

Symbolic Boundaries and the Clinical Preparation of Teacher Candidates

Bilge Cerezci
bilgecerezci@gmail.com

Donald McClure
mcclured@stjohns.edu

Follow this and additional works at: <https://scholar.stjohns.edu/jovsa>



Part of the [Arts and Humanities Commons](#), [Business Commons](#), [Curriculum and Instruction Commons](#), [Curriculum and Social Inquiry Commons](#), [Disability and Equity in Education Commons](#), [Educational Methods Commons](#), [Law Commons](#), [Life Sciences Commons](#), [Medicine and Health Sciences Commons](#), [Scholarship of Teaching and Learning Commons](#), and the [Urban Studies and Planning Commons](#)

Recommended Citation

Cerezci, Bilge and McClure, Donald () "Symbolic Boundaries and the Clinical Preparation of Teacher Candidates," *Journal of Vincentian Social Action*: Vol. 5 : Iss. 2 , Article 7.
Available at: <https://scholar.stjohns.edu/jovsa/vol5/iss2/7>

This Article is brought to you for free and open access by St. John's Scholar. It has been accepted for inclusion in *Journal of Vincentian Social Action* by an authorized editor of St. John's Scholar. For more information, please contact JoVSA@stjohns.edu.

SYMBOLIC BOUNDARIES AND THE CLINICAL PREPARATION OF TEACHER CANDIDATES

Bilge Cerezci, Ph.D

Donald R. McClure, Ph.D

INTRODUCTION

Clinical practice experiences are a central feature of teacher preparation programs (Broad & Tessaro, 2009) because of their potential to build school-university partnerships (Gurvitch & Metzler, 2009; Walsh & Backe, 2013) and to support the growth of teacher candidates' efficacy levels and teaching skills (Gurvitch & Metzler, 2009).

Despite their potential, in practice clinical experiences embedded in teacher preparation programs often have been characterized by divides (Anagnostopoulos et al., 2007; Anderson & Freebody, 2012; Valencia, Martin, Place, & Grossman, 2009; Zeichner, 2010). These divides can create uncertainties for teacher candidates in terms of how they connect theory and practice, and they can result in "problematic situations for which [the teacher candidates] were not sufficiently prepared" (Korthagen & Wubbels, 2001, p. 32).

Using Lamont and Molnár's (2002) understanding of symbolic boundaries, this essay explores what is known, and not known, about two of these divides: 1) that between professional knowledge and skilled practice, and 2) that between universities and PK-12 schools. The essay starts by providing an overview of clinical practice in teacher education, followed by a description of symbolic boundaries. Next there is a discussion of research that addresses those two specific divides. Finally, the essay closes with a brief conclusion providing a summary of the findings and highlighting implications for research and practice.

CONTEXT: CLINICAL PRACTICE IN TEACHER EDUCATION

Traditionally, teacher preparation in the United States has relied on the application of a theory model of pre-service teaching (Korthagen & Kessels, 1999). In this model, teacher candidates spent a vast amount of time learning about

theories at the university as they took multiple methods courses up until their last year. These courses often were provided with only a few weeks of observation, followed by a semester of teaching during their student teaching, with the goal of applying their professional knowledge under the supervision of skilled practitioners. (Bacharach et al., 2010).

"...teacher preparation is complex and, to be successful, it requires several distinct yet related forces to work cooperatively."

Scholarship in teacher education has understood clinical practice as the opportunity for teacher candidates "to gain experience in authentic settings of actual teaching practice"; however, "One of the challenges to designing professional education around the development of clinical practice is the organizational and institutional fragmentation that surrounds those who are learning to teach" (American Association for Colleges of Teacher Education & National Education Association, 2010, May, p. 1). Labaree (1996) likened the fragmentation between university programs and PK-12 schools to that between countries, contending that: "A primary function of the education school is to provide a border crossing between these two countries, each with its own distinctive language and culture and with its own peculiar social structure" (p. 42). Feiman-Nemser (2001) affirmed this view

by advocating for stronger relationships between academic courses and field experiences. Without relationships, “there is no joining of forces around a common agenda and no sharing of expertise” (p. 1020). In other words, teacher preparation is complex and, to be successful, it requires several distinct yet related forces to work cooperatively (Darling-Hammond, 2006).

