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Madeleine Abrandt Dahlgren and Eva Hammar Chiriac

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Learning for professional life: Student teachers' and graduated teachers' views of learning, responsibility and collaboration

Madeleine Abrandt Dahlgren and Eva Hammar Chiriac*,
Linköping University, Sweden*

*Corresponding author: Eva Hammar Chiriac
Department of Behavioural Sciences and Learning
Linköping University
SE-581 83 Linköping
E-mail: eva.hammar.chiriac@liu.se
Tel. no.: +46 13 285735
Fax no.: +46 13 282145*

* (Both authors have double family names without hyphen)

Abstract

The focus of this study is on how final semester students and newly graduated teachers experience the formal objectives of teacher education, with a particular view of the concepts of learning, responsibility and collaboration. The ways of experiencing these concepts varied from conceptions in which only one dimension is discerned from in the student teachers group to conceptions in which several dimensions of the phenomena are discerned in the graduate teachers group.

Key words: Teacher education; student teachers; first-year teachers; transition from education to work life; professional identity

1. Introduction

How does teacher education prepare student teachers for the transition to professional work as teachers, and how do the graduated teachers identify with their professional role? This is the point of departure for and the main focus of interest of the present study, conducted in a Swedish context. The question is not new; it has been debated among policy makers, teacher educators and researchers during the last decades. Still, it is of high relevance, as teacher education in Sweden has gone through a process of turning teacher education into an academic discipline and several changes during the recent decade (Askling, 2006). The status of recurring change is also illustrated by the fact that a reform of teacher education in Sweden, initiated by the Swedish government in 2007, has been just recently launched in December 2008.

Historically, the design of teacher education in Sweden has been influenced by different traditions, rooted in academia and in the school respectively, that encompass different views of the teaching profession. In the former tradition, students are educated to become experts within a certain subject matter, which is also the view of the teaching profession. In the latter, the focus is on the child and the view of the teaching profession is that it is best learned through practice (Linné, 1996; Hartman, 1995). The traditional view of the teaching profession as practice based could still be traced in the ways that students worked with their degree project, Bergquist (2000) showed that project work was not seen as a way of learning a scholarly method of thinking, but rather as an assignment alongside with other assignments in the programme, that should be carried out in a correct way. The overall objectives for teacher education emphasise learning, collaboration and responsibility in the description of how student teachers should acquire an ability to work independently as well as together with others (Higher Education Ordinance, 1993:100). The idea is that students should learn to adopt an analytical approach to their studies, further develop their capacity to reflect and to pursue a critical attitude. They are also expected to learn procedures used in scientific methodology and how best to make use of research material relating to their prospective careers as teachers (Programme for Teacher Education, Linköping 330 credits, 2008). The objectives also state that the graduate teacher should be able to lead and organise other people's learning from a student-centred perspective, to develop the ability to work together with colleagues in teams and to obtain a capacity to take responsibility and handle challenges encountered in the professional practice, such as a complex class room situations. These capacities are defined as a 'personal professional maturity' (p. 5). Additionally, concepts connected to learning and teaching are problematised and scrutinised in several of the intended learning outcomes for the courses throughout the educational programme, indicating an understanding of teacher education as an academic professional program.

In a broader sense, the objectives of teacher education in Sweden can be viewed as responses to global discourses about the role of higher education and the needs of the knowledge society in a globalised world. From a European perspective, the Bologna process and harmonisation of education in Europe for a common labour market is one of these discourses that also raise the issue of the qualifications and employability of teachers. The transition from higher education to work life in other professional areas has been subject to several studies throughout the last decades (e.g., Abrandt Dahlgren et al., 2006, 2008; Axelsson, 2008; Johansson et al., 2008; Johnston, 2003; Nilsson, 2007; Teichler, 1999a, 1999b). During the last decades the issues of higher education in general have been scrutinized and discussed with reference to (a) its role as an institution for education and (b) its traditions about

knowledge and learning in relation to the demands in working life. The hegemony of higher education, with the double roles of both producer and intermediary of knowledge, has been questioned and there has been a debate about whether higher education prepares students in a relevant way for their future professional work life (Dahl, Buland, Finne & Havn, 2006; Swedish National Agency for Higher Education 2003:27). It has been argued that the research about the relationship between higher education and working life as well as about graduate employment needs to focus more on knowledge use and professional development (Johnston, 2003). Brennan & Teichler (2008) elaborate on the knowledge aspect by pointing out issues of quality and relevance, concepts and measurements of competences, job requirements of professional utilisation of knowledge as a thematic area for future higher education research.

1.1. Teacher education, teachers' learning and professional practice

If we contextualise the debate to teacher education, the relationship between teacher education, teachers' learning and professional practice has been pointed out, as a much needed area of research (AERA, 2005). Taking the students' perspective, it is reasonable to assume that they enter their teacher education with hopes and expectations about what their education will bring. Henkel (2005) suggests that professional and social identities are developing in relation to the learners' orientation towards their studies and future profession, "academic identities are formed and sustained...upon individual and collective values, sense of meaning and self-esteem in the academic profession" (p.156). In the same sense, it is reasonable to assume that teacher education may be associated with certain values and the provision of relevant knowledge and skill to prepare them for the future professional field of work.

