Academic Code Meets Praxis Code in Higher Education

The development of mass higher education, such as increased vocational goals, a more consumer-orientated student clientele, fewer resources, broader access, have led to different demands on how to organize studies in higher education (Leatherwood and O’Connell, 2003; Beck and Young, 2010; Kreber, 2006). This, in turn, has brought attention to the nature of teaching concerning the content of knowledge and the organization of teaching, and to questions such as what kind of knowledge is supposed to be produced and how should learning situations be organised? How institutions and teachers within higher education relate to knowledge production and learning has direct impact on what is made available to students (Kember, 2009; Assarsson, 2009). Another question is related to that of power, for example who has the mandate to define, control and organize educational knowledge? The present paper focuses on knowledge production in a teacher education program at a Swedish university. It is a program oriented to the early years, which only since a reform in 1977 is a part of higher education in Sweden, and therefore has rather new academic traditions. The program is directed to both vocational training and to academic studies. The students and teachers are thus positioned between different forms of valid knowledge. One practically orientated and context dependent, and another associated with a strong academic (specialized) language with strongly formalized criteria’s. The aim of the paper is to investigate how knowledge is produced, regulated and negotiated in this context, more specifically, in the students writing of an undergraduate thesis. In their final year all students write an academically oriented undergraduate thesis which includes a traditional research process. The criteria for the theses are regulated by the Higher education ordinance (1993:100), and the theses are used by the Swedish Higher Education Authority to evaluate the program. These criteria, besides being directed to practical contexts and values, also relates to academic form, which puts writing of a thesis as well as the knowledge produced in the focal point of two different forms of knowledge. The British sociologist Basil Bernstein (1971, 2000) argues that knowledge is not neutrally distributed, but carries unequal values, power and potential in distribution of knowledge. Teaching in higher education is to large extent about interaction and use of spoken
language and written texts, where for instance teaching constitute spoken communication about texts where use of language is a critical point. In the present investigation, verbal interaction in a supervision situation between the participating students and the supervisor is explored.

Theoretical framework
The analysis has been inspired by Bernstein’s (1971) writing on the realization of formal educational knowledge. According to Bernstein, formal educational knowledge is realized through three message systems: curriculum, pedagogy and evaluation: “curriculum defines what counts as valid knowledge, pedagogy defines what counts as valid transmission of knowledge, and evaluation defines what counts as a valid realization of this knowledge on the part of the taught” (p. 47). It is the underlying principles of the educational knowledge code which shape the three message systems. Bernstein (1971) argues that the form of the code “depends upon social principles which regulate the classification and framing of knowledge made public in educational institutions” (p. 47). The concepts of classification and framing can thus be used to analyze the underlying structure of the three message systems (which are realizations of the educational knowledge code).

It is the boundary strength between contents that underlies the concepts of classification and framing. Classification refers to the relationship between contents, i.e. to the degree of boundary maintenance between contents. Strong classification mean that contents are well insulated from each other by strong boundaries; weak classification, on the other hand, imply reduced insulation between contents. This because the boundaries between contents are weak or blurred. Strong classification reduces the power of teachers over what is transmitted as she may not overstep the boundaries between contents, while weak classification increases her power. Strong classification also reduces the power of the teacher in relation to the boundary maintainers (Bernstein, 1971). Boundaries of insulation regards also social categories (Atkinson, 1985, Chouliaraki, 1998), and in this paper the notion of classification is also used for the boundary strength between social categories, such as the student/supervisor roles.

The concept of frame “refers to the form of the context in which knowledge is transmitted and received”, that is, to the “specific pedagogical relationship of teacher and taught” (Bernstein, 1971:50). Frame focuses the strength of the boundary between what may be transmitted and not. Strong framing leads to sharp boundaries, and weak framing to blurred boundaries. Frame thus refers to the degree of control teachers and taught has over selection, organization and pacing of the knowledge transmitted and received in the specific pedagogical relationship. Strong framing reduces the options to transmit and receive, and weak framing involves a range of options. According to Bernstein (1971) strong framing reduces the pupils control over what, when and how they receive
knowledge in the pedagogical relationship, and increases the teacher’s power of the same. Bernstein (1971) also notes another aspect of framing, that is, the boundary relationship between every day mundane knowledge and ‘proper’ educational knowledge in relation to what may be taught or not. Variations in the strength of frame can be considered depending on the strength of the boundary (degree of insulation) between the two types of knowledge.

