

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

International Journal of Intercultural Relations

journal homepage: www.elsevier.com/locate/ijintrel

Differences that matter: Boundary experiences in student teachers' intercultural learning

Peter Mesker*, Hartger Wassink, Sanne Akkerman, Cok Bakker

HU University of Applied Sciences Utrecht, NIVOZ, Leiden University, and Utrecht University, The Netherlands

ARTICLE INFO

Keywords:

Boundary experience
Boundary crossing
Discontinuity
Intercultural learning
International teaching internship
Pre-service teacher

ABSTRACT

This case study explored examples of pre-service teachers' learning when experiencing discontinuity and (re)positioning themselves in various professional communities and cultures during an international teaching internship. Pre-service teachers' experiences of discontinuity were defined as boundary experiences, when challenging or problematic socio-cultural differences significantly influenced their (inter)actions. Pre-service teachers' attempts to (re)position themselves in the unfamiliar professional and cultural contexts are described as a state of continuity and examples of boundary crossing. Learning mechanisms of identification, coordination, reflection and transformation in the theory of boundary crossing were used to analyze 15 boundary experiences. The four learning mechanisms provided insight into how a multi-level approach (including personal, professional and cultural aspects) gives a more nuanced perspective on the dominant adjustment paradigm. The value of a boundary experience for pre-service teachers' learning during an international teaching experience resided mostly in raising awareness of existing, often taken-for-granted, personal and professional beliefs and their ability to switch between cultural and professional perspectives. The 15 boundary experiences in this study suggest that educators could focus more on pre-service teachers' coping strategies, existential questions and cultural negotiation when they experience discontinuity, in addition to the current focus on learning outcomes, transformations, or cultural fit.

Introduction

The moment you begin your international teaching internship you are tested in things where you believe in, in what you do, in what you find important, if you want to sustain those beliefs and skills. You are tested if you have enough flexibility to find a compromise, so you don't get into a tight corner in this other culture. During my Dutch internship I learned about the Dutch system, the Dutch curriculum, the power distance towards pupils. You have this experience, you know how it works in the Netherlands, but now you go to this international environment. Let's see how you manage there and how you professionally develop and grow. Can you make it? Are you personally and professionally flexible enough to make a compromise and find your place in a different system and culture? (Suzanne, pre-service teacher).

During an international teaching internship, pre-service teachers not only experience what it means to move between various educational practices (Engeström, Engeström, & Kärkkäinen, 1995; Lave & Wenger, 1991; Wenger, 1998), but also what it means to move across geographical, political, cultural, and linguistic borders (Marginson, 2014). An international teaching internship gives students the opportunity to compare and reflect upon their professional practice and teaching knowledge and examine other

* Corresponding author at: Department of Education, HU University of Applied Sciences Utrecht, Utrecht, 3508 SB, The Netherlands.
E-mail address: peter.mesker@hu.nl (P. Mesker).

sociocultural aspects of education (Lough, Sherraden, & Moore McBride, 2012; Marx & Moss, 2011; Pagano & Roselle, 2009). Pre-service teachers are frequently confronted with multiple cultural opinions that question their professional beliefs. Education abroad interrupts the obvious and the familiar and one is forced to take a step back and address substantial changes and challenges in abbreviated time periods (Biesta, 2010; English, 2013; Kelchtermans, 2009; Marginson, 2014).

When pre-service teachers teach abroad, they are often caught between the familiar and unfamiliar, the expected and unanticipated, or the culturally known and unknown (Dunlap & Webster, 2009; Montgomery, 2010). These situations of friction and challenges have learning potential and are often important moments for the beginning teachers' growth (Conway, 2001; Kelchtermans, 2009; Pillen, Beijaard, & Den Brok, 2013). Kelchtermans (2009, p. 266) describes these situations as moments of vulnerability—discomforting situations, where teachers are exposed to distress, with “the passive dimension of undergoing, surprise, puzzlement and powerlessness”. He considers these situations as essential moments in the development of personal and teaching scholarship. Meijer (2011) argues that these challenges in a teacher's development (she describes as a crisis) should even be provoked as catalysts for a teacher's learning.

For teacher educators interested in student learning during unpredictable moments, or situations of vulnerability (Kelchtermans, 2009), an international teaching internship is potentially a significant experience. How students deal with socio-cultural differences and challenges without their familiar social and academic infrastructure is considered key in their learning during a stay abroad (Furnham & Bochner, 1986; Marginson, 2014; Montgomery, 2010). Educators have abundant knowledge regarding students' learning outcomes after a stay abroad, such as language acquisition (cf. Behrnd & Porzelt, 2012), intercultural skills (cf. Deardorff, Pysarchick, & Yun, 2009), or intercultural sensitivity (Bennett & Bennett, 2004; Hammer, 2012). However, the complex nature of a cross-cultural experience makes it difficult to fully understand how individual students learn. There are relatively few empirical studies that describe how students' learning actually takes place in cross-cultural situations where they perceive tensions and challenges, especially in vocational education and training (Chang, Yuan, & Chuang, 2013; Engberg, 2013; Fee & Gray, 2013; Tran, 2012). Holmes and O'Neill (2012, p. 708) stress that most studies on intercultural competencies lack focus on individual agency and the role of thought processes—introspection, self-reflection, and interpretation. Gonzalez-Loureiro, Kiessling, and Dabic (2015, p. 248) suggest that a multi-level approach incorporating work and home experiences is key for understanding the multifaceted nature of a stay abroad. Marginson (2014, p. 6) argues that the experience of complexity is inevitable in an international context because students who experience something new and unfamiliar in a cross-cultural setting experience learning that is new and unpredictable.

In this case study, we describe and analyze problematic and challenging experiences during an international teaching internship as pre-service teachers' attempt to position themselves in an unfamiliar professional and cultural context and its significance for their professional development. We are specifically interested in determining where learning opportunities are evoked during the pre-service teachers' attempts to manage the discontinuity they experience as a result of problematic or challenging socio-cultural differences during their international internships (Akkerman & Meijer, 2011; English, 2013).

Boundary experiences during an international internship socio-cultural differences, discontinuity and a boundary experience

Pre-service teachers who move between various cultures and practices (Lave & Wenger, 1991; Wenger, 2000) during an international teaching internship are likely to encounter socio-cultural differences that vary from differences in cultural habits, communication, and school culture to teaching strategies (e.g. Jang & Kim, 2010; Pence & Macgillivray, 2008). Students can perceive socio-cultural differences as problematic and causing tension and distress (Zhou, Jindal-Snape, Topping, & Todman, 2008). For example, Adler (1975) and Oberg (1960) describe how individuals can perceive culture shock during a stay abroad that causes major psychological distress. Educators generally expect that cross-cultural obstacles and challenges will function as a trigger for student learning (Furnham & Bochner, 1986; Kim, 2001; Zhou et al., 2008).

Pre-service teachers who perceive socio-cultural differences as an obstacle or challenge experience discontinuity (Akkerman & Bakker, 2011; Akkerman & Meijer, 2011). Whether or not a pre-service teacher perceives a socio-cultural difference as discontinuity is subjective and depends on the person and the situation (Akkerman & Bakker, 2011; English, 2013). English (2013, p. 114) describes how experiences of discontinuity are physical, emotional or even existential moments when an individual encounters something new or unfamiliar. This encounter disturbs the individual's planned or desired course. Akkerman and Bakker (2011, p. 133) define discontinuity as a problematic or challenging socio-cultural difference that stands in the way of how a person wants to interact or act. For example, a pre-service teacher may have a different perspective on teaching methodology than her colleagues at a school in another country. This experience becomes an obstacle when a pre-service teacher starts to feel distressed, for instance, when local procedures and expectations allow no space for maneuvering. This distress can be felt in teacher-student interactions or when preparing lessons.