These professionalisation processes and developments are important to study in order to understand the transition from teacher education to professional work as part and parcel of the construction of a professional identity as a teacher. Beijaard, Meijer and Verloop (2004) describe how teachers' professional identity has emerged as a growing field of research during the recent decade. A review of 22 research studies conducted in this field between 1988 and 2000 showed a variation, both in how professional identity was defined, and in what was chosen as the focus of the studies (see the article for a complete list of references to these studies). Beijaard and colleagues discerned three categories of research on teachers' professional identity. These were (a) the formation of professional identity, (b) the identification of characteristics of professional identity, and (c) studies in which professional identity was (re)presented by teachers' stories. The transition between teacher education and working life as a teacher has traditionally been described as a question concerning application of teacher knowledge that is acquired within teacher training and subsequently applied in practice. This perspective has been challenged in recent decades, when the function of reflection and characteristics of tacit knowledge has been focused in relation to professional education and practice (Schön, 1987; Molander, 1996; Carlgren, 1996). Drawing on the analysed studies, Beijaard et al., (ibid.) identify four features that they claim are essential for understanding teachers' professional identity. They argue that professional identity is an ongoing process of interpretation and re-interpretation of experiences; it comprises both person and context, and consists of sub-identities that more or less harmonise. Further, agency is seen as an important element, meaning that teachers have to be active in the process of professional development. Seen from a socio-cultural perspective, professional identities are constructed and negotiated through participation and engagement in local communities of practice, of which the university context could be seen as one community and the work life context another (Lave & Wenger, 1991; Wenger, 1998). Eteläpelto & Saarinen (2006) describe student teachers' trajectories as they move from the university context to a period of

practical internship in primary school. These results show that the students bring their projects, i.e. their personal goals, conflicts and interests, from one learning community to the other, with the expectation that the new context can provide resources for solving these issues. Eteläpelto & Saarinen (2006) add to the discussion of essentials for understanding the forming of teachers' professional identity (Beijaard, et al., 2004) by suggesting that in order to "negotiate and redefine ones' personal and professional identity in the learning community, there have to be mutually constitutive spaces for learning in terms of developing professional subjectivity. In such spaces the learner's personal goals, plans and intentional projects come together in a favourable environment, one which offers resources for realising them" (Eteläpelto & Saarinen, 2006, p.173).

A longitudinal study comparing teacher education in a Swedish University 1995/96 and 2006, suggests that students at both times experience a lack of correspondence between the educational programme and the work they are being trained for (Hammar Chiriac, 2007). The student teachers are anxious that their education does not correspond with the reality on the field. Similar findings have also been shown in international studies of first year teachers, suggesting that the encounter with work life is experienced as a theory-practice shock. Some of the studies have pointed to the importance of creating possibilities for *reflection on own learning*, as well as the importance of *support and collaboration* in order to make the transition from teacher education to work life easier (Munthe, 2003; Flores & Day, 2006; Dahl et al., 2006). Munthe (ibid) argues that participation in the social practice as a teacher requires that reflection is incorporated in daily activities in order to support the new teacher's own learning. Regular meetings for reflection and exchange of experiences with other newly-graduated teachers have been emphasised as important for the transition to professional work as a teacher (Dahl et al., ibid.). Eteläpelto and Saarinen (2006) emphasise that it is critical that the practical environment includes spaces that are mutually constitutive for the development and negotiation of the personal and professional identity as a teacher. Flores and Day (2006) argue that the context in which the graduated teachers work influences the development of their professional identity as teachers. First year teachers working in schools characterised by collaboration developed more positive attitudes towards teaching than those who worked in schools where collaboration was not supported. Recent research on professional identity development in teachers has questioned earlier models suggesting a linear development where the teacher gradually moves the focus. It has been argued that initially the focus is on the teacher him-/herself, then on carrying out teacher's tasks, and eventually moving to a focus on the students and their learning (Fuller & Brown, 1975). Burn, Hagger, Mutton and Everton (2003) show in their study that student teachers early in their education already take on a student-centred approach. Similar results have also been found by Bullough, Young and Draper (2004). There are also studies focusing on *the responsibilities* of the first year teachers. A Swedish study by Andersson (2005) suggests that first year teachers experience high expectations of being able to handle the responsibility of solving problematic situations in the classroom. Paulin's study (2007) supports the results of Andersson (ibid). The new teachers' responsibility for classroom management and handling the classroom situation during their first semester comprises handling conflicts, problematical children and collaboration with different actors. Paulin shows that already in the second semester of experience the newly-graduated teachers can shift their attention to the individual pupils, their learning and other actors in and outside the classroom.

1.2 Objectives

The overarching knowledge interest of the study is how teacher education prepares students for managing the everyday life in school as professional teachers. The review of previous

research shows that themes like learning, responsibility and collaboration stand out as features of the professional role of the teacher that the students and first year teachers have to understand, learn to master and utilise during their educational journey and first period of professional experience. The meaning that the student teachers and graduated teachers ascribe to these aspects can contribute to an enhanced understanding of the essentials of teachers' professional identity formation and utilisation of professional knowledge. The research question addressed is how final-semester students and newly-graduated teachers with 6-12 months of work life experience the formal objectives of the teacher education, with a particular view of the aspects of learning, responsibility, and collaboration, in relation to the formation of professional identity and the professional teacher role.

2. Methodology

The present study takes the perspective of the participants and presupposes that there is a variation in how the aspects of learning, responsibility and collaboration are conceived. We have applied a phenomenographic methodology, resting on a basic assumption that individuals vary with regard to how they understand different phenomena in the surrounding world, and that describing the variation as an outcome space is a valuable research enterprise (Marton, 1981). Phenomenography is the empirical study of the qualitatively different ways in which various phenomena in, and aspects of, the world around us are experienced, conceptualised, understood, perceived and apprehended (Marton, 1994). This research approach was developed by Marton, Säljö, Dahlgren and Svensson (1977) at the University of Gothenburg in a series of studies of learning in higher education carried out in the early 1970s. The analyses were initially performed in order to obtain a description of the processes and outcomes of meaningful learning from the perspective of the learner. As regards the processes of learning, these were later interpreted as indicating the existence of a surface and a deep-level approach connected, respectively, to an atomistic and a holistic approach. These approaches could be described as a referential dimension as regards the focus of attention and a structural dimension as regards the organisation of the learning material during the learning process (Säljö, 1975; Svensson, 1976; Marton et al., 1977). The dominant method of data collection in phenomenographic research has been semi-structured interviews, and this approach is also applied in this study.

