The aim of the paper is to discuss and problematize the relation between knowledge generated within the framework of preschool practice and academic knowledge about the same practice developed in research. The point of departure is that all education carries values and control of what counts as valid knowledge, something that was actualized in the two cases from pre-school teacher education in Sweden that will be discussed in the present paper. The first case concerns undergraduate preschool teacher students’ thesis writing and the other case is a so called “research school” where a group of professional teachers are offered the opportunity to study for a licentiate degree, examined by a post-graduate essay. In both cases the students were expected to transform and re-contextualize practical knowledge into an academic knowledge form. Although the two cases concern different levels of preschool teacher education, there are some similarities that make the cases relevant to compare and discuss. One is that the writing of theses, both at undergraduate level and post-graduate level aim at transforming practically oriented and context dependent knowledge related to preschool practice into re-contextualized academic knowledge. The aim is to strengthen the scientific base of pre-school in general. Another similarity is that that the theses at both levels are evaluated against an academic framework with strongly formalized criteria. Based on the conclusions drawn from the two cases (authors, 2015; author 2016), we wish to question the underlying assumptions that problems and questions generated in practice can be researched and constitute new and useful academic knowledge. This doesn’t imply that we are negative to research on preschool practice or research conducted by teachers on their own practice in general, but we question the form in which it is organized and the underlying assumptions in the cases described here. In the following we aim to underpin this argument by presenting examples and results from a re-analysis of the two cases.

In the re-analysis the conceptual framework of the sociologist Basil Bernstein was used, especially his notions on horizontal and vertical knowledge. As Bernstein (1971, 2000) argues, knowledge is never neutrally distributed, but carries unequal values, power, and potential in distribution of knowledge. Formal educational knowledge is according to him (1971, 47), realized through three message systems: curriculum, pedagogy, and evaluation, where ‘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’. These message systems are shaped by the underlying principles of the educational knowledge code. The form of the code depends upon social principles that regulate the classification and framing of knowledge.
knowledge. Thus, the concepts of classification and framing are central for understanding regulation of educational knowledge. *Classification* refers to the relationship between contents; that is, to the degree of boundary maintenance between contents. The concept of *framing* ‘refers to the form of the context in which knowledge is transmitted and received’; that is, to the ‘specific pedagogical relationships of (Bernstein 1971, 50). Strong framing reduces the students’ control over what, when, and how they receive knowledge in the pedagogical relationship, and increases the teacher’s power over the same.

According to Bernstein (2000), different forms of knowledge are realized in two discourses or knowledge codes. Horizontal knowledge is oral, local, and context-dependent. It is segmentally organized, meaning that the realization of the discourse varies with the way the culture segments and specializes activities and practices. By contrast, vertical knowledge is abstracted from meanings embedded in everyday life. It is explicit, systematic, and conceptual with specialized language use. It has strong regulative rules regulating access, transmission, and evaluation, motivated by strong distributive procedures (Bernstein 2000). The two different discourses reflect a dichotomy between academic and practical knowledge. Horizontal knowledge is less systematically formed than vertical knowledge, because it lacks the specialized scientific inquiry and evaluation that has been formed with regard to the hierarchy of academically proven and politically legitimated expertise in the university system (Beach and Bagley 2012). Vertical knowledge is thus based on the specialized language of disciplines taught in official education systems, and is found in the academic and professional disciplines (Bernstein 2000).

**The two cases**

One of the cases (case 1), is a project where undergraduate pre-school teacher students were offered student-centred group seminars during the period of writing their theses (authors 2015). The participating students were all enrolled in a teacher education program oriented to the early years, which include both theoretical studies and practical training. In the final year, all students write an academically oriented undergraduate thesis, which are used by the Swedish Higher Education Authority to evaluate higher education programmes in Sweden. The aim of the project was to offer supervised group seminars in order to investigate the possibility of improving supervision practices in relation to undergraduate thesis work. Students were offered seminars that helped them to write and complete their theses, and collaboration and engagement were stated as preconditions for participation. The project thus related to a tradition of student-centred learning which recognizes the social and collective nature of the seminars and the knowledge and experience present in the student body (Shadforth and Harvey 2004).

