Advancing research and policy in teacher education since 1972

A publication of the California Council on Teacher Education

TEACHERS EDUCATION QUARTERLY

Spring 2016 Volume 43 Number 2

Teacher Education Quarterly

Spring 2016 ◆ Volume 43 ◆ Number 2

Published four times a year by Caddo Gap Press for the California Council on Teacher Education

Editor—Kip Tellez, University of California, Santa Cruz (2016) Associate Editor—Reyes Quezada, University of San Diego (2016)

Members of the Teacher Education Quarterly Editorial Board (in addition to the Editors):

Erica Bowers, California State University, Fullerton (2016)

Lynne Bercaw, California State University, Chico (2017)

Mary Christianakis, Occidental College (2016)

Tomás Galguera, Mills College (2018)

Pablo Ramirez, Arizona State University (2015)

Heidi Stevenson, University of the Pacific (2016)

Sharon Russell, CalStateTEACH (ex-officio) (2018)

Alan H. Jones, Caddo Gap Press (ex-officio) (2016)

Members of the Teacher Education Quarterly Advisory Board:

M. Beatriz Arias, Arizona State University

Robert V. Bullough, Jr., Brigham Young University

Linda Darling-Hammond, Stanford University

Ivor Goodson, Brighton University, United Kingdom

Geert Kelchtermans, Center for Educational Policy and Innovation,

Katholieke Universiteit Leuven, Belgium

John Loughran, Monash University, Australia

Carmen Montecinos, Pontifica Universidad Catolica de Valparaiso, Chile

Thomas Nelson, University of the Pacific

Jeannie Oakes, Ford Foundation

Virginia Richardson, University of Michigan

Tom Russell, Queen's University, Ontario, Canada

Frances Rust, University of Pennsylvania

Christine Sleeter, California State University, Monterey Bay

Jon David Snyder, Bank Street College of Education

Ana Maria Villegas, Montclair State University

Ken Zeichner, University of Washington

Published by Caddo Gap Press

Alan H. Jones, Publisher

3145 Geary Boulevard, PMB 275, San Francisco, California 94118 U.S.A.

Telephone 415/666-3012

E-mail info@caddogap.com

Web www.caddogap.com

Copyright 2016 by Caddo Gap Press ISSN 0737-5328

Annual Subscriptions—\$100 (individuals); \$200 (institutions)—see page 112 or online at Caddo Gap Press website at www.caddogap.com

Teacher Education Quarterly

To Our Panel of Readers

Dear Teacher Education Quarterly Readers,

Scholarly inquiry relies on thoughtful researchers conducting sound empirical investigation. Journals such as *Teacher Education Quarterly* offer a public space where the strongest of these works can be shared. In my role as editor, I am honored with the task of managing the process. But this entire enterprise comes to an abrupt and irreversible halt without volunteer reviewers who dedicate their time to review manuscripts. To my mind, volunteer reviewers are the lifeblood of scholarly journals, and *TEQ* is no different.

So I want to thank you, our reviewers, for your time and expertise by listing your names on our website (see http://teqjournal.org/TEQreviewer_list.html). This recognition, I admit, is entirely inadequate, but I want each and every one of you to know how much Associate Editor Reyes Quezada and the *TEQ* Editorial Board appreciate your work. Of course, authors submitting papers often disagree with your assessment, especially when your recommendation is that the paper is not worthy of publication, but this is how double-blind reviewing works, and it's the only way to ensure that only the best manuscripts are published.

If you are reading this volume and you are not yet a member of our reviewer team, please, *please* take a moment to register at http://www.teqjournal.org/ojs/index.php/TEQ/user/register. You'll be asked to review 1 or perhaps 2 manuscripts per year using our reviewer-friendly rating form. You'll find it professionally rewarding and personally engaging, I promise.

Kind regards, Kip

Kip Téllez, Editor, *Teacher Education Quarterly* Professor, Education Department, University of California, Santa Cruz ktellez@ucsc.edu



Volume 43 Number 2 Spring 2016

Contents

Secondary Teacher Candidates' Lesson Planning Learning Christina Santoyo & Shaoan Zhang	3
Identity Formation of LBOTE Preservice Teachers during the Practicum: A Case Study in Australia in an Urban High School	29
Beginning Teachers' Perceptions of the California Teaching Performance Assessment (TPA)	5 1
Conni Campbell, Carlos Cuauhtémoc Ayala, Gary Railsback, Frederick W. Freking, Corey McKenna, & David Lausch	
A Longitudinal Investigation of the Relationship between Teacher Preparation and Teacher Retention Guili Zhang & Nancy Zeller	73
Professional Identity Formation as a Framework in Working with Preservice Secondary Teacher Candidates Betina Hsieh	93
Teacher Education Quarterly Information for Authors	2
California Council on Teacher Education	28
Teacher Education Quarterly Subscription Information and Form	72

Teacher Education Quarterly

Information for Authors

Authors wishing to submit manuscripts for consideration for publication in *Teacher Education Quarterly* are asked to follow the instructions found at:

http://teqjournal.org/

The website offers all of the details for anonymizing the manuscript, etc.

For additional information, prospective authors may contact the editor:

Kip Telléz
Teacher Education Quarterly
Education Depoartment
University of California, Santa Cruz
1156 High Street
Santa Cruz, CA 95064

e-mail: ktellez@ucsc.edu



Secondary Teacher Candidates' Lesson Planning Learning

By Christina Santoyo & Shaoan Zhang

Teacher candidates (TCs) use clinical experiences to enact concepts taught in their university courses; therefore field experiences may be the most important component of teacher preparation (Hammerness et al., 2005). Although school-based teacher educators can be more influential in conceptual and procedural development than university courses (Rozelle & Wilson, 2012), the importance of concurrent university course work and field experiences is clear (Allsopp, DeMarie, Alvarez-McHatton, & Doone, 2006). Throughout course work and fieldwork, lesson planning—defined as developing tangible guides for interactions and outcomes (Ball, Knobloch, & Hoop, 2007)—can be overwhelming for new teachers (Jones, Jones, & Vermette, 2011). Teaching is grounded in the ability to design a lesson by understanding and utilizing resources, assessing the restrictions of the classroom, weighing options, and developing strategies (Brown, 2011). Therefore learning to plan lessons is essential to a TC's successful development as a teacher.

TCs require support and guidance as they learn to adapt curriculum materials for effective use in the classroom (Davis, 2006). They learn to lesson plan by negotiating the pros and cons of multiple methods while considering the needs of their students, their own knowledge, and their goals (Beyer & Davis, 2009). They tend to consider various ideas when planning (Davis, 2006), but these ideas are often

Christina Santoyo is a doctoral candidate in teacher education and Shaoan Zhang is an associate professor of teacher education, both with the Department of Teaching and Learning of the College of Education at the University of Nevada, Las Vegas. christina.santoyo@unlv.edu & shaoan.zhang@unlv.edu

narrow in focus (Beyer & Davis, 2009). Significant research has explored curricular planning by new and prospective teachers (Beyer & Davis, 2009; Courey, Tappe, Siker, & LePage, 2013; Davis, 2006; Jones et al., 2011). However, little research has investigated TCs'lesson planning through a concurrent focus on theories and concepts in a methods course and practices in a school-based context. This study challenges the misconception that methods courses and field experiences are dichotomous.

The goal of teacher education programs is to prepare TCs with knowledge, skills, and dispositions in teaching and learning. When these programs align university courses with field experiences through meaningful assignments, TCs may transfer their learning from the university to classroom practices (Gallego, 2001). However, TCs' learning has a limited impact on in-service practice (Grossman, Smagorinsky, & Valencia, 1999; Richardson, 1996). One reason may be that university-based teacher educators are distanced from school-based teacher education (Hughes, 2006); another reason may be a lack of university course work concepts present in school-based practice (Simmons et al., 1999). Exploring TCs' learning to lesson plan is significant in understanding the connection between school-based and university-based learning and between theory and practice. However, limited research has explored how TCs' field experiences enhance or hinder their planning.