The phenomenographic object of inquiry

A key issue in phenomenography is the nature and ontological status of conceptions, which is the object of the research. Marton claims that the basic unit of phenomenography is experiential, non-dualistic, and an internal personal person-world relationship, "a stripped depiction of capability and constraint, non-psychological, collective but individually and culturally distributed, a reflection of the collective anatomy of awareness, inherent in a particular perspective" (Marton, 1995, p.171). The words "experience", "perceive" and so on are used interchangeably. The point is to suggest that the limited number of ways in which a certain phenomenon appears to people can be found, for instance, regardless of whether they are embedded in immediate experience of the phenomenon or in reflected thought about the same phenomenon. The experiential ontology of conceptions means that there is no other world available to us humans than the experienced one. Human experience is also characterised by our discernment of what is figural in a situation and what constitutes the ground in which this figure is embedded. The individual not only conceives of different aspects or parts of isolated phenomena, but also organises and relates what is conceived to constitute a whole. This could be described as the 'how' or structural aspect of the experience.

Closely linked to the structural aspect is the 'what' or referential aspect, the meaning; when we discern the parts and the whole and their relationship, we also see the meaning. The delimitation from and relation to a context make up the "external horizon" of the phenomenon, like the shape of a piece of a jigsaw puzzle that remains when it is removed from the puzzle as a whole. The delimitation and relating of parts make up the "internal horizon" of the phenomenon, like when you describe the missing piece in its component parts. The external and internal horizons together make up the structural aspect of the experience.

3. The empirical study

3.1 Context

The teacher education programme in this study is designed to train teachers for the lower and higher levels of compulsory schooling, or upper secondary school. The programme is on the undergraduate level and can comprise three to four-and-a-half years of full-time study, depending on level of teaching. According to the programme description, the overarching principles of teaching practice provide the main focus for the programme (Programme for Teacher Education, Linköping 330 credits, 2008). At the same time, the programme is said to give a broad scope for in-depth study of certain course elements and for personal choice regarding study options. Further, the programme focuses on teaching as a working profession. The general course subject *Pedagogic Approaches to Teaching*, is aiming at developing overall teaching capabilities and includes encounters with the working life of a teacher from the first course component. Course work is organised into four interconnected themes; School, Teaching Skills, The Pupil and The Teacher, and integrates theoretical and practical placement studies throughout the programme. At the end of the first year, students decide their future level of teaching; in the lower level of compulsory school, the higher level of compulsory school, or in upper secondary school education. In the second year of the programme, students choose to focus on particular course work elements. This decision can be based on subject matter or area, a thematic skills base, or areas of competence.

3.2 Participants

Ten student teachers at the end of their final semester and 10 newly-graduated teachers, alumni from the same university, consented to participate and were randomly included in the study on the basis of existing course lists from the two groups, and numbered from 1-20. In the results section, we refer to the informants with these numbers, in order to increase transparency in how quotations have been distributed. The group of final-semester students comprised four male and six female participants, representing the various study paths within the teacher education programme. The age of the participants varied between 23 and 43 years, with a mean of 31 years. Several of them have had earlier work life experiences, both as substitute teachers and in other areas of work. They were interviewed about one month before graduation. The group of newly-graduated teachers, comprised three male and seven female participants, and ranged in age from 26 to 46 years, with a mean of 31 years. Their professional experience as teachers varied between 6 and 12 months. The most common forms of employments were (a) in a pool of substitute teachers, (b) ad hoc appointments, (c) substitutes for someone on leave, or (d) appointments not corresponding with their level of qualifications. Another common denominator in this group is that the majority have had shorter periods of unemployment prior to their current employment.

3.3 Data collection and analysis

Data were collected through individual semi-structured interviews that were tape-recorded, transcribed, and subjected to a qualitative analysis (Marton & Trigwell, 2000). Each of the interviews lasted between 45 and 95 minutes with a mean of 63 minutes. All interviews were conducted in Swedish. For the purpose of this article, chosen quotations have been translated to English, and somewhat edited to increase readability. However, the authors have paid great attention to preserve their original meaning. Ethical aspects were considered throughout the study. The ethical principles emphasise the concern for participants' interest, i.e. informed consent, confidentiality, withdrawals and use of material (APA, 2002; Barrett, 2007; BPS, 2006). The interviews concerned how the informants experienced their educational programme and professional work as a teacher. The transcripts from the two groups were analysed and categorised, with a focus on similarities and differences in ways of experiencing learning, responsibility and collaboration in relation to the educational programme and professional work as a teacher. MAD and EHC conducted the qualitative analyses, and a process of negotiated consensus was used to reach the final labelling of the categories in the outcome space (Wahlström, Dahlgren, Thomson, Diwan & Beerman, 1997). The analysis moved between focusing on answers to specific questions like 'When I say learning/responsibility/collaboration and you think about your teacher programme/work as a teacher, what comes to mind?' to the use of each transcript in its entirety, to take into account utterances about the aspect under focus but from other parts of the interview. Different aspects of learning are displayed throughout the interview, e.g. during a glance at their teacher education in retrospect and during discussions about the role of the teacher and students' expectations of the profession of teacher.

The primary analysis of interview data for each of the concept is conducted according to the phenomenographic procedure, following several phases in the analysis. The initial phase is described as *familiarisation* and means that the transcriptions are carefully read with the aim of getting acquainted with the texts in detail. This is also necessary in order to make any corrections or editing. The analysis continues with a phase of *condensation*, in which the most significant statements are selected to give a short version of the entire dialogue concerning the phenomena under study. The selected significant dialogue excerpts were then compared in order to find sources of *variation* or *agreement*. Taking into account the result of the previous steps, the next feature of the analysis was to *group* answers that appeared to have similarities. Based on this grouping, the preliminary categories for each of the concepts were developed in the next step; *articulating* (Dahlgren & Fallsberg, 1991). This is normally the endpoint of a phenomenographic analysis, resulting in a set of descriptive categories, which then can be contrasted with regard to similarities and differences at a meta level. The primary analyses for each concept are not included in this presentation due to space constraints. Instead, we present the results of an additional analysis that we did of the conceptions of learning, responsibility and collaboration, in search for the relationships between conceptions of the concepts, and similarities and differences across the categories. This means, that the result section displays the relationships between the ways of experiencing learning, responsibility and collaboration as a basis for forming an outcome space of descriptive meta-categories, where the variation between and within each of the groups is taken into account.