CONCEPTUAL FRAMEWORK: SYMBOLIC BOUNDARIES

We draw on Lamont and Molnár’s (2002) conceptual framework of symbolic boundaries to understand existing divides in teacher education with the goal of strengthening preparation programs for teacher candidates. The scholars stated, “Symbolic boundaries are conceptual distinctions made by social actors to categorize objects, people, practices, and even time and space” (p. 168). More specifically, symbolic boundaries are unseen lines or demarcations between groups and within groups among “classes” or “roles.” Each class or role is characterized by what it values and by its norms and expectations for behavior.¹

Within the symbolic boundaries framework, we can characterize the divides within clinical preparation (between professional knowledge and skilled practice, and between universities and PK-12 schools) as conceptual distinctions. During clinical preparation, teacher candidates often transition back and forth between two roles: 1) learner in the university classroom, and 2) teacher in the PK-12 classroom. These two roles come with different positional power and authority and in these two roles different types of knowledge are valued, highlighting the conceptual distinction between professional knowledge and skilled practice. Moreover, while they make this role-transition, teacher candidates also have to navigate the second conceptual distinction between the university and K-12 school contexts.

The symbolic boundaries framework also explicitly acknowledges the various “social actors” that are situated across teacher education and that contribute to the preparation of future teachers. These individuals include college and

university course instructors, PK-12 cooperating teachers, PK-12 school administrators, educational researchers, policymakers, and teacher candidates, among others. These individuals interact with each other on a regular basis to develop and make sense of various aspects of teacher preparation including the curriculum, the school (and cooperating teacher) placements of teacher candidates, and the types of material and intellectual resources needed for teacher candidates’ learning.

As teacher candidates struggle to bridge the expectations, norms, and values of their roles as learners and teachers, they may position different social actors as more or less important. The symbolic boundaries framework, then, offers a useful structure to unpack what research can tell us about these conceptual distinctions, how they can be bridged and negotiated, and the role that different actors play in the clinical preparation of pre-service teachers.

EXPLORING TWO SYMBOLIC BOUNDARIES IN THE CLINICAL PREPARATION OF PRE- SERVICE TEACHERS

SYMBOLIC BOUNDARY #1: PROFESSIONAL KNOWLEDGE AND SKILLED PRACTICE

In recent years, scholars of teacher education have aimed to understand the divide in teacher preparation between professional knowledge and skilled practice. As described below, research reveals that different understandings of professional knowledge and skilled practice among educational researchers and practitioners could contribute to this divide. By developing shared understandings of these concepts, social actors such as university professors, school administrators, and cooperating teachers could, perhaps, better align goals and objectives to create a cohesive agenda for the preparation of teacher candidates at different stages of the learning process.

PROFESSIONAL KNOWLEDGE IN TEACHING

Shulman (1986) argued that teachers drew on three knowledge domains: 1) subject matter knowledge (biology, history, algebra, etc.); 2) pedagogical content knowledge (a specialized knowledge base for teaching); and 3) curricular

knowledge. Using Shulman's (1986) Model of Pedagogical Reasoning, Gudmundsdottir and Shulman (1987) concluded that "The most dramatic difference between the novice and the expert is that the expert has pedagogical content knowledge that enables him to see the larger picture...and he has the flexibility to select a teaching method that does justice to the topic" (p. 69). In contrast, the novice teacher had just begun to see "more and larger possibilities in the curriculum, both in terms of unit organization and pedagogical flexibility" (p. 69). This suggests that pedagogical content knowledge is a key area for teacher preparation.

However, in multiple fields there has been a need to better identify and understand what pedagogical content knowledge entails. Powell (2017) proposed a need to theorize pedagogical content knowledge in social studies education. He argued that it was unclear what pedagogical content knowledge looked like in the context of social studies education because the field's overall aims had not been adequately addressed. The researcher also claimed that the social studies community had not fully identified its disciplinary structures, defined its content area, and converted "subject matter knowledge into knowledge for teaching" (p. 3). In the field of mathematics, Ball, Thames, and Phelps (2008) built on Shulman's work to conceptualize professional knowledge through a qualitative study analyzing math teachers' practice. The researchers acknowledged the importance of math content knowledge in teaching and asserted, "Instead of taking pedagogical content knowledge as given, however, we argue that there is a need to carefully map it and measure it. This includes the need to better explicate how this knowledge is used in teaching effectively" (p. 404).

Scholars have also looked to extend the definition of professional knowledge in teaching. For example, Mishra and Koehler (2006) extended Shulman's work by proposing the integration of technological knowledge. The Technological Pedagogical Content Knowledge (TPCK) framework helps describe the unique knowledge that classroom teachers must possess to use

technology effectively, as well as how complex this body of knowledge is.

