for Education, but we chose to call it *laws, ordinances, rules and policies* where the National Agency for Education is included.

I also try to be careful to include [that sort of thing], so that they get a connection. So they see the difference between what trade associations require and what the National Agency for Education requires. You [student] may be right, but unfortunately we are working for the National Agency for Education now.

In the description above, Noel concludes his comparison with the sentence that the teachers «unfortunately» work in accordance with the requirements of the National Agency for Education, that is, the laws, ordinances, rules and policies that the Swedish government imposes on educators' teaching work. The use of the word «unfortunately» is an obvious evaluation on Noel's part.

From Hanna's and Anna's descriptions of their teaching, *evaluation based on one's own experiences, colleagues' views, and students' likes and dislikes* appears as a factor when they relate their teaching at university to real life and their experiences of upper secondary school. Hanna goes back to upper secondary school and compares her current university students with her former upper secondary school students.

Some of my students are already in [the profession] and already work as teachers, and some have not been there at all, and then, based on these [learning] goals, I try to connect with real life situations for them, so that they as teachers can make their assessment [...] You always have a vision that this is how it will be done! This is how I will work when I'm in a real life situation.

Anna says the following about what reality looks like for a teacher and tries to create a social network of resources for her students at the university:

Many of my students already work as teachers, so they know what reality looks like, but I always tell those [who don't not work as teachers] what reality looks like for a teacher. [...] I do everything as a teacher educator, creating a social network of resources for my students at the university. It's not that easy. It's more difficult to create the social network at the university than it is at the upper secondary school when I taught there.

Since, according to previous research (Gandeel, 2016; Hill et al., 2008; Laura, 2017), teachers are controlled by their own experiences in their teaching, we claim that evaluations made on the basis of their own experiences are also beyond the teachers educators' control. An example of this is

provided by the descriptions above where Hanna's and Anna's own experiences of what real life or reality is, constitute the basis for their evaluations.

At the end of each semester, the university sends a digital evaluation link to the students to evaluate the completed courses. Anna says that in addition to the evaluation that the university makes, she evaluates her course and her teaching at the end of each course to improve her course and her teaching.

I always want to see what the teachers in my course think of the course. [...] In addition to the [university] link that my students get at the end of course, I myself make a link to them [students] to see what is good or bad in my course, in my teaching.

In summary, it appears from Hanna's and Anna's descriptions that evaluations, made by students, colleagues and management, but also by educators themselves based on their own experiences of what a real teaching life should be like, seem to be important for teacher educators' teaching work. In addition, the category evaluation shows that the evaluations are also made on the basis of the requirements that laws, regulations, rules and policies and the trade association place on the education.

Student base as a frame factor

The category *student base* emerges when teachers tell about the diverse student base they have and point out that they must adapt their teaching to the students' different backgrounds, which make them more or less equipped for university studies. According to Hiim (2010), teachers take into account the learning process and the students' learning ability. We therefore argue that the factors learning process and learning ability can be related to a *student base* that is beyond the educators' direct control, but we would also like to suggest that the concept of student base is broader than learning process and learning ability. Student base can, for example, include students' family and work situations.

As can be seen from the educators' descriptions, the students' work situation and whether *they already work or do not work as teachers* seem to be important for the educators' teaching work. For example, Noel says that some of his students work as teachers and know what the teaching profession requires and some do not:

Some of my students are professionals and they have never worked as a teacher. Then I have some students who already work as teachers and they know exactly what the teaching profession requires. They don't need to look at the National Agency for Education what it says.

Johanna also says that some of her students already work as teachers and have knowledge of what is included in the teaching profession, while there are also those who need concrete advice.

I have students who already work as teachers and then they know that we don't have any solutions to all the problems that exist in the school, but then there are those who don't work as teachers and are looking for literature that will provide concrete solutions.

As it appears from Noel's and Johanna's descriptions above, teacher educators are influenced by the fact that some of their students work as unqualified teachers in parallel with their studies at university. Those who already work as teachers have knowledge of the teaching profession, the practical implementation of guidelines from the National Agency for Education, and how problems

can be solved, while those who do not work as teachers lack this knowledge and are looking for concrete advice.

