

TENSIONS BETWEEN KNOWLEDGE DISCOURSES IN TEACHER EDUCATION: DOES CURRENT NORWEGIAN REFORM REPRESENT AN ATTACK ON CRITICAL KNOWLEDGE?

CECILIE R. HAUGEN

Cecilie.haugen@ntnu.no

Norwegian University of Science and Technology (NTNU)

TINE A. HESTBEK

tine.hestbek@ntnu.no

Norwegian University of Science and Technology (NTNU)

ABSTRACT. Internationally there are heated debates on what knowledge should be provided in teacher education. Historically, teacher education has played a role in critiquing and challenging current discourses on education. In the neoliberal discourse, teacher education first of all plays an instrumental function, prioritising knowledge proven to be efficient for students' learning outcomes. In recent reform it is emphasised that Norwegian teacher education at universities should be *research-based* and *close to practice*. Furthermore *pedagogy* and *subject didactics* are given the same name, *professional knowledge*, and are expected to be *integrated*. When boundaries between disciplines are broken important questions relate to how a new knowledge orientation is negotiated and what consequences the integration might have on future teachers' professional identity. Analysing an integration project which failed due to great tensions, insight is provided on struggles over how the reform principles are to be recontextualised. Pedagogy and subject didactics build on different discourses of knowledge which serve different purposes that are difficult to integrate. Contextualising the analysis within international trends in teacher education, the authors argue that the integration may represent another attack on critical knowledge.

Keywords: teacher education; knowledge discourses; Basil Bernstein; Norway; research based knowledge; regional curriculum

Introduction

Internationally the teacher is regarded as the key factor for students' educational success or failure (cf. for example OECD, 2005), and there are extremely high expectations as to what a teacher can accomplish (Cochran-Smith, 2013). As a consequence there are heated debates on the content and structure of teacher

education (Afdal, 2012), and the theoretical subjects of teacher education are under great pressure to change (Ongstad, 2006).

As part of a neoliberal discourse, knowledge that can be measured and ranked is given high priority. Especially relevant knowledge is that which is proven to be efficient for students' learning outcomes, often referred to as "evidence-based practice". Improving teachers' work is thus considered equivalent to improving students' learning outcomes (cf. Cochran-Smith, 2013; Haugen, 2013). In such a vision, teacher education first of all plays an instrumental function, addressing a tight connection between the knowledge of the teacher education and practice of curriculum in schools. However, in a historic perspective, university teacher education also has played a more autonomous role, conducting critiques and challenging current discourses on education (cf. Hestbek, 2014; Cochran-Smith, 2013). In such role, knowledge found independent of current policy and practice is emphasised.

All Norwegian teacher education is now under reform. Key principles for the reform work are similar to international trends in the sense that teacher education should be *research-based* and *close to practice* (Norwegian Ministry of Education and Research, 2011; OECD, 2005; Haugen, 2013). The relation between research, policy and practice is however a question of great controversy in the educational field (see for example Hammersley, 2002; 2007) and there are many ways to understand this relation and to describe what theory is (see for example Kvernbekk, 2001a; 2011).

In the latest Norwegian reform (2013), the two theoretical subjects in the university teacher education programme, *pedagogy* and *subject didactics*, have been given the same name: *professional knowledge*, and they are expected to be *integrated*. When the political intentions to make pedagogy and subject didactics more research-based, closer to practice and integrated are recontextualised (cf. Bernstein, 2000) they may have different realisations in practice since "historical, political, institutional and cultural forces influence the recontextualization process" (Afdal, 2012, p. 258).

When breaking the isolation between pedagogy and subject didactics through integration, the weakening of the boundaries will potentially threaten their identities (cf. Bernstein, 2000). Therefore one can expect that power struggles arise over who should set the premises for the change. What this struggle may consist of is not easy to predict because the knowledge identities of both pedagogy and subject didactics have been shifting throughout education history and it has been difficult to describe their characteristics (cf. Kvernbekk, 2001b; Ongstad, 2006; Gudem, 2011). Furthermore the relation between the two have often been conflicting and tense (Imsen, 2006; Gudem, 2011; Engelsen, 2005). While there may take time for the reform to be implemented and work, an analysis of current practice can provide insight into possible conflicts that may arise.

At a Norwegian university teacher education programme an integration project between pedagogy and subject didactics was carried out between 2008–2011. What

is interesting for this context is that the project was abandoned due to collaborative problems. While there was a tendency to explain the problems from “bad personal chemistry,” an analysis of knowledge orientations may provide deeper insight. As will be demonstrated in this paper, pedagogy and subject didactics at this university are differently positioned in knowledge discourses. The different positioning may form the basis for conflict when the reform principles of being research-based and close to practice are to be recontextualised into a pedagogic discourse. The form the recontextualisation takes may have major impact on the professional identity of future teachers.

The problem statements are: What characterises pedagogy’s and subject didactics’ relation to research and practice? What consequences may the integration of pedagogy and subject didactics have on future teachers’ professional identity?

The paper is structured as follows: First the history of pedagogy and subject didactics at Norwegian university teacher education, and then the case is presented. In the methodology section the study is anchored in critical discourse analysis, where Bernstein’s theory of the *pedagogic device* founds the theoretical background. As analysing tools *classification* characteristics are combined with *discourses of knowledge*. The data material comprises of descriptions of learning outcomes and exams in pedagogy and subject didactics.