A boundary is a common notion for describing a geographical dividing line between nations. An individual experiences a boundary when he or she moves from one country to another. In the theory of boundary crossing (Akkerman & Bakker, 2011; Engeström et al., 1995; Lave & Wenger, 1991) a boundary is used as metaphor for experiences of discontinuity, which hinder a person's ability to function properly during an international teaching internship (Akkerman & Bakker, 2011, 2012). Chirkov (2009, p. 95) argues that in the process of acculturation “when people were initially socialized in one cultural environment and then moved and started functioning in another one, offers an opportunity to research these quintessential questions of the interaction of agentic individuals with constraining and controlling social and cultural demands”. English (2013) also stresses how experiencing discontinuity can simultaneously open opportunities for new ideas and modes of practices. Therefore, a boundary can be considered as an example of a threshold concept that can initiate a new way of understanding, interpreting or viewing something (Meyer & Land, 2003; Meyer & Land, 2005, p. 373).

Continuity and the learning potential of a boundary experience

Several intercultural studies show that individuals' experiences of distress while facing problematic or challenging socio-cultural differences in a cross-cultural setting have learning possibilities. Individuals who experience discontinuity often make attempts to overcome the discontinuity because it causes distress and tension (Akkerman & Meijer, 2011; Chandler & Lalonde, 2008; English, 2013; Hermans, 2001; O'Sullivan-Lago & de Abreu, 2008; Zhou et al., 2008; Zimbardo, 1999). These dynamics can be a catalyst for learning, self-understanding and growth (English, 2013; Furnham & Bochner, 1986; Kim & Ruben, 1988; Marginson, 2014). In cross-cultural theories, attempts to cope with discontinuity are often described in terms of successful acculturation or cultural adjustment (Berry, 1997, 1999; Ward & Chang, 1997; Ward & Kennedy, 1993, 1999). More recent studies (Chirkov, 2009; Marginson, 2014) describe the complexity of cultural adaptation, and stress that cultural adaptation isn't always successful. However, there is general agreement about the learning potential of cross-cultural discontinuity. Kim (2001, p. 21) states, "Despite, or rather because of, the difficulties crossing cultures entails, people do and must change some of their old ways so as to carry out their daily activities and achieve improved quality of life in the new environment".

The idea that the distress of moving between disparate practices or cultures offers learning opportunities is an important aspect in the theory of boundary crossing (Engeström et al., 1995; Tsui & Law, 2007; Waitoller & Kozleski, 2013). In the theory of boundary crossing, coping with problematic socio-cultural differences and challenges is described in terms of discontinuity/continuity and boundary crossing (Akkerman & Bakker, 2011; Engeström et al., 1995; Fejes & Köpsén, 2014). Boundaries can incite people to act, or make an effort to manage obstacles and challenges between various practices. An individual makes an effort to manage obstacles and challenges that exist between those practices in order to find a position that 'works' for them. This is described in the theory of boundary crossing in terms of restoring continuity and attempting to cross boundaries (Akkerman & Bakker, 2011; Akkerman & Meijer, 2011).

Positioning oneself between disparate practices or cultures involves self-reflection on existing ways of thinking and acting, finding a balance among various professional perspectives and can include new skills or knowledge (Akkerman & Bakker, 2011; English, 2013; Rizvi, 2005). Experiencing discontinuity often marks a limit to someone's existing knowledge or skills and ability, or questions taken-for-granted modes of thought and action (English, 2013). Schön (1983, 1987) suggests that an unexpected and unfamiliar event in experience and practice can initiate reflective thought. Therefore, the importance of experiences of discontinuity also resides in discontinuity's existential nature. This raises the question of why one is in doubt or perplexed, which can incite inquiry, independent thought and self-reflection (Akkerman & Meijer, 2011; Biesta, 2014a; Dewey, 1938; English, 2013; Kelchtermans, 2009; Schön, 1983, 1987). A reflective practitioner can become aware of (dis)continuity in teaching experiences, or even a continuum of experiences and its meaning for his or her professional development (Dewey, 1938; English, 2013; Schön, 1991). This awareness is a moving force that can result in a pre-service teacher's personal and professional growth (Akkerman & Meijer, 2011; Alsup, 2006; Mezirow, 1997; Rodgers & Raider-Roth, 2006).

It is the combination of reflection and action that leads to knowledge and learning (Biesta, 2014b; Dewey, 1916; Schön, 1991). Because discontinuity involves obstacles for existing habits and routines, a key aspect of experiencing discontinuity is that the pre-service teacher has to make subjective choices or judgments on how to act (Akkerman & Bakker, 2011; Biesta, 2014b; Dewey, 1916). The moment an individual responds to a boundary, and makes an attempt to cross the boundary, the boundary experience has learning potential (Akkerman & Bakker, 2011; Hora & Millar, 2011; Schenke, 2015; Tsui & Law, 2007). For example, during a stay abroad, existing professional beliefs regarding classroom management can be challenged at the international teacher-training school. This might result in the pre-service teacher adding new or additional insights of classroom management to their existing teaching knowledge, and thus expanding his or her professional ways of working. Continuity is restored when an individual is able to perform activities or communication among alternative practices occurs without problems (Akkerman & Bakker, 2012). The task for educators is to guide future teachers in the process of awareness and meaning making of experiences of (dis)continuity (Akkerman & Bakker, 2011; English, 2013).

Learning during a boundary experience

For this case study, we describe and analyze cross-cultural situations wherein pre-service teachers experience discontinuity and make attempts to restore continuity. This study reconstructs how pre-service teachers try to cope with discontinuity and how learning potentials reside in these experiences. In the literature of boundary crossing, Akkerman and Bakker (2011) identified four specific learning mechanisms that are evoked when people try to cross boundaries between alternative practices: identification, coordination, reflection and transformation. In this study, we used these four learning mechanisms to analyze the learning potentials of the participants' boundary experiences. The identification process is defined as a situation wherein boundaries between practices are explicit. Individuals try to cope with those boundaries without necessarily removing them. In the coordination process, individuals harmonize their practices using new or existing means, routines and procedures. During the reflection process, a person has a growing awareness of their own perspective and is able to enhancing their ability to express their perspective (perspective-making), or a growing awareness, understanding and appreciation of another's perspective (perspective-taking). Finally, in the transformation process, the person experiences profound changes in their existing practices. The result is the creation of a new in-between practice or change in an individual including a new role or new identity. According to Akkerman and Bruining (2016), a given sequence of learning mechanisms resulting from boundary crossing does not exist, nor is there one a priori learning mechanism that is more valuable than another. For example, identification can be as valuable as transformation depending upon the situation and the person.

Despite the fact that educators expect that experiencing discontinuity and re-establishing continuity can be an important learning

experience, there is little understanding of the types of experiences wherein the learning potential begins, or what the learning potential of experiencing discontinuity means for (beginning) teachers precisely. The aim of this study is to describe and analyze how pre-service teachers attempt to cross a boundary to restore continuity because we expect to find learning potentials in that action.

Method

Data collection and participants

This study is designed as a qualitative, small-scale case study using an interpretative research approach (Borko, Whitcomb, & Byrnes, 2008; Smith, Flower, & Larkin, 2009), in order to understand the dynamics of pre-service teachers’ actions and changes in the intersubjective meanings of various culturally constructed realities (Chirkov, 2009, p. 279). Borko et al. (2008, p. 1025) describe how interpretative research “seeks to perceive, describe, analyze, and interpret a specific situation or context, preserving its complexity and communicating the perspectives of the actual participants”.