It also appears from the educators' descriptions that they take into account the *students' various basic knowledge* in their teaching work. Anna says the following about the students who have different knowledge and different chances of understanding the tasks:

We have to concretise what we teach. Some students have difficulty understanding what the task requires. [...] Some of our students, they may not have studied for 20 or 30 years while some come almost directly from upper secondary school.

Johanna talks about her students' differences in awareness of what it takes to become a teacher. According to her, these differences can be important for students' individual development as teachers:

Our students are so different, some know exactly what it takes to become a teacher, and some don't, but for me it is very important that everyone can see their own development when they are here at university, and it isn't impossible, but it isn't easy either.

Anna's and Johanna's descriptions indicate that teacher educators are influenced by their students' varying knowledge backgrounds. This applies, for example, to students' understanding of what a task requires, and what is required to become a teacher.

From Johanna's descriptions, it also appears that she takes into account *the students' different practical conditions* in her teaching work. In the description below, she talks about her students with different conditions and their efforts to work with collegial learning:

My students are all motivated, but they have different conditions, I have students who are the only vocational teachers in their schools. Then, I also have students who work in schools where there are several teachers. Those students are used to working in teaching teams. So, if those students, for example, are going to work with collegiate learning, it isn't a problem, but the students who are the sole vocational teachers in their schools, they have another prerequisite to work with collegiate learning, and I have to keep that in my mind when I plan my teaching.

This description indicates that teachers' teaching is affected by what schools their students work in, and with what other teachers.

The category *student base* shows that the educators teach a student base with varying basic knowledge and practical conditions. The student base is also diverse when it comes to the temporal distance between the students' upper secondary studies and their university studies and the fact that some students already work as non-graduate teachers in schools and some do not.

Discussion

Based on Hiim's (2010) didactic relationship model, we believe that teacher educators' teaching and students' learning are context-bound and consist of interactions between planning, reflection, implementation, frame factors, learning ability, evaluation, learning process, knowledge content and goals. We chose to take a closer look at the concept of frame factors, but since there are relationships between frame factors and other factors included in Hiim's didactic relationship model, it becomes a matter of course that prominent frame factors also affect and are affected by the other factors.

Time is one of the frame factors that influence educators' teaching (Gibbs, 1992; Leahy et al., 2005; Loughran & Hamilton, 2016). Teachers need time to research their own practice and gain a better understanding of their teaching work, but also to achieve professional development and get opportunities for close collaboration with other university lecturers and researchers (Gibbs, 1992; Leahy et al., 2005; Loughran & Hamilton, 2016).

It emerges from the educators' descriptions that having enough time is an important factor for their teaching work. They need time to teach and meet with students. They also need time to carry out their teaching work, which is also guided by other frame factors. Adequate time is needed for educators to be able to observe higher education regulations, create and implement study guides, and help students achieve the learning goals, which guide both teaching and learning. Lack of time can put stress on the teacher educators.

Time is also important for the university lecturers to be able to see the long-term perspective of their teaching work and for any changes within it (Gibbs, 1992). The educators need to take part in current research (Duch et al., 2021; Loo, 2020), and for that, they need time. Cooperation between university teachers with different educational backgrounds, knowledge and skills is also an important factor in developing teachers' teaching and students' learning (Impedovo, 2021). For this reason, there should be time for university teachers to create opportunities for collaboration with other researchers and teacher educators to base their teaching on scientific research results, disseminate research knowledge, reflect on their teaching practice and adopt a scientific attitude as researchers (Impedovo, 2021).

