

# Student Teachers' Conceptions of Theory and Practice in Teacher Education

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Per F. Laursen  
Professor, ph.d.  
Danish University of Education  
Tuborgvej 164, DK-2400 Copenhagen, Denmark  
pefi@dpu.dk

# Student Teachers' Conceptions of Theory and Practice in Teacher Education

Per F. Laursen

## Abstract

*This paper presents the results of an interview study of student teachers' conceptions of theory and practice in teacher education. Student teachers often complain that theory in teacher education is not relevant to practice. This problem has probably grown worse during the last decades with the enhanced academic ambitions of many teacher training programs. However student teachers' reports about the problem are often expressed in clichés that are difficult for teacher training institutions to act upon. The purpose of this project has been to acquire a more precise and subtle understanding of the students' conceptions and their rationales. The empirical material of the project is qualitative group interviews with 34 students from five Danish teacher training colleges. The results show that student teachers view theory as a product of other persons' work and theorizing is not viewed as anything they do or can do themselves. Student teachers want primarily to learn to teach, not to reflect on teaching and therefore they want theories to be useful and to be 'tool-like'. Teacher students do not want recipes or manuals; they want freedom to develop their own way of teaching.*

## Introduction: historical background of the theory-practice gap

During the last decades the 'theory-practice gap' in teacher education has been widely discussed. Many student teachers experience problems about the relationship between 'theory' and 'practice' in teacher education and find 'theories' irrelevant to the development of teacher competences. However, 'theory' and 'practice' are vague terms and phrases like 'theory-practice gap' have become almost clichés. The purpose of this article is to answer the questions: What do student teachers mean by 'theory' and 'practice' and how do they believe that the relationship between theory and practice should be?

Seen in historical perspective the 'theory-practice gap' is a relatively new issue. The problem has not always existed and therefore it need not necessarily exist in the future. All through the long history of formal teacher education – in Denmark the first teacher training college was opened in 1791 – programs have been composed of two main parts, an academic part taking place at teacher training colleges or universities and a practical part taking place at schools. Seen from today's viewpoint it might perhaps be expected that the relationship between these two parts of teacher education always has been a complicated issue. But during the first century the relationship seems to have been considered to be rather straightforward: At the teacher training colleges students learned subject matter knowledge and principles and methods of teaching. At school they learned how to practice these principles and methods. Teachers both at college and in schools were supposed to be models the students should imitate (Braad et al 2005).

At the beginning of the 20<sup>th</sup> Century this relationship became more complicated. The belief in *the* correct way of teaching was gradually replaced by the ideal that the professional teacher should master several or multiple ways of teaching and be able to choose among them according to the circumstances. Still the lecturers at teaching training colleges and the mentors at practice schools were supposed to function as models to be imitated by student teachers. And the relationship between theory and practice was viewed as a matter of application of theory. By the middle of the 20<sup>th</sup> Century the rational curriculum planning models brought with them a new concept of teacher competence based on professional rationality. Especially Ralph Tyler's *Basic Principles of Curricu-*

*lum and Instruction* (Tyler 1949) was influential. Teacher's competences were now understood as the ability to plan a course so that learning experiences and teaching methods resulted in the learning outcomes stipulated by the aims. The competent teacher could apply her knowledge of curriculum planning, the psychology of learning and so on to planning under various circumstances.

This 'technical-rationality' model (Schön 1987) or 'application of theory model' (Korthagen & Kessels 1999) became relatively quickly an object of both empirically and theoretically based criticism. Empirical studies of teacher socialization showed that practice seemed to be more important to teacher development than teacher education (Lortie 1975) and studies of learning during field experience demonstrated that many theoretical conceptions were "washed out" from teacher education (Korthagen & Kessels 1999). Other studies showed that student teachers' beliefs were difficult to change by direct intervention and 'applying theory to practice' so that teacher education had only modest effects (Tillema 1998). Theoretically based critique noted that practical teacher competence was a result of personally and ethically based dispositions rather than standard models of 'rational' planning (van Manen 1991).