Participants in this study included eight pre-service teachers from a post-graduate teacher education program at Utrecht University, the Netherlands. The program coordinator and a senior teacher educator of the teacher-training program were approached as gatekeepers and selected representative pre-service teachers, based on the variation in their study abroad destinations and teaching subjects. From the 18 pre-service teachers in the program, eight pre-service teachers were selected and all gave their consent to participate. This teacher education program was selected because it has a specific focus on international education and includes an international internship. The program is taught in English and specific attention is paid to intercultural competencies and pre-departure preparation. Pre-service teachers conduct two teaching internships: the first at an international or bilingual school in the Netherlands and the second at a secondary school abroad in the United Kingdom (UK), Norway, South Africa or St. Martin (Caribbean). Our study focuses on the second, international internship when pre-service teachers are abroad for three months. Individual data collection was conducted from December 2013 until June 2014.

Data sources

Six data sources were used for this paper: each pre-service teacher’s personal biography, two individual inventories of perceptions of socio-cultural differences, a reflection on intrapersonal development, a visual metaphor and individual interviews (see Table 1). The purpose of these data sources was to gain insights into participants’ perceptions of their learning process during their international teaching internship, the role of their personal biography in this learning process and to document obstacles and challenges that had a profound influence on their learning. A member check was used to validate data sources and participants’ descriptions.

The main author of this paper works at another Dutch university, thus, he was assumed to be able to maintain a professional distance and avoid the risk of being subjective due to pre-existing knowledge while collecting data. The latter is an important methodological consideration since the researcher’s interpretation of the pre-service teachers’ boundary experiences was important in data analysis.

Data analysis

We defined a boundary as a problematic or challenging socio-cultural difference leading to discontinuity in action or interaction (Akkerman & Bakker, 2011, 2012) to identify and construct boundaries that participants perceived and described in their narratives. Our analysis builds on results reported in an earlier study using some of the same data sources (Mesker, Wassink, Akkerman, & Bakker, 2017). A multiple case study design (Miles & Huberman, 1994) was used as a research methodology to analyze the participants’ narratives (Connelly & Clandinin, 1999) of boundary experiences.

First, the individual data sources were analyzed to identify problematic and/or challenging socio-cultural differences each participant described (Table 2, analytical step one). NVIVO was used for open coding (Boeije, 2010; Corbin & Strauss, 2008). A cross-case analysis (Merriam, 1998) was made in NVIVO to explore whether participants perceived similar or disparate problematic and/or challenging socio-cultural differences during which we found that the pre-service teachers’ perceptions of those socio-cultural

Table 1
Examination of Eight Dutch Pre-service Teachers’ Boundary Experiences During Study Abroad: Data Sources and Analytic Steps.

Data source	Analytical step
Personal biography	Identifying the participants’ previous international experiences and backgrounds
Inventories of perceptions of problematic socio-cultural differences	Identifying socio-cultural differences that participants perceived as a boundary Identifying the participants’ responses to a boundary
Self-reflection	Determining possible learning mechanism(s) after experiencing a boundary
Visual metaphor on intrapersonal development	Determining possible learning mechanism(s) after experiencing a boundary
Semi-structured interview	Constructing problematic socio-cultural differences that participants perceived as a boundary Constructing the participants’ responses to a boundary Constructing learning mechanism(s) after experiencing a boundary

Table 2
Analytical Steps, Process and Strategy Used to Identify Boundary Crossing Experiences.

Analytic Steps	Analytic process	Analytic strategy
1. Identifying socio-cultural differences that pre-service teachers perceived as a boundary.	We examined and compared narratives of pre-service teacher's discourse and utterances, that showed that a situation or experience that was perceived as problematic or a challenge.	Open coding of themes ^a
2. Constructing perceived boundaries	We identified 15 boundaries including the following themes: teacher-centered activities, care for pupil well-being, power distance in teacher-pupil, classroom management, interaction with parents, collaboration with colleagues, values and beliefs, manage to get around by oneself, boundary of personal privacy, rules at school, type of school, language differences, cultural outlooks on life, poverty and safety.	Axial coding of themes ^a
3. Identifying the pre-service teachers' responses while perceiving a boundary	We analyzed the various ways in which the individual participant responded to a boundary including their strategies, and whether they were successful or not in handling the boundary	Selective coding ^a
4. Interpretation of constructed boundaries and participants' responses to constructed boundaries in terms of the four learning mechanisms	We deductively used the description of the four learning mechanisms (Akkerman & Bakker, 2011) to analyze the particular learning mechanism(s) that was evoked during a boundary experience.	Selective coding ^a

^a Corbin and Strauss (2008).

differences were unique. In the next phase of axial coding (Boeije, 2010; Corbin & Strauss, 2008), NVIVO was used to establish the main coding categories, which resulted in 15 individual boundary themes (Table 2, analytical step two). We had expected to find more examples of boundary experiences that occurred outside of school, because the data sources focused on both personal and professional aspects. However, most coding categories that resulted in the constructed boundaries (Table 3) focused on teaching aspects or school culture.

Next, in the stage of selective coding (Boeije, 2010; Corbin & Strauss, 2008), a narrative inquiry approach (Connelly & Clandinin, 1999) was used to interpret the significance of the identified boundary experiences for the pre-service teachers' professional development. Data sources (see Table 1) from individual participants were studied through close reading (Smith et al., 2009, pp. 82–84) to identify the participants' strategies and responses when experiencing a boundary (Table 2, analytical step three). We expected that identifying the response to a problematic socio-cultural difference would give us a better understanding of pre-service teachers' attempts to cross a boundary and its learning potential. Participants' descriptions of their responses gave us an understanding of whether or not they had perceived the experience as an obstacle or challenge. Finally, we deductively used Akkerman and Bakker's descriptions (2011) of the four learning mechanisms to analyze and compare how the identified boundaries and the pre-service teachers' strategies and responses corresponded with specific learning mechanisms (Table 2, analytical step 4).

The analysis was conducted by the first author. An important aspect of the analysis was a double hermeneutic circle (Smith & Osborn, 2003), when the researcher is "trying to make sense of the participants trying to make sense of what is happening to them" (Smith et al., 2009, p. 3). The main author of this paper had the expertise and knowledge in the field of teacher education and what it meant to work abroad. An audit trail procedure (Akkerman, Admiraal, Brekelmans, & Oost, 2008) was followed to review the analytical steps and outcomes. Two independent auditors examined analytic choices for identifying boundary experiences and learning outcomes and validation of the research approach in general. The three generic criteria of the audit trail were: visibility,

Table 3
Boundaries Perceived by Pre-service Teacher(s) During an International Teaching Internship.

Boundaries perceived as obstacles
<ol style="list-style-type: none"> 1. The way pupils and mentors are accustomed to teacher-centered activities, including a power distance between teacher and pupils 2. Many pupils have a difficult socio-economic background, including poverty (affecting their behavior at school and perspective on life) 3. Pupils' relatively complicated domestic situations 4. Life on your own in a boarding school is lonely, while in the Netherlands the pre-service teacher has family and friends to rely on 5. A bi-cultural background causes a confrontation in s personal values that are not necessarily valued in the Netherlands, but are important and valued in South Africa 6. The (school) culture is rather strict about distinguishing parents' and teachers' responsibilities regarding domestic problems and violence 7. There's an alternative perception of what a good teacher is in a boarding-school culture, including a difference in how to interact with and care for pupils 8. The difficulties in teacher-pupil interaction for a male teacher working in a girls' school 9. Teaching in a strict school culture with many rules 10. Teaching in an environment where few activities are planned or controlled 11. A language barrier, including the fact that local teachers are not willing to switch to English 12. Feeling unsafe as a woman in South Africa
Boundaries perceived as challenges
<ol style="list-style-type: none"> 13. Experiencing poverty and polarization in a voluntary project in a township in South Africa 14. The lack of authority and power distance at school and in the classroom 15. The difference in the professional ambitions of colleagues in the teaching internship

comprehensibility and acceptability. The main points of discussion in the audit trail report concerned the methodological choices for identifying boundaries, as well as the theoretical question of whether or not all boundaries were necessarily problematic. The results of the audit trail were used in the final data analysis.