For the other case (case 2), the educational framework is a so called “research school” where a group of professional pre-school teachers are offered the opportunity to study for a licentiate degree, examined by a post-graduate essay. The pre-school teachers enrolled in the research school, work part time beside their studies. Research schools for professional teachers has during the last ten years been a reoccurring educational policy in Sweden with the explicit aim to
develop and strengthen the scientific bases in school and pre-school practice, by offering theoretical tools and scientific concepts to the participants (author 2016). The content of a research school is decided beforehand and the teachers have to apply for it. The participants are financed partly from the state and partly from the municipalities where they are employed as pre-school teacher. Both studies are conducted in line with the legal and ethical guidelines regulating research in Sweden.

Case 1 was previously analysed, using Bernstein’s concepts of classification and framing and horizontal and vertical knowledge as analytical tools. An analysis of language meaning was also carried out drawing on the later work of Wittgenstein (1953), and his notion that in order to understand the meaning of language expressions it is necessary to understand in what context these expressions become meaningful (authors 2015). In case 2 the licentiate essays were evaluated with a special focus on the meaning of language expressions and Bernstein’s distinction between horizontal and vertical knowledge codes (author, 2016). Despite the differences in design in the two studies, results from the analyzing process of each study showed many similarities. The themes of the present paper were identified when case 2 was viewed through the lens of the previous results of case 1.

Results/Discussion
The aim of this paper was to discuss and problematize the relation between knowledge generated within the framework of preschool practice and academic knowledge about the same practice developed in research. The results calls for further investigations of this relation and the potentiality for different knowledge forms to be realized and transferred to other contexts. In case 1 on which the present paper is based, the pre-school teacher students and the supervisor were positioned between different forms of valid knowledge: one practically orientated and context dependent, and another academic with strongly formalized criteria. The two different discourses reflect a dichotomy between academic and practical knowledge. In case 2 the findings show that when the students attempted to approach the research problem in their essays, the practice code language, including norms and values adopted in practice training, did not facilitate them to develop valid academic knowledge. In both cases the practical knowledge was subordinated the academic knowledge when it came to evaluation. The preschool teachers and the teacher students had great difficulties to re-contextualize their practice generated knowledge. This is in line with Bernstein (2000) argument that knowledge produced and reproduced in a specific context have limited potential for being transferred to other contexts. Following Wittgenstein (1953), any knowledge is rooted in practical skills – which means that learning and using language is embedded in the context. The students’ control of the knowledge production was reduced in both cases, something that showed when the
content of the essays and theses was evaluated. The supervisor’s intentions and the students’ interpretation of those intentions were subordinated to the underlying principles of educational knowledge; it was these principles that finally determined what was possible, valid, and desirable knowledge production. These findings align with previous research about regulative principles and practices in educational settings (Chouliaraki 1998; Sriprakash 2011; Doherty et al. 2013). These studies give a similar picture, showing competing frameworks that determine the possible knowledge production rather than the explicit educational goals or the tacit pedagogical ideal that teaching is based on. In the context of the specific cases explored, the dimension of evaluation became superordinate to the pedagogic framework. As one of the participants of the research school (case 2) puts it: “In the end, our knowledge and experience was not valued, since it didn’t fit the scientific standards of the university”. This could be interpreted as the horizontal knowledge culture adopted by the undergraduate as well as the postgraduate students was no longer valid when it came to producing a thesis in an academic genre where the requested knowledge was vertically organized. The horizontal and vertical knowledge codes ultimately did not meet; instead, the two different discourses formed competing and colliding frameworks. The relation needs to be problematized since the knowledge forms, connected to different language codes are basically different: differently organized, structured and realized – and the final product is evaluated in relation to an academic framework.

References