Pedagogy and Subject Didactics in Norwegian University Teacher Education

Pedagogy as a subject has different meanings internationally. Imsen (2011, p.7) describes it as a subject which is about “upbringing, teaching and socialisation in all ages and of all areas of life.” It can also be described as “either the science (theory) or the art (practice) of teaching that makes a difference in the intellectual and social development of students” (McCulloch & Crook, 2008, p. 429). However, pedagogy has different content and profile in different countries. The Scandinavian pedagogy is a mixture, building on both a continental and angloamerican tradition. In Norwegian teacher education, the subject normally will consist of elements from different disciplines in the pedagogic field, such as pedagogic philosophy, pedagogic history, pedagogic psychology, pedagogic sociology and didactic. However the content may vary between different institutions with respect to how and whether knowledge is research-based and close to practice, as emphasised in the principles of the current reform.

Subject didactics is a relatively new field in Norwegian teacher education programmes. Before 1974, the teacher education at universities consisted of pedagogy, school subjects and *teaching methods*. In the 1970s, there was a change in the teaching methods in school subject courses. New content expanded the perspective, for example by focusing on legitimation of the subject and the specific subject’s development in education, and, strongly influenced by German and Danish trends, the name was changed to *subject didactics* (Lorentzen et al., 1998). This is now defined as the specification of didactics for a particular school subject

or a group of subjects, for example mathematics didactics or Norwegian didactics. It is in the intersection between pedagogic theory and subject science, between general didactics theory and in the sphere of educational activity, that subject didactics is anchored. This implies that the role of subject didactics on one side is related to the subject connection and on the other side the practical teaching situation (Gundem, 2011). Research in the field of subject didactics are related to practical and applicable questions (Gundem, 2011).

Case

Teacher education at Programme for Teacher Education at the Norwegian University of Science and Technology (NTNU) serves as an instrumental case study (cf. Stake, 1995). Teacher education at this university is especially interesting since the university ran a development project from 2008–2011 aiming at integrating pedagogy and subject didactics in terms of content and structure. A joint timetable was developed, and subject didactics educators and pedagogy educators were to plan and teach together in some parts of the programme. The aim was that this approach would break down the isolation between the two subjects and for this they had to negotiate to find a common knowledge orientation.

Even though both the wish and intent to make the collaboration work were present, the project was abandoned in 2011. While there was a tendency to put the problems down to “bad personal chemistry,” there is a need to delve more deeply into the problems, analysing the knowledge of the two subjects to try to find reasons to explain why it was found to be so difficult to integrate them.

Methodological Framework

The conducted study is a critical discourse analysis (Fairclough & Wodak, 1997), on how the social and political domination is reproduced in texts. Bernstein’s (2000) *Pedagogic device* is a tool for capturing how power works and how different arenas of cultural production, reproduction and transformation of culture are related. The *distributive rules* refer to the field of production of discourse. In this context it refers to the policy intentions/reform principles about teacher education (research-based, close to practice and integrated). The knowledge orientation of pedagogy and subject didactics is thus contextualised and mirrored against current policy intentions. As stated in the introduction, being research-based is nowadays often framed in an instrumental manner, where teacher education is expected to provide knowledge proven to be effective for students’ learning outcomes in schools. Such knowledge is characterised by a *tight connection to policy and practice*.

As the distributive rules regulate the legitimate discourse about teacher education, the *recontextualizing rules* constitute the principle for the specific pedagogic discourse. However, the original discourse, as described through the distributive rules, is transformed in this arena. The recontextualizing rules constitute the principle for how the policy intentions of being research-based and close to practice

form a pedagogic discourse. In the gap between the first discourse and its transformed form, there is also a discursive gap where ideology comes into play. Through this transformation, the pedagogic discourse will never be identical with the discourses it has recontextualized.

Pedagogic discourse is "...a rule which embeds two discourses; a discourse of skills of various kinds and their relations to each other, and a discourse of social order" (Bernstein, 2000, pp. 31–32). In relation to the pedagogic discourse it is important to pay special attention to the *evaluative rules*, since the evaluative rules condense the meaning of the whole Pedagogic Device and create a new field: the field of reproduction. When evaluating the response to the distributive and recontextualization rules, what counts as legitimate forms of consciousness for future teachers is condensed. Hence, in this context, attention will be paid to the knowledge orientation of pedagogy and subject didactics, with specific focus on relation to policy and practice. In the discussion section, positioning in different knowledge discourses is related to different visions of what counts as a professional teacher identity.

Describing Identity and Integration through Principles of Classification

Classification describes power relations and the transmission of power. "Classification strength [...] is the means by which power relations are transformed into specialised discourses [...]" (Bernstein, 2000, p. xvi–xvii), which in this context relates to knowledge discourses. Classification can be used to describe the relation between categories where the *degree of isolation* describes how identity is formed. If a category is to have a specialised voice, it needs to have space in which to develop its uniqueness. It is not first of all within the category itself that this identity is built, but rather in the *space between* different categories, through the negation of the other. For example, for pedagogy and subject didactics to have their own identity, they need to be developed as what the other is not. If the isolation is broken (as the policymakers ask for through an integration), then they could both lose their identity.

The knowledge orientation is analysed as to how they are formed discursively by categorising them as strongly or weakly classified (+/- C) in relation to policy and practice. If their relational characteristics are different, they could be legitimised as separate identities in teacher education. If their characteristics are similar, they may not be legitimate as distinct categories, and integrating the two could be a natural step to take.

