

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Räihä, Pekka; Moilanen, Pentti; Dobozy, Eva; Saukkonen, Sakari

Title: Speechlessness, anxiety, and confusion in a teacher education student group

Year: 2018

Version: Published version

Copyright: © 2017 the Authors

Rights: CC BY-NC-ND 4.0

Rights url: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Please cite the original version:

Räihä, P., Moilanen, P., Dobozy, E., & Saukkonen, S. (2018). Speechlessness, anxiety, and confusion in a teacher education student group. *Teaching Education*, 29(3), 221-233.
<https://doi.org/10.1080/10476210.2017.1378636>

Speechlessness, anxiety, and confusion in a teacher education student group

Pekka Räihä, Pentti Moilanen, Eva Dobozy & Sakari Saukkonen

To cite this article: Pekka Räihä, Pentti Moilanen, Eva Dobozy & Sakari Saukkonen (2018) Speechlessness, anxiety, and confusion in a teacher education student group, *Teaching Education*, 29:3, 221-233, DOI: [10.1080/10476210.2017.1378636](https://doi.org/10.1080/10476210.2017.1378636)

To link to this article: <https://doi.org/10.1080/10476210.2017.1378636>



© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 22 Sep 2017.



Submit your article to this journal [↗](#)



Article views: 577



View Crossmark data [↗](#)



Speechlessness, anxiety, and confusion in a teacher education student group

Pekka Räihä^a, Pentti Moilanen^b, Eva Dobozy^c and Sakari Saukkonen^d

^aFaculty of Education, University of Tampere, Tampere, Finland; ^bFaculty of Education, University of Jyväskylä, Jyväskylä, Finland; ^cDeputy Dean Learning and Teaching, Curtin Business School, Curtin University, Perth, Australia; ^dFinnish institute for Educational Research, University of Jyväskylä, Jyväskylä, Finland

ABSTRACT

The aim of the study was to explore the tensions, as experienced by student teachers, in a teacher education program that is based on psychodynamic theory. Previous research shows that students have had orientation problems in innovative university studies because it involves students having to take steps toward their discomfort zone. It was therefore considered important to study the mismatch or match of the training model and student experiences. The data were gathered through student interviews. The data analysis utilized a case study methodology and proceeded from thematic network analysis toward a deeper interpretation of the data. The analysis shows students struggle to understand the meaning and practices of psychodynamic-oriented pedagogy. The analysis also shows that students were unable and unwilling to share their learning experiences with students outside the new program. This can be understood as a tension between different conceptual understandings of learning.

ARTICLE HISTORY

Received 2 February 2017
Accepted 6 September 2017

KEYWORDS

Teacher education; higher education; psychodynamic theory

1. Introduction

The dominant ideology of teacher education has changed from delivering pedagogical content and tools toward more constructivist ideas. Teacher education could be perceived to be at the forefront in the development of a new teaching and study culture in universities. Yet teaching practices change quite slowly in teacher education (Mäensivu, 2012; Räihä, Rautiainen, Nikkola, & Mäensivu, 2011; Ruohotie-Lyhty & Kaikkonen, 2009). The students have a tendency to resist change and at the start of their teaching career they also tend to resort to traditional teaching methods (Cochran-Smith & Zeichner, 2005; Doyle, 1997; Klein, 2010; Mattheoudakis, 2007). If, however, established practices and roles are challenged, the resulting reaction of students to the unexpected and incomprehensible event is often bewilderment, anxiety, and difficulty in relating to others (Dobozy, 2011; Nikkola, 2011; Mäensivu, 2012).

Those pedagogies that focus on reflection are especially not always welcomed by student teachers (Bronkhorst, Koster, Meijer, Woldman, & Vermunt, 2014). Learning to be critically reflective entails painful self-exploration and some students are overwhelmed by the

CONTACT Pekka Räihä  pekka.raiha@uta.fi

© 2017 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

invitation to explore self-awareness or group dynamics (Gilmartin, 2000; Holloway & Gouthro, 2011).

Bronkhorst et al. (2014) suggest that student resistance toward innovative learning methods should be seen as a mismatch between the expectations of students and the teacher education program. Therefore, one needs to explore in detail how students experience the teacher education programs, how they are challenged by these programs and how they try to make sense of the programs.

Even in Finland, which is sometimes labeled as the PISA-wonderland, teacher education is struggling to make a desired impact. The new 2016 national core curriculum for comprehensive schools makes a huge leap away from subject-specific content to more holistic, phenomenon-based content. This requires altered visions and practices of teaching and perhaps even a new kind of teacher. One solution is that the basic theory underlying teacher education is changed from education toward psychodynamic theories.