### 'Theory', 'practice', and teacher competence in contemporary research

In 1983 two books were published that marked a new era in the conception of the role of theory and practice in teacher competence and teacher education, namely D. A. Schön's *The reflective practitioner* (Schön 1983) and F. Elbaz': *Teacher Thinking: A Study of Practical Knowledge* (Elbaz 1983). Both books underscored that practical professional competence is not the result of applying theory to practice. Following this new tradition several concepts have been introduced to underline the practical character of teacher competence, for instance personal practical knowledge (Connelly & Clandinin 1990) and craft knowledge (Brown & MacIntyre 1993). Practical knowledge was seen as professional knowledge that is more specific and pragmatic than academic knowledge (Zanting et al 2003). Studies of teachers' views on research and theory showed that teachers do not value academic research. Teachers tend to view academic knowledge as being neither practical, contextual, credible, nor accessible and they rely more on experiences of their own and their colleagues (Gore & Gitlin, 2004). Student teachers tend to share these attitudes; a study found the following statement of a student teacher to be typical: 'Forget about theory, practice is all' (Hascher et al 2004).

Overcoming this perceived gap between theory and practice in pre-service teacher education is a widespread endeavor (Westbury et al. 2005). Today's dominating view is that theory and practice should be integrated (Leinhardt et al 1995). Reflection is often viewed as the way to achieve this integration. According to the integrative and reflective approach student teachers are encouraged to construct their own philosophy of education integrating their experiences and personal practical knowledge with general theory (Shin 2006). Several models of teacher education stress the continuing cycle of interplay between theory, practice and reflection as the way to promote changes in student teachers' attitudes and practices (Hill 2000). Among the alternatives to the 'application-of-theory' is the constructivist (Kroll 2004) or social constructivist approach that promotes students to develop grounded theories based on information gathered from the world of practice (Carlson 1999). Another influential new model of teacher education is Fred Korthagen's 'realistic approach'. It is based on the insight shared by many teacher education researchers that students begin teacher education with rather persistent subjective theories of teaching. 'Reframing' of the students' mind requires much more than just presenting new theoretical frameworks to them. Instead the 'realistic teacher education approach' aims at the students having practical experience with ways of teaching that slowly can inspire new ways of thinking about teaching (Korthagen & Kessel 1999, Korthagen 2001).

Although the literature on teacher education and on theory and practice in education is enormous only few research projects have focused on the student teachers' conceptions. Some authors have noticed that beginning student teachers expect to be told how to teach (e.g. Jong et al 1998, Loughran 2005). The usual response from teacher educators and researchers confronted with this view has been that this expectation ought not to be met and that student teachers instead should learn how to reflect on teaching (e.g. Zantig et al 2003, p. 207).

## Research questions

The aim of our project was therefore to reach a more subtle understanding of the student teachers' conceptions and preferences. We found it unlikely that there is nothing more to be said about prospective teachers' expectations of teacher education than that they want to be told how to teach. And we expected that the student teachers' expectations ought to be met with a more favorable attitude than telling them that they have to learn something else than they wished for.

Our research questions were:

- How do student teachers view teachers' work, competences, and teacher education?
- What are student teachers' concepts of 'theory' and 'practice' and the relation between them?

## Context: Teacher education in Denmark

Danish teacher education takes place at 18 training colleges offering a concurrent-type program in which student teachers work with pedagogy, school subjects and internships throughout the program. The program is of four years' duration and includes teaching practice at a school for a total of 24 weeks, the organization of which is decided by the individual institution. The general outlines of the program are regulated by legislation: the duration, subjects, rules regarding the institutions and their management etc. The theoretical part of the program includes the following:

- Pedagogical subjects (theory of education, psychology, general didactics, school and society)
- School subjects: Danish or mathematics and three more main subjects must be chosen by the student.

The admission requirement for the teacher training program is an examination at upper secondary level. 1/3 of the students are men, 2/3 are women. About 55% of the students complete the program by the officially stipulated time of study, and 75% in total complete the program ([www.uvm.dk](http://www.uvm.dk)).

## Method and material

The research group<sup>1</sup> decided to do semi-structured qualitative interviews (Kvale 1996) as the obvious method to learn to know what 'theory' and 'practice' mean to student teachers. However, student teachers can often be heard uttering a certain repertoire of rather stereotyped cliché-like statements about 'theory and practice' in teacher education. Danish student teachers often say that 'theory is one thing, practice something else' or 'college and school are two different worlds'. We were interested in going beneath such statements and reconstruct the student teachers' thinking about teacher competence, how it can be developed and which role educational theory and practical experience might play. Therefore we decided not to introduce the words 'theory' or 'practice' to the student teachers during the interviews. Instead we asked the student teachers four broad questions in order to elicit their own thinking:

1. What is demanded of a teacher today and what must a teacher be able to do?
2. Where and how can you learn to do what a teacher must be able to do?