However, the classification characteristics need to be situated within theory of knowledge to make more sense out of how the characteristics are part of knowledge discourses. This is where the *form* of knowledge comes in, on *whether* and *how* it is research-based.

Horizontal Knowledge Discourses and Classification Characteristics

Bernstein (2000) describes how different *forms of knowledge* are realised within different discourses, described as *horizontal* or *vertical*. Horizontal discourse refers to what can be understood as everyday knowledge or common sense (common as it applies to all). In the context of teacher education, this refers to the knowledge teachers first of all gain through experience. Knowledge in a horizontal discourse is “contextually specific and *context dependent*, embedded in on-going practices, usually with strong affective loading, and directed towards specific, immediate goals, highly relevant to the acquirer in the context of his/her life” (Bernstein, 2000, p. 159). For example, how to react to students who are interrupting class is not automatically related to how a teacher could work with the students to satisfy a learning goal. Moreover, there is no *one* way to react to interruptions, or *one* way to work on a learning goal. Therefore, the knowledge is segmentally organised since the knowledge gained in one context may not be relevant to another. This means that a teacher needs to build up a repertoire of strategies on a variety of themes to be well prepared for a variety of contexts with a variety of students. Since this knowledge is context dependent it means that no one can tell the student teachers what to do in a specific context, but they could be introduced to a variety of strategies from experienced teachers to help them along the way.

Knowledge in the horizontal discourse is first of all oriented towards the question of “how.” This could refer to how to work on the curriculum, which is described as a weak classification (-C) in relation to policy (policy practices), or about how to use different strategies in classroom practice, which is described as a weak classification (-C) in relation to practice (practice as action).

Vertical Discourses and Classification Characteristics

Vertical discourses refer to what we call “research-based” knowledge and can be described as the opposite of horizontal discourses, as they are coherent, explicit, have a systematically principled structure and are described as either hierarchically organised or as a series of specialised languages. A vertical discourse with *hierarchical knowledge structures* “attempts to create very general propositions and theories, which integrate knowledge at lower levels, and in this way shows underlying uniformities across an expanding range of apparently different phenomena” (Bernstein, 2000, p. 161). A metaphor for describing this type of knowledge is the pyramid. Whereas Bernstein states that this type of knowledge is typical in the natural sciences it is currently receiving much attention in educational research, for example in the form of evidence-based practice (cf. Hammersley, 2002; 2007; Haugen, 2013; Cochran-Smith, 2013). Such a research orientation searches for *one* truth for educational problems. For example, what is the most effective way to avoid disciplinary problems? Its legitimacy is dependent on empirical evidence. Through the hierarchical form, social and political problems and dilemmas in education are simplified and neutralised. Furthermore, the research pays little attention to understanding/explaining the results, the results are explained as:

“That’s just the way it is” (see for example policies addressed on PISA data in Haugen, 2010). Its relation to practice is characterised by contradiction: it is closely related by addressing practical solutions, but at the same time characterised by low context-sensitivity (cf. Haugen, 2010), as the *same* practical solution is applied to all contexts.

When it comes to classification characteristics, the vertical discourse with a hierarchical structure is characterised by weak classification with respect to both policy and practice (-C evidence informed policy and practice). In other words, the classification characteristics are the same as for the horizontal discourse described above, although the discourses are *formed* differently.

The other research-based knowledge form is *vertical discourses with horizontal knowledge structures* which “consist of a series of specialized languages with specialized modes of interrogation and criteria for the construction and circulation of texts” (Bernstein, 2000, p. 161). Examples of such knowledge forms are typically found in the social sciences and humanities.¹ In sociology, for example, different “languages” are functionalism, post-structuralism, Marxism and so on. In contrast to the hierarchical knowledge structure where development means that theory is created which is more general than previous theory, in a horizontal knowledge structure, it is impossible to create a more general theory, as this structure is based on different languages consisting of “different and often opposing assumptions, with each language having its own criteria for legitimate texts, what counts as evidence and what counts as legitimate questions or a legitimate problematic” (Bernstein, 2000, p. 162). In this context, there is no “one truth,” but various “truths” depending on which perspective is provided and what problem is focused. Each language represents different “glasses” through which to view the world.

Thus the vertical discourses with horizontal structures are not able to provide direct solutions to “efficiency-problems” at a general level. The strength of this knowledge is that it represents different tools for analysing and understanding educational problems in specific contexts, treating practice as data. In the next turn it is this distance to practice and thereby this autonomous position which is its weakness, namely that it cannot prescribe practical solutions. However, it is also this autonomous position that forms the *critical* element, providing knowledge for a teacher’s autonomous professional judgement, where the distance to practice is what makes it more context-sensitive. Its legitimacy therefore needs to be discussed in relation to the specific context and problem.

Describing the classification in relation to policy and practice, the vertical discourse with a horizontal structure is different from the horizontal discourse and the vertical discourse with a hierarchical structure. Since the vertical discourse with a horizontal structure is characterised by knowledge decontextualised from concrete situations, its relation to policy and practice is strongly classified (+C), treating policy and practice as data to be analysed and discussed.