2. Psychodynamic oriented teacher education

In Finland, in order to become a qualified teacher, all teachers have to acquire a master's degree and complete their studies with a master's thesis. Studies usually take five academic years. Educational sciences are the major subject in class teacher education. Studies in educational sciences are organized according to the subfields of educational studies (*history, philosophy, psychology, and sociology of education and didactics*) and over the years students' understanding of the subfields of education deepens. In general, with some small exceptions, studies in Finland's 10 different class teacher education study programs are structured similarly with only minor differences in content.

At the University of Jyväskylä, a different teacher education program – the Critical Integrative Teacher Education (CITE) – was introduced in 2003. The curriculum of CITE is not organized according to the subfields of educational sciences but according to the study of certain educational phenomena from a psychodynamic point of view. In the beginning, CITE was considered as a critical alternative to mainstream teacher education in Finland and also at the University of Jyväskylä. Subsequently, the teacher education curriculum at the University of Jyväskylä has turned toward phenomenon-based principles and mainstream teacher education has adapted some pedagogical principles from CITE. In spite of this, CITE still runs as a separate program and relies on its original principles.

The CITE program is offered every alternate year to a standard group (13–14) of students who are selected for the program. In order to be accepted for the CITE program, one first has to be accepted for teacher education. During recent years, the intake of class teacher students at the University of Jyväskylä has been 80–96 people. When they receive their letter of acceptance new students are simultaneously informed of the possibility to participate in the CITE program. Students accepted for the CITE program commit themselves to an intensive study period of two academic years. Throughout the first two academic years, two days a week are set aside for involvement in the CITE program. During the rest of the study week, students engage in subject-specific studies included in the degree course. After these two years, the students participate in the mainstream educational program for three years.

As mentioned, the CITE program is grounded in ideas derived from psychodynamic theories, according to which, learning to teach is not a mere matter of applying decontextualized skills or of mirroring predetermined images (Britzman, 2003). '... Learning to teach – like

teaching itself – is always the process of becoming; a time of formation and transformation, a scrutiny into what one is doing, and who one can become' (Britzman, 1991, p. 8).

Psychodynamic theories are based on the psychoanalytic tradition, which may also be used in trying to understand how human groups work. According to these theories, emotional and nonconscious processes exist in all human groups. The affective and emotional side of groups especially is a main focus of the psychodynamic perspective. Understanding nonconscious group processes is a way to help group members to act in a more constructive way and to increase group effectiveness (Bion, 1979; Mcleod & Kettner-Polley, 2004). We do not refer to any major psychodynamic theory but use various scholars of the psychodynamic tradition. The most important scholars for us have been Bion (1979), Britzman (1991, 2003) and Nikkola (2011).

Psychodynamic theories, often referred to as 'psychodynamics', emphasize unconscious motivation and irrational actions, which lead to the inevitability of conflict between social expectations, spontaneous behavior and a variety of emotional reactions (Bion, 1979; Britzman, 2003; Nikkola, 2011). Applying psychodynamics to the CITE program means that participants will need to identify and acknowledge unarticulated and hidden tensions among group members as a part of working in small CITE learning teams. The focus of learning is particularly on the hidden and barely perceived phenomena that constitute the prerequisites for, and also obstacles to, learning in the group (Räihä, Rautiainen, & Nikkola, 2013). For this reason, the students study their own reactions in the group and thus seek a deeper understanding of themselves and of the group's multiple interpretable realities (Nikkola, 2011; Räihä et al., 2011). The conceptualization of group phenomena is based on a lived-through authentic group experience. According to psychodynamic theories, the teacher's main tool is to understand her/himself. Otherwise it is difficult to supervise the learning of students in school.

In addition, the teacher's work is seen as an activity shaped by various contradictions. For this reason, even as they study to become teachers, students must learn to cope in social situations that are structured around different interpretations of reality and conflicting interests. Previous research has shown that students underestimate the complexity of teaching and assign more importance to their personal characteristics than to pedagogical training (Fajet, Bello, Leftwich, Mesler, & Shaver, 2005), and newly graduated teachers underrate educational science and educational research as a basis for their teacher practice (Räihä et al., 2013; Rautopuro, Tuominen, & Puhakka, 2011).

In contrast to traditional HE programs, where students take courses in constantly changing study groups, CITE is based on the principles of the value of students' long-term presence in a learning group. The program endeavors to construct a community of inquiry, where the traditional roles of teachers and students, and their differences are called into question. Freedom and responsibility play reciprocal roles during the course of the program; a central idea is that students take responsibility for their own learning (Mäensivu, 2012).