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The boundary strength of classification and framing reveal the distribution of power and principles of social control (Bernstein, 1971). Knowledge is not neutrally distributed, but carries unequal values, power and potential in distribution of knowledge (Bernstein, 1971, 2000). In different contexts different forms of knowledge are considered valuable. Englund (2011), argues that teacher education in Sweden carries a strong tradition of normativity. Studying the talk of teacher educator’s, two discourses can be distinguished. One is a praxis discourse connected to practical knowledge and another is related to academic knowledge (Englund & Linné, 2008). The praxis discourse has features of what Bernstein (2000) refers to as horizontal form of knowledge. Such knowledge is typified as everyday or ‘common sense’ language that is context dependent and segmentally organized. The realization of the knowledge varies with the way the culture segments and specializes activities and practices (p. 157). The other discourse, academic discourse, is associated with an academic language with strongly formalized criteria, in Bernstein’s (2000) wording, vertical knowledge. This knowledge is context independent, general, abstract and conceptual with specialized language use. It has strong regulative rules regulating access, transmission and evaluation, motivated by strong distributive procedures (p. 157).

The context of the study

The data presented comes from a one year postdoctoral project which itself is completed within a postdoctoral program for quality development in higher education at Malmö university (year 2012-2013), Sweden. The aim of the project was to offer supervised group seminars to help students to write and complete their undergraduate thesis and at the same time study the process. The purpose of the supervision was to offer sessions that promoted students engagement and involvement. Collaboration and engagement was therefore proclaimed as a condition for participation. The project thus relates to a tradition of student-centered learning (Kember, 2009; Stigmar, 2009) and collaborative learning (Bruffee, 1999; Barkley et al, 2005). The supervisor was supposed to be a facilitator rather than a transmitter of knowledge, which according to Chouliaaki (1998) characterizes the use of politeness strategies, the avoidance of voice of authority, supervisor’s withdrawal from a position of explicit authority, and a marker of relaxation of the supervisor-student power relations. The pedagogical
relationship between students and the supervisor was thus planned to have what Bernstein (1971) would refer to as weak framing.

The project was carried out by one of the authors, with undergraduates at a teacher education program oriented to play work, preschool and elementary school year 1-3. The accomplishment of the thesis was divided into two courses (spring and autumn 2012). In the first course, the students wrote a project plan were the aim and implementation should be clear. During this period they also did their fieldwork. In the second course they completed the thesis. During two courses the students and the supervisor met in seminars. Fifteen students participated (all female), and totally they wrote eight dissertations: all except one student wrote in pair. The participation in the project was voluntary. The participants were divided into two groups, four dissertations in each, and the students stayed in these groups during the whole process. The recorded material was transcribed verbatim, according to transcription level 3 (see Linell, 1994), which is a thorough documentation of what was said, compared to a transcription in a linguistic sense. The material was analysed by two researchers separately. The second researcher was introduced to the material for the analysing process to avoid bias on the part of the researcher who was the supervisor (who also decided the purpose and structure of the project).

The analysis combines a sociological as well as a pedagogical dimension. The pedagogical dimension is based on Bernstein’s (1990) argument that pedagogic communication is a medium through which power relations are constituted. Bernstein, who has pointed out the systematicity of this constitution, refers to language use in educational settings as the “pedagogic text” (1990:7). He claims that social relationships become visible in the text, and that, by studying pedagogic text in context it is possible to recover and analyze regulations and practices. Bernstein though did not engage himself in such analysis (Chouliaraki, 1998). In order to analyze the text on a micro level, some of Fairclough’s (2003) text interpretation-tools have been used. According to Fairclough (2003) text can contain cues for interpretation of relationships (such as contents or social roles). The language in interaction carries many dimensions, but for the purpose of the present analysis two dimensions have been in the fore. One is the dimension of meaning, what words mean, what they are about (content), what Austin (1962) refers to as locutionary act associated with particular institutional practices and another is what words do, illocutionary act (Austin, 1962) in framing social relations.

**Results**

Here some themes will be presented concerning structuring and negotiation of educational knowledge. The themes have been distinguished by features of the pedagogic text in the empirical material. Focus for the analysis was to distinguish cues for interpretation of how the specific situation was regulated. In order to illustrate the themes, extracts from different parts of the supervised
seminars will be used as examples. This does not mean that the themes or features were found exclusively in these examples, but are to be seen as illustrations of themes that were general in varied ways throughout the empirical material. The following themes are presented and discussed:

- **Regulation through language.** This theme concerns how the relationship between the supervisor and students were constructed through the use of language and how the educational content; what the students were supposed to do and at what pace, was framed by the supervisor.