Results

In this study we explored pre-service teachers' experiences during an international teaching internship in which the pre-service teachers perceived a socio-cultural difference as a boundary. We will give an overview of boundary experiences perceived by the participants and highlight examples of learning during various boundary experiences for each of the four learning mechanisms. In each case, the participants' boundary experiences are described, including context and responses.

We found 12 boundaries (Table 3) that the pre-service teachers perceived as an obstacle, and 3 boundaries the participants perceived as a (positive) challenge. With the exception of boundaries number 12 and 13, all boundaries were perceived in the school context. Most of those boundaries were of a professional nature evoked by obstacles and challenges in teacher-pupil interaction (numbers 1, 2, 3, 8, and 14) and school culture (numbers 6, 7, 9).

The other boundaries included professional as well as personal aspects. Two boundaries were mainly caused by character (numbers 4 and 10), one boundary by a bi-cultural upbringing (number 5), one boundary by a boarding school where a clear distinction between personal and professional space is missing (number 7), one boundary by a language barrier causing isolation (number 11), and one boundary by future personal and professional ambitions (number 15).

Two boundaries, regarding teacher-pupil interaction and expectations of the role of a teacher (numbers 1 and 7), were perceived by more than one participant. This can be explained by the fact that the pre-service teachers taught in the same school and apparently perceived the socio-cultural difference in a similar way.

Learning during a boundary experience

In the theory of boundary crossing, the significance of a boundary experience resides in the individuals' attempts make to cope with discontinuity and create a renewed state of continuity. The aim of this study was to explore how the pre-service teachers' perception of a boundary influenced their responses and the learning potential of specific responses. We reconstructed the various ways a boundary experience evoked the pre-service teachers' learning potential during their attempts to restore continuity using the four potential learning mechanisms (identification, coordination, reflection and transformation). We found three types of boundary experiences and learning in a cross-cultural setting: identification, reflection and transformation. Contrary to what we expected, the pre-service teachers did not describe examples of the coordination learning mechanism. In the overview (Table 4) we note the learning mechanisms that the pre-service teachers described based upon the boundaries we had identified (Table 3).

Identification learning mechanism

During the identification learning mechanism, the pre-service teachers experienced temporary, momentary discontinuity. The

Table 4
Overview of Learning Mechanisms During Boundary Experiences, and Their Learning Potential as Defined by Akkerman and Bakker (2011) with Examples and Boundaries Noted.

Learning mechanism	Learning potential resides in	Examples of learning potential from boundary experiences	Identified boundaries
1. Identification process	Renewed insights in differences between practices and how individuals relate to other practices.	Insight that a certain type of school (boarding school) doesn't match professional and personal preferences (reported boundary #4).	4, 6, 8, 9, 11, 12
2. Coordination process	Attempts to overcome a boundary, and collaboration between practices, e.g., coordination requires an individual's communicative skills or the capacity to translate routines and procedures.	Participants perceived no boundary experience related to coordination learning mechanism	None
3. Reflection processes (a & b)			
3a. Reflection: perspective-making	Exchanging perspectives.	Awareness of the importance of a balance between personal and professional spaces as well as school culture and care of pupils (reported boundary #7)	1, 3, 7
3b. Reflection: perspective-taking	Joint meaning-making and connecting the knowledge of both practices.	Awareness of a professional preference for student-centered activities and little power distance. Finding a teaching strategy to integrate an alternative way of teaching in his teaching practice (reported boundary #1).	1, 2, 10, 14
4. Transformation process	Recognizing a shared problem, and developing solutions to bridge obstacles between practices, which results in a practice hybridization or integration.	Taking over teacher colleagues' professional ambitions resulting in enhanced personal-professional ambitions to work at an international school (reported boundary #15).	5, 13, 15

pre-service teachers showed no intention of changing their approaches or attitudes to overcome the discontinuity. In fact, they found continuity in their international teaching internship by not crossing a boundary. Participants perceived their professional obstacles or challenges as something one has to cope with only during an internship, but did not consider it as useful or significant for their teaching practice. Two participants experienced obstacles in school types. A boarding school and a girls' school proved to be very specific and sometimes problematic working environments. At the same time, the fact that the participants were aware of the fact that they worked in this school type, made them reluctant to use the schools' teaching approaches. In some cases, the choice not to attempt to remove discontinuity was caused by conflicting personal and professional values and beliefs, for example, Janet's boundary experience of domestic violence. Other examples included obstacles in school culture and language barriers. One boundary experience concerned a non-educational boundary, wherein a participant experienced feelings of being unsafe in South Africa, which made her appreciate safety in her home country. Safety was something she had taken for granted in the Netherlands.

In general, the pre-service teachers who perceived a boundary and learned through boundary experiences of identification (Table 4), experienced discontinuity that hindered their actions in school, or conflicted with personal and professional values or preferences. In all boundary experiences, the learning potential included the pre-service teachers learning what their own teaching preferences and beliefs were and why they were so important. The participants had the opportunity to compare alternative teaching aspects, interactions and (school) cultures, during their attempts to manage discontinuity. The experience of discontinuity enhanced the pre-service teachers' awareness of why they found specific personal and professional values and beliefs important, and why they did not want to adapt to the other (school) culture. Eventually, participants learned why they did not want to cross the boundary and what the meaning of the discontinuity was for them, or their teaching practice.

Example: Identification and Learning (Janet). Janet (23) is an English teacher in South Africa, who struggled with the fact that domestic violence is not uncommon amongst pupils and staff and her colleagues seem to accept this as a fact of life. During one of her lessons, she was confronted with this boundary.

One of my pupils had blue bruises on her face and had some difficulty walking. A week before every pupil had to write a poem, which they had to read out loud in class. Her poem was pretty intense and discussed her parents, telling us that she was afraid of her mother. It worried me.

She discussed this situation with her mentor and other colleagues. All of them told her not to worry, which worried Janet even more.

(my mentor) responded that this girl was just posing, you shouldn't care so much (...). It turned out the girls' parents had phoned the school, explaining that her daughter had been drunk in the weekend and had fallen down because of that. I still didn't believe it (...). My supervisor said the girl was already seeing the school psychologist. "If my own daughter would have been drunk in the weekend, I might have hit her as well", she said. Then I thought: "Wow!"

Janet felt helpless. On the one hand she couldn't solve this obstacle, and on the other hand, it showed her an important moral dimension in her work as a teacher.

There was little I could do now, I am just an intern. An authority had just told me that she would have done the same (...). This was very intense for me (...). I really felt this incident showed me this was going against my own values. It really felt terrible (...). Within three months I am gone, so I can't just say: "I will fix this". You just don't know what you have to do. I really felt a personal boundary was being pressured (...). I think this shouldn't happen to any human being. A child should be protected.

The learning potential in this boundary experience resides in the fact that Janet became aware of her important professional values, as well as an employer's future expectations that differed from her expectations.

I think I would not let this happen to me again in the future (...) I would really make sure that I would know what had happened. And I would address my superiors again. Especially if you experience such a thing as a novice teacher, you need to ask for help (...). Yes, I really learned what my boundary is. If I would experience something similar again at school, I think I might go to another school, I think (...) I want to adapt to another culture, but there are limits.

Coordination learning mechanism

In our study, the coordination learning mechanism did not have a role in the boundary experiences we identified. Routines or procedures between the teacher training institute and the school were hardly mentioned. Only for Janet (boundary experience #9) did the school rules determine her experience of discontinuity. However, she did not mention examples of a coordination learning mechanism; she only spoke about an identification learning mechanism. Apparently, either school procedures or local guidance were well organized, or they were not perceived as problematic compared to other socio-cultural differences.