3. Results

The ways of experiencing the concepts of learning, responsibility and collaboration form a continuum from conceptions in which only one dimension is discerned, to conceptions in which several dimensions of the phenomena are discerned. There is also a variation in the context referred to by the informants. In the student group, two overarching ways of

contextualising the concepts are discernible; *educational context orientation*, which is the overall dominating pattern, and *work life context orientation*, which is represented only by a few students. The responses from the teacher group are all work life context oriented. The total outcome space is comprised of four categories, over which the informants are distributed according to the following.

3.1. Senior students

3.1.1. *Educational context orientation*

A. Weak connection to professional teacher role

The typical features of the category are that students experience learning in an unclear way or only talk about only one aspect of learning. They display difficulties in applying learning in the university to the field of practice as a teacher. Often learning is seen as a synonym to teaching methods or as the own process of learning. Two quotations from the students illustrate this:

Well...learning is happening all the time.../..and we have discussed that there are different types of learning, kind of...(17)

When I think of learning, it is mostly different ways or forms of teaching methods.../..and it is mostly the good old chalk and talk method if you like. (11)

Further, in this group, responsibility and collaboration are related to their own educational situation as student teachers. The concepts of responsibility and collaboration are associated with the university and the faculty's responsibility for the educational programme. The students talk about the authorities having the responsibility for producing professional and knowledgeable teachers, including the duty to identify and exclude those students who are not cut out to become teachers. Collaboration is viewed as including on the organisational level the different discipline departments responsible for the teacher education programme, and on the group level the team of lecturers involved in the teaching.

Aha, then I think about that the teacher education has a responsibility, and that they must, they must educate good teachers, simply. (13)

Then I think about the teacher education programme, that they must collaborate better with other departments. That's very important...(16)

In this group, very few students make connections to a personal responsibility for the learning process during the educational programme or to a personal responsibility for the individual's professional development. The dominating pattern is that to become a teacher, the student needs to fulfil the requirements of the assignments and tasks designed by the course convenors. The students also talk about taking a personal responsibility for the study activities individually, as well as for the activities in their respective study groups.

Well, I don't need to take particularly much responsibility. (...) For my own sake, that I learn things.../..and when it comes to responsibility for readings, schedules and the like, you always get that material emailed to you, so you don't need to take the responsibility for that...(15)

3.1.2. Work life context orientation

B. Beginning understanding of the professional teacher role

Typically, in this category the accounts reveal both a theoretical understanding of learning and a view of the teachers in an educational programme as role-models for teaching practice. A typical feature is the connection of the concept of learning to the respondent's own teacher role and the issue of transforming their own learning into teaching. The importance of mentoring and tutoring in the teaching practice is emphasised.

Learning occurs on two levels...I learn things here that I am supposed to apply on others so that they will learn, if you know what I mean...it works in two direction...Even if I learn a thing here, I can not...I do not teach the pupils exactly the same thing...It is a kind of change...you have to transform the learning in different ways...(12)

The issue of responsibility and collaboration is linked both to the theoretical part of the teacher education programme, and to the professional work as a teacher. The students state that their approach to the learning process will be decisive in determining the kind of teacher that they will become. Responsibility and collaboration are also seen as connected to the professional activities as a teacher, and as central aspects of the professional teachers' role. Responsibilities for (a) long-term planning, (b) everyday teaching and follow-up of students, and (c) contacts with parents are examples given in the interviews.

Responsibility is kind of how I educate myself to become a responsible professional...One hasn't had like, that kind of responsibility yet, but, of course, responsibilities for lessons and teaching, but I haven't had the responsibility to manage the pupils, I mean, to manage the whole class for a full semester, or for the dialogue with the parents, or for managing conversations about student development. One hasn't had that kind of responsibility yet. (10)

The students often return to the concept of responsibility in regard to other questions during the interview. This frequently occurs in connection to the question about the role of the teacher in the classroom. The answers reflect their feeling that the transition to becoming a teacher occurs as the students have the experience of trying to handle the complete responsibility for all aspects of management of a class. This is something that is referred to as not possible to learn during teacher education but rather must be learned in work life. The students also discern the link between groupwork in the educational programme and future teamwork as a professional teacher. They assume that knowledge from groupwork gained in education might be transferred to collaborative work with colleagues or pupils in professional life as a teacher. Collaboration has two purposes; firstly, as a way of learning to achieve knowledge or as a means of learning and, secondly, as a way to learn about working in groups, that is, collaboration as an objective in itself.

And many are aware of that collaboration is a part of the school of today, in teams with colleagues (...) Then I think that a lot of collaboration emerges because you study together, not because you are forced to collaborate. (9)

There has been a lot of group-work and you know that you are going to work in teams with colleagues so you have to learn to collaborate. That is very important. (17)

3.2. Newly-graduated teachers

In the teacher group, the outcome space reveals a quite different picture. The dominating pattern is the reference to the context of work life, and there are very few connections to the educational context. The structural aspect of the ways of experiencing the concepts in the teacher group shows a continuum in a similar pattern as in the student group.

3.2.1. *Work life context orientation*

C. Search for a professional teacher role

In this group the informants talk about learning in terms of how to connect what they have learned during the teacher education programme about learning theories to the practice of teaching. They experience difficulties in finding ways to apply the theories, and they find the study of learning theories in the educational programme 'too scientific' to fit the everyday work in school. The accounts also reveal, however, that the informants are gradually realising the relevance of theoretical frames of reference for their everyday work. They talk about how they reflect on the experience of their own failures in teaching, and how they return to the course literature for guidance, or how they turn to senior colleagues seeking advice. The excerpt below exemplifies this attitude.