The CITE students are also supposed to study without direct and constant supervision and by themselves as a group. Compared to other students in teacher education, they are significantly more responsible for their own learning as individuals and as a group. Students' previous study history at school does not support students' spontaneous and reciprocal studying and learning, which includes organizing the group, establishing each member's individual goals, and exploring each member's own behavior. Recent research (Löppönen, 2011; Mäensivu, 2012; Mäensivu, Nikkola, & Moilanen, 2013) on the CITE program indicates

that students experienced great difficulty in breaking away from the traditional student role, where the student is the consumer of knowledge and perceived as subordinate to the teacher (expert), and in moving toward more equal membership of a community of learners with the teacher as mentor and adviser rather than content expert.

Within the CITE program, prevailing school practices are questioned and students are challenged to examine the premises underlying their own activities according to psychodynamic principles. CITE students are forced to examine the strategies they have adopted to avoid taking responsibility for their own learning. In addition, they have to examine how they have developed such strategies during their educational career. The program is underpinned by experiential learning principles and, for this reason, the conceptualization of educational phenomena rests similarly on the students' experiences. Students' cognitive, social and emotional transformation to active constructors of knowledge and respected social players is achieved through careful designs of physical learning spaces and the employment of non-traditional pedagogical practices (see Dobozy, Dalziel, & Dalziel, 2012).

In the CITE program, a lot of time and attention is given to reflection on the learning activities of student teachers both as individuals and as a group. Once a week, a minimum of 2 h is allocated to a counseling session, which is led by the program's senior trainer. In the session, students are encouraged to express as freely as possible their experiences and actual feelings about the learning tasks and their learning process. The conversations should help the student teachers learn more about themselves as learners and future teachers. If, for example, someone starts questioning his or her career choice, it is not seen as a threat but as an opportunity to explore the motivational aspect in more depth.

Students are given learning tasks by the educators but they are also encouraged to set their own learning goals and tasks. The students have the responsibility to organize their learning as a group and ask for help from the CITE educators when the students are in need of it.

The role of CITE trainers is to set requirements for students' deep learning, to express the trainers' observations about student learning processes and to help students conceptualize their learning experiences. CITE trainers do not try to save the students from making mistakes in learning because mistakes often provide a good starting point for reflection and deeper learning. Therefore, students' negative learning experiences are not necessarily a sign of bad teacher education but they often offer students a chance to reconsider their conceptions and convictions about learning.

Teacher education may constitute a time of biographical crisis and a threat to student identity, because learning is characterized by ambivalence, uncertainty, and anxiety (White, 2006). Maintaining one's identity is the most basic human need and thus the ultimate motive underlying all human behavior. People's behavior is motivated by a continuous need to verify their identity (Bracher, 2006). Teacher student identity has cultural bounds and even some mythic character; to become a teacher is highly appreciated in Finnish society. Social expectations and cultural myths underlying the teaching profession structure individual's views of authority, knowledge, expertise, and identity (Britzman, 2003).

The organization of teacher education tends to reinforce the mythic ideas and images of education that prospective teachers bring to the university (Britzman, 2003). This is perhaps understandable given the huge time students have spent in schooling before they enter teacher education. Therefore, we need teacher education that challenges the myths that form the core identity of teacher students. This is not a simple task because learning can

threaten students' identities in numerous ways, most of which are invisible to educators and students alike (Britzman, 2003). This defense against threatening new knowledge can produce not only a failure to learn but in some cases even hatred of having to learn. The mere encounter with difference can be enough to threaten their identity-bearing beliefs and worldviews (Bracher, 2006).

3. Research questions and research design

The research reported here explored the tensions, as experienced by students, created through the implementation of the new CITE training program. The following research questions were posed:

- How do CITE students seek to understand the training they encounter?
- How are CITE students able to share their experiences with students enrolled in the traditional teacher education program at the same university?

In this article, we report on the analysis of group interviews recorded with teacher education students between December 2009 and March 2010. The first interview group consisted of six students who began CITE studies as part of their teacher education program at the University of Jyväskylä in 2005, and the second group consisted of eight students who began CITE in 2007. The latter were interviewed in two groups, consisting of five and three students, respectively. The group interviews were informal in nature, reminiscent of open discussion, and lasted about two hours. The interviews were recorded and each interview produced 12–15 pages of transcribed text.

The data analysis utilized a case study methodology and proceeded from thematic network analysis (Attride-Stirling, 2001) toward a deeper interpretation of the data (Moilanen & Räihä, 2010; Palonen & Malkopoulou, 2011). Expressions of student experiences and actions were extracted from the data and categorized into themes. Thereafter, the themes were related to each other to enable the construction of meaning structures. The construction of meaning structures used abductive logic combining research data and psychodynamic theories to identify which shared unspoken meanings shape student experiences and action (Danemark, Ekström, Jakobsen, & Karlsson, 1997).

Theoretical interpretation combined with hermeneutic interpretation of the learning culture was needed to make student expressions understandable. They give background to student expressions and help readers to understand their meaning.