Reflection learning mechanism

In 10 cases, we found examples of the reflection learning mechanism, which were characterized by pre-service teachers' attempts to temporarily adapt or find temporary solutions to remove the discontinuity. The participants felt an urge to search for compromises and temporary solutions because these boundaries had practical implications in the pre-service teachers' daily teaching. The pre-service teachers mostly described discontinuity in teacher-pupil interactions or pupils' problematic domestic situations. The

discontinuity compelled them to reflect on the other's perspective and well as their own. Those boundary experiences evoked the reflection learning mechanism and revolved around the theme: 'what type of teacher do I want to be and become?' and the use of the other's practice perspective to gain a renewed outlook on their own teaching practice. In four boundary experiences, this resulted in perspective-making, and in six boundary experiences resulted in perspective-taking (Table 4). We present two examples of the reflection learning mechanism, one for perspective-making and one for perspective-taking.

Reflection: perspective-making

In the four examples of perspective-making, we found that the participants experienced discontinuity in the teaching context. They mainly perceived problems in interactions with pupils, and pupils' problematic domestic situations and obstacles caused by school culture and type. School culture, school type and domestic situations are not problems that are easily managed, which enhanced the participants' feelings of discontinuity. The boundaries they encountered were either professionally too unfamiliar or complicated to handle. The participants became aware of their professional beliefs, and mentioned in their interviews and reflections how they also became aware of the importance of certain unfamiliar teaching styles or how other school cultures work. In all examples of perspective-making, the pre-service teachers were open-minded to the others' perspectives, and took the time to understand the alternatives. However, despite the pre-service teachers' efforts to understand the alternative perspective of the international teacher training school, none of the participants expressed real appreciation, or immediate intentions of using the others' perspectives in their teaching practice. The reason was that the discontinuity was too complex to remove.

Example of reflection and learning: perspective-making (Ellen). Ellen is a history teacher at a boarding school in Wales. She reports how she was struggling with the school culture that is different from what she is used to. She had particular difficulties with the expectations of the teacher's role and the lack of privacy at the boarding school as a boundary.

After her internship, Ellen described the discontinuity in her interview. Ellen initially felt distressed about boarding school's context.

During the night the gates would close at the boarding school (...). The fact that everything is happening at school and that there is no reason to leave the area was not so much shocking, but distressing (...). Students live together in a house with fifty others, girls and boys separately. In each room four children sleep together. The feeling of privacy is totally gone. That was kind of shocking.

In her interview, as well as her boundary inquiries during the internship, Ellen explained how expectations of the teachers' and pupils' roles at a boarding school became an obstacle for her after a few weeks. The type of school and the school's culture were unfamiliar to her, and did not reflect the type of teacher she wanted to be.

The encompassing teachers at this boarding school all had several roles. The vice-principal of the school described this as a "360 degrees teacher". The teacher plays a role in almost everything (...). For teachers the distinction between their professional and personal space is almost not there. One of the pupils came to my house once, telling me that he was just checking where I lived, so he would know where to deliver a message or an assignment (...). You have to be available at all times for the children.

When she became aware of this discontinuity, Ellen made attempts to understand how other teachers were able to have such an encompassing role in the pupils' lives, and observed her other colleagues. She was aware of the discontinuity, but this did not change her perception of teaching.

A colleague invited us once to join him for a day. He had a meeting with a pupil as her subject teacher, but he also spoke to her as a mentor, as head of the department and assistant house parent. So, he played four different roles in one meeting. That was kind of shocking that teachers play such an important role in the life of such a child. It's interesting and distressing at the same time, because you hardly have your own life.

The learning potential for Ellen in this boundary experience was that it taught her that in her professional life she needs a clear line between her personal and professional life and thus, a boarding school is not a context where she wants to work.

What I liked about the life at a boarding school is the fact that you are really involved in pupils' lives. This was too much, but it's nice that your involvement doesn't stop at the classroom' door. And that you are involved in other activities of those children, or the fact that you can help them with a problem (...). But the fact that school takes over your life didn't appeal to me at all.

Reflection: perspective-taking

In the six boundary experiences wherein we found examples of perspective-taking the pre-service teachers expressed both an appreciation and a willingness to use teaching aspects of the school abroad in their future teaching practice. Pre-service teachers actively responded that they did not only try to understand 'otherness', but in fact, really seem to understand why this socio-cultural difference bothered them and might also be useful in their future practice. In a sense, the participants submitted to their vulnerability in an unfamiliar cultural setting, and took the chance to put themselves in the position of the cultural other. This vulnerable attitude mainly raised their awareness of existing professional beliefs, but it did not significantly affect their teaching practice at the time. Most of these strategies concerned the power distance between teachers and pupils. In one case, the cross-cultural experience made the participant recognize and accept a specific teacher-character trait that she intended to use in her future practice.

Example of reflection and learning: perspective-taking (Amy). Amy is a history teacher in the UK. Her boundary experience was caused by the fact that she taught at a school that is located in a poor area with unemployment, deprived children and even threats to child safety. Amy noticed that this also has a profound influence on pupils' behavior and her own interaction with them. In the first few weeks, Amy tried to understand the pupils' stories and problems.

During my internship in the UK children told me several stories about their domestic situations. I was beaten by my father and this and that. Some parents aren't allowed to enter the school area (...). I learned you really have to sit down with such a child and show them what they can, that what they do is relevant. I noticed this is something you can't always achieve in a classroom setting and you have to give pupils individual attention.

After a few weeks, Amy started to analyze the actual reasons why child safe-guarding and domestic situations were such an important issue and what it meant for her own teaching practice.

Children have low expectations of their future in such a school. It is very working class, people don't expect to leave the area, or expect to achieve something at all (...). That gets me back to this personal bond with my pupils: the fact that you are digging deeper, you know their context, so that you are better able to support them in what they want (...). You are much more than a subject teacher. You feel more responsibility, because you know that it's not just a child in your classroom. (...). You got this feeling that you are part of pupils' upbringing and not only teaching. That you can give them a broader perspective on the world, which they did not have before.

In retrospect, Amy thought that this boundary experience taught her that it's important to be more than a subject teacher, especially for pupils with problematic domestic situations and made her aware of how she could make a difference as a teacher.

You don't just teach history, but you have a bigger and broader responsibility to inspire pupils. To show them what they are capable of (...). You develop as a teacher, so you adapt and you take it with you. It's not like you adapt completely and that's it. It's that you have to adapt to certain things. But when you return to the Netherlands those things are part of you (...). I can work at any Dutch school, meet a child that has a difficult domestic situation and understand which impact this can have. It can make you understand bad behavior of a pupil (...). If I would ever work at a school with a similar context, I would be very aware of pupils' situations.

Transformation learning mechanism

In the pre-service teachers' verbal and written reports, we found three boundary experiences that showed signs of a transformation learning mechanism. In these three boundary experiences (Table 4), the pre-service teachers were able to use cross-cultural aspects within the discontinuity they experienced to find continuity in their professional context. The important motivation to cross the boundary was personal: a bi-cultural upbringing, a private trip to an orphanage school or a personal desire to work and live abroad. The pre-service teachers were exposed to discontinuity that went beyond a "normal" or to-be-expected experience in their attempts to restore continuity. It appeared that the mixture of personal and professional aspects of the boundary experiences gave the pre-service teachers' experiences a sense of urgency that demanded a response using a cross-cultural perspective in their attempts to restore continuity.

The subjective and moral dimensions within the three boundary experiences appeared to cause certain transformations. All three participants mentioned that their boundary experiences strengthened and changed specific professional beliefs. Also, in two of three boundary experiences, the pre-service teachers described transformations as (positive) challenges instead of obstacles. After visiting an orphanage school in Soweto, Marc became inspired to teach his future pupils respect for cultural differences. At the same time, this boundary experience made him reflect upon alternative future teaching aspirations, such as working abroad in a similar volunteer project. Adriana knew before her internship that she would like to live abroad, but the boundary experience showed her that her professional future lay in teaching at an international school. Adriana's boundary experience has also affected her professional aspirations – she has become much more ambitious, since being influenced by the attitude of her international colleagues.