- **Valid knowledge expressed in praxis code and academic code.** The theme concerns what was put forward by the supervisor as valid knowledge. Although the supervisor and the students used the same set of wording, they used the expressions in different ways, in different contexts and with different meanings. Their use of language was interpreted as two differing codes; one context dependent praxis code and one decontextualized academic code. The academic code was used mainly by the supervisor and the praxis code mostly by the students.

- **Negotiation of valid knowledge.** This theme shows how valid knowledge was negotiated in the pedagogic text. The academic code was put forward by the supervisor as classifying valid knowledge, which moved away from the student’s experience of practice. However, in some occasions there was a negotiation going on about the content of the students’ projects and whether it is valid or not.

### Regulation through language

As mentioned previously, the seminars were oriented towards student-centered learning with focus on the student’s involvement and engagement, both in their own and others writing processes. The point of departure was that the students would have a high degree of control over the selection, organizing and pacing of the knowledge production (weak framing). During the first sessions this was also what the supervisor intended to achieve. The extract below is from the first session. The supervisor here introduces the task of writing the thesis and asks the group of students how they would like to organize the talk:

S: Would you like to speak about it one at the time or would you like to speak in groups with the ones you are working with? (paus) Let’s take one and one. Lets start with... a little bit around... what are your expectations on the thesis itself? What do you want? What do you want yourselves with the thesis? We want one thing, which is obviously that you learn the process and that you end up with an approved thesis. And at the same time you are going to learn a research process. That’s our aim. But what is your own aim with the thesis? (paus) Let’s start there. Yes? (turns to one of the students)

When the students do not answer to the invitation to organize the talk, the supervisor decides how to organize it. She asks the students about their expectations, feelings, what they want with their theses
and their aims. She also presents her expectations about the supervision in the seminars; one concrete outcome, an approved graduation thesis, and a learning outcome, that the students learn something about the research process. The forms of regulation enacted in the talk between supervisor and students can be interpreted with the concepts of classification and framing. The relationship between supervisor and students in the extract appears relaxed, and could be interpreted as characterized by flexibility, friendliness and a positive atmosphere. A weak classification (blurred boundaries between social roles) can thus be applied to the relationship between the supervisor and the students. However, while the classification of the social relationship is weak, the framing of what is supposed to be transmitted and received in the pedagogical relationship is strong. Despite the supervisor’s intentions of weak framing of content, she is heavily in control of what is supposed to be transmitted since she knows the final requirement of what counts as an approved thesis, and is herself subordinated to this. Because of the weak classification of the social relationships, the requirements concerning content and form of the thesis are in many cases invisible to the students, and the supervisor seldom gives input on the principles of the practice of writing a thesis. On one hand the students are asked to act and give input independently, but they are at the same time being directed according to the supervisor’s own criteria.

Another cue pointing at weak classification of boundaries between social categories is how the supervisor uses pronouns in her talk. In the example above the pronouns are sometimes used in an unspecific way, that is, not self-evident who is included or excluded in pronouns like we or us (marked with italics in the extract). This is also the case in the sequence below from another seminar where the supervisor speaks about the process and work with the theses as a joint project where the student’s as well as the supervisor are going to help each other:

S: And that is what we all should help each other with (laughter). We will help each other /…/

Because …this is also this, here… that is why we do this together. We will help each other… on the way.

In this extract the use of the pronoun we (italics in the extract) indicate that the boundaries of social categories are weak. It is not clear who is included in the pronoun we. But the supervisor’s use of pronouns can also be interpreted as strong framing, as in the previous example where she speaks about expectations of the thesis and says: “That’s our aim. But what is your own aim with the thesis?” The supervisor is here positioning herself as part of the staff of the university, having specific aims with the educational practice, which possibly differ from the aims of the students’. She is thus subordinated to the institutional practices and thereby in reduced control of what counts as valid knowledge in the pedagogical context, which in this case could be interpreted as strong classification and framing since there are few options for the students and the supervisor.
Valid knowledge expressed in praxis code and academic code

It is not explicit what counts as valid knowledge, and in the empirical material there are few examples of concrete statements about what is expected. But the supervisor in some occasions, like in the extract below, uses negative statement to classify what is not valid knowledge. In the context of this particular extract the theme of the talk is that the student’s should remind each other not to be normative. Earlier in the session two students discuss a topic they are interested in pursuing in their thesis, that is, what teachers think as they evaluate children:

Andrea: One must be careful how to formulate it.
S: Yes, one must be… (careful) and not become like “right and wrong and good and bad”. Like that.
So that… you must make it much more reasoning.
Andrea: So it will be a lot like: Do they evaluate because they have to?