The present analysis of the interview data focuses on the students' learning experiences of their first two years, which is the period when students pursued their CITE studies.

4. Findings

The data analysis yielded three main themes based on the five group interviews. The three themes are:

- Isolation
- Difficulty in discussing learning experiences with non-members
- Uncertainty and anxiety

Students described how CITE students worked as an isolated group and were usually separated from other students. This can be labeled as tribalism. Difficulty discussing with others emerged in everyday situations when students from different groups tried to share study experiences. CITE students found that they lacked a common language and set of experiences with mainstream students. Formally they were studying the same degree, but in reality they were living in very different and separated learning realities. In addition, CITE students expressed a high level of confusion and they feared they would not learn the content of their prescribed curriculum, which caused them anxiety.

4.1. Isolation

In spite of the CITE students' eagerness to share their experiences with the other teacher students, CITE students experienced difficulties in making contacts with them.

To begin with, I had this idea that I wanted to get to know the others, the ones other than in this group. So it wouldn't be like staying outside. But the more time passes, the more we like it sitting next to each other and not talking to the others. (Elisa / CITE program)

Yeah, we started getting along with each other pretty quickly, then there were 13 girls¹ walking one behind the other and then they were sitting next to each other at lectures. I thought: this can't be true. (Liisa / CITE program)

CITE students not only studied together but they also spent the time between classes together, for example when eating.

And especially going to eat on Mondays and Tuesdays, it really distinguished 'our gang' because we had that one lunch break and everybody had to go and eat then so we could manage the rest of the day. And almost everybody went to Ilokivi [student restaurant], so we were all in the same group. But it was pretty natural to set off from here [teaching classrooms] in a group since we were all going to the same place, so in a way it became a custom. But on the other hand it also looked as if we wanted to be together all the time. (Sara / CITE program)

CITE students studied in their own space and were physically separated from others. Therefore it was natural that they set off together for lectures intended for all students and sat in their own group. Although all teacher education students' basic studies took place in groups of 12–15, so-called home groups, it was only the CITE group that separated off into its own crowd. Indeed, one of the central goals in CITE is a deeper understanding of the group, both as a learning environment and as an object of learning. It seems that, whereas in the other study programs students existed and operated not only as a group but also as individuals, CITE was to a large extent solely a group.

Besides differences at the level of talk, CITE students were distinguished not only by their intense togetherness mentioned above but also by their actions in matters concretely linked to studying. For example, taking lecture notes was not 'permitted' in the CITE group, as the other student teachers did.

In our group it wasn't really done to take notes in a lecture (Peter / CITE program)

Dispensing with lecture notes can be examined from different perspectives. By not taking lecture notes the CITE students differentiated themselves – consciously or unconsciously – from the teacher students and formed a sort of a tribe of their own (Becher, 1989; Becher & Trowler, 2001). Abandoning note-taking can be seen as a test of obedience. All of the group's activity was supposed to reflect some kind of deliberation. The liveliness typical of

student teachers was outlawed. Everything that smacked, even minimally, of rashness or thoughtlessness, such as humor, was forbidden.

I remember the group discussions as well; I remember you had to speak calmly, and you weren't allowed to be too lively. (Irene / CITE program)

You weren't even allowed to nod your head. And humor was an easy way out so, OK, you didn't even smile. (Sara / CITE program)

A CITE student who has read the manuscript of this article and taken part in the interviews had an even stronger sense than we did of the quest to be distinct and different (member validation; Seale, 1999). In his opinion this is also an issue of feeling superior to others. 'Perhaps we considered the others to be somewhat inferior or less interesting because they weren't part of the CITE ideology' (CITE student email to authors, 20 January 2013).

4.2. *Difficulty in communicating with others*

Students in the same degree program usually want to share experiences. In this case, this proved to be almost impossible.

I don't feel like sharing what I've learned here because it just feels impossible to get that kind of interaction going, that kind of communication [with other teacher students]. (Irene / CITE program)

Yes, and then what seems like a contradiction to me; on the one hand if you want to talk to someone about these experiences and share them, then it would naturally be class teacher students, the ones doing the same work, but they're exactly the ones you don't talk to. But they're the last group I'd [tell]. (Irene / CITE program)

Since they showed reluctance to engage in discussion with other teacher students about the ideas raised by the program, they looked for partners who shared in their experiences and beliefs more closely. As their studies progressed it was the home and immediate circle that functioned as a discussion forum.