Example of transformation and learning: (Suzanne). Suzanne was raised bi-culturally in the Netherlands and has South African roots. She has lived here since she was ten, when her parents arrived in the Netherlands. Although she has visited South Africa several times, this is the first time she worked there as a teacher. Suzanne recognized South African school culture from her past, she was strongly influenced by the Dutch educational system. In her reflections during her stay abroad, as well as in her interview after returning, Suzanne described how after the first few weeks, she began to recognize her South African roots and specifically South African values that had disintegrated during her time in the Netherlands.

My South African background felt as something isolated in the Netherlands. Something that felt strange and as something you can't use in Dutch society, because you want to belong to a culture. In order to function in the Dutch culture, it is easier to adapt to Dutch values and beliefs (...). It didn't mean my South African background disappeared, but it remained isolated in my family. It was still there, but I let it disintegrate. Or perhaps it was something I couldn't put into context, because I didn't know if it was something good, or something inherently South African (...). In South Africa humility and appreciation of the other are just part of their culture. I think that's why South African teachers have more commitment and invest more in their pupils than Dutch teachers do (...). When I returned to South Africa, I recognized it. So it was something that was there, but which I didn't conceive as something that molds your character. And that felt good.

Suzanne recognized an implicit, already-existing discontinuity with her home culture that affected her professionally and personally. This boundary experience helped Suzanne to define the type of teacher she wanted to become using both South African and Dutch values, since she now recognizes the value of her bi-cultural roots.

I have been much more able to accept where I come from. And, also how to use another culture in my own culture. Or at least have peace with it, in order to become a better teacher. For example to be a culturally sensitive teacher, who understands at the same time how the Dutch and the South African culture work (...). I can easily change perspectives and have more understanding for people who are also coming from another culture. That's something I just understand very well, that one can have different norms and values and that this influences how you operate, whether that is inside a classroom, a company or a museum.

Discussion and conclusion

This case study explored experiences of discontinuity when pre-service teachers moved between various professional communities and cultures during an international teaching internship that differed from their own experience. The pre-service teachers' experiences of discontinuity were defined as boundary experiences wherein challenging or problematic socio-cultural differences significantly influenced their (inter)actions (Akkerman & Bakker, 2011; English, 2013). The pre-service teachers' attempts to (re)position themselves in the unfamiliar professional and cultural context to function again (defined as a state of continuity) (Akkerman & Bakker, 2011), have been described as examples of boundary crossing (Akkerman & Bakker, 2011; Engeström et al., 1995).

The 15 boundary experiences the pre-service teachers described in this study show that cultural adjustment can be operationalized in distinct ways. Therefore, the pre-service teachers' learning experiences during an internship abroad had multiple outcomes. This is in line with Marginson's (2014, p. 8) suggestion that the dominant paradigm of international education is mostly understood as a process of "adjustment" or "acculturation" to the requirements and habits of the host country (Berry, 1997, 1999; Ward & Chang, 1997; Ward & Kennedy, 1993, 1999) and needs a significantly more nuanced interpretation. We found that the four learning mechanisms of identification, coordination, reflection and transformation in the theory of boundary crossing (Akkerman & Bakker, 2011) were helpful in interpreting the pre-service teachers' adjustment within this paradigm. However, it must be noted that no pre-service teacher described a boundary experience leading to a coordination learning mechanism. This study offers insights on the following themes that could help support the nuanced insights Marginson (2014) calls for including: the dynamic and ambiguous nature of boundary experiences, the value of describing cultural adaptation from a multi-level approach (including personal, professional and cultural aspects), pre-service teacher's cultural negotiations during boundary crossing, and their reflections on their boundary experiences.

The boundary experiences the pre-service teachers described in this study were dynamic, ambiguous, and resulted in various adaptations. The present study shows how a boundary as an in-between space (English, 2013) is a key aspect in the pre-service teachers' professional development as they attempt to cope with discontinuity to find a renewed state of continuity (Akkerman & Meijer, 2011). The interaction with the other in an international context gives pre-service teachers the chance "... [to] construct an intersubjective world out of our individual, subjective worlds," as Biesta (2014b, p. 15) has stated. The process of acting and undergoing during a boundary experience is what Dewey (1938) considered to be a key aspect of educational experiences that should not be avoided by educators (see also Biesta, 2014a; Meijer, 2011; Schön, 1987). This allows the pre-service teacher to explore, experiment, and develop new ideas to move past limits of knowledge and ability and find a way out of perplexing situations (English, 2013). Therefore, teacher educators should consider focusing more on understanding experiences of (dis)continuity and coping strategies rather than only on actual learning outcomes (Biesta, 2014a; Holmes & O'Neill, 2012; Kelchtermans, 2009).

The present study shows that the concept of a boundary experience (Akkerman & Bakker, 2011; Engeström et al., 1995) is useful in a multi-level approach as proposed by Gonzalez-Loureiro et al. (2015). The authors describe how work and socio-cultural context are often studied separately, and suggest that future studies should use a multi-level approach incorporating work and home in origin and host cultures in which coping strategies can be a useful concept. The pre-service teachers' attempts to cope with challenges and obstacles during their international teaching internship, as described in this study, included multiple dimensions of cultural, personal and professional aspects, which were often interrelated (see for example, Janet's boundary experience of domestic violence). Chirkov (2009, p. 102) stresses how many studies on cultural adaptation lack deep descriptions of experiences and interpretation of the meaning for the individual. The multi-level approach using the aforementioned four learning mechanisms of Akkerman and Bakker (2011), also gave rich, valuable insights for interpreting the subjective and unique nature of pre-service teachers' learning in an international context, as Chirkov (2009) and Holmes and O'Neill (2012) have suggested. The individual pre-service teachers' attempts to cross a boundary raised their awareness of existing professional or personal beliefs (identification mechanism), enhanced professional self-understanding and cultural sensitivity (reflection mechanism), or became a critical stage of learning, exploring, or experimenting (transformation mechanism) (Biesta & Tedder, 2007; Biesta, 2014b; English, 2013; Fives & Buehl, 2012; Kelchtermans, 2009; Mezirow, 1991).

All the boundary experiences had in common that the pre-service teachers' learning at the boundary started when they encountered limits of knowledge and ability, as English (2013, p. 55) has described. In some boundary experiences, this was perceived as problematic, and in others as challenging in a more positive way (see also Mintz, 2014). The boundary experiences spurred the pre-service teachers to manage the obstacle or challenge through cultural negotiation (Chirkov, 2009; Marginson, 2014). Cultural negotiation determined the pre-service teachers' actions and whether or not they were open to new knowledge or ability influenced their learning in multiple ways. The boundary experiences we identified provided various examples of what it means exactly to be positioned in-between distinct cultures and educational systems and the significance of this in-between space for pre-service teachers'

professional development (Akkerman & Bakker, 2011; English, 2013; Marginson, 2014; Rizvi, 2005). According to Marginson (2014, p. 11), cultural adaptation should not be viewed as “a conversion to a (non-existent) stable equilibrium, but [rather as] a never finished cultural negotiation”. Educators should avoid looking at boundary experiences in an instrumental way, or consider one learning mechanism to be more important than another. This finding is in line with how Akkerman and Bruining (2016) describe boundary experiences and attendant learning mechanisms.