The purpose of this study is to examine how secondary TCs in a general methods course and a school-based field experience learn lesson planning. It provides insight regarding the interactions of the TCs' methods course and first practicum experience. The general research question is, How do TCs' experiences in a concurrent practicum experience and methods course shape their lesson planning practices? Specifically, we investigate the following: (a) How does concurrent enrollment influence TCs' planning to use teacher-centered and student-centered methods? (b) How do university- and school-based contexts impact TCs' lesson planning choices?

Theoretical Framework

Dewey's (1938) experiential learning theory, expanded upon by Kolb (1984) and Zeichner (2010), guided us to see the impact of concurrent enrollment in a methods course and field experience on TCs' learning to lesson plan. Zeichner's (2010) concept of third space is particularly important in understanding the gap between university- and school-based contexts and in guiding discussion of the findings and significance of the study.

Experiential learning theory was developed by David Kolb as a philosophy of education based on Dewey's (1938) theory of experience. Experiential learning theory states that learning is a process that draws on prior knowledge and is thus always relearning; learning results from resolution of conflict and involves all aspects of a person's identity—thinking, feeling, perceiving, and behaving; and learning is a consequence of interactions between a person and the environment (Kolb & Kolb,

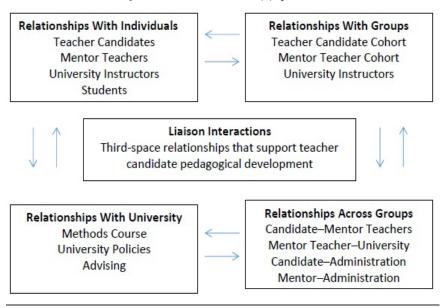
2005). Correspondingly, Kolb (1984) asserted that learning is a transformational knowledge-creation process in which "knowledge results from the combination of grasping and transforming experience" (p. 41).

Experiential learning, according to Kolb and Kolb (2005), is dependent on the learning environment. The concept of learning space views the learner and his or her environment as "interdependent variables" (p. 199); individuals learn through interaction with the environment, integrating theoretical knowledge and practical experiences. Zeichner's (2010) concept of third space, or hybrid spaces, elaborates on this understanding by asserting that "individuals draw on multiple discourses to make sense of the world" (p. 92). The goal of third space is to bring school-based and university-based teacher educators together in new ways to improve the teacher education experience in a nonhierarchical manner (Zeichner, 2010). Figure 1 shows the third-space environment that teacher education programs aim to achieve. In traditional programs, university faculty members are viewed as possessing the expertise as opposed to viewing the school-based teacher educators (mentor teachers) as experts.

In a third space, experiential learning is attained by creating spaces that encourage experiences that allow learners to grow (Kolb & Kolb, 2005). We argue that in

Figure I

Third-space interactions: Building and navigating relationships in partnerships. Adapted from "Navigating the Terrain of Third Space: Tensions Within Relationships in School-University Partnerships," by S. D. Martin, J. L. Snow, & C. A. Torrez, 2011, *Journal of Teacher Education*, 62(3), p. 306.



teacher education, experiential learning should occur in third-space contexts to help TCs apply theories in practice. These third spaces should be purposefully constructed with an understanding of the complex social contexts of both the university and the school site to create "transformative learning sites for TCs" (Martin, Snow, & Torrez, 2011, p. 308). The concept of third space must consider the relationships within the context as fundamental to the space's educative potential. Third spaces provide potential for nonhierarchical conversations among TCs and in-service teachers as well as university faculty (Levine, 2010). When third spaces are not present in teacher education settings, these conversations are not guaranteed.

Although experiential learning has the potential to contribute to TCs' learning, the alignment of school-based field experience and university courses is crucial (Darling-Hammond, Bransford, LePage, Hammerness, & Duffy, 2005; Dewey, 1938; Goodlad, 1990). The research questions for this study were designed to discover how practical lesson planning knowledge and choices are impacted by an experiential environment.

Literature Review

According to Beyer and Davis (2009), teachers negotiate curriculum and work actively to develop and enact a plan. This idea represents the thought behind most research on TCs' learning to plan lessons. The reviewed studies focus on the lesson planning process (Ball et al., 2007; Mutton, Hagger, & Burn, 2011; Tyler, 2013), the impact of educative supports on planning (Beyer & Davis, 2009; Courey et al., 2013), and how new teachers implement curricula (Jones et al., 2011; Ruys, Keer, & Aelterman, 2012). Additionally, extant literature related to teacher- and student-centered lesson plans and concurrent enrollment in field experiences and methods courses is reviewed.

The Lesson Planning Process

The traditional method of lesson planning influenced by Tyler (1950) includes four processes: (a) identifying the school's goals, (b) selecting methods and learning experiences to meet those goals, (c) organizing instructional experiences, and (d) assessing how effectively goals were met (Tyler, 2013). In other words, lesson planning follows the process of identifying an objective, planning to meet the objective, and assessing students' learning. This structure also involves making decisions while teaching and incorporating theories and beliefs (Ball et al., 2007). The tendency to follow a script when lesson planning may be due to the TCs' lack of contextualized knowledge (Mutton et al., 2011). Ball et al. (2007) found that intern and novice teachers followed similar processes in lesson planning. However, these findings contradict Tyler (2013), who found that TCs did not follow the objective—planning—assessment procedure. Most organized information that they

viewed as important; connected the curriculum to their students' lives and modified it for their needs; and considered the influences of scheduling, technology, other materials, and outside influences on instruction (Ball et al., 2007). The differences in planning techniques could be due to participants' development from practicum students to student teachers to novices.

Researchers have also studied educative supports and found that certain supports impact TCs' learning to lesson plan. Educative materials are curriculum resources intended to help teachers make decisions about lesson design (Beyer & Davis, 2009). There are two types of educative materials: general educative materials, which relate to multiple lessons, and lesson-specific materials, which focus on one principle of practice. Educative supports help teachers adapt their lesson plans to student needs by applying principles that relate to prior knowledge. Beyer and Davis found that lesson-specific materials were used more often without focusing on underlying principles, and general materials were adapted to multiple critiques of lesson plans. The universal design for learning (UDL) is one general educative strategy that aims to prepare teachers to design flexible instruction regarding presentation, eliciting student responses, and engaging and accommodating diverse students (Courey et al., 2013). One study found that incorporating UDL principles in lesson plans significantly improved after professional development (Courey et al., 2013). This finding suggests that training throughout the teacher education program using educative supports will help TCs implement new strategies.

Extant research has also focused on the implementation of curricula during field experiences. One study focusing on the implementation of collaborative learning in lesson plans found that while TCs have a basic understanding of group work and can develop collaborative learning tasks, they have less success when implementing the lessons (Ruys et al., 2012). Another study focused on mistakes made during lesson implementation. Through microteaching, Jones et al. (2011) discovered common mistakes that TCs make when implementing their lesson plans. These weaknesses relate to objectives, assessment, an inability to engage students for entire class periods, and focusing on factual rather than conceptual knowledge.

Planning for Teacher-Centered and Student-Centered Lessons

Although the importance of student-centered teaching methods in maintaining student engagement in the technology age has been demonstrated (Schlechty, 2001), studies have shown that TCs do not implement student-centered teaching methods successfully. Upon examination of 323 student-centered lesson plans, Ruys et al. (2012) found that TCs developed strengths in designing appropriate learning tasks and developing adequate learning materials, but their ability to establish social objectives, rules, and expectations for collaborative work was weak. Specifically, engaging students successfully in collaboration was challenging because of ineffective time planning.

These challenges may be one reason for TCs' preference for teacher-centered

lessons. Cohen and Zach (2013) explored whether using teacher-centered or student-centered lessons influences TCs' teaching efficacy. Results show that TCs in the teacher-centered group were more efficient than those in the student-centered group. Cohen and Zach explained that student-centered lessons require new strategies and skills, and the brief nature of teacher preparation hinders TCs' confidence development. Additionally, owing to a lack of experience and limited exposure to students, these situations may challenge TCs' ability to handle complex issues, such as lesson planning, management, and student participation. On the contrary, the teacher-centered TCs experienced fewer student-related issues and were more comfortable with their teaching abilities.

Complex situations in field experiences complicate TCs' lesson planning. Strangis, Pringle, and Knopf (2006) explored how preservice teachers in science methods courses planned lessons. One finding was that mentor teachers do not model lesson planning in a transparent way, so TCs do not see connections between the university course and their practicum. Strangis et al. explained that mentor teachers may have internalized the process and assumed that TCs should be able to lesson plan as they do. They suggested that university-based teacher educators and school mentors ensure continuity of practice from university to school classrooms.