R: Well, I don't know what I think of...Different ways, perhaps, to achieve learning...how to organise...how to reach everyone.../

I: Was this something you were for during the teacher education?

R: Well, what can I say...It was at a very superficial level, only scraping the surface...We talked about different views of knowledge and different kinds of learning and so on, but we did not tie it sufficiently enough to the practical... How to actually go about it when you are out here...(26)

The newly-graduated teachers seem to have difficulties relating learning to their new profession and work as a teacher. The same weak connection to professional work occurs when the teachers are prompted to talk about responsibility and collaboration. Typically, the informants discern a single dimension of responsibility, i.e. the responsibility of teachers to be the voice and the advocate of the pupils in relation to threats inside and outside the classroom. The latter also includes keeping the pupils safe and secure.

That you have responsibility over pupils, many pupils. And that the responsibility looks different depending on which year you are (teaching in) and what kind of job you have. (29)

I and my other colleague are the only ones, *laugh*, who can defend them a bit. And that is my first and foremost thought. (24)

A similar way of reasoning is discernible when it comes to the first-year teachers' views of collaboration. Some graduates talk about collaboration in terms of having access to and being legitimate members of a specific collaborative team in the school that can function as a

support for the teaching. They do not, however, discern or discuss collaboration with other actors in or outside the school.

Then I think about our team of colleagues, or our mentors team (s. 13). We go through different student issues, and ask ourselves very much, what can we do about this? ... and, try to collaborate so that no single teacher has to carry all the responsibility, but that we share this...(24)

The answers also reflect a view that collaboration is not a self-evident feature of the everyday work as a teacher. The accounts often reveal a lack of collaboration, and a wish to collaborate with colleagues.

I can feel that we don't really collaborate in the way I am used to since earlier (during the teacher education programme). (26)

D. Establishing professional teacher role

The dominating feature of the answers of the group of teachers with one year of work-life experience is that the respondents talk about learning, responsibility and collaboration in a multi-dimensional way, linking work life and subject matter. This seems to indicate that newly-graduated teachers have developed a more elaborated and complex meaning of the concept of learning. Learning is often seen as comprising several interrelated aspects and actors, as illustrated by the quotation below,

Eeh...well...learning is everything, from the pupils learning how to take responsibility of their own, to their knowing that Stockholm is our capital...and then...my learning of every day...that it doesn't work if these two pupils sit together, well you know, the small things...The pupils also need to learn to keep their things in order and keep it nice and tidy around them. So learning is a lot, both for the kids, but also for me...(20)

Learning is viewed as a mutual process, comprising the pupils' learning as well as the teacher's learning. Even if the pupils' learning is focused, both parties are learning from each other. Learning is described as continuous and interactive. The way in which this group of informants use and reflect on learning can also be transferred to their approach to responsibility and collaboration, which could be described as comprehensive and complex. The teachers identify responsibility as pertaining and distributed to several actors inside and outside the school. The teachers carry responsibility, but so also do the pupils and parents. The responsibility needs to be mutual and equally shared.

Yes but you have a pedagogical responsibility, you have a social responsibility, you have several different parts of responsibility within the responsibility (...) It is all the time a meeting of these different parts of responsibility in the everyday life. (25)

Collaboration occurs with multiple actors, such as colleagues, pupils, mentors, parents, and people in the school with specific functions, for instance the headmaster or remedial teachers. Similar to the comments about a distributed and shared responsibility, the teachers talk about a shared responsibility for collaboration in the interest of the pupils, and not only between teachers. Teachers within this category discern contexts outside the school, such as the pupils' families, as important for how the work in the school functions.

Between my pupils and me...collaboration with parents in particularly. (...)
 There are a lot [of persons] you have to cooperate with during a...(20)

That (collaboration) is an absolute condition for successful work in classroom
 and in the workplace and so on. (...) Particularly collaboration with the
 homeroom teacher, pupils, other teachers, remedial teachers in the school. (25)

3.3 Summary of the results

To summarise, the categories form a continuum of different dominating patterns of conceptions in the two groups. These are displayed in Table 1, showing the distribution of subjects over the total outcome space.

Insert table 1 about here

Table 1. Experiences of Teacher Role in terms of learning, responsibility and collaboration
 Distribution of subjects over the total outcome space.

Group	Focus	Perception of role
Final Year Teacher Education Student (n=10)	Educational context orientation	A. Weak connection to professional teacher role (n=6)
	Work life context orientation	B. Beginning understanding of professional teacher role (n=4)
Newly Graduated Teachers (n= 10)	Work life context orientation	C. Searching for a professional teacher role (n=3)
	Work life context orientation	D. Establishing professional teacher role (n=7)

4. Discussion

The results in the student group show a variation in how the concepts learning, responsibility and collaboration are conceived. At the narrowest level, the student teachers showed a vague and unarticulated view of learning, responsibility and collaboration, and the relationships between them. In this view, the educational situation and the students' own learning is in the foreground. A somewhat broader conception displayed an initial understanding of the relevance of these concepts for the role of a teacher. The continuum of views of responsibility and collaboration in the group of senior students follows a pattern from locating collaboration outside the individual, and as the responsibility of the authorities, to viewing collaboration during studies as an important preparation for the coming professional work. Even if the concepts of learning, responsibility and collaboration are emphasised in the teacher education programme and its intended learning outcomes, it is not self evident that students connect them with their coming work as a teacher. One explanation of this could be that the recent experience of being a student might be what first comes to mind when student teachers get