Further, multicultural education scholars have argued that a body of professional knowledge in teaching exists that is related to diversity and culture. Ladson-Billings (1995) advocated for culturally relevant teaching, which she defined as:

a pedagogy of opposition...Culturally relevant pedagogy rests on three criteria or propositions: (a) Students must experience academic success; (b) students must develop and/or maintain cultural competence; and (c) students must develop a critical consciousness through which they challenge the status quo of the current social order. (p. 160)

This student-centered framework assumes that in order for students to meet the three criteria, classroom teachers must possess certain professional knowledge and skills. More specifically, teachers must possess cultural awareness and cultural competence to help students develop critical consciousness themselves and to achieve academic success.

Other research has supported and advanced culturally relevant pedagogy. Culturally sustaining pedagogy "...seeks to perpetuate and foster—to *sustain*—linguistic, literate, and cultural pluralism as part of the democratic project of schooling" (Paris, 2012, p. 95). While acknowledging the contributions of culturally relevant pedagogy, Paris and Alim (2014) argued that a change in stance could help "...combat such oppressive educational and social policies" (p. 89) in society. Thus, an important component of teachers' professional knowledge is to identify these oppressive educational and social policies and to use pedagogical tools and strategies to center the curriculum around their students' cultures and backgrounds.

While this section only briefly explored some understandings of professional knowledge in teaching, it shows that there are many different understandings or dimensions of professional knowledge in teaching. No doubt, each

understanding is valuable and expands the knowledge base on teacher education, but the variety of understandings also could lead to confusion among teachers about what professional knowledge they need and how they can connect it to skilled practice.

SKILLED PRACTICE IN TEACHING

Research also has conceptualized skilled practice in teaching in different ways. Lampert (2010) identified four types of teaching practice. First, *practice as that which contrasts with theory* is the application of a theory or an idea rather than simply the articulation of one. The second, *teaching as a collection of practices*, concerns people's actions: "The intellectual connections that need to be developed also depend on regularity or habit" (p. 24). The third type, *practice for future performance*, is conceptualized in terms of rehearsal. Referencing the work of Graziani (2005, April), Lampert (2005, April), and Leinhardt and Steele (2005), Lampert asserted that rehearsing promotes greater proficiency in teaching which, in turn, helps teachers resolve various problems and/or issues that surface in the classroom. The last, *practice of teaching*, concerns "more than acquiring skills or best practices. It involves adopting the identity of a teacher, being accepted as a teacher, and taking on the common values, language, and tools of teaching" (p. 29). Lampert compared this conceptualization to the way people understand "the *practice* of medicine and the *practice* of law" (p. 29). Taken together, these four understandings reveal different interpretations of practice in teaching that could have implications for the overall aims and philosophical stances of teacher education programs.

In more recent years, scholars and practitioners of education have built on Lampert's understandings to develop even more nuanced interpretations. For example, Ball and Forzani (2011, April) argued for high-leverage practices in teaching to enhance professional knowledge and create a shared language in the profession. This view led to the creation of TeachingWorks at the University of Michigan, a network of educational researchers and practitioners that created a set of 19 high-leverage practices such as explaining and modeling

content, practices, and strategies; implementing norms and routines for classroom discourse and work; and building respectful relationships with students and others (TeachingWorks, University of Michigan, 2018).

Windschitl et al. (2012) asserted that a key practice unique to science teaching was for science educators to guide students "...to generate coherent explanations of natural phenomena using a variety of intellectual and social resources" and to help students "...understand how claims are justified..., represent their thinking to others..., critique one another's ideas..., and revise their ideas in response to evidence and argument" (p. 881). Research by Hiebert & Morris (2009) and Ball et al. (2009) suggested that particular teaching practices exist for math teachers as well.

Similar to the section on pedagogical knowledge, this brief review demonstrates there are many different understandings of skilled practice in teaching. These understandings require further bridging and negotiation to develop a better understanding of what counts as skilled practice in teaching.