To summarise, the analytical framework looks like this:

Table 1 Classification characteristics of knowledge discourses

	Classification in relation to practice	Classification in relation to policy
Horizontal discourse	Weak classification (-C): practice as action	Weak classification (-C): policy practices
Vertical discourse with hierarchical structure (Research- based)	Weak classification (-C): evidence-informed practice	Weak classification (-C): evidence-informed policy implementation
Vertical discourse with horizontal structure (Research-based)	Strong classification (+C): Practice as data	Strong classification (+C): Policy as data

Data Material

The data material comprises descriptions of learning outcomes for pedagogy and subject didactics. Since the descriptions are general and may go in different directions when it comes to how they relate to policy and practice, the exams for pedagogy and all the 19 subject didactic courses found at NTNU from 2010-2011 are also analysed.² The exams are especially interesting as evaluation “constructs the pedagogic practice by providing the criteria to be transmitted and acquired” (Bernstein, 2000, p. 114). In that sense, the exams condense the meaning and instantiate the descriptions of learning outcomes on a general level.

Results

The description of learning outcomes and exams are represented as quotations. By providing the raw data, the interpretation is accessible to the reader. Formulations found especially important for the analysis are presented in bold font.

Knowledge Discourses in Pedagogy

Learning outcomes pedagogy

Perspectives on didactics, knowledge, motivation and learning, relations and leadership, tutoring, evaluation, adapted teaching, education/cultural education, the school’s and teacher’s role in society, nationally and internationally, historically and **politically**, **research methods and research and development work**, teacher **professionalism** and **ethics**.

Based on the perspectives on the theme described above, the student can:

- analyse** the current **curriculum** and see the connection between goals, planning, accomplishment, evaluation and **further development of educational practice**.
- contribute to **local curriculum** planning, and based on research and **critical reflection** over own practice, collaborate on the **school’s development**.
- contribute to **reflection** over the school’s **purpose, ideology, ethics and attitudes**. This involves expressing a **critical reflective attitude** towards one’s own and the school’s practice and contributing to a sustainable **development of society**, locally and globally.

The learning outcomes from pedagogy are represented only in relation to a vertical discourse with a horizontal structure: “perspectives” (note the plural form) on different topics, such as “didactics, knowledge, motivation and learning, relations and leadership, tutoring, evaluation, adapted teaching, education/cultural education, the school’s and teacher’s role in society, nationally and internationally, historically and politically, research methods and research and development work, teacher professionalism and ethics.” As stated earlier, pedagogy typically consists of contribution from different disciplines (psychology, sociology, philosophy, history), and the learning outcomes found at NTNU are typical of a *regional curriculum design* (cf. Bernstein, 2000; Doherty et al., 2013) where disciplinary boundaries are weak, and the relevance is anchored in professional contexts and problems. It could also be stated here that the learning goals are weakly anchored in the disciplines, but rather portray thematics which could be related to different perspectives. This leaves the learning outcomes open for different interpretations.

There are two references to policy: “analyse the current curriculum” and “contribute to local curriculum planning.” However, although these formulations are connected to policy, it is unclear whether policy implementation is addressed, as “perspectives” on these issues form the material for undertaking analysis and taking a “critical reflective attitude towards one’s own and the school’s practice.” All learning outcomes may thus be positioned at a distance, giving an autonomous position in relation to both policy and existing practice by treating them as data, thereby strong classification (+C). However, whether this could be a proper interpretation may be clearer when we look at the exams for pedagogy.

Exams Pedagogy

Exam 1. The teacher in the school and the school in society

The student shall formulate a **problem** related to the “teacher in school” or “the school in society” and base the discussion on **theory**.

The student shall mainly use **literature** from the spring semester, but may additionally use other relevant literature/articles/chronicles in media/educational policies.

Examples of thematics: school cultures, minority questions, socialization, youth, professionalism, work ethics, educational policies, educational history.

Exam 2. Oral exam.

1. Give an account of **different forms** of evaluation. **Discuss** how the different forms may affect the teacher’s **pedagogic practice**.
2. **Discuss** challenges in a multicultural school.
3. **Discuss** opportunities newly employed teachers have to make changes in the school.
4. **Discuss** consequences individualism and collaboration may have on a teacher’s **practice**.
5. Present and **discuss** important changes in Norwegian educational **policies**.
6. In the public media there are often **discussions** on the theme that the school is favouring girls over boys. What do you consider as important issues in such discussions?
7. **Discuss** possibilities and limitations for teacher autonomy.
8. **Discuss** the teacher’s possibilities and limitations for **practising** adaptable teaching in the classroom.

The exams confirm the strong classification in relation to both policy and practice where theoretical perspectives are emphasised. The first exam is an individual paper where the student can choose widely from different themes in the fields of “the teacher in the school” or “the school in society.” The student has to use the literature in the field of pedagogy but can also add other relevant literature, as well as articles/chronicles in the media/educational policies. Possible theme areas are: educational culture, minority questions, socialisation, youth behaviour, professionalism, professional ethics, education policies and education history. The student is required to use theory to discuss the problem statement. Focus on practical solutions is not asked for in the formulations.

The second exam is oral, where the students are tested on the second half of the curriculum. This examination is also centred around discussing various topics based on theoretical knowledge. The student has one hour to prepare for a given task before the examination. It is stated in the instructions given to the students that they must refer to pedagogic literature; common sense is not relevant knowledge if not contextualised within the literature.

Although there are references to policy (number 5) and practice (numbers 1 and 4) in some of the tasks, it is not stated that the student teacher should demonstrate what to do as concrete action. The tasks have the characteristic of discussing various themes in policy and practice based on literature, and are therefore strongly classified (+C) by treating policy and practice as data. To summarise: all descriptions of learning outcomes and exams in pedagogy are related to a vertical discourse with a horizontal structure. Pedagogy marks an autonomous position (+C) in relation to both policy and practice by focusing on learning different perspectives on school, teaching and learning, mainly using concrete practice or policy as data material to be analysed and discussed. In both descriptions of learning outcomes and exams little attention is given to practice as action, policy practices (cf. horizontal discourse), evidence-informed practices or evidence-informed policy implementation (cf. the vertical discourse with a hierarchical structure). The focus is on different perspectives on policy and practice, critical and reflective attitude, and *changing* schools to “contribute to a sustainable development of society.”