It seems like Andrea in the first line using the pronoun one refers to herself as a teacher evaluating children. The supervisor (S) also uses the pronoun one (Sw. man) but she refers to teacher students writing their theses. Andrea misses the supervisor’s intention and is still thinking of the teachers work in the last line. In this whole section the content (valid knowledge) is controlled by what the students mustn’t do, that is, to be normative or judging teachers’ activity as right or wrong. This way of framing what is not valid content by a negative judgment is quite common in the material, while, again, statements about what is valid content are rare.

Apart from valid content, there is also one valid and one not valid way to use language; two differing ways of speaking about the thesis writing can be identified generally in the sessions, for instance when the students and the supervisor discuss the purpose of thesis writing. An analysis of the verbal interaction, show that an academic code is used mainly by the supervisor and a praxis code by the students. The praxis code is connected to work practice institutions, where valid knowledge is knowing how to act in the proper way: what is right, good and how it should be (Englund, 2011). In the extracts the praxis code was identified as talk about values, explicitly normative claims, as well as connections to teacher practice. The academic code is not context dependent in the same way, which means that the language use is more abstract and distinguished by use of metaphors, what Bernstein (2000) would refer to as vertical knowledge code. When the students describe their aims of the theses, they all mention that they want to gain knowledge with relevance for their practice. One student says that she wants “…to know how to do, to be able to use the knowledge…” another speaks about methods: “…the different methods that I can take and use later on…” A third student speaks about tools that she will be able to use later on as well. When the students formulate the aim of their theses it is about identifying what is best and right, and it is often related to the Swedish school curriculum program. They are then interested to know whether the teachers in their investigations know about
the curriculum and whether they follow it correctly. Bernstein (2000) refers to this form of knowledge as horizontal. Such knowledge is context dependent and close to action and everyday situations.

Something that further complicates a common understanding between supervisor and students is that they sometimes use the same expressions, but with different meanings connected to the different codes they are using. One example is the notion of theory. The word is often found in student’s talk contrasting practice: One student says “...you may have an idea where there are theories, but how does it look in practice?” Theory is found in literature, or is the content of texts “...we have read that in theory...” in contrary to practice, which is expressed and connected with the spoken word. Theory is also talked about as basic thought, own ideas or other people’s basic conceptions. Even though the meanings vary in the students’ talk, what is in common is that the meanings are concrete and contextual (horizontal knowledge code).

**Negotiation of valid knowledge**

Two of the students, Lisa and Karen are writing an essay where the notion of fundamental values in teacher’s work is essential, and they want to study how teachers relate to fundamental values in everyday situations at school. In one of the seminar there is a discussion about the meaning of the notion and the aim of using fundamental values as a central concept in the thesis. Karen explains that they are going to define and explain the meaning of fundamental values based on the school curriculum program “…since it is a little bit that we thought of. We were going to explain fundamental values and what they stand for…” The supervisor claims that they must problematize the concept of fundamental values:

S: It is a little bit about in which way you look at the subject of fundamental values. Are you going to problematize the question of fundamental values yourself? /.../It is not that obvious that –these are the fundamental values and this is how they are transmitted, now, are you doing as it says?

The supervisor and the students are here negotiating valid knowledge. The students’ project is closely connected to practice and they want to define fundamental values by the curriculum program in order to make an analysis where they compare theory (=the fundamental values according to curriculum) with practice (=teachers activity). The supervisor wants them to use fundamental values as a concept. In the next session Karen and Lisa are still expressing an interest in investigating whether the teachers in their study work with the fundamental values according to the curriculum.

Lisa: Because we thought that we would take that in the analysis later. That we later look at our interviews that we made and juggle it to and fro with what it says in the curriculum, it says concretely that you are supposed to do like this, and they do like this and that. /.../So we will take it in the analysis later. But we felt a bit in the introduction that there we should take in that... – according to the curriculum this is how you should work and then there is the question that – but how does it work in practice? And then we will analyze.

S: Mm. But are you then going to see... what do they do? Do they do as it says in the curriculum? Is that, a little bit like... what you are going to look at?
Lisa: Yes.
S: *But it cannot be...* It cannot be the aim of the thesis. /.../ Sort of, it cannot be an aim of a thesis to check if they do it in the “right” or “wrong” way!
Lisa: No, but then...Not... not if they are going to do right or if they do wrong, but look at how they think about the curriculum and how they interpret the curriculum and how they work in their way according to the curriculum and then, look at... kind of... what works, so to speak.

Here the supervisor is framing what is valid knowledge by giving a negative assessment (marked with italics in the extract) of what the two students propose as aim of their essay. In another seminar the same thesis is discussed.