Teacher educators have their own idea of how teaching should be conducted. Their own perceptions of what to teach, why to teach, when to teach, and how to teach, guide their teaching. Based on Erbilgin (2019), we think that teacher educators reflect on their teaching, and our study shows that teacher educators reflect on the frame factors that they perceive as having an influence on their teaching. Even if they would wish to do so, the teacher educators in our study cannot change frame factors such as time, authorities, evaluation and student base. There are different leaders in the short-track teacher education who decide over time, partly evaluate the educators' teaching and decide on what is important to teach and how the educators should support their students in their learning. Previous research also shows that there is a strong relationship between school authorities and the work environment in school (Scherp, 2002). School leaders' use of power does not always have to mean anything negative. In theory, school leaders are supposed to use their position of power to lead the organisation effectively, and create a pleasant working environment in the school. Many teachers appreciate school leaders who exercise authority in a good way (Scherp, 2002). However, we cannot ignore that school leaders control the way in which teachers plan, implement and evaluate their teaching (McCroskey & Richmond, 2009; Richmond & McCroskey, 2009). This also applies to the short-track teacher education in Sweden where leaders exercise authority for instance through planning the arrangement of campus meetings. Laws, ordinances, rules and policies also govern the short-track teacher education and the educators just have to follow them.

Another frame factor that guides the teacher educators' teaching work is evaluation. Teacher educators' teaching is continually evaluated by students, colleagues, management and authorities, but our study shows that the teacher educators also evaluate their own teaching based on different norms. They can assess the knowledge involved in an education or in a teaching practice based on established norms. Among those norms, there are aspects relating to trade association

and the laws, ordinances, rules and policies that the Swedish government imposes on educators' teaching work. Teacher educators also evaluate their teaching based on the literature chosen for their subjects. The chosen literature can be important for the students through helping them in their future professions and in the new unknown context where unforeseen problems may occur (Fenton-O'Creevy et al., 2015). Hiim (2013) writes that the norms of knowledge can be set based on the authorities, on the social benefits and on the benefits of the labour market, and the teachers update their knowledge and reflect on their expertise based on those norms. Consequently, the category evaluation shows that teacher educators handle the norms that trade association and authorities impose on the education by evaluating their teaching and students' learning. The teachers (and in our study, the teacher educators) in their teaching assume a norm that is determined by their own previous professional experiences (Hiim, 2013, 2015). The tasks that students carry out and the literature they study during their university education are crucial to their knowledge and skills development (Biggs & Tang, 2011; Moon, 2004; Nicol et al., 2014), and some of those tasks and some of that literature can be related to teacher educators' previous personal experiences.

Biggs and Tang (2011) write that university education is constantly changing due to technological developments. It is possible that trade associations adapt better to technology development than teacher education. It is perhaps for this reason that especially the teacher educators who teach technical subjects talk about the importance of the trade association in our study. That is to say, the teacher educators (who teach technical subjects) can evaluate knowledge that the trade association requires as more relevant than knowledge that teacher education requires. University education is also constantly changing due to societal changes (Gibbs, 1992). A current example of societal change is the Covid-19 pandemic (Impedovo, 2021; Phelan & Morris, 2021), which has changed university education and teachers' teaching planning from campus education to online education (Phelan & Morris, 2021). In this case, teachers' evaluation of their teaching becomes context-bound (Hiim, 2010), since the kind of campus teaching that worked before the pandemic may work differently during the pandemic when it is rearranged into online teaching.

A frame factor that emerges from the descriptions is the student base. The teachers plan their teaching based on the students' knowledge needs. This means that they take the student base into account in their planning (Agricola et al., 2021). In other words, there are relationships between teachers' teaching planning and the student base as a frame factor, which is also consistent with Hiim's didactic relationship model where the factors are not isolated but instead always related to each other. According to Sakamoto (2021), teachers' awareness of what the individual student needs to learn, and how this learning should take place, is an important factor for the student's learning. Our study shows that teacher educators must take into account the student base in their planning, for example regarding students' previous knowledge, teaching skills and experiences of the teaching profession, or if they work (as non-graduate teachers) in their schools. The diverse student base can be important for whether or not teacher educators' time is ample enough for teaching and meeting with the students.