I talked to my own mates, the family; I've really talked about this a lot. But no, no way, to those other students who could somehow, I can't say benefit, but they might be interested. (Irene / CITE program)

The CITE program takes place in long-term groups and its central goal is to mold a research-minded community where learning and questions related to education and school are investigated authentically without imaginary school situations, and often to do this merely through one's own self. Students studied their own experiences in various kinds of social encounters and their personal ways to make sense of these situations. This kind of exploration necessarily raises questions that can be discussed naturally where the original events took place, for example, questions related to tensions in the CITE student group were discussed in the CITE group meetings with the aid of psycho-dynamic concepts.

4.3. *Uncertainty and anxiety*

After a few months of studies in the CITE program students began to have doubts about the sense of the program. Contrary to expectation, it was not only the other teacher students who caused this doubting attitude – they were avoided – but the folks at home. The CITE ideology mentioned earlier is also seen in the fact that external criticism was dismissed.

I began to have my doubts when I was talking to my mum and then she just asked what it was, what do you do and what's the purpose. So I really couldn't explain but I was strongly of the opinion that this is good. (Liisa / CITE program)

My [doubt] also has to do with my mum when she asked when do you have exams and, something like it wasn't perhaps the same compared with other university studies, or perhaps like what you're used to when you think about studying at university. And I was surprised myself that it wasn't that you sit in some mass lectures and do exams. Because I had assumed it was like that. So perhaps there was a feeling like, all right, we don't really have exams and then a bit of a confused feeling that, what really is the idea in this. (Peter/ CITE program)

Discussing the program with anybody else other than members of the CITE group felt oppressive. When there was no common ground with other students, talking about CITE with others entailed leaving one's own comfort zone and entering a zone of discomfort. This was to be avoided, thus further increasing the togetherness of the CITE students. This interpretation follows the notion that people may respond to the devaluation of their group by increasing their identification with the group (Leach, Mosquera, Vliek, & Hirt, 2010).

At some point my parents and brothers and sisters – my sister's a special teacher – they started to criticize when I told them a few things. Then I had the feeling that I'm not able to talk about this well enough. (Alice / CITE program)

CITE students wanted to discuss their studies with others but felt they did not have the vocabulary to explain the idea of the CITE program.

When I couldn't explain when somebody asked what is your group like, what do you do, then I couldn't really say anything. And then when the other person was wondering a bit why can't you say anything, what do you mean you can't describe it. Of course you can, just say what you do there. I just couldn't, no. (Sara / CITE program)

Our previous research has also revealed student anxiety to be a vital part of the learning process in CITE (Moilanen & Rautiainen, 2009). Anxiety among the students has three features. Firstly, there is the adaptation to the new requirements of the CITE-program. Students in CITE are required to take a lot more responsibilities compared to other students in teacher education. Secondly, the fact that the learning outcomes cannot be seen immediately. Therefore, it is impossible in some cases to describe one's learning experience and outcomes to others. This may well increase anxiety. This is typical of education drawing on psycho-dynamic starting points (Britzman, 2003; Nikkola, 2011). Thirdly, the intense partnerships among the group members also increase the pressure the student may feel. A compact group offers security – as is the case in tribalism – and strengthens group identity (Brewer, 2003). Tribalism may well lead to competition and negativity toward outsiders, which is understandable at the group level, but which at the individual level may have negative consequences. On the other side, pressure for conformity in the group may also be experienced as pressure on one's individuality.

4.4. Possible interpretations

Isolation among CITE students can be interpreted in multiple ways. Firstly, it is a consequence of organizational structure. CITE has a timetable of its own, studies take place in a separate building, and the study program is highly integrated. Although the training happened in separate CITE facilities some distance from other departmental teaching, it was nevertheless not a matter of keeping the program hidden from view but because some of the CITE program educators' offices were in these separate facilities. It was then natural that teaching

took place closer to staff offices and that it was in fact possible to have the same permanent workspace available for use by the program every Monday and Tuesday. In the end, other students' conceptions of CITE students and the program were largely shaped by this physical separation, as will be seen below. Apart from physical isolation, the biggest difference for CITE students was in the way studying took place. Apart from certain school subjects, almost all studies during the first two years were completed within the CITE program, and in the same group.

Secondly, the CITE program is based on a different theoretical model compared to other teacher education. The vocabulary and concepts explored in the CITE program are new and unfamiliar to students. It takes some time before CITE students have sufficient conceptual tools for understanding and communicating their learning experiences and how this relates to them as future classroom teachers.

Thirdly, uncertainty leads to isolation because facing people who think differently reveals one's own ignorance. Therefore, it is safer to stick to one's own group. Uncertainty is also connected with difficulty in discussing with others, which can be seen as a consequence of the nature of the CITE learning process. When CITE students explained the goals and principles of CITE to others, they faced an overwhelming task for the simple reason that it is extremely difficult to put an ongoing psychodynamic learning process into words. Since the goal of the program has been to increase one's own understanding by means of long-term training and experimentation or to transform both being and learning in a group, it is quite difficult to talk about one's own learning outcome halfway through the program.