S: Then you must show... if you... if you see in your material that the daily activity... the daily activity is pervaded of – it is a bit like in your case, if you can see in your material that the daily activity is pervaded in different ways of partly the fundamental values as a... whatever you now mean by fundamental values, because it seems like as if... therefore you must... here you must... you must... this you must flesh out, kind of.
Karen: Mm.
S: So you have to show it, in what way it does.

Here the supervisor is framing the valid knowledge by claiming what the students must do, that is, *flesh something out*. She uses a metaphor to point at something different from what they think they are supposed to do in order to analyze their material. The metaphor she uses doesn’t give the students’ any clues about how to concretely perform their analysis, since the meaning she refers to is not context dependent. The students and supervisor thus use the same expressions, but, as in the extract above, they mean very different things. This depends on whether the meanings are context dependent or context independent.

Another example of negotiation concerns formalities. The students want to know how to make references correctly and a large part of the session (14 minutes) is spent on discussions about what is right. The supervisor remarks: “It is a lot of formalities now, really.” The students do not react, and the discussion about referencing correctly continues. A bit later the supervisor tries again:

S: Yes. It is a lot... sort of you bring up those discussions about formalities, do you want that or do you want something else?
Maria: It is not what is most important. Really.

During the session the students have asked for concrete input about how to write their theses, but the supervisor frames the validity of their requests by questioning their choice of using a large part of the seminar to discuss referencing. This is also an example of framing using a negative assessment even though it is presented as a choice. With the question she implicates that “what you ask for is not what is most important” (valid), something that the student Maria in the example also reinforces. What in the seminars was presented as an opportunity for the students to negotiate about pacing and content of the session, finally was not counted as valid.
Discussion

The question of valid knowledge in teacher education and how such knowledge is organized seems to be a complex question. In its extension it is also a question of power, and what is possible, valid and desirable knowledge produced in education. Bernstein’s concepts classification and framing has in this paper been used to explore and understand the regulation of educational knowledge in the context of thesis writing.

So what conclusions can be made from the results? The roles, relationships and content available to the students were regulated through the supervisor’s use of language, which in turn is regulated by a strong institutional academic context in which thesis writing is embedded both locally and nationally. From the start of the supervised sessions the students had different conceptions from their supervisor about the meaning of writing an undergraduate thesis and about valid content in such a thesis, and it seemed like the students would have opportunity to choose content and control the process of writing a thesis. The supervisor sent double messages to the students, when on one hand she asked them to use their former experience and on the other hand valued a certain kind of the knowledge code. The weak classification of social roles and the absence of input on the principles of the practice of writing a thesis made it invisible to many of the students to perceive what was expected of them and when they asked for clues and formalities they were told that it was not what was most important. Bernstein (2000) points out vertically and horizontally organized knowledge as contrasting codes. The horizontally organized praxis code was not supported by the supervisor, while the vertically organized academic code was constructed as valid knowledge. The students’ conception built on their experiences and in the line of teacher practice, a knowledge culture connected to a certain way of speaking that probably have been enhanced during the education. Englund (2011) saw in her investigations about normativity and use of language in teacher education that the praxis code was frequently used by teacher educators as well. According to Nylund and Rosvall (2011) vertically organized knowledge is central for professional training educations. This concerns knowledge that is contextual and bound to specific practice, which seems legitimate for teacher practice. But knowledge produced and reproduced in practice has limited potential being transferred to other contexts (Bernstein 2000). This could be interpreted that the horizontal knowledge culture adopted by the teacher students in the vocational parts of their education was no longer valid when it came to produce an undergraduate thesis in an academic genre where the requested knowledge is vertically organized.

Despite the supervisor’s intentions of a collaborative knowledge production, with weak boundaries between the social categories (supervisor and students) and in relation to the what, when and how of the seminars, the project ended up to be regulated by both strong classification and strong framing. The framing was strong since the supervisor was in control of what counted as valid knowledge and how and when it was supposed to be transmitted. On the other hand, the supervisor
had reduced power over what was to be transmitted because of the strong academic context in which
thesis writing is embedded. Even though it looked like knowledge was negotiated in the supervised
sessions, there was never a question of negotiation of criteria or outcome. What was presented as an
opportunity for the students to negotiate about pacing and content of the sessions, did not count as
valid knowledge. Thus it was evident that it was the underlying principles of the educational codes that
shaped the educational situation. The supervisor’s intentions, as well as the students’ interpretation
of those intentions were subordinated the underlying principles of the forms of the codes, that finally
determined what was possible, valid and desirable knowledge produced in education.

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