prompted to reflect on the meaning of the concepts. Alternatively, the lack of references to the coming professional work in this group could be interpreted as supporting previous research that has suggested the existence of a gap between the education of teachers and the practice of the profession (Munthe, 2003; Flores & Day, 2006). One should bear in mind, that the study is based on a small-scale qualitative analysis, and the results can at first hand only be generalised within this frame. However, the case that we are displaying here, can tentatively inform a broader debate on the feasibility of teacher education for the professional work as a teacher. A recently-conducted evaluation at Linköping University focusing on students' level of satisfaction with their studies shows that 52% of the student teachers in Linköping express hesitation about the programme's relevance for future work (NSI, 2008). These findings support the latter interpretation and could be seen as reflecting a view pertaining to the traditional view that teaching is best learned through practice (Hartman, 1995; Linné, 1996; Bergquist, 2000). Eteläpelto and Saarinen (2006) suggest that student teachers' learning issues or 'projects' related to their teaching practice are brought with them in their trajectories from the educational setting to be dealt with in the practical environment. Our study did not reveal any such ideas in the answers categorised as having a weak connection to the professional role of a teacher. On the contrary, this category indicates that this group of students has not yet embarked on their trajectory to work life - their attention is still firmly focused on the educational context. The gap between student teachers' understanding of the relevance of their studies within the programme and the view articulated in official goals reflects a broader debate on how to integrate academic and professional skills in teacher education (Swedish National Agency of Higher Education, 2003). An academic approach to teacher education is suggested to provide tools for and enable students to take a critical view of their own professional development and teaching (Dimenäs, 2007). This has not been the explicit focus of the present study, but as a general reflection we can conclude that the interviews contain only few expressions of critical attitudes towards the informants' own professional development or towards teaching practice. In the sense that there are critical viewpoints, they seem to be more directed towards the teacher education programme as such, being overly academic and scientific.

The accounts of the newly-graduated teachers, on the other hand, indicate that the first period of work life experience puts the concepts of learning, responsibility and collaboration on the agenda in an obvious way. Our findings suggest that the meanings of the concepts are transformed as the context shifts from the educational setting to the work place, and it seems, as the concepts first get contextualised to the teacher role when some experience of professional work is obtained. The category of answers in the newly-graduated teachers that display a search for a professional role could maybe be an illustration of how concepts shift meaning in the work place context, and that it is not self-evident that the work place context provides the immediate resources to understand or handle the situation. The accounts reveal a movement between the practical experience and theoretical understanding in a reflective and re-interpretative process. A previous study concerning the students' own conceptions of critical moments for learning in the teacher education programme displays a variation of answers (Hammar Chiriac, 2007). Most students in this study state that learning is generated when theoretical and practical contents interconnect. Continuity, relevance and a variation of content and working modes are also important aspects for learning to occur. One of the pedagogical modes, emphasised by the students as stimulating learning, is group work. Working together with others in a group can serve two functions; firstly, as a means for learning (acquiring knowledge) and, secondly, as an object for social training for future professional work (learning to collaborate in groups). Thus, group work can serve a twofold purpose; (a) to stimulate and facilitate learning and (b) to exemplify future practice. The latter

is about transferring knowledge from group work gained during education to future collaborative work in teams or groups in professional life (Hammar Chiriac & Einarsson, 2007; Hammar Chiriac, 2008). Previous research on professional learning in higher education shows that students expect that there is a certain value associated with their studies culminating in their entering a professional field. This occurs via studies related to a specific discipline, or via their preparation to enter *any* professional field through a focus on more generic professional skills (Kaufman & Feldman, 2004, Abrandt Dahlgren *et al.*, 2007). In this sense, the manner in which students approach their studies – their engagement with the studies – may be related to the way in which they appreciate their progression as novice professionals through their development of professional identities. The quality of their preparation for professional work depends on the essential ways in which they understand the relations between their own academic learning and the way in which they perceive their future professional work (Reid *et al.*, 2008; Reid & Solomonides, 2007; Abrandt Dahlgren *et al.*, 2006).

The newly-graduated teachers are searching for, or are establishing a practical understanding of the relevance of learning, responsibility and collaboration related to the role of a teacher after their second semester of experience, which could be seen as reflecting a variation regarding the preparedness for or awareness of the demands of the professional work early in their career. The results in the teacher group vary from a from conceptions in which only one dimension is mentioned, to conceptions in which several dimensions of the phenomena are discerned. An area emphasised by all teachers is their own learning during their first working year. They talk about learning to take responsibility for handling the classroom and the associated administration. They also talk about learning to handle the multiple contacts and collaborating with relevant actors in and outside the school. These findings are in line with the findings of Andersson (2005) and Paulin (2007), who showed that newly-graduated teachers managed to handle the high expectations of their capabilities and the situation in the classroom.

The strengths of the phenomenographic approach to the analysis of the data is that it made possible to display the variation in how student teachers and graduated teachers conceived of some phenomena central to the role of a teacher. Taking a second order perspective, the results of a phenomenographic study reflects not only the subjective perspective of individuals pertaining to the studied groups. Conceptions as representing a non-dualistic and internal person-world relationship means that both subject and object constitute each other; i.e., neither the subject nor the object would be the same without the relation between them. In this way, the subject and object are not independent; they form a unity that reflects both the experienced phenomenon and the experiencing subject. “The essence of the non-dualistic standpoint is that we cannot describe a world that is independent of our descriptions or of us as describers” (Marton, 1995, p. 173). This means, that through the informants’ conceptions, we can discern the internal horizon of the phenomena, and also the external horizon in how the teacher education program and the work as a teacher is reflected. A possible weakness of the study is the cross-sectional design, which means that we have not followed the same individuals in their transition to work life. Still, the outcome space in the two groups respectively make up a ‘frozen moment’, a view of a particular point in a continuing process,. The processes of socialisation into the professional culture are thereby not highlighted. However, the results of this study add a different perspective, that contributes some understanding of the transition and the formation of professional identity.