This reluctance to talk about the program not only affected students, but also the CITE educators. They too avoided talking about the program with other educators who operated differently because of a different professional language. The emergence of a different pattern of linguistic discourse most likely also surprised the instructors in some way. When CITE began it was not possible to give details of the program because it was still in the making. The CITE educators still did not know how the program was going to run (Moilanen, 2013).

5. Conclusions

The study showed there was a mismatch between student expectations and the CITE teacher education program. The practices and demands of the program were a surprise to the students. On the other hand, this mismatch is not necessarily a problem for the education program because according to previous research it can be expected. Psycho-dynamic teacher education includes acquaintance with experiences that may be painful and stressful. Of course the aim of education is not to produce painful experiences but they are the price one has to pay if one wants to understand him/herself deeply. One of the roles of the CITE teachers is to help the students to understand their experiences (see Gilmore & Anderson, 2016).

Additionally, two concepts are useful in trying to understand the results – boundary crossing and threshold concepts. A boundary is a sociocultural difference that leads to discontinuity in action or interaction (Akkerman & Bakker, 2011). In our data there is a boundary between CITE students and other students. The data shows examples of unsuccessful attempts and lack of attempts to cross the boundaries.

The concept of threshold concepts is crucial for understanding why the boundary crossing did not succeed. A threshold concept opens up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding (Meyer & Land,

2003). These changes in understanding may be so fundamental that they affect the whole way in which the student understands his/her studies and him/herself as a student (Abbott, 2013). New threshold concepts lead to new ways of thinking and a new discourse (Meyer & Land, 2005).

Students had difficulties in understanding that they have an opportunity to set their own learning goals and assume responsibility for their own learning. According to our experience it takes several months for the students to understand that these concepts have a relevance for their own learning. When students have understood the new experiential meaning of the concept of responsibility they can see learning from a totally new viewpoint.

In our case, CITE-students learned concepts that questioned their conceptions of school and the nature of learning. They were learning a new discourse but did not yet master it. Therefore, they had difficulties in explaining their experiences to their student colleagues. On the other hand, these colleagues lacked an understanding of the concepts of critical pedagogy and psychodynamic thinking. These ways of thinking presented troublesome knowledge for other students because they questioned self-evident truths of other pedagogical thinking (see Meyer & Land, 2005).

This may explain why CITE-students had difficulties in describing what they were doing and what they had learned. The meaning perspective had changed so dramatically that there were hardly any shared points of reference.

Education, just like other areas of life, is full of contradictions and multiple viewpoints and voices. Traditional teacher education has too often ignored the uncontrollable and contradictory side of reality and tried to construct mainly technical instruments for the management of school reality. The quest for control, however, restricts the development of the professional competence required in a teacher's work. It is a part of professional competence to be able to cope with the polyphony both in oneself and in the surrounding reality. If the contradictory essence of reality is allowed to live in teacher education, then teacher education has a chance of getting closer to the reality of school (Nikkola, Räihä, Moilanen, Rautiainen, & Saukkonen, 2008; Räihä et al., 2011). Reality cannot change into the nonexistent harmony of teacher education, rather, the reverse is the case; teacher education has to change and move toward contradictory reality.

UNESCO's Working Definition of Transversal Competencies sets new demands for education and also for teacher education. Among these competencies are interpersonal skills, intra-personal skills, and global citizenship. People should learn leadership, organizational skills, collaboration, and teamwork. They should also learn to understand themselves. In addition, ability to resolve conflicts and political participation are important for all (Care & Luo, 2016).

CITE gives students an opportunity to learn transversal competencies. The research conducted on CITE has shown that the learning of these competencies is sometimes difficult but nevertheless possible in higher education (see Moilanen & Rautiainen, 2009; Räihä et al., 2013; Nikkola, 2011).

This research has highlighted the need for genuine development in teacher education. It may also be applicable to higher education in general. There is, however, one prerequisite for change: the operational learning culture of higher education and the theory underlying it must be questioned. Although higher education cannot be based on one definitive learning theory, some suggestions can be put forward. Following Nygaard and Holtham (2008, p. 17), the central pedagogical question is 'how to learn', not 'what to learn'. Seeing students

as producers of knowledge emphasizes the importance of facilitating students' learning processes. As this paper indicates, that is not always an easy task.

Note

1. In this group all students were female.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Pekka Räihä is Senior Lecturer of Education in the University of Tampere, Tampere, Finland. His research interests include teacher education and school culture.

Pentti Moilanen is Professor (emeritus) of Education in the University of Jyväskylä, Jyväskylä, Finland. His research interests include teacher education and philosophy of education.