Although teacher education programs hope to demonstrate both teacher-centered and student-centered methods, in practice, many TCs focus primarily on teacher-centered methods. Currently, a limited number of studies have demonstrated how teacher education programs can prepare TCs to integrate student-centered methods more successfully in field experiences.

Concurrent Enrollment in University Course Work and Fieldwork

Teacher education occurs in two distinct contexts, and often teacher educators assume that TCs can make connections between the contexts on their own (Feiman-Nemser & Buchmann, 1985). The existence of these two contexts (university-based and school-based settings) and the resulting assumptions is referred to as the "two-worlds pitfall" (Feiman-Nemser & Buchmann, 1985, p. 16). To overcome this pitfall, teacher educators must help TCs realize the link between theory or understanding and practice. TCs also need to learn how to judge their practices and "adapt them to particular settings as well as to their own capacities" (Feiman-Nemser & Buchmann, 1985, p. 17). To successfully combine theory and practice, concurrent enrollment in university course work and fieldwork is crucial.

According to Zeichner (2010), whose work is essential in understanding third space, "two of the most in-depth national studies of teacher education in the U.S. have shown that carefully constructed field experiences that are coordinated with campus courses" (p. 484) are more instrumental in TC learning than the traditionally separate field experiences. Darling-Hammond (2006) studied seven effective teacher education programs and found that one common feature that made them

effective was field experiences that "are carefully developed to support the ideas and practices presented in simultaneous, closely interwoven coursework" (p. 41). Tatto (1996) found that congruence between university and school expectations is influential in developing TCs' beliefs. Zeichner (2010) also cited several studies that demonstrated the detrimental effects of disconnected field experiences, including Feiman-Nemser and Buchmann (1985), Stones and Morris (1972), and Zeichner (1996). These studies demonstrated the importance of concurrent enrollment in field experiences and university course work.

Previous studies have investigated lesson planning or concurrent university- and school-based enrollment, but they did not study both lesson planning and concurrent enrollment. Therefore this study examined the lesson planning experiences of TCs in a concurrent university-based and school-based teacher education context.

Methods

This multiple case study (Yin, 2013) used observation, interview, and artifact analysis to examine how TCs' experiences while concurrently enrolled in a practicum experience and methods course shaped their lesson planning. We chose to investigate the research question using a multiple case study to gain an in-depth understanding of a bounded integrated system (Glesne, 2011). The overarching research question explored how TCs' concurrent enrollment in a practicum and methods course shaped their lesson planning. Specifically, the goal was to understand how university- and school-based contexts impacted TCs' planning choices and how concurrent enrollment influenced their planning to use teacher-centered and student-centered methods.

Participants and Context of the Study

We conducted our study at a mid-sized university in the southwestern United States in spring 2014. We selected participants using extreme case sampling (Baker, 2006) and chose multiple cases to allow an in-depth understanding of the candidates' experiences. The participants were four master's-level students concurrently enrolled in a practicum and methods course while seeking licensure in secondary education. Because of the current national teacher shortage (Ingersoll, Merrill, & May, 2014) and the increase in the number of nontraditional teacher education programs at the researched university, we elected to study an alternative route program. Although the findings may not generalize to traditional undergraduate teacher education, they will provide greater understanding of nontraditional TCs' learning to lesson plan.

The four TCs who participated in the study were enrolled in their first and only practicum experience, taken concurrently with a general methods course. One candidate who was enrolled in the methods course was excluded because she was not enrolled in her practicum. Three of the participants were studying science

education, and one was studying English education. Three participants were female and had no teaching experience, and the one male participant had 3 years of substitute teaching experience. The participants were students in a dual licensure and master's program: Megan in physics, Christy in biology, Shannon in English, and Mike in physics. Each of the participants had previous experience in another field before entering the teacher education program.

The course was a secondary education general methods course designed to examine effective teaching practices and theories. It focused on classroom organization, management, planning, contexts, and conditions as well as the school context and community. The course was selected because it is the first introduction to different types of general lesson planning as opposed to specific content area planning. The practicum experience in which the TCs were concurrently enrolled required attendance in a secondary classroom in their discipline (science or English) for 125 hours over the course of the semester. These requirements were completed by attending 3 hours each Tuesday and Thursday and 5 full days in the classroom for one semester. The TCs were required to coteach by planning and implementing at least five whole-class lessons with the aid of the methods course. All four candidates were placed in the same high school for their practicums, and mentor teachers were selected by the principal of the school.

The methods course instructor described his role in educating the TCs as answering questions and considering feedback, providing helpful suggestions, and being available to address concerns outside of class. He fulfilled this role through assignments and individual conferencing. The assignments related to lesson planning included curriculum analysis, individual lesson planning and peer editing, and a final unit plan. The goal of the curriculum analysis assignment was to help TCs understand the flow of planning, from standards to the delivery of objectives to formative and summative assessment. The lesson planning and peer editing assignments required TCs to write five lesson plans based on the instructional methods taught in the course and following a specified template. These instructional methods included (a) presenting and explaining, (b) direct instruction, (c) concept teaching, (d) cooperative learning, and (e) problem-based learning and inquiry. These lessons were written consecutively (moving from teacher centered to student centered), and each lesson plan was peer edited. Figure 2 shows the spectrum of teacher-centered to student-centered instruction. The unit plan was the culminating experience for the course: TCs created a cohesive 1- or 2-week unit utilizing specific standards and resources that was based on their revised lesson plans. All of the assignments were designed to help the TCs develop practical lessons to apply in a school-based context. Ideally, each of the five lessons developed in the course would be taught in the field, but this did not occur for any of the TCs (as further explained in the findings).

At the researched university, the school-based mentor's role in all field experiences was to meet collaboratively with the TC to discuss goals, objectives, and requirements of upcoming lessons. The mentors were required to give feedback

to the candidates before they performed the lesson. The nature of this feedback at the planning stage was not clarified by the university. While the TC presented the lesson, the mentor teacher was expected to observe and provide feedback. During the practicum, TCs worked with both the school-based and university-based teacher educators and were intended to learn to integrate lesson plans into the classroom through observation of and practice with their mentor teachers.

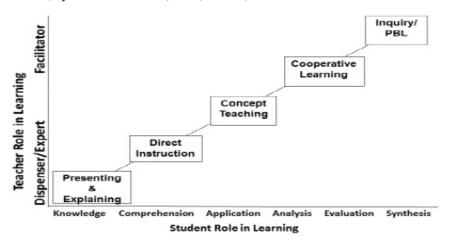
The practicum experience, intended during planning to be a third-space learning environment, was separate from the university setting in practice. While the university instructor and the researchers attempted to gain access to the school-based setting, none of the mentor teachers would allow access to their classrooms. They were all given the opportunity to participate, but none were willing to do so. Their apprehension demonstrates the difficulty in creating a true third space; while the university instructor attempted to successfully align his course with the practicum experience, he was met with barriers from the school-based mentors. Each mentor had a different set of expectations, and all of the information about the mentors came from TC self-report. Therefore the ideal third space that is discussed in the theoretical framework was not achieved; rather, concurrent enrollment with minimal alignment of course work and fieldwork occurred.

Data Sources

Multiple data sources were triangulated to acquire sound and sufficient information. Data included recorded semistructured, face-to-face interviews (see Appendix

Figure 2

Teacher-centered to student-centered spectrum. Adapted from *Learning to Teach*, 10th ed., by Richard I. Arends, 2015, Boston, MA: McGraw-Hill.



A) and field notes (Ryan & Bernard, 2003) taken during observation (see Appendix B). These data sources helped to answer the research question, How do TCs' experiences in a concurrent practicum experience and methods course shape their lesson planning practices and choices? Through observations of their methods course and conferences, the researchers were able to understand the methods being taught in the university course. Observation also helped us understand the instructor's view of the different purposes of student-centered and teacher-centered lessons as well as the different procedures or learning activities and assessments involved with each method.