5. Conclusion

The results of this study show that the view of the teacher education programme as an academic professional program, as displayed in the overarching objectives, is not univocally reflected in the students' and graduates' ways of experiencing the concepts of learning, responsibility and collaboration. A traditional view of teaching skills as something that are learned through practice is still possible to trace in the students' and recent graduates' accounts. Alongside with this, there are also traces of what can be seen as a modern academic view of teaching, where practical experiences are integrated with theoretical reflections. Furthermore, the results of this study do not support the idea of the transition from teacher education to work life as a theory-practice shock, nor do they reveal a perfect match between the objectives of the programme and the demands of the professional work as a teacher. OECD (2005) has pointed at the importance of mentoring, spaces for reflection, and a supportive and carefully planned phase of introduction as important tools for making the transition from teacher education to work life. In this study, the ways of experiencing the transition can be described along a continuum, from an educational context orientation to a work life context orientation, indicating that different students have different needs for reflection and support in this process. The findings of the study can contribute to the discussions around professional identity formation. The challenge for teacher educators seems still to be the design of the educational arrangements, in a way that allows students to critically reflect on aspects of their professional development, and to provide differentiated ways of stimulating a process of identification with the professional role as a teacher.

7046 words

Ethical approval

The manuscript has not been subject to ethical approval of an ethics committee. However, the ethical guidelines provided by Elsevier have been applied throughout the study.

Disclosure/conflicts of interest

N/A

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Contributions

EHC has conducted the interviews. MAD and EHC have equally participated in the preparation of the article. Both authors have approved of the final article.

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References

- APA (American Psychological Association) (2002). *The Ethical Principles of Psychologists and Code of Conduct*. Retrived August 2, 2008 from <http://www.apa.org/ethics/code2002.html>
- Abrandt Dahlgren, M., Hult, H., Dahlgren, L. O., Hård af Segerstad, H., & Johansson, K. (2006). From senior student to novice worker: learning trajectories in political science, psychology and mechanical engineering. *Studies in Higher Education, 31*, 569–586.
- Abrandt Dahlgren, M., Reid, A., Dahlgren, L., & Petocz, P. (2008). Learning for the professions: Lessons from linking international research projects. *Higher education: an international journal of higher education and educational planning, 56*, 129-148
- AERA. (2005). *Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education*. New York: Lawrence Erlbaum Associates.
- Andersson, I. (2005). *Nyutbildade lärares yrkessocialisation i mötet mellan praktik och teori*. [Newly qualified teachers' socialisation at work in the interaction between practice and theory] Linköping University, Skapande Vetande.
- Asking, B. (2006). *En förnyad svensk lärarutbildning*. [A renewed Swedish teacher education]. In K. Skagen (Ed.), *Lärarutbildningen i Norden* [Teacher education in the Nordic countries] (s.91–108). Stockholm: HLS Förlag.
- Axelsson, R-M. (2008). *Formbara människor. Högre utbildning och arbete som utsnitt ur läkares och civilingenjörers levnadsbanor*. [Flexible people. Higher education and work through physicians' and engineers' life trajectories] Academic dissertation No 132. Linköping University, Department of Behavioural Sciences and Learning.
- Barett, M. (2007). Practical and ethical issues in planning research. In G. Breakell, S. Hammond, C. Fife-Schaw & J.A Smith (Eds.), *Research methods in Psychology* (pp. 24–48). London: Sage Publications.

- Beijaard, D, Meijer, C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education* 20, 107–128.
- Bergquist, K. (2000). *Examensarbetet. Ett bidrag till vetenskaplighet i lärarutbildningen?* [The degree project. A contribution to scholarship in teacher education?] Pedagogisk Forskning i Sverige 2000, 5, 1–18.
- BPS (British Psychology Society) (2006). *Code of ethics and conduct*. Retrived August 2, 2008 from http://www.bps.org.uk/the-society/code-of-conduct/code-of-conduct_home.cfm
- Bullough, R.V., Young, J., & Draper R.J. (2004) One-year teaching internships and the dimensions of beginning teacher development. *Teachers and Teaching*, 4, 366-394.
- Burn, K., Hagger, H., Mutton, T., & Everton, T. (2003) The complex development of student teachers' thinking. *Teachers and teaching: Theory and practice*, 4, 309-331.
- Brennan J., Kogan M. & Teichler, U. (1996) *Higher Education and Work*. [Higher Education Policy Series, 23]. London: Jessica Kingsley Publishers.
- Brennan J. & Teichler, U. (2008) The future of higher education and of higher education research. Higher education looking forward: an introduction. *Higher Education*, 56, 259-264.
- Carlgren, I. (1996). *Lärarutbildning i förändring* [A changing teacher education] [DsU 1996:16]. Stockholm: Utbildningsdepartementet.
- Dahl, T., Buland, T., Finne, H., & Havn. V. (2006) *Hjelp til praksisspranget. Evaluering av veiledning av nyutdannede lærere* [Supporting the leap into practice. Evaluation of supervision of newly graduated teachers]. [SINTEF rapport 50 A06050]. Trondheim: SINTEF Teknologi og samfund.
- Dahlgren, L.O. & Fallsberg, M. (1991) Phenomenography as a qualitative approach in social pharmacy research. *Journal of Social and Administrative Pharmacy*, 8, 150-156.
- Dimenäs, J (red.).(2007) *Lära till lärare. Att utveckla läraryrket – vetenskapligt förhållningssätt och vetenskaplig metodik* [Learning to become a teacher. Developing the teaching profession – scientific attitude and research methodology]. Stockholm: Liber
- Eteläpelto, A. & Saarinen, J. (2006). Developing subjective identities through collective participation. In S. Billett, T. Fenwick, & M. Somerville (Eds.), *Work, Subjectivity and Learning. Understanding learning through working life* (pp. 157–177). Dordrecht: Springer
- Flores, M.A. & Day, C. (2006). Contexts which shape and reshape new teachers' identities: A multi-perspective study. *Teaching and Teacher Education* 22, 219-232.
- Fuller, F.S. & Brown, O.H. (1975) *Becoming a teacher*. In: K.Ryan (Ed) *Teacher education: 74th year book of the National Society for the Study of Education* (pp. 25-52) Chicago, IL, National Society of the Study of Education,
- Hammar Chiriac, E. (2007). *Lära på lärarprogrammet. Studenternas vardag på utbildningen*. [Learning in teaching education. Students' everyday life in the educational programme] Linköping University, Skapande Vetande.
- Hammar Chiriac, E., & Einarsson, C. (2007). *Is the grass greener in the other group? Students' experiences of group-work*. In J. Näslund & S. Jern (Ed.), *Interaction on the Edge. Proceedings from the 5th GRASP conference*, Linköping University, May 2006 (s. 70-87). Linköping: Linköpings universitet.
- Hammar Chiriac, E. (2008). *Forskning om grupparbete*. [Research on group work]. In E. Hammar Chiriac & A. Hempel (red.), *Handbok för grupparbete – att skapa väl fungerande grupparbeten i undervisning* [Handbook for group work - to establish well functioning group work in education] (s. 23-49). Lund: Studentlitteratur.