Previous research describes the university lecturers' teaching work in relation to students' learning. Mayer (2021), Mayer and Reid (2016) and Ping et al. (2018) write about the importance of student participation in group discussions, and Leahy et al. (2005) highlight the importance of

self-assessment for student learning. In this context, as it appears from teacher educators' descriptions, the diverse student base is an important factor to take into account when it comes to student learning. Richardson (2008) writes that university lecturers should tell their students clearly about the goals of the education and what is required of the students. In a diverse student base, it must be assumed that different students perceive the requirements that are set differently, and they carry out the education based on the requirements in different ways. Likewise, collaboration between students can vary due to the diverse student base.

Conclusion

Teaching a profession is based on solving authentic problems in working life (Gustafsson & Thång, 2017) and the persons considered to have knowledge of such problems in the teacher profession are teacher educators who can teach students to carry out professional teaching (Toom, 2017). The core of teaching the teacher profession is about finding teaching methods that help the students in their knowledge development (Timmerman, 2009). The teacher educators also train their students to manage teaching in an ongoing societal development, and thus try to create opportunities for the students to transfer knowledge from the university to the school. The educators' attempt to create opportunities for their students is influenced by a number of different frame factors, and in our study, the most prominent frame factors as narrated by teacher educators in a short-track teacher education in Sweden are time, authorities, evaluation, and student base.

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References

- Agricola, B. T., Prins, F. J., van der Schaaf, M. F., & van Tartwijk, J. (2021). Supervisor and student perspectives on undergraduate thesis supervision in higher education. *Scandinavian Journal of Educational Research*, 65(5), 877-897. <https://doi.org/10.1080/00313831.2020.1775115>
- Ahlgren, C., & Gillander-Gådin, K. (2011). Struggle for time to teach: Teachers' experiences of their work situation. *Work*, 40(Supplement 1), 111-118. <https://doi.org/10.3233/WOR-2011-1272>
- Andersén, A., Asghari, H., & Petersson, M. (2018). Yrkesämnesdidaktik på universitet: Mål, innehåll, arbetssätt och examination [Vocational subject didactics at university: Learning

- goals, content, working methods and exams]. *Nordic Journal of Vocational Education and Training*, 8(3), 98-123. <https://doi.org/10.3384/njvet.2242-458X.188398>
- Asghari, H. (2014). *Från uppväxt till lärargärning: en livsberättelsestudie med åtta yrkeslärare på industritekniska programmet [From growing up to the teacher act: A life story study with eight vocational teachers in the industrial-technology programme]*. Fakulteten för humaniora och samhällsvetenskap, Pedagogiskt arbete, Karlstads universitet. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-33669>
- Asghari, H., Andersén, A., & Petersson, M. (2019). Att vara lärare för lärare: Ämnesdidaktiska syften i utbildning till yrkeslärare och ämneslärare [Being a teacher for teachers: Subject didactic purposes in education for vocational teachers and subject teachers]. In M. Svanberg & C. Vikström (Eds.), *Pedagogiska utvecklingsprojekt vid Karlstads universitet: Bidrag från universitetspedagogisk konferens 2017-2019* (pp. 11-36). Karlstads universitet.
- Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university: What the Student Does*. McGraw-Hill Education.
- Broady, D., & Lindblad, S. (1999). På återbesök i ramfaktorteori [Revisiting frame factor theory]. *Pedagogisk Forskning i Sverige [Swedish Educational Research Association]*, 4(1), 1-4.
- Brockmeier, J., & Carbaugh, D. A. (2001). Introduction. In J. Brockmeier & D. A. Carbaugh (Eds.), *Narrative and identity: Studies in autobiography, self and culture* (pp. 1-22). John Benjamins Publishing Company. <https://doi.org/10.1075/sin.1.01bro>
- Bruner, E. M. (1986). Experience and its expressions. In V. W. Turner & E. M. Bruner (Eds.), *The anthropology of experience* (pp. 3-30). University of Illinois Press.
- Dahllöf, U. (1967). *Skoldifferentiering och undervisningsförlopp [School differentiation and teaching process]*. Almqvist & Wiksell.
- Denzin, N. K. (1988). *Interpretive biography*. Sage Publications. <https://doi.org/10.4135/9781412984584>
- Duch, H., Larsen, V., & Lund, B. (2021). FoU i lektorkvalificering og dets betydning for undervisning [R&D in the associate professor qualification process and its impact on teaching]. *Scandinavian Journal of Vocations in Development - SJVD*, 6(1). <https://doi.org/https://doi.org/10.7577/sjvd.3909>
- Eiríksdóttir, E. (2018). Variations in implementing the dual VET system: Perspectives of students, teachers, and trainers in the certified trades in Iceland. In S. Choy, G.-B. Wärvik, & V. Lindberg (Eds.), *Integration of vocational education and training experiences: Purposes, practices and principles* (pp. 145-163). Springer. https://doi.org/10.1007/978-981-10-8857-5_8
- Emanuelsson, J., & Sahlström, F. (2008). The price of participation: Teacher control versus student participation in classroom interaction. *Scandinavian Journal of Educational Research*, 52(2), 205-223. <https://doi.org/10.1080/00313830801915853>
- Erbilgin, E. (2019). Two mathematics teacher educators' efforts to improve teaching and learning processes: An action research study. *Teaching and Teacher Education*, 78, 28-38. <https://doi.org/10.1016/j.tate.2018.11.005>
- Fenton-O'Creevy, M., Brigham, L., Jones, S., & Smith, A. (2015). Students at the academic workplace boundary. In E. Wenger-Trayner, M. Fenton-O'Creevy, S. Hutchinson, C. Kubiak, & B. Wenger-Trayner (Eds.), *Learning in landscapes of practice: Boundaries, identity, and knowledgeability in practice-based learning* (pp. 43-63). Routledge.