Knowledge Discourses in Subject Didactics

Learning Outcomes Subject Didactics

<p>Broad range of work methods and teaching aids in education Typical misinterpretations and common challenges students have in the subject Know the subject well enough to be a confident and specialised tutor for the students Plan and accomplish inquiry-based research with and without technical aids Lead and motivate students in their work on subjects and create constructive and inclusive learning environments Use varied and relevant methods in teaching and give adaptive teaching in the subject Collaborate with students and colleagues on planning and accomplishment of teaching</p>

Give the students process evaluations and summative evaluations **as described in the curriculum and current legislation**

Analyse **curriculum** and use it as a basis for planning, **accomplishment** and evaluation in teaching

Keep updated on **relevant research and development results** in the **subject**

Legitimise choice of different methods

Reflect over and **continually improve** own practice in order to facilitate the students' learning

Knowledge about **learning theory**

The subject's **development and significance in education and society**

The common learning goals for subject didactics are not always easy to categorise as pertaining to either a horizontal or a vertical discourse. Many of the goals seem open as to how they refer to policy and practice. We find the following characterised by weak classification (-C) in relation to practice, relating to the question "how": "Broad range of work methods and teaching aids in education/training", "know the subject/profession good enough to be a confident and specialised tutor for the students/apprentices," "plan and accomplish inquiry-based research with and without technical aids," "lead and motivate students in their work on subjects and create constructive and inclusive learning environments," "use varied and relevant methods in teaching/training and give adaptive teaching in the subject," "collaborate with students/apprentices and colleagues on planning and accomplishment of teaching." These goals are clearly related to practice by referring to action in the classroom, but not necessarily to policy.

Two common goals are characterised as weakly classified (-C) to policy: "Give the students process evaluations and summative evaluations as described in the curriculum and current legislation" and "analyse curriculum and use it as a basis for planning, accomplishment and evaluation in teaching."

The following common goals for subject didactics are characterised by a vertical discourse with a horizontal structure: "Knowledge about learning theory," "the subject/profession's development and significance in education and society." Three elements are difficult to categorise, namely "reflect over and continually improve own practice in order to facilitate the students' learning", "keep updated on relevant research and development results in the subject" and "legitimise choice of different methods". Here the question is what knowledge "reflect over" relates to, and how "relevant" and "legitimise" are to be interpreted: relevant and legitimise in relation to what? These can be interpreted as both a vertical discourse with a hierarchical or horizontal structure.

The question of what knowledge discourses are emphasised most and how may be clearer when looking at the exams for the various subject-didactics studies, describing how the meaning of the description of learning outcomes is condensed and specified.

Exams in Subject Didactics

Altogether the exams for the 19 subject didactics courses are characterised by weak classification to practice and policy. All 19 subject didactics courses tie the exams tightly (-C) to policy practices (how to teach the curriculum). For example we find the following:

- Discuss **how** grammar can be taught **in accordance with the Norwegian syllabus in the Curriculum (LK06)**.
- Choose an area in mathematics didactics. Take one or several goals from **LK06** as a point of departure and describe a **teaching plan** to communicate the subject matter knowledge **according to the competence goals** and the area you have chosen.
- History didactics: **Plan teaching** with the following goals from the **curriculum** as a point of departure. Account for the **work method**, use of **time** and the **curriculum's requirements for skills** in the subject.

Furthermore, practice as action is emphasised:

- Norwegian didactics: Choose one of the attached **student texts** and provide an analysis and evaluation of the text. In conclusion you should give a proposal on what you would pay attention to in a **response given directly to the student**.
- Media didactics: Make a **teaching plan** where you let the students use the PC. Choose competence goals from the **curriculum**.

Thus the knowledge demanded can be described as directly aiming to provide practical solutions (-C policy and practice). This knowledge could be either experience-based (horizontal discourse) or research-based in the form of a vertical discourse with a hierarchical structure, as evidence-based practice. It is not always possible to know on the basis of the data analysed here which discourse is actually emphasised in the teaching of subject didactics. For example we find formulations like:

- The **teaching plan** must be anchored in **history-didactics theory**.

Two subject didactics courses (music and arts and crafts) differ from the others in formulating exams. Their formulations are more similar to those of pedagogy, where the relation to practice is characterised by strong classification (+C) to policy and practice. From arts and crafts we find the following:

- During the teaching practice you have experienced **situations** and episodes which can **provide a basis for theoretical, subject didactic reflexions** about teaching arts and crafts. Take such a situation or episode as a point of departure and reflect on it in light of own or other's practice and relevant literature.

And a few of the subject didactic courses emphasise a discussion about the subject to be taught in school. For example we find from subject didactics of arts and crafts, music and Norwegian:

- An **analysis** of the curriculums in arts and crafts from the curriculum of 1971 to 2006 may indicate that arts history is increasingly gaining influence in the general education. **Discuss** the statement and possible reasons for this change and what the consequences might be.
- **Discuss** how music as subject in school is legitimised, historically and/or from one specific context.
- Choose one aspect of the curriculum on Norwegian in LK06. **Discuss its place** and how it possibly implies a renewal of the Norwegian subject.