- Hartman, S. (1995). *Lärares kunskap. Traditioner och idéer i svensk undervisningshistoria*. [Teachers' knowledge. Traditions and ideas in the history of Swedish education]. Linköpings University Skapande Vetande.
- Henkel, M. (2005) Academic identity and autonomy in a changing policy environment. *Higher Education*, 49 155-176
- Higher Education Ordinance*, 1993:100. Retrieved October 17, 2008, from <http://www.regeringen.se/sb/d/574/a/21541>
- Johansson, K., Hård af Segerstad, H., Abrandt Dahlgren, M., Hult, H., & Dahlgren, L.O. (2008). The Two Faces of Political Science Studies. Junior and Senior students' thought about their education and their coming profession. *Higher education : an international journal of higher education and educational planning*, 55, 623-636.
- Johnston, R. (2003). The shape of research in the field of higher education and graduate employment – some issues. *Studies in Higher Education* 28, 414-426.
- Kaufman, P. & Feldman, K.A. (2004) Forming identities in college. A sociological approach, *Research in Higher Education*, 45, (5), 463-496.
- Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Linné, A. (1996). *Moralen, barnet eller vetenskapen? En studie av tradition och förändring i lärarutbildningen*. [Moral, child or science? A study of tradition and change in teacher education]. Stockholm: HLS Förlag.
- Marton, F., Dahlgren, L.O., & Säljö, R. (1977). *Inläring och omvärldsuppfattning*. [Learning and conceptions of reality]. Stockholm: Almqvist & Wiksell.
- Marton, F. (1981). Phenomenography - describing conceptions of the world around us. *Instructional Science*, 10, 177-200.
- Marton, F. (1994). Phenomenography. In T. Husén & T. N. Postlethwaite (Eds.), *The International Encyclopedia of Education*. London: Pergamon Press.
- Marton, F. (1995). Cognosco ergo sum. Reflections on reflections. *Nordisk pedagogik*, 15, 165-180.
- Marton, F., & Booth, S. (1997). *Learning and awareness*. Mahwah, N.J.: Erlbaum Associates.
- Marton, F. & Trigwell, K. (2000). Variatio Est Mater Studiorum. *Higher Education Research & Development*, 19, 381-395.
- Molander, B. (1996). *Kunskap i handling*. [Knowledge in action] Göteborg: Daidalos
- Munthe, E. (2003). Teachers' workplace and professional certainty. *Teaching and Teacher Education*, 19, 801-813
- Nilsson, S. (2007). *From higher education to professional practice. A comparative study of physicians' and engineers' learning and competence use*. Academic dissertation No 121. Linköping University, Department of Behavioural Sciences and Learning
- NSI (2008). *Nöjd Student Index*. Retrieved October 21, 2008 from http://www.student.liu.se/content/1/c6/11/89/04/Fakultet-Utb_vet.pdf
- OECD (2005). Teachers matter. Attracting, development and retraining effective teachers. OECD, Organisation for economic co-operation and development. Retrieved October 20, 2008 from <http://www.oecd.org/edu/teacherpolicy>
- Paulin, A. (2007). *Första tiden i yrket – från lärare till student. En studie av de svårigheter nyblivna lärare möter under sin första tid i yrket*. [The first terms in service - from student to teacher. A study of the difficulties that the newly qualified teachers meet during their first terms of teaching]. Stockholm: Lärarhögskolan. [Institute of Education].

- Programme for Teacher Education, Linköping 330 credits.* (2008). Retrived October 17, 2008, from <http://www.liu.se/en/education/undergraduate/LARAL>
- Reid, A. & Solomonides, I. (2007). Design students' experience of engagement and creativity. *Art, Design and Communication in Higher Education*, 6 (1) 27-39
- Reid, A., Dahlgren, L.O, Petocz, P. & Abrandt Dahlgren, M. (2008) Identity and engagement for professional formation. *Studies in Higher Education*, 33 (6), 729-742.
- Schön, D. (1987). *Educating the reflective practitioner: toward a new design for the education of professionals*. San Francisco: Jossey-Bass
- Svensson, L. (1976). *Study skill and learning*. Göteborg: Studies in Educational Sciences, 19.
- Swedish National Agency for Higher Education (2003). Report 2003: 27
- Säljö, R. (1975). *Qualitative differences in learning as a function of the learner's conception of the task*. Göteborg: Studies in Educational Sciences, 14.
- Teichler, U. (1999a). Higher Education policy and the world of work: changing conditions and challenges. *Higher Education Policy* 12, 258-312.
- Teichler, U. (1999b). Research on the relationship between higher education and the world of work: Past achievements, problems and new challenges. *Higher Education* 38, 169-190.
- Utbildningsdepartementet [Ministry of Education and Research] (2008). En ny lärarutbildning, [A new teacher education] Swedish Government, Ministry of Education and Research, Dir. 2007:103
- Wahlström, R., Dahlgren, L.O., Tomson, G., Diwan, V.K. & Beermann, B. (1997). Changing primary care doctors' conceptions – a qualitative approach to evaluating an intervention. *Advances in Health Sciences Education* 2, 221–236.
- Wenger, E. (1998). *Community of practice. Learning, meaning and identity*. Cambridge: Cambridge University Press.