- Freeman, M. (2010). *Hindsight: the promise and peril of looking backward*. Oxford University Press.
- Gandeel, A. M. (2016). *English language teachers' beliefs and practices regarding the teaching of speaking* [Doctoral dissertation]. University of Leeds.
- Gibbs, G. (1992). *Creating a teaching profile*. Technical and Educational Services.
- Goodson, I. F., & Choi, P. L. (2008). Life history and collective memory as methodological strategies: Studying teacher professionalism. *Teacher education quarterly*, 35(2), 5-28.
- Goodson, I. F., & Sikes, P. J. (2001). *Life history research in educational settings: Learning from lives*. Open University Press.
- Gustafsson, C. (1999). Ramfaktorer och pedagogiskt utvecklingsarbete [Frame factors and pedagogical development work]. *Pedagogisk Forskning i Sverige [Swedish Educational Research Association]*, 4(1), 43-57.
- Gustafsson, J., & Thång, P. O. (2017). *Workplace learning in higher education: Two examples from a Swedish context* (pp. 35-49). Emerald Publishing Limited.
<https://doi.org/10.1108/S1479-367920170000032002>
- Henriksson, A.-S., & Elmgren, M. (2015). *Universitetspedagogik*. Norstedts.
- Hiim, H. (2010). *Pedagogisk aksjonsforskning. Tilnærminger, eksempler og kunnskapsfilosofisk grunnlag [Pedagogical Action Research. Examples, principles and epistemology]*. Gyldendal Norsk Forlag AS.
- Hiim, H. (2012). Relevant, praksisbasert yrkesutdanning. Artikkel i Ledelse og profesjonsutøvelse [Relevant, practice-based vocational education. Article in Authorities and professional practice]. In B. Aamotsbakken (Ed.), *Ledelse og profesjonsutøvelse i barnehage og skole [Authorities and professional practice in kindergarten and school]* (pp. 123-137). Universitetsforlaget.
- Hiim, H. (2013). *Praksisbasert yrkesutdanning [Practice based vocational education]*. Gyldendal Akademisk.
- Hiim, H. (2015). Kvalitet i yrkesutdanningen: Resultater fra et aksjonsforskningsprosjekt om yrkesforankring av innholdet i yrkesutdanningen [The quality of curriculum in VET: Results from an action research project on content and structure in VET]. *Norsk Pedagogisk Tidsskrift [The Norwegian Journal of Pedagogy]*, 99(2), 136-148.
<https://doi.org/10.18261/ISSN1504-2987-2015-02-07>
- Hill, H. C., Blunk, M. L., Charalambous, C. Y., Lewis, J. M., Phelps, G. C., Sleep, L., & Ball, D. L. (2008). Mathematical knowledge for teaching and the mathematical quality of instruction: An exploratory study. *Cognition and instruction*, 26(4), 430-511.
<https://doi.org/10.1080/07370000802177235>
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. Sage publications.
- Impedovo, M. A. (2021). *Identity and teacher professional development: A reflective, collaborative and agentive learning journey*. Springer Nature. <https://doi.org/10.1007/978-3-030-71367-6>
- Janssen, F., Westbroek, H., & Doyle, W. (2014). The practical turn in teacher education: Designing a preparation sequence for core practice frames. *Journal of Teacher Education*, 65(3), 195-206. <https://doi.org/10.1177/0022487113518584>