Summing up the analysis of knowledge discourses in subject didactics we find that all 19 emphasise a weak classification to policy and practice in their knowledge through exams on how to teach the curriculum. Furthermore action in the classroom is often focused. Music didactic and arts and crafts didactic additionally give tasks which are similar to pedagogy, through providing practice as data to be analysed and discussed.

Discussion

The analysis of descriptions of learning outcomes and exams indicates that pedagogy and subject didactics at NTNU are differently formed as knowledge identities. Pedagogy is clearly positioned within a vertical discourse of knowledge with horizontal structure, characterised by its strong classification (+C) to policy and practice, treating policy and practice first and foremost as data material. Subject didactics is to a high degree positioned within a horizontal discourse and a vertical discourse with a hierarchical structure, characterised by weak classification (-C) to policy and practice, and aiming to provide practical solutions. In such manner pedagogy and subject didactics take different roles and functions in the teacher education programme.

As stated through Bernstein's concept of classification, identity is built on its relation to other categories. For an identity to be formed, it needs its separate space. Since pedagogy and subject didactics are formed differently, the two knowledge orientations are not easily combined. This may go a long way to explaining why so many difficulties were encountered when trying to integrate the two at NTNU. In other words, the collaboration problems cannot be reduced to the rather vague explanation "bad personal chemistry," but need to be understood in a power perspective. A lot is at stake when integrating the two. The different forms pedagogy and subject didactics take are linked to different *purposes* of teacher education, all of which are needed to prepare student teachers for their professional work.

Continuity and Horizontal Discourse

Hansen (2008) distinguishes between three different purposes teacher education may have. Purpose one: The school is to socialise young people into adjusting to the demands and expectations of society. Since teacher education students themselves have been socialised by the school system, there is little need for research-based teacher training since they already are in possession of “the code” for how a school is run. This alternative in teacher education is first and foremost a programme for learning the socialisation function of the existing system to ensure continuity, and it does not have a concept of change. Bernstein’s horizontal discourse is relevant here. He distinguishes between the horizontal discourse’s *reservoir* and *repertoire*. Repertoire “refer[s] to the set of strategies and their analogic potential possessed by any one individual and the term *reservoir* refer[s] to the total of sets and its potential of the community as a whole” (Bernstein, 2000, p. 158). Ensuring that the student teachers are prepared as thoroughly as possible then means providing them with as much and as varied practice as possible. This vision of teacher education leaves no room for research-based knowledge. In the Norwegian university teacher education the horizontal discourse knowledge is gained in teaching practice. In addition, as demonstrated in the analysis, subject didactics is partly anchored in a horizontal discourse.

Policy Implementation and Vertical Discourse with Hierarchical Structure

In the second purpose teachers are thought of as technicians and functionaries who basically “serve” the interests of those who are in possession of economic and political power (Hansen, 2008). Hence, the relevant knowledge in this perspective is connected to policy implementation, which can be either experience-based (horizontal discourse) or research-based. For this purpose research-based means providing research on the most effective way of implementing policy, which is often conceptualised as “evidence-based practice” or “best practice”. The basic assumption is that as long as teachers have access to what is most “effective” for a specific policy they can provide the best teaching. The task of the teacher education programme is consequently to provide knowledge on the most effective teaching. Such a vision can be linked to a neoliberal agenda, and is promoted by both the OECD and the Norwegian government (see Haugen 2013).

The instrumental purpose of teacher education is present in the knowledge orientation of all the 19 subject didactic courses through their emphasis on how to implement the curriculum.

Educational Development and Vertical Discourse with a Horizontal Structure

The third purpose emphasises that teacher education should prepare for continuity as well as development (Hansen, 2008). However, this perspective is based on the idea that the teacher should assume a more autonomous stance than in perspective two. This entails that the teacher should legitimise present practices as well as work towards a better society.

Hansen (2008, p. 12) argues that: “Teachers need to cultivate an articulate perspective on today’s rapidly changing world with its economic, social, technological, and environmental problems and prospects... Unless teachers cultivate a sense of purpose allied with a feeling for the larger human affairs of our time, they may themselves feel solely like functionaries.”

This means that if teachers are to have a central role in the development of the school, it is necessary that in addition to having knowledge and experience on how to teach under the current curriculum, they also need to have wider perspectives and knowledge on the larger questions concerning the school’s role and function in society. In some of the subject didactic exams legitimation and discussion of the subject’s place is in focus, and in pedagogy exam through developing a critical attitude and “contribute to a sustainable development of society locally and globally”.

In contrast to perspective two, we would argue that in this perspective it is imperative that the relation between research, policy and practice is characterised by strong classification. To take a critical stance on policy and practice, teachers need to have knowledge about *different* perspectives on education, as is described through the vertical discourse with a horizontal structure. This knowledge does not mean, however, that the education system will be characterised by harmony.

This also counts for the subject pedagogy itself, where you find internal struggles for which perspectives should be emphasised. According to Kvernbekk (2011), there should be theory (of the “strong” kind) which does not need to identify itself in practice, but instead may have a distance to the practice that allows it to function as a critical tool. Theory that must prove that it works in practice does not have this distance. Some theories must be able to apply “the bird’s-eye view” on the practice and theory and the theory-practice discussions, and maintain a critical function. This kind of theory does not need to worry about if-should issues, it should not be fed back to the practice for the sake of changing it. With a gap as a kind of free space for the theory, the theory’s intrinsic value can also be considered (ibid.). Ball (2007, p. 116) states that theory can “...de-familiarise present practices and categories, to make them seem less self-evident and necessary, and to open up spaces for invention of new forms of experience”. In such way teaching is acknowledged as an intellectual, cultural and contextual activity (cf. Cochran-Smith, 2004). However, as stated in the introduction, such knowledge is of low relevance in a neoliberal discourse, as it cannot prove its efficiency in the practice field.