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<sup>1</sup> Karen Braad, Carsten Henningsen, Per F. Laursen, Bodil Nielsen, J. Paulsen

3. Do you think that the teacher education program you are involved in will qualify you to become a teacher?
4. If you could design a teacher education program according to your preferences what should it be like?

We decided to interview the student teachers in groups because we expected that students' conceptions of these fundamental issues are developed together with fellow students and therefore would be more validly expressed by a group than by single students. We interviewed 34 student teachers in 12 groups. The student teachers attended five of the 18 Danish teacher training colleges and they were interviewed at the colleges. Half the student teachers were the first year students and the other half were fourth year students. The interviews lasted about one hour and were audio-recorded and transcribed.

The data were analyzed primarily by meaning categorization (Kvale 1996, p. 196) aiming at identifying the student teachers' conceptual structure concerning teacher competence and the role of theory and practice.

## Results

We expected student teachers' conceptions of theory and practice to be subordinated to their general conceptions about teacher competence. We therefore analyzed the student teachers' conceptions beginning with the most general continuing to the more specific in the following order: teachers' work, teacher competence, theory and practice, and finally the relationship between theory and practice in teacher education.

**Teachers' work:** The student teachers viewed teachers' work as very demanding and several of the first year students found it almost overwhelming after their first internship. Many of them were surprised to find that teachers have so many different things to do, that they must take care of many tasks simultaneously, and that many of the tasks can not be planned in advance:

*A teacher must be kind of an all round person needing an eye on each finger and many fingers. In fact needing to do all sorts of things. Not only socially and concerning subject matter; the teacher must be able to manage any unforeseen situation.*

The student teachers viewed the task about the students' general social and personal functioning and their general social and personal development to be the most important in the daily work of teachers. In Denmark like in many other countries the public opinion these years stresses subject matter teaching and learning as the most important activity in school. The student teachers seemed not to have accepted this policy. Or, if they have, they tended to view a good social climate in the classroom and personally and socially well functioning students as preconditions that must be established prior to subject matter teaching and learning. Especially first year student teachers viewed subject matter instruction as something that can be done relatively easy if the social preconditions are established. The fourth year student teachers had become more humble in relation to subject matter teaching and were not that sure that their competences would be sufficient.

Cooperation with parents was seen as an important and difficult part of teachers' work. Parents who are ambitious on behalf of their children as well as parents with social problems who do not care for their children were viewed as challenging:

*I had expected parents to interfere a lot. But I experienced the opposite – they simply didn't care about their kids. They did not support them doing their homework and the students didn't progress. It is a hopeless situation for a teacher.*

Also the relations to colleagues were seen as an important aspect of teachers' work.

Summing up on teachers' work: Student teachers viewed teachers' work as complex and demanding and they found the relational and personal aspects to be the most difficult ones compared to subject matter teaching.

**Teacher competence:** Talking about teacher competence the interviewees made a distinction between two main domains of competence: personal-relational competences and subject-matter-teaching competences. Official documents on teacher education in Denmark normally write about three main domains of teacher competence: subject matter knowledge, pedagogics and practical knowledge. The reason why students did not use these concepts seems to be that they viewed the personal-relational competences to be very important and this view is not reflected in official documents.

According to the student teachers you must have a basis of personal qualities before starting teacher education; the personal-relational competences can only to a limited degree be acquired in teacher education programs:

*Clearly, it is the human being behind that is most important.*

The most important personal quality is to be committed to working and being together with children:

*You can't learn to care for kids. This is something you have to make clear to yourself before you become a teacher. I mean, you don't become a doctor if you can't stand seeing blood.*

It is important to be able to perform and to lead a large group of children also under chaotic circumstances. And it is important to be able to take an interest in all the children regardless of their personalities or behavior. A teacher should be able to evoke respect from her students and to be regarded as a natural and trustworthy authority. Precondition for this is that the teacher shows the students her respect.