SUMMARY #1

Based on these two literatures, we suggest that social actors such as educational researchers and practitioners should work to bridge the many interpretations of professional knowledge and skilled practice in order to strengthen the clinical preparation of pre-service teachers and, thus, address a symbolic boundary in teacher education. We also propose that, perhaps, this conceptual bridging might first need to take place *within* each concept to help facilitate bridging *between* the concepts. For example, in terms of professional knowledge in teaching, educational researchers and practitioners could further explore the relationship(s) between TPCK and culturally relevant pedagogy to better understand how these two pedagogies are related and how they might inform each other, rather than each perspective existing in isolation. Similarly, in terms of skilled practice in teaching, researchers and practitioners could explore how different understandings of practice, such as those described by Lampert

(2010), might be further bridged and negotiated. With different understandings of professional knowledge and skilled practice that teacher educators might be using, it is important for education scholars and practitioners to work to bridge these symbolic boundaries and address fragmentation that exists in teacher education.

SYMBOLIC BOUNDARY #2: UNIVERSITIES AND PK-12 SCHOOLS

University teacher preparation programs aim to prepare the next generation of teachers who can understand and select innovative teaching practices and skills based on empirical research (Detrich & Lewis, 2013). In order for these skills to be refined and redefined by the teacher candidates, they need to be provided with corresponding teaching opportunities in their PK-12 field placements (Scheeler et al., 2016). Ball and Forzani (2009) summarize this point well when they state, “Novices need opportunities to try out and experiment with support, aspects of complex practice, gradually increasing their complexity and reducing scaffolding” (Ball & Forzani, 2009, p. 504).

However, in the context of clinical preparation, teacher candidates often encounter boundaries between the teacher education program and the schools in which they complete their clinical practices (Andersson & Andersson, 2008; Edwards & Mutton, 2007; Finlay, 2008; Gorodetsky & Barak, 2008) or “dissonance between knowledge developed in the academic program and candidates’ experiences in the field placements” (Gambhir et al., 2008, p. 200). Specifically, such discontinuities can cause teacher candidates to struggle to navigate the differences between university coursework and expectations they face in their field placements. In turn, some learning contexts can become too “challenging,” resulting in disappointing field experiences for teacher candidates (Bullough & Draper, 2004). Others can be too “authentic” and present an overload of information (Ball & Cohen, 1999). Oftentimes what makes the clinical experience more challenging or too authentic is a result of a failed triad composed of a teacher candidate, public

school mentor, and university supervisor (Bullough & Draper, 2004).

In their teaching experiences, students are placed with mentors. However, these mentors often receive very little to no guidance on effective mentoring practices or ways to mentor teacher candidates aligned with the goals of particular teacher educator programs (Beck & Kosnik, 2002; Cuenca, 2011). Consequently, mentor teachers often rely on their own interpretation and conceptualization of what mentoring should be like based on their own experiences as students, teacher candidates, and in-service teachers (Jones & Straker, 2006). As a result, mentors interpret and enact their roles as mentors in vastly different ways (Feiman-Nemser, 2001; Shulman & Sato, 2006).

Further, there are complex dynamics between cooperating teachers and university mentors. Bullough and Draper (2004) closely observed the relationship dynamics of a teacher candidate, her mentor teacher, and the university supervisor who was a mathematics expert. The results of the study revealed that both the teacher candidate and the mentor teacher did not view the university professor as an expert. Rather, the mentor teacher perceived herself as an expert due to her extensive years of teaching in the field. The teacher candidate reported feeling torn between her mentor teacher and the university professor’s approach to teaching and learning, but ultimately followed her mentor teacher’s guidance which resonated with her style of teaching mathematics. The researchers reported that the teacher candidate “positioned herself as a confused and frustrated intern stuck between the contradictory demands of her mentor and her university professor” (Bullough & Draper, 2004, p. 417).

Even when the teaching practices emphasized in the methods courses are reflected in teacher candidates’ field placements, they might still be required to follow the teaching structure established at their placement with little to no room for student teachers to be involved in the decision-making processes (Hammermess et. al., 2005). Without adequate practice of implementing

the knowledge and skills learned and acquired in the university-based courses during their field experiences, teacher candidates may not develop the level of proficiency and fluency needed to internalize these newly acquired skills (Scheeler et al., 2016). Darling Hammond (2009, February) refers to this disconnection as the Achilles heel of teacher education and preparation. In response to this need, Lampert (2005, April) has postulated a continuum of practice settings that range from “virtual” to “designed.” This continuum argues that the structure of the student-teaching context varies in terms of how the participants in each setting interact directly and indirectly to provide opportunities for pre-service teachers’ development and learning of their craft (Ball & Forzani, 2009).