Through interviews, we were able to understand the TCs' perceptions of their lesson planning choices, how the TCs perceived the goals and purposes of student-centered and teacher-centered lessons, which methods the TCs implemented in their lesson plans and their reasoning, and TCs' perceptions of the usefulness of concurrent enrollment. To ensure that TCs fully understood each of the teaching methods and their similarities and differences, we conducted only one interview at the end of the semester. However, being unable to collect primary data for school-based mentors weakens our ability to fully understand the TCs' success in implementing methods and how TCs learn to lesson plan in an ideal third space.

Data Collection

The first author conducted observations of the methods course throughout the 2014 spring semester, lasting approximately 2 hours and 45 minutes each. Additionally, the researcher observed six hour-long conferences between the instructor and the TCs and conducted four semistructured interviews with the TCs (Glesne, 2011), ensuring data triangulation. The work was also externally audited by another research participant (Glesne, 2011). The first author was shadowing the course and took on the role of participant observer to allow interaction with the TCs as a student as well as a student instructor.

Data Analysis

The data were coded using a hybrid inductive and deductive approach (Fereday & Muir-Cochrane, 2006). They were then analyzed thematically through repetition and similarities and differences (Ryan & Bernard, 2003). Deductive codes were developed through literature analysis to initially analyze the observations. These codes included broad terms such as mentoring, linkages, and confidence. Then, two rounds of coding were conducted using the interview data. During the first round of coding, general codes were developed inductively. The codes included presenting and explaining, direct instruction, concept teaching, cooperative learning, problem-based learning, inquiry, student learning, assessment, insecurity/struggles, confidence, mentor teacher roles, process, and course content. The second round of coding involved reorganizing the data into specific thematic codes. The new codes

developed into two themes: (a) teacher-centered and student-centered instruction and (b) the mentor's role in lesson planning.

Findings

The findings are organized into two themes: lesson plan approaches and the mentor's role in lesson planning. The findings in these themes suggest that TCs gain confidence through experiential learning in school-based contexts; success of a practicum program could depend on the mentor teachers encouraging their mentees to try new things during their preservice field experiences; TCs make fewer errors in lesson planning for teacher-centered lessons than for student-centered lessons; and TCs feel the need for a mentor, but their mentor teachers are not meeting the standards the students expect.

Lesson Plan Approaches: Teacher Centered or Student Centered?

The methods course focused on a spectrum of teaching approaches from teachers as experts who dispense information to teachers facilitating instruction. The six models taught in the course moved along the spectrum weekly; it began with teacher-centered models (presenting and explaining and direct instruction), which focus on factual knowledge, and it moved along the spectrum to more student-centered, conceptual models (concept teaching, collaborative learning, problem-based learning, and inquiry). The instructor discussed that student-centered instruction could be difficult for beginning teachers because it requires more planning, classroom management, time management, and reliance on students to take an active role in their learning.

Confidence in planning teacher-centered lessons. Similar to findings by Ball et al. (2007) and Tyler (2013), the lesson plan template provided by the methods course gave TCs structure and a common vocabulary to discuss issues in planning. Shannon explained that in learning to lesson plan, she followed a formula, starting with "this is what we're going to do today" (referring to the advanced organizer), followed by introducing a topic, lecturing, and then incorporating "an exercise or an activity." Finally, she would "wrap things up." For Shannon, understanding the "verbage" or common vocabulary from the course helped her explain her lesson planning procedure and gave her confidence in lesson implementation.

Following the model developed in the methods course, TCs used teacher-centered methods in their first lessons taught during the practicum. According to Megan, using direct instruction "felt OK. . . . There's one child who's in charge." At the beginning of the semester, she was not confident in her ability to plan and implement a teacher-centered lesson; she felt that her students held more power than she did. At the end of the semester, though, she stated,

I thought [direct instruction] was the most successful as a new teacher. . . . I think as I have more experience, my concept learning could be great. . . . Cooperative

learning, no that's going to take a couple years of teaching of classroom management and stuff like that under my belt.

Because Megan's mentor teacher encouraged her to focus on one method, by the end of the semester, she was confident in direct instruction. This finding demonstrates Cohen and Zach's (2013) claim that TCs are more confident when planning teacher-centered lessons.

During individual conferences between the methods course instructor and TCs that centered on lesson plan revisions, the instructor focused on minor details of teacher-centered lesson plans that needed clarification, such as clearer explanations of what the TC's role was as the teacher or what their students would be doing at a specific point in the lesson. The TCs had little trouble conceptualizing a lesson, and they were confident that their plans would translate well into the school-based setting. This finding aligns with Mutton et al. (2011), who found that TCs tend to follow a script because they lack experiential knowledge of how to incorporate lesson plans in the classroom.

When discussing more student-centered lessons during the conferences, the TCs corrected the issue of vagueness, but they had more difficulty understanding the methods. They found it difficult to conceptualize a thoughtful activity, or they misunderstood how to teach using the method. For her concept lesson (the third lesson plan and first student-centered lesson), Shannon stated that she found it "boring," and she could not think of a concept she wanted to teach. The instructor had to reexplain what a concept was and help Shannon brainstorm possible topics. Mike also struggled with his concept lesson in that he and the instructor did not agree on the difference between reflection and learning. For this method to be planned to the course specifications, students needed to explain how they learned the concept, not simply reflect on the concept. Shannon's and Mike's experiences with concept teaching support Jones et al.'s (2011) finding that new teachers often focus on factual rather than conceptual knowledge, which demonstrates a decreased confidence in planning for student-centered lessons.

Based on the conferences, TCs were most confident planning teacher-centered lessons and less confident using student-centered methods, again supporting findings by Cohen and Zach (2013). While major corrections were not required for the teacher-centered plans, they were required for student-centered plans. Christy, for example, needed to make significant changes to her student-centered cooperative learning lesson. In the lesson, she used a strategy called Numbered Heads Together (Arends, 2015). The instructor argued that this was only a strategy and did not suffice as an entire cooperative learning lesson. Facing challenges in engaging students in collaboration aligns with findings by Ruys et al. (2012). Christy had also forgotten to include a culminating summative assessment for her unit plan (which included all of the methods taught in the course). She explained that a lab she had used in the lesson would serve as the assessment, but there were pieces from the unit plan, primarily the cooperative learning and inquiry lessons, missing from the assessment. When discussing all of their lessons, the TCs tended to use

words like "successful" or "well" when referring to teacher-centered lessons, and they tended to use words such as "challenging" or "management" when referring to student-centered lessons. For example, Mike stated,

Making [the lesson] completely student-centered was a challenge. . . . It takes time to move toward a more student-centered based approach. You have to be comfortable with who you are and knowing that you can manage the class before you can move into more student-centered teaching.

Even Mike, the most experienced TC, was more confident with the teacher-centered methods. By challenging their lesson plan development and choices, the university-based teacher educator supported TCs to implement their lessons in the school-based context so that they gained confidence in implementing teacher-centered lessons.

Lesson implementation in classrooms. When asked which of their lesson plans they felt was most effective in their practicums, three of the TCs listed a teacher-centered lesson (presenting and explaining or direct instruction). Megan presented five lessons throughout her practicum, all of which were presenting and explaining or direct instruction. She said, "Going into practicum—I don't have any real teaching experience. . . . What I need is just time to get comfortable speaking in front of the class. At least for this year." Like most of the licensure program students, Megan entered the classroom as a second career. She was concerned about her lack of practice teaching and interacting with her students. Experiential learning, for her, should focus on practice in a school-based context. Christy also found success with teacher-centered instruction. For her direct instruction lesson, she taught the students about a math concept that was difficult for them. She stated that her direct instruction lesson was successful because

I gave them kind of like a hands-on thing they could manipulate, and \dots I showed them how to do it and then had them do it, and it worked out really well actually. They finally got it after like an entire year of not understanding how to do it.

Christy viewed this lesson as successful, and she defined success through experiential learning in the following way:

It worked, like I said, way better than I thought it would.... I thought they were going to get it like right away and it was going to be oversimplified, but it actually challenged them, which was even better because it made them think about it... it was just like the most rewarding thing I've ever done.... I probably had 90% of the kids understanding what was going on, which was amazing to me.

For Megan, Christy, and Shannon, the experience of using teacher-centered methods in practice gave them more confidence with those methods. Christy's explanation shows that success means that most of the students learn a concept and are able to apply it.