Eva Dobozy is Associate Professor of Education in the Curtin University, Perth, Australia. Her research interests include technology enhanced learning, design thinking and curriculum analytics.

Sakari Saukkonen is an elementary school teacher in Huhtasuo Comprehensive School, Jyväskylä, Jyväskylä, Finland. His research interests include teacher education, sociology of school, and lifelong guidance and counselling.

References

- Abbott, R. (2013). Crossing thresholds in academic reading. *Innovations in Education and Teaching International*, 50, 191–201.
- Akkerman, S., & Bakker, A. (2011). Boundary crossing and boundary objects. *Review of Educational Research*, 81, 132–169.
- Attridge-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research*, 1, 385–405.
- Becher, T. (1989). *Academic tribes and territories. Intellectual enquiry and the culture of disciplines*. Milton Keynes: Society for Research into Higher Education & Open University Press.
- Becher, T., & Trowler, P. R. (2001). *Academic tribes and territories. Intellectual enquiry and the culture of disciplines* (2nd ed.). Hong Kong: Open University Press.
- Bion, W. R. (1979). *Kokemuksia ryhmistä. Ryhmädynamiikka psykoanalyysin näkökulmasta. Alkuperäisteoksesta Experiences in groups and other papers (1961) suomentanut Liisa Syrjälä* [Origin, experiences in groups and other papers (1961)]. Espoo: Weilin+Göös.
- Bracher, M. (2006). *Radical pedagogy. Identity, generativity, and social transformation*. New York, NY: Palgrave Macmillan.
- Brewer, M. B. (2003). *Intergroup relations* (2nd ed.). Buckingham: Open University Press.
- Britzman, D. (1991). *Practice makes practice: A critical study of learning to teach*. Albany: State University of New York Press.
- Britzman, D. (2003). *Practice makes practice. A critical study of learning to teach* (Revised ed.). Albany: State University of New York Press.
- Bronkhorst, L., Koster, B., Meijer, P., Woldman, N., & Vermunt, J. (2014). Exploring student teachers' resistance to teacher education pedagogies. *Teaching and Teacher Education*, 40, 73–82.
- Care, E., & Luo, R. (2016). *Assessment of transversal competencies. Policy and practice in the Asia-Pacific region*. Paris: The United Nations Educational, Scientific and Cultural Organization 7.