Some of the student teachers, especially from the fourth year, were quite explicit and detailed in their specification of the personal qualities demanded of a teacher: The teacher must be enthusiastic, ambitious, sincere, tactful, extrovert, empathic, and a good communicator. The teacher must consider her job as a kind of calling. If the teacher shall be able to make the students learn with enthusiasm she must invest herself personally in the teaching. A teacher must be interested in her students not only as learners but as persons. She must familiarize herself with the lives of her students outside school and she must also be willing to let her students know something about her own life outside school. Still, she must be able to draw a line and avoid the relations to students becoming as private. According to the student teachers a teacher must be able to show her caring for each student and she must be able to relate herself to each individual student and not only to the class as a group. Students with emotional or social problems are great challenges, especially because they evoke many unexpected problems in class needing the teacher to improvise. To mediate conflicts between students and between parents and school is another important competence.

Student teachers tended to view the necessary personal qualities as a matter of personality rather than professional competence. On the basis of these qualities relational competences can be developed in teacher education according to the student teachers, primarily in internships:

*I do believe that it is when you are in practice and relate to the real kids that you learn. It is difficult coming into schools, always, but it is getting easier each time. You learn something and you bring something with you home and you can say: Now I have got this experience.*

Being together with children is indispensable if the student teachers want to learn how to relate to them. A lot can be learned by studying mentors and fellow student teachers but the core of relational competence can only be learned by practicing as a teacher relating to children. Still, something can and should be done about relational competences at college. Psychology-courses can give a basic understanding of children's reactions and personality. The student teachers thought that the colleges should supply them with more tools to develop relational competences and the student teachers believed that training in managing relations should be done in college. Some of them mentioned role-playing as a method.

Besides the personal and relational competence student teachers considered the ability to teach subject matter to be the other main part of teacher competence. This part is judged to be more simple and easy to master than the personal and relational aspects:

*It is important to make yourself visible, it is obvious. That's why I thought: 'OK, first of all'. Then subject matter teaching can follow.*

The first year students simply expected the college to give them the necessary qualifications whereas several fourth year students were far from sure that they would have acquired the necessary qualifications by graduation.

The student teachers wanted the college's courses in the school subjects to be close to common practice in schools concerning both content and method, although of course at a higher level. According to the student teachers analysis of lesson plans and accounts of teaching cases are valuable activities in college courses. They also enjoyed analyzing textbooks and other teaching material used in schools. They criticized that several college lecturers do not have sufficient updated knowledge about teaching in schools.

Basically the student teachers believed that subject matter teaching is learned in the same way as the personal and relational qualities: by practicing in schools. The student teachers did not consider the college courses to be useless but they clearly preferred them to mirror practice in schools and to introduce tools to master the teacher's challenges.

Summing up on teacher competence: The student teachers see personal and relational competences and being able to teach subject-matter as the main parts of teacher competence. They find the personal-relational aspect of the job to be the most complex and demanding. Both aspects of teacher competence must be learned primarily in practice according to the student teachers.

**Theory and practice:** The student teachers used 'theory' in several different senses:

- subject matter content in school subjects
- tools and methods to be used while teaching and managing the class
- educational and psychological views on for instance learning and human nature

Common to these different senses was that the student teachers viewed 'theory' as a kind of existing product which they could come to know from their lecturers or from textbooks and which they thereafter should be able to use in 'practice'.

None of the interviewed student teachers ever used 'theory' about their own activity or about the products of this activity, e.g. their own analyses and reflections on their teaching. To them 'theory' was something that is produced by others ('theorists') and which is valuable if it can be used by student teachers and teachers.

‘Practice’, on the other hand, is something which they themselves should become able to do. ‘Practice’ was used about activities in schools, especially about what the teacher does in the classroom working with students. Sometimes the student teachers also used ‘practice’ about the planning of teaching and about cooperation with colleagues or parents. The interviewees never used ‘practice’ about developmental or researching activities.

According to the student teachers a theory is good if it can be used in practice in schools and can help teachers and student teachers manage their job. Compared to this ideal the interviewees mentioned three problems about the relation between ‘theory’ and ‘practice’ in teacher education:

- The teacher education program does not introduce a sufficient amount of tools and methods.
- The lecturers teach theories but do not care about how the theories should be used in practice.
- If lecturers talk about ideas about practice these ideas are often too theoretical and too distant from the daily life in school.