Although all of the TCs were required to create lesson plans for each method, the most experienced TC had more confidence than his colleagues in applying his knowledge of student-centered methods. Of the four participants, Mike was the

only one to use student-centered instruction in his school-based experience through cooperative learning. Mike described his experience as successful but encountered some challenges. He explained,

The actual approach to actually teaching it and just making it completely student centered was a challenge.... I mean all the prep happens outside of the classroom.... Once the class started, I mean, you're just kind of being the subject matter expert, advising.... I wasn't quite sure if the prep that you started and presented would actually work.... I didn't actually probably get it perfected until third period.

Mike's experience with teaching a collaborative (student-centered) lesson relates to Ruys et al.'s (2012) study that found that TCs have a basic understanding of group work and can develop tasks using collaborative learning, but they have less success when organizing and implementing student-centered lessons.

Despite the challenges, Mike felt that the collaborative lesson was successful. He stated that the real-world application of the lesson (using Pundit squares to determine probability) made it interesting for the students, which was instrumental in its success. He also claimed that being comfortable in one's classroom management ability is crucial to successful instruction. Mike has previous teaching experience and was the only participant who felt somewhat comfortable and successful when planning and teaching a student-centered lesson. He did, however, lack confidence in problem-based learning. He stated,

If you give a science person a choice between [problem-based learning] and inquiry, they're going to pick inquiry every time because that's what we do all the time. So I'm . . . I need to move to understand more like problem-based learning—I need to get more comfortable with that.

He explained that he was less comfortable with problem-based learning because the other methodologies are more "straight forward," and because problem-based learning is challenging, he is more likely to be reluctant to try it. This statement further elaborates on Ruys et al.'s (2012) finding that candidates lack confidence in implementing collaborative lessons.

As Christy stated, moving along the spectrum from teacher-centered to student-centered instruction requires more preparation, which creates uncertainty about the lesson. The experiential learning process took at least three class periods before Mike felt confident with the method. He also said that his content knowledge was challenged in "making sure that I had a clear understanding of how I wanted to articulate that on a level—at a freshman level—that I didn't give them too much information . . . information that they don't need." Mike needed to give the students enough direction to ensure success but not so much that it would be confusing.

All of the participants who were new to teaching avoided student-centered teaching approaches, and the one who had previous teaching experience discussed his reluctance to try a new and different approach. Shannon explained her reluc-

tance to try student-centered instruction by stating, "My most success as being a first-year teacher, even a second-year teacher, is going to be with those first type of methods . . . just because of the experience aspect of it." Even though they were given the tools to understand and try the more complicated and time-consuming methods in their university course, the TCs were reluctant to try those methods.

Although the TCs have a positive attitude toward the student-centered teaching approach, most of them chose to utilize teacher-centered lessons during their experiential learning. They believed that inexperience resulted in their reluctance to try to use student-centered teaching models. This finding reveals the gap between TCs' knowledge of learning and their lack of confidence in and support for implementing more challenging learning tasks in field experiences.

Mentorship in Lesson Planning

In addition to a focus on teacher- and student-centered methods, mentorship at the school site and in the university course was a common theme. TCs struggled with gaps between their mentor teachers' knowledge, skills, and practices and the methods focused on in their university course. However, they did believe that their mentors were proficient in teacher-centered strategies, and they viewed their university instructor as a positive mentor. The gap in methods at the university-based and school-based sites also demonstrates the lack of a third space.

School mentor support and modeling. Extant research has found that TCs require support and guidance (Davis, 2006) while negotiating the positive and negative aspects of multiple teaching methods and strategies and considering the needs of their students, their own knowledge, and their goals (Beyer & Davis, 2009). Mentor teachers at the school site can be integral in closing the gap between theories, concepts, and frameworks taught in university courses and the site-based experience when it comes to lesson planning, but not all TCs observed this in reality. Megan seemed to learn the most from her mentor teacher. Megan's mentor focused on lesson planning as a way to integrate past knowledge with what the students are currently learning and as a way to prepare students for future classes. Megan stated, "When he structures his instruction, he's always kind of looking forward. ... He knows the terminology from where they've come.... He always tells me, 'You want to ask questions that direct them to the conclusion you want them to get to." Megan was able to observe how an in-service teacher keeps past and future concepts in mind during instruction. Megan also discussed that he allowed her to choose lessons with which she was comfortable and to utilize all of his materials, and he gave her the ability and freedom to teach as often as possible.

Unfortunately, the area in which Megan felt most uncomfortable was student-centered instruction, and that was the area in which she felt least supported. During an observation, Megan stated that her mentor followed the same daily routine (direct instruction), and in her interview, she stated that he focused mostly on teacher-cen-

tered lectures because he had difficulty with classroom management. She explained that during student-centered instruction, her mentor teacher overlooked classroom management issues that Megan viewed as impeding student learning, such as texting in class or socializing. In addition to behavior problems, Megan stated that she felt uncomfortable in the classroom. She said, "It's still more their class. . . . I feel I'm only the visitor. You can't come in like—don't do that, be quiet, whatever—the heavy . . . that one has been a challenge all year." Megan's place in the classroom did not seem clear, and she struggled to feel like an authority figure in class. This feeling made student-centered instruction challenging because she already felt that she had little control. Megan's mentor teacher lacked the disposition to encourage Megan to try student-centered methods in the school-based context. These findings are consistent with Feiman-Nemser and Buchmann's (1985) discussion of the two-worlds pitfall. Megan did not feel like a member of the school community; therefore course work and fieldwork were not effectively interwoven (Darling-Hammond, 2006).

Unlike Megan, Shannon did not feel supported by her mentor teacher. While the mentor gave Shannon access to materials, she did not provide Shannon with direction. This lack of transparency in lesson planning supports findings by Strangis et al. (2006). When asked how her mentor teacher could have helped her, Shannon said, "Read the lesson plan? Read—give me feedback, and not do everything so quickly." Shannon went on to elaborate that she thought her mentor teacher was supposed to read her lessons and give her feedback and discuss how her lessons could be improved. She also stated, "I need direction at this point in my life. . . . I don't think I'm expected to know anything. . . . I used all my knowledge that I previously had. She didn't really teach me anything this semester." Shannon expressed a desire to learn and grow as a teacher, and the lack of support left her feeling frustrated.

Mentor knowledge. TCs tend to consider various ideas when planning (Davis, 2006), but these ideas are often narrow in focus (Beyer & Davis, 2009). Therefore it is crucial for mentors to support and guide TCs in learning to broaden their focus. For instance, unlike Megan, the other TCs did not feel that they learned much, if anything, about lesson planning from their mentor teachers, again supporting Strangis et al. (2006). Christy used the whiteboards that her mentor teacher had used previously to check for student understanding, but she did not plan with him. Therefore she could not benefit from his pedagogical content knowledge. Mike stated that his mentor teacher showed him the parameters of the lesson that he was going to teach and allowed him to select his topic but did not plan with him. For both Mike and Christy, being given the freedom to plan and teach without input from the mentor was the mentor's greatest contribution as opposed to their knowledge, skills, or dispositions.

While Mike and Christy did not express concern with the lack of input by their mentor teachers, Shannon found faults with the sample plans that hers provided. The mentor lent Shannon a mythology unit to help her plan a lesson for her ninth-grade class. Shannon stated,

It seemed like it should have been sixth grade. . . . I feel like she dumbs her students down . . . and I think that's where I draw the line right there with me and my mentor. . . . She's not demanding enough from them.

Shannon wanted to learn from her mentor's lesson planning and unit planning knowledge and experience, but she felt that the planning she observed was inadequate.

Even though most of the TCs felt that their mentor teachers' input was not valuable for their lesson planning, they felt comfortable asking questions of their mentor teachers and discussing issues with their methods course instructor. Because the TCs were mostly unable to look to their mentor teachers for guidance and knowledge, some of them looked to their methods instructor for mentorship. Shannon, for example, drew inspiration from him for her lesson planning. She explained, "He says, 'I show you these things that are exemplar like activities.' . . some people it pisses them off because I don't expect you to go [to] this level. Me, it's a challenge." Shannon viewed her instructor's methods as challenging her to create better lesson plans, which was the opposite of what she experienced with her mentor teacher. She received support and knowledge from her university instructor rather than her site-based mentor.