With the exception of the transformation learning mechanism, the pre-service teachers’ descriptions of the 15 boundary experiences did not include specific examples of how Meyer and Land (2003), 2005, p. 373) defined a threshold concept as initiating a new way of understanding, or interpretation. The importance of pre-service teachers’ learning during boundary experiences resided instead in the existential nature of a boundary and its subjective, individual value for their professional development (Biesta, 2010; English, 2013). Existing often taken-for-granted beliefs or ways of thinking and working no longer worked for the pre-service teachers abroad (Biesta, 2010; English, 2013; Kim, 2001). The importance of the boundary experience resided mostly in raising the pre-service teachers’ awareness of their existing knowledge and ability, rather than in transformations (Mezirow, 1991).

The boundary experience helped, or sometimes even forced, the pre-service teachers’ reflections on subjective and moral dimensions in teaching (Bakker, 2016; English, 2013; Meijer, 2011; Rodgers & Scott, 2008), including inner dispositions, norms and beliefs, which had been taken for granted before their international experiences. Subjective and moral dimensions, such as personal backgrounds, previous teaching experiences and future teaching ambitions (Kelchtermans, 2009), became more apparent in the international context and also colored the participants’ actions or judgments during their boundary experiences.

Limitations and future implications

We are aware of the fact that the participants’ reconstructions of their experiences of discontinuity were made in hindsight and categorization was based on the researchers’ interpretations, thus it was not possible to fully capture the actual moments of discontinuity at the time. Therefore, no statements can be made about what the pre-service teachers were actually thinking during their discontinuity experiences.

Although the pre-service teachers in this study did not describe examples of experiences of discontinuity that resulted in learning experiences related to the coordination learning mechanism, we think this should be a point of interest for teacher educators. It is a common challenge for pre-service teachers and new teachers to maneuver between procedures and requirements of the teacher-training institute and the schools where they are interning (Kelchtermans, 2009; Loughran, Brown, & Doecke, 2001; Pillen et al., 2013). It appears the international teaching context made the pre-service teachers feel that socio-cultural differences in school procedures and routines were outside their circle of influence. Future studies could focus more on those aspects in teaching internships.

The nature of several of the boundary experiences and learning mechanisms we described are common for pre-service teachers’ teaching internships at home as well. In their home country, pre-service teachers also experience alternative school cultures and differences in power distance towards pupils. What is uncertain is whether or not the boundary experiences during an international teaching internship generate learning mechanism(s) that are different than similar boundary experiences at home and if so, why. A comparative study on the differences and similarities of boundary experiences at home and abroad could provide teacher educators with valuable additional insights into the value of an international teaching internship.

References

- Adler, P. S. (1975). The transitional experience: An alternative view of culture shock. *Humanistic Psychology*, 15(4), 13–24.
- Akkerman, S. F., & Bakker, A. (2011). Boundary crossing and boundary objects. *Review of Educational Research*, 81(2), 132–169.
- Akkerman, S. F., & Bakker, A. (2012). *Leren door boundary crossing tussen school en werk [Learning by boundary crossing between school and work]*. *Pedagogische Studiën [Pedagogical Studies]*, 91(1), 8–23.
- Akkerman, S., Admiraal, W., Brekelmans, M., & Oost, H. (2008). Auditing quality of research in social sciences. *Quality & Quantity*, 42(2), 257–274.
- Akkerman, S., & Bruining, T. (2016). Multi-level boundary crossing in a professional development school partnership. *Journal of the Learning Sciences*, 25(2), 240–284.
- Akkerman, S. F., & Meijer, P. C. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education*, 27, 308–319.
- Alsup, J. (2006). *Teacher identity discourses. Negotiating personal and professional spaces*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Bakker, C. (2016). Professionalization and the quest how to deal with complexity. In C. Bakker, & N. Montesano Montessori (Eds.). *Complexity in education. From horror to passion*. Rotterdam: Sense Publishers.
- Behrnd, V., & Porzelt, S. (2012). Intercultural competence and training outcomes of students with experiences abroad. *International Journal of Intercultural Relations*, 36, 213–223.
- Bennett, J. M., & Bennett, M. J. (2004). Developing intercultural sensitivity: An integrative approach to global and domestic diversity. In D. Landis, J. M. Bennett, & M. J. Bennett (Eds.). *Handbooks of intercultural training* (pp. 147–165). Thousand Oaks, CA: Sage.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, 46(1), 5–34.
- Berry, J. W. (1999). Acculturation. In M. H. Segall, P. R. Dasen, J. W. Berry, & Y. H. Poortinga (Eds.). *Human behaviour in global perspective* (pp. 299–323). Boston, MA: Allyn & Bacon.
- Biesta, G. J. J. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Boulder, Co: Paradigm Publishers.
- Biesta, G. J. J. (2014a). *The beautiful risk of education*. Boulder: Paradigm Publishers.
- Biesta, G. J. J. (2014b). Pragmatism in the curriculum: Bringing knowledge back into the curriculum conversation, but via pragmatism. *The Curriculum Journal*, 25(1), 29–49. <http://dx.doi.org/10.1080/09585176.2013.874954>.
- Biesta, G. J. J., & Tedder, M. (2007). Agency and learning in the lifecourse: Towards an ecological perspective. *Studies in the Education of Adults*, 39, 132–149.
- Boeije, H. (2010). *Analysis in qualitative research*. Londen: SAGE Publications.
- Borko, H., Whitcomb, J. A., & Byrnes, K. (2008). Genres of research in teacher education. In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.). *Handbook of research on teacher education: Enduring questions in changing contexts* (pp. 1017–1049). New York: Routledge.
- Chandler, M. J., & Lalonde, C. (2008). Cultural continuity as a protective factor against suicide in First Nations youth. *Horizons*, 10(1), 68–72.
- Chang, W. W., Yuan, Y. H., & Chuang, Y. T. (2013). The relationship between international experience and cross-cultural adaptability. *International Journal of*