- Jenset, I. S., Klette, K., & Hammerness, K. (2018). Grounding teacher education in practice around the world: An examination of teacher education coursework in teacher education programs in Finland, Norway, and the United States. *Journal of Teacher Education*, 69(2), 184-197. <https://doi.org/10.1177/0022487117728248>
- Johansson, M. C. (2019). *The institutionalisation of validation and the transformation of vocational knowledge: The case of admission into Vocational Teacher Education in Sweden* [Doctoral dissertation]. Linnaeus University Press.
- Kitchen, J., & Petrarca, D. (2016). Approaches to teacher education. In J. Loughran & M. L. Hamilton (Eds.), *International handbook of teacher education* (pp. 137-186). Springer. <https://doi.org/10.1007/978-981-10-0366-0>
- Krueger, R. A. (2014). *Focus groups: A practical guide for applied research*. Sage publications.
- Langellier, K., & Peterson, E. E. (2004). *Storytelling in daily life: Performing narrative*. Temple University Press.
- Laura, K. (2017). Examining mathematics classroom interactions: elevating student roles in teaching and learning. *International Journal of Educational Methodology*, 3(2), 93-102. <https://doi.org/10.12973/ijem.3.2.93>
- Leahy, S., Lyon, C., Thompson, M., & Wiliam, D. (2005). Classroom assessment: Minute by minute, day by day. *Assessment*, 63(3), 19-24.
- Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative research: Reading, analysis and interpretation*. Sage Publications. <https://doi.org/10.4135/9781412985253>
- Lindberg, V. (2003). Learning practices in vocational education. *Scandinavian Journal of Educational Research*, 47(2), 157-179. <https://doi.org/10.1080/00313830308611>
- Loo, S. (2020). *Professional development of teacher educators in further education: Pathways, knowledge, identities and vocationalism*. Routledge. <https://doi.org/10.4324/9780429056741>
- Loughran, J., & Hamilton, M. L. (2016). Developing an understanding of teacher education. In J. Loughran & M. L. Hamilton (Eds.), *International handbook of teacher education* (pp. 3-22). Springer. <https://doi.org/10.1007/978-981-10-0366-0>
- Lundgren, U. P. (1972). *Frame factors and the teaching process: A contribution to curriculum theory and theory on teaching*. Almqvist & Wiksell.
- Lundgren, U. P. (1981). *Att organisera omvärlden: En introduktion till läroplansteori [Organizing one's world: An introduction to curriculum theory]*. Liber.
- Mayer, D. (2021). Teacher education policy and research: An introduction. In D. Mayer (Ed.), *Teacher education policy and research* (pp. 1-10). Springer. https://doi.org/10.1007/978-981-16-3775-9_1
- Mayer, D., & Reid, J.-A. (2016). Professionalising teacher education: Evolution of a changing knowledge and policy landscape. In J. Loughran & M. L. Hamilton (Eds.), *International handbook of teacher education* (pp. 453-486). Springer. <https://doi.org/10.1007/978-981-10-0366-0>
- McCroskey, J. C., & Richmond, V. P. (2009). Power in the classroom I: *Teacher and student perceptions*. *Communication Education*, 32(2), 175-184. <https://doi.org/10.1080/03634528309378527>
- Mishler, E. G. (1999). *Storylines: Craftartists' narratives of identity*. Harvard University Press.