The findings in this section support extant literature that effective teacher education programs integrate course work and fieldwork (Darling-Hammond, 2006) and that often TCs are placed in two separate contexts (the two-worlds pitfall) rather than given a third space in which to learn (Feiman-Nemser & Buchmann, 1985). As a result, TCs did not have the opportunity to shadow their mentors as they taught student-centered lessons, and they did not develop confidence in planning and teaching student-centered lessons during their practicums. The findings demonstrate that a third space was not created because the university-based teacher educator wanted the TCs to experience the whole spectrum of methods, while the school-based mentors were less concerned with developing student-centered skills.

Discussion

Teacher-Centered Methods

On the basis of observations of the participants' methods course and our interviews with the four TCs and the methods course instructor, we found that TCs prefer teacher-centered instructional methods. They prefer these methods because (a) they were able to learn them more easily and therefore their confidence grew through implementing teacher-centered lessons and (b) their mentor teachers mainly utilized teacher-centered instruction. Similarly, student-centered lessons were used less often because TCs lack confidence, support, and modeling in those lessons. These findings support the research question, How does concurrent enrollment influence TCs' planning to use teacher-centered and student-centered methods?

The interview results indicate that TCs gain confidence in teacher-centered

lesson planning through concurrent enrollment in a university course and schoolbased context. This finding supports Jones et al. (2011), who found that new teachers tend to focus on factual rather than conceptual knowledge. Because of support from their university-based instruction, the TCs in this study were more confident in teacher-centered lessons and were more successful in planning and teaching them. As Courey et al. (2013) found, training with educative supports can influence participants to use specific principles in lesson planning and help them become more comfortable with practicing those concepts. The focus on teachercentered methods demonstrates the need for a third space environment where TCs can learn to lesson plan. Without this environment, there is—as Feiman-Nemser (2001) claimed—traditionally a feeble connection between course work and field experiences. The goal of concurrent enrollment is to change that relationship. However, this study found that while the methods course instructor placed equal emphasis on all teaching methods, the mentor teachers did not encourage TCs to practice student-centered methods. The TCs also may have valued a successfully taught lesson over a well-written student-centered lesson. During interviews, TCs defined a successful lesson as one that taught students the intended information and lacked classroom management issues. Gaining experience in teaching students may have been the most valuable aspect of their practicum experiences (as Megan stated); therefore they may have wanted to teach lessons in which they were more confident and avoid issues like classroom management.

Student-centered instruction was only used experientially by the TC with the most previous teaching experience. Although Mike was willing to try a studentcentered method, he was reluctant to try problem-based learning because he had little experience with it. As Ruys et al. (2012) found, TCs can develop tasks using collaborative learning, but they have less success in implementing student-centered lessons. This finding demonstrates the TCs' tendency to practice the methods with which they feel most confident. It suggests that university- and school-based teacher educators should attempt to create a third space in which TCs can learn to plan and teach student-centered lessons rather than allowing them to resort to the lesson plan approaches with which they are more comfortable. Mike's mentor teacher was uninvolved in the planning process, and this raises the question of whether more involvement might encourage Mike to push himself to try a new method. He understood the problem-based learning approach theoretically, but he did not have an experiential or circumstantial understanding. Feiman-Nemser and Buchmann (1985) demonstrated that to overcome the two-worlds pitfall and create a third space, TCs must understand the link between theory and practice.

TCs tend to follow a script until they have more experience teaching (Mutton et al., 2011), and having a mentor teacher who requires more adventurous teaching could help TCs abandon the script earlier. The success of a practicum could depend on the mentor teachers' willingness to be involved with TCs' learning and to encourage them to try new lessons. Although TCs were encouraged to try new

instructional techniques in their methods course, they were not confident in trying them in the school-based setting without support and modeling. The importance of a strong mentor in teacher education has been confirmed (Beyer & Davis, 2009; Davis, 2006), but a significant finding from this study is that mentors are also influential in encouraging TCs to attempt lessons that they are not confident in teaching.

The findings also suggest that the TCs feel the need for a mentor. The literature stated that two common mistakes TCs make are trying to cover too much information and an inability to keep students engaged (Jones et al., 2011). Having a mentor teacher who is involved in the TC's development could help correct those mistakes. However, mentor teachers are not meeting the standards the TCs expect. While this finding is not valid without any data from the mentors, we learned from the TC data that their expectations for their mentors are fulfilled through interactions with their university instructor.

Creating a Third Space

On the basis of the theoretical framework of third space, ideally, university-based and school-based teacher education would occur concurrently and nonhierarchically. The existence of this environment is addressed by the research question, How do university- and school-based contexts impact TCs' lesson planning choices? Although the goal of teacher education programs is to create the ideal third space, in practice, there are several concerns about the school-based context and mentors' willingness to work with the university instructor. According to the TCs, mentors lacked sufficient knowledge, skills, and dispositions to support their learning of student-centered instructional methods. The mentors did not have the anticipated opportunities to work collaboratively with the TCs and the university-based instructor, who viewed both student-centered and teacher-centered methods as crucial to the TCs' development as burgeoning teachers.

Experiential learning theory posits that learning is a transformational experience that occurs when a person connects theory and practice through interacting with his or her environment. Third space expands on this concept to include the importance of relationships in the educational context. These relationships should be nonhierarchical and should span the university- and school-based settings. The researched institution had yet to create the required nonhierarchical relationships. The university instructor and school-based mentor teachers neglected to communicate about the TCs' progress or the goals related to their lesson planning. Although the TCs were aware of their university instructor's view about the importance of learning multiple teaching methods, their mentor teachers did not appear to share this belief. Many of the TCs expressed the feeling that their mentor teachers and university instructor had different expectations for their lesson planning. This finding demonstrates that a third space was not created, although the program was developed with consideration of the theory; as a result, concurrent enrollment was

not as effective, as Darling-Hammond (2006) suggested it should be, at interweaving course work and fieldwork.

Implications for Teacher Education Programs

One implication of our findings relating to third space is that the university course design should be communicated to school-based mentors so that they not only know the assignments but also know the model of aligning the university course and field experiences. Additionally, to create a third space, mentor teachers must be trained to work closely with their TCs and university faculty members.

The study extends our understanding of challenges that TCs face in learning student-centered teaching methods and demonstrates the need for teacher education program reform that takes third space into consideration. This study is significant to the teacher education program in many ways. Feiman-Nemser (2001) stated, "Good teachers know about a range of approaches to curriculum, instruction, and assessment; and they have the judgment, skill, and understanding to decide what to use when" (p. 1018). Enrollment in a general methods course provides TCs with the theoretical knowledge of a range of teaching methods, and concurrent enrollment in the practicum experience should (with the aid of a motivating mentor teacher) provide them with judgment, skill, and understanding. The study suggests that the mentor teacher plays an integral role in which skills a TC utilizes in the field. Therefore it is not sufficient to offer a course that is aligned with the school-based field experience; rather, the significant alignment of course work and mentorship remains a daunting task in teacher education reform.

Grossman (2005) stated that the five prevalent approaches used in teacher education are (a) laboratory experiences, such as microteaching; (b) case methods; (c) video or hypermedia; (d) portfolios; and (e) practitioner research. In the general methods course, the case methods approach was the only one utilized. The study suggests that the university instructor should create more opportunities for TCs to practice student-centered methods through university-based approaches, such as microteaching, before implementing lessons in their practicums. Although laboratory experiences were not more effective than other approaches in increasing TCs' understanding, they have been found to increase TCs' self-confidence (Grossman, 2005). Therefore using microteaching to practice the student-centered instructional methods in the methods course before performing the lesson in the practicum could encourage TCs to try more student-centered methods. We suggest that TCs be offered more opportunities to apply the theories that they have learned from the university course, in both school-based and university-based contexts.

Finally, the study extends the understanding of third space, in which "individuals draw on multiple discourses to make sense of the world" (Zeichner, 2010, p. 92). The goal is to create an environment in which mentor teachers and university instructors work together. This study found that the traditional version

of teacher education was upheld, and a third space was not created for the TCs. They viewed the classroom and university as separate spaces and did not view implementation of lesson plans created for the course as important, although concurrent enrollment increased confidence in implementing teacher-centered lesson plans.