SUMMARY #2

Collaboration between cooperating teachers and university-based educators is key to bridging the learning context provided at the universities with teaching context in field placements. It is imperative that faculty from the teacher education programs and the faculty at PK-12 schools share expertise and integrate resources by crossing these “symbolic” boundaries in order to support and design field experiences that are carefully tailored and planned like campus-based courses. Although research on documenting the effectiveness of such an approach to prepare teacher candidates in the field (e.g., school-based courses) has been on the rise, this research is fairly limited to what extent these certain kinds of teacher education experiences impact teacher candidates’ learning in desired directions (Clift & Brady, 2005).

CONCLUSION

In this essay, we used Lamont and Molnár’s (2002) conceptualization of symbolic boundaries to explore two divides in the clinical preparation of teacher candidates: 1) between professional knowledge and skilled practice; and 2) between universities and PK-12 schools. As a joint American Association for Colleges of Teacher Education and National Education Association (2010) policy brief authored by Grossman argued, these boundaries must be bridged in order to

address the organizational and institutional fragmentation that exists in the clinical preparation of teacher candidates and to provide future teachers with the high-quality support they need to be successful educators.

This essay, while not a comprehensive survey of the literature, aimed to begin exploring what existing scholarship has to say about the two symbolic boundaries. Initial findings demonstrate that there are many different interpretations of what professional knowledge and skilled practice should look like and this may require bridging *within* the two concepts to reconcile the various definitions before we can bridge *between* the two concepts. In terms of the symbolic boundary between universities and PK-12 schools, initial findings suggest that the structure of student teaching experiences has deep roots in the cultures of universities and schools, and that collaboration between the two entities should be in place to maximize the potential of teacher candidates and student teaching. Overall, in order to create a “joining of forces around a common agenda” (Feiman-Nemser, 2001, p. 1020) between academic courses and field experiences, we assert that research scholars and practitioners must continue working to negotiate symbolic boundaries that account for the conceptual distinctions and various social actors involved in the clinical preparation of teacher candidates.

IMPLICATIONS FOR RESEARCH AND PRACTICE

Here we highlight three main implications for research and practice based on our understanding of the symbolic boundaries that exist in the clinical preparation of pre-service teachers. First, providing meaningful and targeted teaching and learning goals and experiences for teacher candidates is an important objective for teacher education programs (if not the most important). Accomplishing such a goal requires teacher education programs to design teaching and learning experiences that allow teacher candidates to use the professional knowledge they have gained through their university courses across multiple educational settings. Such design work requires teacher educators to bridge the symbolic

boundaries between professional knowledge and skilled practice and universities and PK-12 schools.

Currently, a number of teacher education programs are experimenting with creating different settings for teacher candidates to practice their teaching knowledge and skills. Such experiments include designing virtual classrooms, moving methods courses into school settings (Lampert & Graziani, 2005, March), professional development schools (PDSs) (Clift & Brady, 2005), and urban teacher residency programs (Solomon, 2009). In addressing the quality of clinical experiences through extensive research review, Zeichner (2010) determined that when teacher candidates' field experiences are well-curated with coursework and mentorship, "teacher educators are better able to accomplish their goals in preparing teachers to successfully enact complex teaching practices" (p. 95). Zeichner goes further in stating that clinical practice should promote a tight connection between coursework and fieldwork, mediated by an engaged faculty member, as a better alternative to the traditional, more distanced model of university-based pre-service teacher education.

Second, we believe that the symbolic boundary between professional knowledge and skilled practice feeds into the symbolic boundary between universities and schools. In other words, without a firm bridge between professional knowledge and skilled practice, it is less likely that the boundary between universities and PK-12 schools also can be crossed. Therefore, we assert that the boundaries themselves are connected to each other and can either "collapse" or "prop up" each other. Universities and school districts, then, should find effective ways to collaborate with in-service teachers by providing professional development opportunities to inform teachers of current and effective research and pedagogy in education. At the same time, this collaboration could provide university-based teacher educators with opportunities to *learn from* experienced practitioners to further ground the researchers' work in practice. Such collaborative efforts, we argue, could help bridge the institutions' approaches to teaching and learning and, therefore, send a more consistent message to

teacher candidates about what constitutes professional knowledge and skilled practice in teaching.