Conclusion

When reforming Norwegian teacher education programmes it is evident that the students will need to learn from both horizontal and vertical discourses of knowledge. The balance between them needs to be discussed in relation to managing teaching in a short-term perspective versus a long-term perspective. In

the short-term, students need to gain a knowledge base and skills to practice teaching (horizontal discourse). However, such knowledge may not be sufficient if the aim of teachers and schools is to develop. Rather, prioritising a horizontal discourse over a vertical discourse may be a way of ensuring the status quo. The horizontal discourse is what most students feel they need the most when they are studying to become teachers. To support new teachers' work, it is important to focus on what can be done in the practice field by experienced teachers.

In a long-term perspective, teachers will need competencies related to *change*. They will be working under different reforms, and one important goal is that schools should be developing to improve the shortcomings of the system and adapt to the rapid changes in the so-called Knowledge Society. Whether the Norwegian authorities see the best way to improve schools through more bureaucracy and control or through educating teachers to more autonomous and critical positions will have major impact on what knowledge the teacher education programmes should focus on. Internationally, much research has been conducted into the effects of having tight control on teachers' work and the results are not promising (cf. for example Apple, 2006; Ravitch, 2010). One country going in the opposite direction is Finland, where teachers are granted a high degree of autonomy and, unlike in many other countries, have a high status. In Finland, pedagogy has a larger position in the teacher education programmes (Saarrommaa Hausstätter & Saarrommaa, 2008), and programs are found to be more research-based than in Norway (Afdal, 2012).

In the encounter with global actors and trends working to reduce teacher's autonomy (Haugen, 2013), it will be interesting to see what consequences a tighter integration of pedagogy and subject didactics will have in the long run as increasing regionalisation may be a sign of a political intention to increase instrumentality (cf. Bernstein, 2000; Doherty et al., 2013). Which discourse will be setting the premises for what it means to be research-based and close to practice in the integration, and what knowledge will lose ground? Combined with more centralised control over and competition in teachers' work, this reform may be an attack on critical knowledge and have the potential to change the teacher profession in profound ways.

NOTES

1. Bernstein (2000) provides more detailed descriptions of different knowledge forms within the vertical discourse with a horizontal structure, describing subjects with weak and strong 'grammar.'

2. The 19 subject didactics courses are in mathematics, history, Norwegian, media, biology, physics, chemistry, informatics, English, French, Spanish, German, dramatics, social sciences, geography, religion, arts and crafts, music, physical education.

REFERENCES

- Afdal, H. W. (2012). Knowledge in teacher education curricula – Examining differences between a research-based program and a general professional program, *Nordic Studies in Education*, 3, 245–262.
- Apple, M. W. (2006). *Educating the ‘right’ way. Markets, standards, God, and inequality*. New York: Routledge.
- Ball, S. J. (2007). Intellectuals or technicians? The urgent role of theory in educational studies. In M. Hammersley (Ed.), *Educational research and evidence-based practice* (pp.106–120). London: SAGE.
- Bernstein, B. (2000). *Pedagogy, symbolic control and identity*. Boston, MA: Rowman & Littlefield.
- Cohran-Smith, M. (2013). Trends and challenges in teacher education: National and international perspectives. In A. L. Østern, K. Smith, T. Ryghaug, T. Krüger, & M. B. Postholm (Eds.), *Teacher education research between national identity and global trends. NAFOL Year Book 2012* (pp. 121–138). Trondheim: Akademika Publishing.
- Cochran-Smith, M. (2004). The problem of teacher education. *Journal of Teacher Education*, 55, 295–299.
- Doherty, C., Dooley, K. & Woods, A. (2013). Teaching sociology within teacher education: Revisiting, realigning and re-embedding. *Journal of Sociology*, 49, 515–530.
- Engelsen, B. U. (2005). En fagdidaktikk for dagens og morgendagens skole [Subject didactics for the school of today and tomorrow, in Norwegian]. *Norsk pedagogisk tidsskrift*, 2, 89–99.
- Fairclough, N., & Wodak, R. (1997). Critical discourse analysis. In T. A. van Dijk (Ed.), *Discourse as Social Interaction* (pp. 258–284). London: SAGE.
- Gundem, B. B. (2011). *Europeisk didaktikk [European didactics]*. Oslo: Universitetsforlaget.
- Hammersley, M. (2002). *Educational research, policymaking and practice*. London: SAGE.
- Hammersley, M. (Ed.) (2007). *Educational research and evidence-based practice*. London: SAGE.
- Hansen, D. T. (2008). Values and purpose in teacher education. In M. Cochran-Smith, S. Feiman-Nemser, D. John McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education. Enduring questions in changing contexts* (pp. 10–26). New York: Routledge.
- Haugen, C. R. (2010). OECD: For en konservativ modernisering av utdanning? [OECD: In favour of a conservative modernisation of education?, in Norwegian]. In E. Elstad & K. Sivesind (Eds.), *PISA sannheten om skolen? [PISA – The Truth about Education? – in Norwegian]* (pp. 69–82). Oslo: Universitetsforlaget.
- Haugen, C. R. (2013). Comparing the OECD’s and Norway’s orientation to equity in their teacher education policies – Teacher autonomy under attack? *The Journal for Critical Education Policy Studies*, 11, 165–202.
- Haugen, C. R. (2014). Likeverd gjennom likhet eller likeverd gjennom mangfold? En sammenligning av OECDs og den rød-grønne regjeringens utdanningspolitikk [Equity through equality or equity through diversity? A comparison of the OECD’s and the red-green government’s educational policies, in Norwegian]. In C. R. Haugen & T. Hestbek (Eds.), *Pedagogikk, politikk og etikk. Demokratiske utfordringer og muligheter i norsk skole [Pedagogy, politics and ethics. Democratic challenges and opportunities in Norwegian schools, in Norwegian]*. Oslo: Universitetsforlaget.