The motivation of this study was to determine how TCs learn lesson planning through enrollment in a methods course and practicum experience. The result was that TCs learn lesson planning through practical application of theoretical concepts learned in the methods course. Confidence is a major factor in TCs' willingness to apply knowledge in practice. There is a common understanding in teacher education that fieldwork is the most important part of teacher education (Hammerness et al., 2005). However, this study suggests that there was a weak connection between university- and school-based settings.

Further research is needed to understand the importance of concurrent enrollment, third-space environments, and TCs' learning to lesson plan. Research should be conducted to understand TCs' challenges in understanding and applying student-centered lessons. Also, more research in which mentor data are included is required. These data should include observations and interviews that focus on challenges mentors face in working with TCs in a third-space setting.

Conclusion

The purpose of this study was to examine how secondary TCs enrolled in a general methods course and field experience learn lesson planning. Through observations and interviews, the study provided insight into the impact on candidates' learning to lesson plan through the interaction of their methods course and practicum experiences.

The findings of this study show that TCs gain confidence in their lesson planning (primarily in teacher-centered methods) through concurrent enrollment in a practicum where they can practice their lessons; TCs' willingness to try new methods could be related to their mentor teachers' involvement with and encouragement of their mentees; TCs feel a need for a mentor; and the lesson planning supports utilized in the methods course did not encourage student-centered teaching methods. These findings imply that it is necessary to further design assignments to enhance student-centered teaching in the practicum experience as well as in the university class. Additionally, a third-space environment in which university- and school-based teacher educators work together is needed. More communication between the methods course instructor and the mentor teacher could assist in encouraging TCs to utilize student-centered methods in the practicum. An involved mentor who encourages the TCs to try new methods is crucial for their professional development. Learning to plan lessons is essential to a TC's success in learning to teach, and a strong relationship between the school and university is crucial to that learning.

Note

¹ All names are pseudonyms.

References

- Allsopp, D. H., DeMarie, D., Alvarez-McHatton, P., & Doone, E. (2006). Bridging the gap between theory and practice: Connecting courses with field experiences. *Teacher Education Quarterly*, 33(1), 19–35. Retrieved from http://files.eric.ed.gov/fulltext/EJ795196.pdf Arends, R. I. (2015). *Learning to teach* (10th ed.). Boston, MA: McGraw-Hill.
- Baker, L. (2006). Observation: A complex research method. *Library Trends*, 55(1), 171–189. doi:10.1353/lib.2006.0045
- Ball, A. L., Knobloch, N. A., & Hoop, S. (2007). The instructional planning experiences of beginning teachers. *Journal of Agricultural Education*, 48(2), 56–65. Retrieved from ERIC database. (EJ840106)
- Brown, M. W. (2011). The teacher–tool relationship: Theorizing the design and use of curriculum materials. In J. T. Remillard, B. A. Herbel-Eisenmann, & G. M.Lloyd (Eds.), *Mathematics teachers at work: Connecting curriculum materials and classroom instruction* (pp. 17–36). New York, NY: Routledge.
- Cohen, R., & Zach, S. (2013). Building pre-service teaching efficacy: A comparison of instructional models. *Physical Education and Sport Pedagogy*, 18(4), 376–388. doi: 10.1080/17408989.2012.690374
- Courey, S. J., Tappe, P., Siker, J., & LePage, P. (2013). Improved lesson planning with universal design for learning (UDL). *Teacher Education and Special Education*, 36(1), 7–27. doi:10.1177/0888406412446178
- Darling-Hammond, L. (2006). Powerful teacher education: Lessons from exemplary programs. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L., Bransford, J., LePage, P., Hammerness, K., & Duffy, H. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do.* San Francisco, CA: Jossey-Bass.
- Davis, E. A. (2006). Preservice elementary teachers' critique of instructional materials for science. Science Education, 90(2), 348–375. Retrieved from http://onlinelibrary.wiley. com/doi/10.1002/sce.20110/pdf
- Dewey, J. (1938). Education and experience. New York, NY: Simon & Schuster.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013–1055. Retrieved from http://www.brandeis.edu/mandel/questcase/Documents/Readings/Feiman_Nemser.pdf
- Feiman-Nemser, S., & Buchmann, M. (1985). Pitfalls of experience in teacher preparation. *Teachers College Record*, 87(1), 53–65. Retrieved from ERIC database. (ED237504)
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80–92. Retrieved from http://ejournals.library.ualberta.ca/index.php/IJQM/article/viewArticle/4411
- Gallego, M. A. (2001). Is experience the best teacher? The potential of coupling classroom and community-based field experiences. *Journal of Teacher Education*, 52(4), 312–325. doi:10.1177/0022487101052004005
- Glesne, C. (2011). Becoming qualitative researchers: An introduction (4th ed.). Boston,

- MA: Pearson Education.
- Goodlad, J. (1990). Teachers for our nation's schools. San Francisco, CA: Jossey-Bass.
- Grossman, P. (2005). Research on pedagogical approaches in teacher education. In M. Cochran-Smith & K. Zeichner (Eds.), Studying teacher education: The report of the AERA panel on research and teacher education (pp. 425–476). Mahwah, NJ: Lawrence Erlbaum Associates.
- Grossman, P., Smagorinsky, P., & Valencia, S. (1999). Appropriating tools for teaching English: A theoretical framework for research on learning to teach. *American Journal of Education*, 108(1), 1–29. Retrieved from http://www.researchgate.net/profile/Peter_Smagorinsky/publication/249120937_Appropriating_Tools_for_Teaching_English_A_Theoretical_Framework_for_Research_on_Learning_to_Teach/links/0deec53ac6d0f77aa2000000.pdf
- Hammerness, K., Darling-Hammond, L., Bransford, J., Berliner, D., Cochran-Smith, M., McDonald, M., & Zeichner, K. (2005). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 358–389). San Francisco, CA: Jossey-Bass.
- Hughes, J. A. (2006). Bridging the theory-practice divide: A creative approach to effective teacher preparation. *Journal of Scholarship and Teaching*, 6(1), 110–117. Retrieved from http://josotl.indiana.edu/article/download/1623/1622
- Ingersoll, R., Merrill, L., & May, H. (2014). What are the effects of teacher education and preparation on beginning teacher attrition? (Research Report No. RR-82). Philadelphia, PA: Consortium for Policy Research in Education, University of Pennsylvania. Retrieved from http://cpre.org/sites/default/files/researchreport/2018_prepeffects2014.pdf
- Jones, K. A., Jones, J., & Vermette, P. J. (2011). Six common lesson planning pitfalls: Recommendations for novice educators. *Education*, 131(4), 845–864. Retrieved from ProQuest database.
- Kolb, D. A. (1984). Experiential learning: Experiences as the source of learning and development. Upper Saddle River, NJ: Prentice Hall.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4, 193–212. doi:10.5465/AMLE.2005.17268566
- Levine, T. H. (2010). Tools for the study and design of collaborative teacher learning: The affordances of different conceptions of teacher community and activity theory. *Teacher Education Quarterly*, 37(1), 109–130. Retrieved from ERIC database. (EJ872652)
- Martin, S. D., Snow, J. L., & Torrez, C. A. F. (2011). Navigating the terrain of third space: Tensions within relationships in school-university partnerships. *Journal of Teacher Education*, 62(3), 299–311. Retrieved from http://scholarworks.boisestate.edu/cgi/viewcontent.cgi?article=1009&context=literacy_facpubs
- Mutton, T., Hagger, H., & Burn, K. (2011). Learning to plan, planning to learn: The developing expertise of beginning teachers. *Teachers and Teaching*, 17(4), 399–416. doi: 10.1080/13540602.2011.580516
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.), Handbook of research on teacher education (pp. 102–119). New York, NY: MacMillan Library Reference.
- Rozelle, J. J., & Wilson, S. M. (2012). Opening the black box of field experiences: How cooperating teachers' beliefs and practices shape student teachers' beliefs and practices. *Teaching and Teacher Education*, 28(8), 1196–1205. doi:10.1016/j.tate.2012.07.008
- Ruys, I., van Keer, H., & Aelterman, A. (2012). Examining pre-service teacher competence