Third, each year, many teacher candidates spend a significant amount of time in field placements. Until early 2020, these field placements provided teacher candidates with opportunities to work with young students in a face-to-face format and observe mentor teachers in the classroom. The arrival of the COVID-19 pandemic, however, forced many schools to make a rapid and dramatic shift to online learning which, among other things, profoundly affected the way teacher candidates learned to teach. In light of this shift, the symbolic boundaries framework may help teacher education researchers and practitioners reconsider existing divides in teacher education to determine how these divides might be further bridged. Universities and PK-12 schools, for example, could reevaluate how teacher candidates are developing TPACK to better address the needs of young learners who have begun spending substantially more time learning in online academic spaces. The long-term effects of the COVID-19 pandemic on U.S. schools remain unknown, but the symbolic boundaries framework may help researchers and practitioners better understand how the pandemic has influenced or shifted existing divides. This knowledge, in turn, could help teacher educators determine how to effectively prepare today's teacher candidates for the challenges of PK-12 teaching. The pandemic, understandably, has heightened the importance of strong partnerships between PK-12 schools and teacher education programs.

This research essay represents a first step at exploring the symbolic boundaries between professional knowledge and skilled practice in teacher education, as well as between universities and PK-12 schools. Perhaps one key to bridging these boundaries is to understand that the boundaries are not mutually exclusive of each other, but rather, are connected. Therefore, bridging the symbolic boundaries requires collaboration among schools and universities at multiple levels. Bridging these symbolic boundaries will require establishing collective understandings

of what constitutes professional knowledge and skilled practice across university and PK-12 settings. Hopefully, such collaborations can minimize discrepancies and maximize teaching and learning opportunities for current and future educators.

REFERENCES

- American Association for Colleges of Teacher Education & National Education Association. (2010, May). *Learning to practice: The design of clinical experience in teacher education*. P. Grossman.
- Anagnostopoulos, D., Smith, E., & Basmadjian, K. (2007). Bridging the university-school divide: Horizontal expertise and the “two worlds pitfall.” *Journal of Teacher Education*, 58(2), 138-152. doi: 10.1177/0022487106297841
- Andersson, I., & Andersson, S. B. (2008). Conditions for boundary crossing: Social practices of newly qualified Swedish teachers. *Scandinavian Journal of Educational Research*, 52, 643-660. <https://doi.org/10.1080/00313830802497307>
- Anderson, M. J., & Freebody, K. (2012). Developing communities of praxis: Bridging the theory practice divide in teacher education. *McGill Journal of Education*, 47(3), 359-377. <https://doi.org/10.7202/1014864ar>
- Bacharach, N., Heck, T. W., & Dahlberg, K. (2010). Changing the face of student teaching through coteaching. *Action in Teacher Education*, 32(1), 3-14. <https://doi.org/10.1080/01626620.2010.10463538>
- Ball, D., & Cohen, D. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession* (pp. 3-32). Jossey-Bass.
- Ball, D., & Forzani, F. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60(5), 497-511. <https://doi.org/10.1177/0022487109348479>
- Ball, D. L., & Forzani, F. (2011, April). *Identifying high-leverage practices for teacher education* [Presentation] SHEEO, Chapel Hill, NC. Retrieved from http://www.teachingworks.org/images/files/2011_AERA.pdf
- Ball, D. L., Sleep, L., Boerst, T., & Bass, H. (2009). Combining the development of practice and the practice of development in teacher education. *The Elementary School Journal*, 109(5), 458-474. <https://doi.org/10.1086/596996>
- Ball, D. L., Thames, M. H., & Phelps, G. (2008). Content knowledge for teaching: What makes it special? *Journal of Teacher Education*, 59(5), 389-407. <https://doi.org/10.1177/0022487108324554>
- Beck, C., & Kosnik, C. (2002). Professors in the practicum: Involvement of university faculty in preservice practicum supervision. *Journal of Teacher Education*, 53(6), 6-19. <https://doi.org/10.1177/0022487102053001002>
- Broad, K., & Tessaro, M. (2009). Voices from the field: Associate teachers and teacher candidates in learning conversations. In T. Falkenberg & H. Smits (Eds.), *Field experiences in the context of reform of Canadian teacher education programs* (pp. 6778). Faculty of Education, University of Manitoba.
- Bullough, R., & Draper, R. J. (2004). Making sense of a failed triad: Mentors, university supervisors and positioning theory. *Journal of Teacher Education*, 55(5), 407-420. <https://doi.org/10.1177/0022487104269804>