- Intercultural Relations*, 37(2), 268–273.
- Chirkov, V. (2009). Critical psychology of acculturation: What do we study and how do we study it, when we investigate acculturation? *International Journal of Intercultural Relations*, 33, 94–105.
- Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teachers College Press.
- Conway, P. F. (2001). Anticipatory reflection while learning to teach: From a temporally truncated to a temporally distributed model of reflection in teacher education. *Teaching and Teacher Education*, 17(1), 89–106.
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles: Sage Publications.
- Deardorff, D., Pysarchick, D., & Yun, Z.-S. (2009). Towards effective international learning assessment: Principles, design and implementation. In H. De Wit (Ed.). *Measuring success in the internationalisation of higher education* (pp. 23–27). European Association for International Education: EAIE Occasional Paper.
- Dewey, J. (1916). *New York: Macmillan. Democracy and education: An introduction to the philosophy of education*.
- Dewey, J. (1938). *Experience & education*. New York, NY: Kappa Delta Pi.
- Dunlap, M. R., & Webster, N. (2009). Enhancing intercultural competence through civic engagement. In B. Jacoby, & Associates (Eds.). *Civic engagement in higher education: Concepts and perspectives* (pp. 140–153). San Francisco, CA: Jossey-Bass.
- Engberg, M. E. (2013). The influence of study away experiences on global perspective-taking. *Journal of College Student Development*, 54(5), 466–480.
- Engeström, Y., Engeström, R., & Kärkkäinen, M. (1995). Polycontextuality and boundary crossing in expert cognition: Learning and problem solving in complex work activities. *Learning and Instruction*, 5, 319–336.
- English, A. (2013). *Discontinuity in learning. Dewey, Herbart and education as transformation*. New York: Cambridge University Press.
- Fee, A., & Gray, S. J. (2013). Transformational learning experiences of international development volunteers in the Asia-Pacific: The case of a multinational NGO. *Journal of World Business*, 48, 196–208.
- Fejes, A., & Köpsén, S. (2014). Vocational teachers' identity formation through boundary crossing. *Journal of Education and Work*, 27(3), 265–283.
- Fives, H., & Buehl, M. M. (2012). Spring cleaning for the 'messy' construct of teachers' beliefs: What are they? Which have been examined? What can they tell us? In K. R. Harris, S. Graham, & T. Urdan (Eds.). *Individual differences and cultural and contextual factors* (pp. 471–499). Washington, DC: APA.
- Furnham, A., & Bochner, S. (1986). *Culture shock: Psychological reactions to unfamiliar environments*. New York: Methuen.
- Gonzalez-Loureiro, M., Kiessling, T., & Dabic, M. (2015). Acculturation and overseas assignments: A review and research agenda. *International Journal of Intercultural Relations*, 49, 239–250.
- Hammer, M. R. (2012). The intercultural development inventory. A new frontier in assessment and development of intercultural competence. In M. Vande Berg, R. M. Paige, & K. Hemming Lou (Eds.). *Student learning abroad. What our students are learning, what they're not, and what we can do about it* (pp. 115–136). Sterling, VA: Stylus.
- Hermans, H. (2001). Mixing and moving cultures require a dialogical self. *Human Development*, 44, 24–28.
- Holmes, P., & O'Neill, G. (2012). Developing and evaluating intercultural competence: Ethnographies of intercultural encounters. *International Journal of Intercultural Relations*, 36, 707–718.
- Hora, M. T., & Millar, S. B. (2011). *A guide to building education partnerships. Navigating diverse cultural contexts to turn challenge into promise*. Sterling, VA: Stylus.
- Jang, D., & Kim, D. Y. (2010). The influence of host cultures on the role of personality in the acculturation of exchange students. *International Journal of Intercultural Relations*, 34, 363–367.
- Kelchtermans, G. (2009). Who I am in how I teach is the message. Self-understanding, vulnerability and reflection. *Teachers and Teaching: Theory and Practice*, 15(2), 257–272.
- Kim, Y. Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. Thousand Oaks, CA: Sage.
- Kim, Y. Y., & Ruben, B. D. (1988). Intercultural transformation: A systems theory. In Y. Y. Kim, & W. B. Gudykunst (Eds.). *Theories in intercultural communication* (pp. 299–321). Newbury Park, CA: Sage.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lough, B. J., Sherraden, M. S., & Moore McBride, A. (2012). Measuring international service outcomes: Implications for international social field placements. *Journal of Social Work Education*, 48(3), 479–499.
- Loughran, J., Brown, J., & Doecoe, B. (2001). Continuities and discontinuities: The transition from pre-service to first-year teaching. *Teachers and Teaching: Theory and Practice*, 7(1), 7–22.
- Marginson, S. (2014). Student self-formation in international education. *Journal of Studies in International Education*, 18(1), 6–22.
- Marx, H., & Moss, D. M. (2011). Please mind the culture gap: Intercultural development during a teacher education study abroad program. *Journal of Teacher Education*, 62(1), 35–47.
- Meijer, P. C. (2011). The role of crisis in the development of student teachers' professional identity. In A. Lauriala, R. Raimo Rajala, H. Ruokamo, & O. Ylitapio-Mäntylä (Eds.). *Navigating in educational contexts. Identities and cultures in dialogue* (pp. 41–54). Rotterdam: Sense Publishers.
- Merriman, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Mesker, P., Wassink, H., Akkerman, S., & Bakker, C. (2017). Student teachers' boundary perceptions during an international teaching internship. Manuscript submitted for publication.
- Meyer, J. H. F., & Land, R. (2003). Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines. In C. Rust (Ed.). *Improving student learning: Improving student learning theory and practice – Ten years on* (pp. 412–424). Oxford: Oxford Centre for Staff and Learning Development.
- Meyer, J. H. F., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49, 373–388.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.
- Mezirow, J. (1997). Transformative learning: Theory to practice. In P. Cranton (Ed.). *Transformative learning in action: Insights from practice—New directions for adult and continuing education* (pp. 5–12). San Francisco: Jossey-Bass.
- Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks: Sage Publications.
- Mintz, A. I. (2014). Review of Andrea R. English. Discontinuity in learning: Dewey, Herbart, and education as transformation Cambridge University Press, 2013. *Studies in Philosophy and Education*, 33, 451–458.
- Montgomery, C. (2010). *Understanding the international student experience*. New York: Palgrave Macmillan.
- Oberg, K. (1960). Culture shock: Adjustment to new cultural environment. *Practical Anthropology*, 7, 177–182.
- O'Sullivan-Lago, R., & de Abreu, G. (2008). Going back to their roots: Maintaining continuity in the dialogical self through signs. *Psychology & Society*, 1, 42–53.
- Pagano, M., & Roselle, L. (2009). Beyond reflection through an academic lens: Refraction and international experiential education. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 18, 217–229.
- Pence, H. M., & Macgillivray, I. K. (2008). The impact of an international field experience on preservice teachers. *Teaching and Teacher Education*, 24, 14–25.
- Pillen, M., Beijgaard, D., & Den Brok, P. (2013). Professional identity tensions of beginning teachers. *Teachers and Teaching: Theory and Practice*, 19(6), 660–678.
- Rizvi, F. (2005). Identity, culture and cosmopolitan futures. *Higher Education Policy*, 18, 331–339.
- Rodgers, C. R., & Raider-Roth, M. B. (2006). Presence in teaching. *Teachers and Teaching: Theory and Practice*, 12(3), 265–287.
- Rodgers, C. R., & Scott, K. H. (2008). The development of the personal self and professional identity in learning to teach. In M. Cochran-Smith, S. FeimanNemser, D. J. McIntyre, & K. E. Demers (Eds.). *Handbook of research on teacher education: Enduring questions and changing contexts* (3rd ed.). New York: Routledge, Taylor & Francis Group/Association of Teacher Educators.
- Schenke, W. (2015). *Connecting practice-based research and school development. Cross-professional collaboration in secondary education* (Doctoral dissertation). Retrieved from UvA-DARE (ISBN 9789461420169).
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Schön, D. A. (1991). *The reflective turn: Case studies in and on educational practice*. New York: Teachers College, Columbia University.

- Smith, J. A., Flower, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London: Sage.
- Smith, J. A., & Osborn, M. (2003). Interpretative phenomenological analysis. In J. A. Smith (Ed.). *Qualitative psychology: A practical guide to research methods*. London: Sage Publications Ltd.
- Tran, L. T. (2012). Internationalisation of vocational education and training: An adapting curve for teachers and learners. *Journal of Studies in International Education*, 17(4), 492–507.
- Tsui, A. B. M., & Law, D. Y. K. (2007). Learning as boundary-crossing in school–university partnership. *Teaching and Teacher Education*, 23, 1289–1301.
- Waitoller, F. R., & Kozleski, E. B. (2013). Working in boundary practices: Identity development and learning in partnerships for inclusive education. *Teaching and Teacher Education*, 31, 25–45.
- Ward, C., & Chang, W. C. (1997). “Cultural fit”; A new perspective on personality and sojourner adjustment. *International Journal Intercultural Relations*, 21(4), 525–533.
- Ward, C., & Kennedy, A. (1993). Psychological and socio-cultural adjustment during cross-cultural transitions: A comparison of secondary students overseas and at home. *International Journal of Psychology*, 28(2), 129–147.
- Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations*, 23(4), 659–677.
- Wenger, E. (1998). *Communities of practice, learning, meaning and identity*. Cambridge, UK: Cambridge University Press.
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization*, 7, 225–246.
- Zhou, Y., Jindal-Snape, D., Topping, K., & Todman, J. (2008). Theoretical models of culture shock and adaptation in international students in higher education. *Studies in Higher Education*, 33(1), 63–75.
- Zimbardo, P. G. (1999). Discontinuity theory: Cognitive and social searches for rationality and normality may lead to madness. *Advances in Experimental Social Psychology*, 31, 345–486.