- Cochran-Smith, M., & Zeichner, K. (2005). *Studying teacher education: The report of the AERA panel on research and teacher education*. Mahwah, NJ: Lawrence Erlbaum.
- Danemark, B., Ekström, M., Jakobsen, L., & Karlsson, J. (1997). *Att förklara samhället*. Lund: Studentlitteratur.
- Dobozy, E. (2011). Resisting student consumers and assisting student producers. In C. Nygaard, C. Holtham, & N. Courtney (Eds.), *Beyond transmission – Innovations in university teaching* (pp. 11–26). Faringdon: Libri Publishing.
- Dobozy, E., Dalziel, J., & Dalziel, B. (2012). Modernising Fordist modes of knowledge production and consumption with transdisciplinary pedagogical templates. In *Refereed proceedings of the 3rd annual Conference of the International Association for Development of the Information Society (IADIS)* (pp. 220–226). Perth, Western Australia: Internet Technologies & Society (ITS) Stream, Curtin University.
- Doyle, M. (1997). Beyond life history as a student: Preservice teachers' beliefs about teaching and learning. *College Student Journal*, 31, 519–531.
- Fajet, W., Bello, M., Leftwich, S., Mesler, J., & Shaver, A. (2005). Pre-service teachers' perceptions in beginning education classes. *Teaching and Teacher Education*, 21, 717–727.
- Gilmartin, J. (2000). Psychodynamic sources of resistance among student nurses: Some observations in a human relations context. *Journal of Advanced Nursing*, 32, 1533–1541.
- Gilmore, S., & Anderson, V. (2016). The emotional turn in higher education: A psychoanalytic contribution. *Teaching in Higher Education*, 21, 686–699.
- Holloway, S., & Gouthro, P. (2011). Teaching resistant novice educators to be critically reflective. *Discourse: Studies in the Cultural Politics of Education*, 32, 29–41.
- Klein, M. (2010). Constructivist practice, pre-service teacher education and change: The limitations of appealing to hearts and minds. *Teachers and Teaching: Theory and Practice*, 7, 257–269.
- Leach, C., Mosquera, P., Vliek, M., & Hirt, E. (2010). Group devaluation and group identification. *Journal of Social Issues*, 66, 535–552.
- Löppönen, P. (2011). *Minäkeskeisyys opiskelijaryhmän suojaumiskeinona* [Egocentricity as a student group's protective device]. Master's thesis, University of Jyväskylä, Department of Teacher Education, Jyväskylä.
- Mäensivu, M. (2012). Auktoriteettisuhteen vankina? Tapaustutkimus luokanopettajaksi opiskelevista [Prisoner of an authority relationship? A case study of class teacher students]. *Aikuiskasvatus*, 32, 107–115.
- Mäensivu, M., Nikkola, T., & Moilanen, P. (2013). Students constructing the curriculum – An experiment to increase responsibility. In C. Nygaard, N. Courtney, & P. Bartholomew (Eds.), *Quality enhancement of university teaching and learning* (pp. 19–35). Oxfordshire: Libri Publishing.
- Mattheoudakis, M. (2007). Tracking changes in pre-service EFL teacher beliefs in Greece: A longitudinal study. *Teaching and Teacher Education*, 23, 1272–1288.
- McLeod, P., & Kettner-Polley, R. (2004). Contributions of psychodynamic theories to understanding small groups. *Small Group Research*, 35, 333–361.
- Meyer, J., & Land, R. (2003). *Threshold concepts and troublesome knowledge. Linkages to ways of thinking and practicing* (Occasional Report 4, May 2003© ETL Project). Coventry: Universities of Edinburgh.
- Meyer, J., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49, 373–388.
- Moilanen, P. (2013). Kollegat uhkana ja turvana [Colleagues as a threat and as a shelter]. In T. Nikkola, M. Rautiainen, & P. Räihä (Eds.) *Toinen tapa käydä koulua. Kokemuksen, kielen ja tiedon suhde oppimisessa*. Vastapaino: Vantaa.
- Moilanen, P., & Räihä, P. (2010). Merkitysrakenteiden tulkinta [Interpretation of meaning structures]. In J. Aaltola & R. Valli (Eds.), *Ikkunoita tutkimusmetodeihin II* (pp. 46–69). Jyväskylä: PS-kustannus.
- Moilanen, P., & Rautiainen, M. (2009). Onko valtautuminen mahdollista? Toimintapätevyyden kehittyminen luokanopettajakoulutuksen integraatio-hankkeessa [Is empowerment possible? Development of action competency in integration project]. In R. Jaatinen, V. Kohonen, & P. Moilanen (Eds.), *Kielikasvatus, opettajuus ja kulttuurienvälinen toimijuus* (pp. 158–177). Helsinki: Okka-Säätiö.
- Nikkola, T. (2011). *Oppimisen esteet ja mahdollisuudet ryhmässä. Syyllisyyden kehittyminen syntipukki-ilmiöksi opiskelijaryhmässä ohjaajan tulkitsemana* [Learning in a group: Obstacles and opportunities. The development of guilt into a scapegoat phenomenon in a study group as interpreted by the instructor]. Jyväskylä: Jyväskylä Studies in Education, Psychology and Social Research 422.

- Nikkola, T., Räihä, P., Moilanen, P., Rautiainen, M., & Saukkonen, S. (2008). Towards a deeper understanding of learning in teacher education. In C. Nygaard & C. Holtham (toim.), *Understanding learning-centered higher education* (pp. 251–263). Frederiksberg: Copenhagen Business School Press.
- Nygaard, C., & Holtham, C. (2008). The need for learning-centered higher education. In C. Nygaard & C. Holtham (Eds.), *Understanding learning-centered higher education* (pp. 11–29). Gylling: CBS Press.
- Palonen, K., & Malkopoulou, A. (Eds.). (2011). *Rhetoric, politics, and conceptual change*. Helsinki: Suomen Ateenan-instituutin säätiö.
- Räihä, P., Rautiainen, M., & Nikkola, T. (2013). CITE (Critical Integrative Teacher Education) – Breaking loose from empty theory and blinkered practice. *Refereed proceedings of the TEPE 2012 Annual Conference*, Warsaw.
- Räihä, P., Rautiainen, M., Nikkola, T., & Mäensivu, M. (2011). The sequence of educational innovation from university to working life. In C. Nygaard, N. Courtney, & C. Holtham (Eds.), *Beyond transmission: Innovations in university teaching* (pp. 63–76). Faringdon: Libri Publishing.
- Rautopuro, J., Tuominen, V., & Puhakka, A. (2011). Vastavalmistuneiden opettajien työllistyminen ja akateemisten taitojen tarve. *Kasvatus* 42, 316–327.
- Ruohotie-Lyhty, M., & Kaikkonen, P. (2009). The difficulty of change: The impact of personal school experience and teacher education on the work of beginning language teachers. *Scandinavian Journal of Educational Research*, 53, 295–309.
- Seale, C. (1999). *The quality of qualitative research*. London: Sage.
- White, N. (2006). Tertiary education in the noughties: The student perspective. *Higher Education Research & Development*, 25, 231–246.