- Hestbek, T. (2014). Kunnskapsdiskurser i lærerutdanningen [Knowledge discourses in teacher education, in Norwegian]. In C. R. Haugen & T. Hestbek (Eds.), *Pedagogikk, politikk og etikk. Demokratiske utfordringer og muligheter i norsk skole [Pedagogy, politics and ethics. Democratic challenges and opportunities in Norwegian schools]*, in Norwegian]. Oslo: Universitetsforlaget.
- Imsen, G. (2006). Allmenn didaktikk og fagdidaktikk – mellom dannelse og utdanningspolitikk [General didactics and subject didactics – between education and educational politics]. In S. Ongstad (Ed.), *Fag og fagdidaktikk i lærerutdanning [Subject matter knowledge and subject didactics in teacher education]* (pp. 243-257). Oslo: Universitetsforlaget.
- Imsen, G. (2011). *hva er PEDAGOGIKK? [what is PEDAGOGY?]*, in Norwegian]. Oslo: Universitetsforlaget.
- Kvernbekk, T. (2011). Filosofisk om teori og praksis [Philosophy on theory and practice, in Norwegian]. *Bedre skole*, 2, 20–25.
- Kvernbekk T. (2001a). Erfaring, praksis og teori [Experience, Practice and Theory, in Norwegian]. In T. Kvernbekk (Ed.), *Pedagogikk og lærerprofesjonalitet [Pedagogy and Teacher Professionalism]* (pp. 146–163). Oslo: Gyldendal Akademisk.
- Kvernbekk, T. (2001b). Om pedagogikkens faglige identitet [On pedagogy as subject identity]. In T. Kvernbekk (Ed.), *Pedagogikk og profesjonalitet [“Pedagogy and professionalism,”* in Norwegian] (pp. 17–30). Oslo: Gyldendal Akademisk.
- Lorentzen, S., Streitlien, Å., Tarrou, A. L. H., & Aase, L. (2008). *Fagdidaktikk. Innføring I fagdidaktikkens forutsetninger og utvikling [Subject didactics, in Norwegian]*. Oslo: Universitetsforlaget.
- McCulloch, G., & Crook, D. (Eds.) (2008). *The Routledge international encyclopedia of education*. London and New York: Routledge.
- Norwegian Ministry of Education and Research (2008/2009). Report to the Storting (Parliament). White paper no. 11. *Læreren, rollen og utdanningen [The Teacher, the Role and Education]*, in Norwegian].
- Norwegian Ministry of Education and Research (2011). *Mandat til nasjonale rammeplanutvalgene for lærerutdanning 8–13 [Mandate for the national curriculum committees for teacher education]*, in Norwegian].
- NTNU (2012). <http://www.ntnu.no/plu/studier>, retrieved 15 May.
- OECD (2005). *Teachers matter. Attracting, developing and retaining effective teachers*. OECD Publishing. <http://www.oecd.org/dataoecd/39/47/34990905.pdf>. Retrieved 20 September 2010.
- Ongstad, S. (2006). Introduksjon. [Introduction]. In S. Ongstad (ed.), *Fag og fagdidaktikk i lærerutdanning [Subject matter knowledge and subject didactics in teacher education]* (pp. 11–16). Oslo: Universitetsforlaget.
- Ravitch, D. (2010). *The death and life of the great American school system*. Philadelphia, PA: Basic Books.
- Saarrommaa Hausstätter, R., & Saarrommaa, S. (2008). *Finsk skole og den finske læreren – en historisk og kulturell reise [The Finnish School and the Finnish Teacher – A historical and cultural journey]*, in Norwegian]. Downloaded 10 March 2012: <http://www.kunnskapsnettverk.no/C11/C1/Midtllyngutvalget/Diverse%20dokumenter%20%20lenker/Midtllyngfinsk%20skole.pdf>
- Stake, R. E. (1995). *The art of case study research*. London: SAGE.

CECILIE R. HAUGEN is a professor at the Programme for Teacher Education at the Norwegian University of Science and Technology (NTNU). Her research field is in the sociology of education. Her current areas of research are into how neoliberal policies are shaping and changing educational policies and practices in the Norwegian context. More specifically she works with how OECD policies are influencing Norwegian policymaking, and how neoliberal reforms are negotiated and resisted by teachers and parents in Norwegian schools.

TINE A. HESTBEK is a professor at the Programme for Teacher Education at the Norwegian University of Science and Technology (NTNU). Her research interests are into the field of educational policies, democracy and education, both in schools and teacher education. She is specifically interested in changes in knowledge discourses in the teacher education and what consequences the changes have on student teachers and pupils.

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