- Moon, J. (2004). *Linking levels, learning outcomes and assessment criteria*. Exeter University. http://aic.lv/ace/ace_disk/Bologna/Bol_semin/Edinburgh/J_Moon_backgrP.pdf
- National Archives Collection. (2011). *Föreskrifter om ändring av riksarkivets föreskrifter och allmänna råd (RA-FS 2007:1) om gallring och återlämnande av handlingar vid universitet och högskolor [Archival and records management legislation and regulations (RA-FS 2007:1) on thwarting and return of documents at universities]*. <https://riksarkivet.se/rafs?pdf=rafs/RA-FS%202011-02.pdf>
- Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education: A peer review perspective. *Assessment & Evaluation in Higher Education*, 39(1), 102-122. <https://doi.org/10.1080/02602938.2013.795518>
- Phelan, A. M., & Morris, J. D. (2021). Teaching and teacher education for a post-pandemic Canada: Context, crisis, critique and complication. In D. Mayer (Ed.), *Teacher education policy and research* (pp. 43-56). Springer. https://doi.org/10.1007/978-981-16-3775-9_4
- Ping, C., Schellings, G., & Beijaard, D. (2018). Teacher educators' professional learning: A literature review. *Teaching and Teacher Education*, 75, 93-104. <https://doi.org/10.1016/j.tate.2018.06.003>
- Plummer, K. (2006). *Documents of life 2: An invitation to a critical humanism*. Sage Publications.
- Polkinghorne, D. E. (2007). Validity issues in narrative research. *Qualitative inquiry*, 13(4), 471-486. <https://doi.org/10.1177/1077800406297670>
- Richardson, D. (2008). Don't dump the didactic lecture; fix it. *Advances in Physiology Education*, 32(1), 23-24. <https://doi.org/10.1152/advan.00048.2007>
- Richmond, V. P., & McCroskey, J. C. (2009). Power in the classroom II: Power and learning. *Communication Education*, 33(2), 125-136. <https://doi.org/10.1080/03634528409384729>
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Sage Publications.
- Sakamoto, N. (2021). *Teacher awareness as professional development: Assistant language teachers in a cross-cultural context*. Springer Nature. <https://doi.org/10.1007/978-3-030-88400-0>
- Scherp, H. Å. (2002). *Lärares lärmiljö: Att leda skolan som lärande organisation [Teacher's learning environment: To lead the school as a learning organization]*. Karlstad University.
- Squire, C., Andrews, M., & Tamboukou, M. (2008). Introduction: What is narrative research? In M. Andrews, C. Squire, & M. Tamboukou (Eds.), *Doing narrative research* (pp. 1-21). Sage Publications. <https://doi.org/10.4135/9780857024992.d2>
- Swedish Research Council, (2017). *Good research practice*. https://www.vr.se/download/18.5639980c162791bbfe697882/1555334908942/Good-Research-Practice_VR_2017.pdf
- Timmerman, G. (2009). Teacher educators modelling their teachers? *European Journal of Teacher Education*, 32(3), 225-238. <https://doi.org/10.1080/02619760902756020>
- Toom, A. (2017). Teachers' professional and pedagogical competencies: A complex divide between teacher work, teacher knowledge, and teacher education. In D. J. Clandinin & J. Husu (Eds.), *The Sage handbook of research on teacher education* (pp. 803-819). Sage Publications. <https://doi.org/10.4135/9781526402042.n46>
- Wibeck, V., Dahlgren, M. A., & Öberg, G. (2007). Learning in focus groups: An analytical dimension for enhancing focus group research. *Qualitative Research*, 7(2), 249-267. <https://doi.org/10.1177/1468794107076023>

Wilkinson, S. (2011). Analysing focus group data. In D. Silverman (Ed.), *Qualitative research* (3rd ed., pp. 87-104). Sage Publications.