An interviewee said about the insufficient promotion of tools:

*I lack tools. After the summer holiday I’m going to be a teacher of Danish and when I arrive in a class to teach Danish how do I find out if some students are dyslexic? How do I bring about flow in classroom activities? How can I vary my teaching? I think I lack a lot of tools to do things like that.*

Several of the interviewees said on their own initiative that they were well aware that now a day it is not possible to give any recipes or manuals showing in detail and step by step how to teach:

*I think that you can get some tools. Then it is up to you how to use them. You can modify things so that you can use them yourself. I don’t think that ‘how to do it’ can be delivered to you. But you can get some tools and then you can choose how to use them.*

Even if it was possible to use recipes they preferred instead to develop their own style of teaching and to develop kinds of teaching adapted to the circumstances and the students. They feared that the personal and relational qualities in teaching which they valued so much would be destroyed by recipes or manuals.

Summing up on ‘theory’ and ‘practice’: The student teachers see ‘theory’ as made by ‘theorists’ and used by teachers. ‘Practice’ is done by teachers in class. A good ‘theory’ is like a tool helping teachers to manage their job. ‘Theories’ introduced in teacher education programs should leave open the possibility to develop teaching adapted to the persons involved and to the circumstances.

## Conclusion

The research questions of this study were:

- How do student teachers view teachers’ work, competences, and teacher education?
- What are student teachers’ concepts of ‘theory’ and ‘practice’ and the relation between them?

Based on the interviews it is relatively easy to answer these questions because the interviewees’ were explicit and outspoken and almost all of them shared the same basic conceptions and attitudes.

Student teachers view teachers’ work as complex and demanding and they see the personal and relational aspects as especially important. Therefore teacher competence is conceived primarily as a matter of personal qualities and relational competences and only secondarily as a matter of being able to teach subject matter. Teacher competence is primarily acquired by practicing in schools and college courses should support this by introducing tool-like theories.

Student teachers view 'theory' as products made by 'theorists' and 'practice' as something they should become able to do themselves when teaching and managing classes. A good theory works like a tool helping teachers to master their job. Because the personal and relational aspects of teaching are so important 'practice' can not be guided by recipes or manuals. Instead the teacher should be able to improvise and to develop teaching adapted to the persons involved and to the circumstances.

**Discussion: Should teacher education programs meet the needs of student teachers?**  
To put the conclusion of this study simple and provoking: Teacher education programs want students to learn how to reflect on teaching but students want to learn how to teach.

Especially in the beginning of the process of becoming a teacher student teachers do primarily focus on their own classroom behavior (Burn et al 2003, p. 325). Why not simply try to meet the needs of the student teachers and supply them with ideas, suggestions, guidelines and tools about how to teach and how to develop their own way of teaching?

It might be objected that teachers' way of teaching is strongly influenced by their values and beliefs and that it is impossible for teachers to develop new ways of teaching unless they reflect critically on their values and beliefs (Tatto 1999). It might further be objected that professional teachers ought not to be 'consumers' of other peoples' theories, they should be co-constructors of the profession's theoretical-practical knowledge (Sweeny 2003). Of course the ambitions of teachers' professional development should not be any lower than that. But it seems legitimate and fully understandable that students in pre-service teacher education are more concerned about learning the basic craft of teaching and prefer theories that are helpful in mastering this challenge.

Teacher training should of course not be reduced to skill training in the classroom. An obvious response to the expressed expectations of student teachers however is to promote a kind of reflective apprenticeship continuum ranging from imitation to exploration and gradual expansion of the reflective process throughout the period of teacher education (Smedley 2001). Student teachers' development towards teacher competence is complex and varied (Sendan & Roberts 1998) and student teachers are concerned about being able to develop their own way of teaching adapted to their students and to the circumstances. As pointed out by recent research on the development of the concerns of student teachers they are not totally unwilling to reflect (Guillaume & Rudney 1993, Burn et al 2003).

Teacher educators have feared that teacher education would be turned into a totally school based enterprise following the classical apprenticeship model (Hill 2000). However, this will not be the result of meeting the student teachers' needs. Student teachers want to develop their own way of teaching instead of following recipes and they *are* motivated for reflection but the reflective component should be based on student teachers' self-expressed concerns and questions (Guillaume & Rudney 1993). Student teachers do not want teacher education to become totally practical and free of theory and they do not want any simple recipes for teaching. They just want theory to help them learning to teach.

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