- Clift, R., & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education* (pp. 309-424). Routledge.
- Cuenca, A. (2011). The role of legitimacy in student teaching: Learning to “feel” like a teacher. *Teacher Education Quarterly*, 39(2), 18–26.
- Darling-Hammond, L. (2006). Constructing 21st century teacher education. *Journal of Teacher Education* 57(3), 300-314. <https://doi.org/10.1177/0022487105285962>
- Darling-Hammond, L. (2009, February). *Teacher education and the American future* [Charles W. Hunt Lecture, Presentation] Annual Meeting of the American Association of Colleges for Teacher Education, Chicago.
- Detrich, R., & Lewis, T. (2013). A decade of evidenced-based education: Where are we and where do we need to go? *Journal of Positive Behavior Interventions*, 15(4), 214-220. <https://doi.org/10.1177/1098300712460278>
- Durkheim, E. (1965). *The elementary forms of religious life*. Free Press.
- Edwards, A., & Mutton, T. (2007). Looking forward: Rethinking professional learning through partnership arrangements in initial teacher education. *Oxford Review of Education*, 33(4), 503-519. <https://doi.org/10.1080/03054980701450928>
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055. <https://doi.org/10.1111/0161-4681.00141>
- Finlay, I. (2008). Learning through boundary crossing: Further education lecturers learning in both the university and workplace. *European Journal of Teacher Education*, 31(1), 73-87. <https://doi.org/10.1080/02619760701845024>
- Gambhir, M., Broad, K., Evans, M., & Gaskell, J. (2008). *Characterizing initial teacher education in Canada: Themes and issues*. Prepared for the International Alliance of Leading Education Institutes. <https://www.oise.utoronto.ca/guestid/ite/UserFiles/File/CharacterizingITE.pdf>
- Gorodetsky, M., & Barak, J. (2008). The educational-cultural edge: A participative learning environment for co-emergence of personal and institutional growth. *Teaching and Teacher Education*, 24(7), 1907-1918. <https://doi.org/10.1016/j.tate.2008.01.006>
- Graziani, F. (2005, April). *The pedagogical practice of the authoritative professional in professional education* [Paper presentation] Annual Meeting of the American Educational Research Association, Montreal, Canada.
- Gudmundsdottir, S., & Shulman, L. (1987). Pedagogical content knowledge in social studies. *Scandinavian Journal of Educational Research*, 31(2), 59-70.
- Gurvitch, R., & Metzler, M. (2009). The effects of laboratory-based and field-based practicum experience on pre-service teachers’ self-efficacy. *Teaching and Teacher Education*, 25(3), 437-443. <http://dx.doi.org/10.1016/j.tate.2008.08.006>
- Hammerness, K., Darling-Hammond, L., & Bransford, J. (2005). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp. 358-389). Jossey-Bass.
- Hiebert, J., & Morris, A. (2009). Building a knowledge base in teacher education: An experience in K-8 mathematics teacher preparation. *The Elementary School Journal*, 109(5), 475-490. <https://doi.org/10.1086/596997>

- Jones, M., & Straker, K. (2006). What informs mentors' practice when working with trainees and newly qualified teachers? An investigation into mentors' professional knowledge base. *Journal of Education for Teaching*, 32(2), 165–184. <https://doi.org/10.1080/02607470600655227>
- Korthagan, F., & Kessels, J. (1999). Linking theory and practice: Changing the pedagogy of teacher education. *Educational Researcher*, 28(4), 4–17. <https://doi.org/10.3102/0013189x028004004>
- Korthagan, F., & Wubbels, T. (2001). Learning from practice. In F. Korthagen, J. Kessels, D. Koster, B. Lagerwerf, & T. Wubbels (Eds.), *Linking practice and theory: The pedagogy of realistic teacher education* (pp. 32–50). Lawrence Erlbaum.
- Labaree, D. F. (1996). The trouble with ed schools. *The Journal of Educational Foundations* 10(3), 27–45.
- Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice*, 34(3), 159–165. <https://doi.org/10.1080/00405849509543675>
- Lamont, M., & Molnár, V. (2002). The study of boundaries in the social sciences. *Annual Review Sociology*, 28, 167–195.
- Lamont, M., Pendergrass, S., & Pachucki, M. (2015). Symbolic boundaries. In *International encyclopedia of the social & behavioral sciences* 23 (2nd Ed., pp. 850–855). Elsevier. <https://doi.org/10.1016/b978-0-08-097086-8.10416-7>
- Lampert, M. (2005, April). *Preparing teachers for ambitious instructional practice: Learning to listen and to construct an appropriate response* [Paper presentation] Annual Meeting of the American Educational Research Association, Montreal, Canada.
- Lampert, M. (2010). Learning teaching in, from, and for practice: What do we mean? *Journal of Teacher Education*, 61(1-2), 21–34. <https://doi.org/10.1177/0022487109347321>
- Lampert, M., & Graziani, F. (2005, March). *Unpacking practice: The pedagogies of learning from practice* [Paper presentation] Annual meeting of the American Educational Research Association, Montreal, Canada.
- Leinhardt, G., & Steele, M. (2005). Seeing the complexity of standing to the side: Instructional dialogues. *Cognition and Instruction*, 23(1), 87–163. https://doi.org/10.1207/s1532690xci2301_4
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93–97. <https://doi.org/10.3102/0013189x12441244>
- Paris, D., & Alim, H. S. (2014). What are we seeking to sustain in culturally sustaining pedagogy? A loving critique forward. *Harvard Educational Review*, 84(1), 85–100. <https://doi.org/10.17763/haer.84.1.9821873k2ht16m77>
- Powell, D. (2017). Brother, can you paradigm? Toward a theory of pedagogical content knowledge in social studies. *Journal of Teacher Education* [currently published in “online first” format]. doi: <https://doi.org/10.1177/0022487117708553>
- Scheeler, M. C., Budin, S., & Markelz, A. (2016). The role of teacher preparation in promoting evidence-based practice in schools. *Learning Disabilities: A Contemporary Journal*, 14(2), 171–187.

- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14. <https://doi.org/10.3102/0013189x015002004>
- Shulman, J. H., & Sato, M. (2006). *Mentoring teachers toward excellence: Supporting and developing highly qualified teachers*. Jossey-Bass.
- Solomon, J. (2009). The Boston Teacher Residency: District-based teacher education. *Journal of Teacher Education*, 60(5), 478-488. <https://doi.org/10.1177/0022487109349915>
- TeachingWorks, University of Michigan. (2018). *High-leverage practices*. Retrieved from <http://www.teachingworks.org/work-of-teaching/high-leverage-practices>
- Valencia, S., Martin, S., Place, N., & Grossman, P. (2009). Complex interactions in student teaching: Lost opportunities for learning. *Journal of Teacher Education*, 60(3), 304-322. <https://doi.org/10.1177/0022487109336543>
- Walsh, M., & Backe, S. (2013). School-university partnerships: Reflections and opportunities. *Journal of Education*, 88(5), 594-607. doi: 10.1080/0161956X.2013.835158
- Weber, M. (1978). *Economy and society*. University of California Press.
- Windschitl, M., Thompson, J., Braaten, M., & Stroupe, D. (2012). Proposing a core set of instructional practices and tools for teachers of science. *Science Education*, 96(5), 878-903. <https://doi.org/10.1002/sc.21027>
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college and university-based teacher education. *Journal of Teacher Education*, 61(1), 89-99. doi: 10.1177/0022487109347671

NOTES

¹The symbolic boundaries framework also builds on the work of scholars such as Durkheim (1965) who theorized “classification systems and their relationship with the moral order” and Weber (1978) who theorized “the production and reproduction of inequality” (Lamont et al., 2015, p. 850).

ABOUT THE AUTHORS

Bilge Cerezci, Ph.D., is assistant professor in Early Childhood Education at National Louis University. She began her career as an early childhood educator in Turkey. Cerezci moved to Chicago in 2007 to pursue graduate studies at the Erikson Institute and completed her master’s degree in child development with an infancy specialization in 2009. She was awarded her Ph.D. in applied child development from Loyola University Chicago in 2017. She has served as a faculty member at City Colleges of Chicago, Loyola University Chicago, and St. John’s University in New York. Her research focusing on early mathematics instruction and the quality of early math interactions between young children and early childhood teachers has appeared in numerous national and international academic journals including *Early Education and Development*, *Journal of Vincentian Social Action*, *Journal of Childhood, Education and Society*, and *Early Childhood Education*.

Donald R. McClure, Ph.D., is an Assistant Professor in the Department of Curriculum and Instruction at St. John’s University. His research interests span the areas of teacher education, social studies education, and international and comparative education. Prior to becoming a faculty member at St. John’s, McClure served as an elementary and middle school teacher for eight years in the United States and Ireland. He holds his Ph.D. in Curriculum, Instruction, and Teacher Education from Michigan State University; his M.Ed. from the University of Notre Dame; and his Bachelor of Music from Central Michigan University.