- in lesson planning pertaining to collaborative learning. *Journal of Curriculum Studies*, 44(3), 349–379. doi:10.1080/00220272.2012.675355
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. Field Methods, 15(1), 85–109. Retrieved from http://research.fit.edu/sealevelriselibrary/documents/doc_mgr/922/Ryan_et_al._2003._Techniques_to_Identify_Themes.pdf
- Schlechty, P. C. (2001). Shaking up the schoolhouse: How to support and sustain educational innovation. San Francisco, CA: Jossey-Bass.
- Simmons, P. E., Emory, A., Carter, T., Coker, T., Finnegan, B., Crockett, D., . . . Labuda, K. (1999). Beginning teachers: Beliefs and classroom actions. *Journal of Research in Science Teaching*, 36(8), 930–954. doi:10.1002/(SICI)1098-2736(199910)36:8<930::AID-TEA3>3.0.CO:2-N
- Stones, E., & Morris, S. (1972). Teaching practice: Problems and perspectives—A reappraisal of the practical professional element in teacher preparation. London, UK: Methuen.
- Strangis, D., Pringle, R., & Knopf, H. (2006). Road map or roadblock? Science lesson planning and preservice teachers. *Action in Teacher Education*, 28(1), 73–84. doi: 10.1080/01626620.2006.10463568
- Tatto, M. T. (1996). Examining values and beliefs about teaching diverse students: Understanding the challenges for teacher education. *Educational Evaluation and Policy Analysis*, 18(2), 155–180. doi:10.3102/01623737018002155
- Tyler, R. W. (1950). Basic principles of curriculum and instruction, syllabus for education 360. Chicago, IL: University of Chicago Press.
- Tyler, R. W. (2013). Basic principles of curriculum and instruction. Chicago, IL: University of Chicago Press.
- Yin, R. K. (2013). Case study research: Design and methods. Thousand Oaks, CA: Sage.
- Zeichner, K. (1996). Designing educative practicum experiences for prospective teachers. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), Currents of reform in pre-service teacher education (pp. 215–234). New York, NY: Teachers College Press.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61(1–2), 89–99. doi:10.1177/0022487109347671

Appendix A

Interview Questions

Interview of TCs' Lesson Planning During Practicum

Directions: This interview includes eight questions that will help the researchers understand how TCs learn to teach in a context where the methods course and the practicum are combined.

- 1. Describe a method you used most successfully in your practicum during (methods) (Presenting and Explaining, Direct Instruction, Concept Teaching, Cooperative Learning, Problem-Based Learning, or Inquiry-Based Learning).
- 2. Why do you think it was a successful lesson? What challenged you most in planning and teaching this lesson?
- 3. What do you think your students learned from this lesson? How did you come to this conclusion?

Christina Santoyo & Shaoan Zhang

- 4. Please describe what challenged you most when you planned this lesson regarding content knowledge, pedagogical content knowledge, and general pedagogy. Also, describe what challenged you regarding classroom management knowledge, assessment knowledge, and student learning knowledge. How did you manage to overcome your challenges?
- 5. What did your mentor teacher at your school site do to help you plan and teach this lesson successfully?
- 6. How could your mentor teacher have helped you better plan and teach this lesson?
- 7. What activities and assignments in (methods) helped you plan and teach the lesson?
- 8. What experiences do you think that you need more of in the (methods) course to better prepare you to teach this lesson?

Appendix B

Observation Protocol

Time	Speaker	Method	Notes	Quotes
7:45 p.m.	Instructor	Direct Instruction	Discussion of lesson planning: • Establishing set	"What if there are no steps?" (Mike)
			(state objectives; pull them in with a hook)	"Then it's not procedural knowledge."
			• Demonstration of knowledge (steps I will demonstrate must be present)	"Just because it sounds elementary to you doesn't mean it will be to your students."
			• Guided practice (we do; working through the steps	"You are teaching them how to do something."
			with them) • Check for understanding and provide feedback (if you do it with guided practice, must be stated explice • Extended practice/ independent (can be in homework; must be stated explicitly	"In the classroom you'll probably do them together." (Presentation and Direct Instruction)
7:52 p.m.	Megan	Direct Instruction	Used exit ticket as independent practice	"That's how I know they actually did something."

Information on the California Council on Teacher Education

Founded in 1945, the California Council on the Education of Teachers (now the California Council on Teacher Education as of July 2001) is a non-profit organization devoted to stimulating the improvement of the preservice and inservice education of teachers and administrators. The Council attends to this general goal with the support of a community of teacher educators, drawn from diverse constituencies, who seek to be informed, reflective, and active regarding significant research, sound practice, and current public educational issues.

Membership in the California Council on Teacher Education can be either institutional or individual. Colleges and universities with credential programs, professional organizations with interests in the preparation of teachers, school districts and public agencies in the field of education, and individuals involved in or concerned about the field are encouraged to join. Membership entitles one to participation in semi-annual spring and fall conferences, subscription to *Teacher Education Quarterly* and *Issues in Teacher Education*, newsletters on timely issues, an informal network for sharing sound practices in teacher education, and involvement in annual awards and recognitions in the field.

The semi-annual conferences of the California Council on Teacher Education, rotated each year between sites in northern and southern California, feature significant themes in the field of education, highlight prominent speakers, afford opportunities for presentation of research and discussion of promising practices, and consider current and future policy issues in the field.

For information about or membership in the California Council on Teacher Education, please contact: Alan H. Jones, Executive Secretary, California Council on Teacher Education, Caddo Gap Press, 3145 Geary Boulevard, PMB 275, San Francisco, California 94118; telephone 415/666-3012; email <caddogap@aol.com>; website <www.ccte.org>.

The next semi-annual conference of the California Council on Teacher Education will be:

October 20-22, 2016, Kona Kai Resort, San Diego



Identity Formation of LBOTE Preservice Teachers during the Practicum:

A Case Study in Australia in an Urban High School

By Hoa Thi Mai Nguyen & Lynn Sheridan

The increase in the number of language background other than English (LBOTE) students entering teacher education in Australia offers a challenge for teacher educators (Cruickshank, Newell, & Cole, 2003; Fan & Le, 2009; Han, 2005; Premier & Miller, 2010). For many LBOTE preservice teachers, the practicum experience is seen as both professionally challenging and personally frustrating and often results in an erosion of confidence of teaching competence (Danyluk, 2013; M. H. Nguyen, 2014; Yoon, 2012). Teacher educators must understand and allow for the LBOTE preservice teachers' experience in Australian schools to assist in the development of a healthy teacher identity. Although several studies to date have examined the general experiences of LBOTE preservice teachers (Cruickshank et al., 2003; Fan & Le, 2009; M. H. Nguyen, 2014; Sawir, 2005), none have specifically examined the impact of teaching practice on identity formation. The development of teacher identity is a critically important component of the learning-to-teach process (Beauchamp

Hoa Thi Mai Nguyen is a lecturer in the School of Education at the University of New South Wales, Sydney, New South Wales, Australia. Lynn Sheridan is a senior lecturer in the School of Education at the University of Wollongong, Wollongong, New South Wales, Australia. hoa.nguyen@unsw.edu.au & lynns@uow.edu.au

& Thomas, 2009; Kanno & Stuart, 2011), directly linked to teacher performance and growth. Bullough (1997) has emphasized that "teacher identity, the beginning teacher's beliefs about teaching, learning and self-as-a-teacher, is a vital concern to teacher education as it is the basis for meaning making and decision making" (p. 21).

This study captures the experiences of LBOTE preservice teachers using a case study approach to explore identity development. Wenger's (2000) "modes of belonging" form the theoretical framework to develop an understanding of the factors contributing to teacher identity. This article draws on in-depth interviews of two participants. The discussion of the findings aims to contribute to a further understanding of the formation of LBOTE preservice teacher identity within the Australian experience. More specifically, the study aims to answer the following research questions:

- 1. How does the LBOTE preservice teacher develop his or her teacher identity?
- 2. What factors affect the quality of this identity formation during the professional experience with reference to Wenger's matrix?

LBOTE Preservice Teacher Identity

A complex issue in the determination of teacher identity exists around the interrelationship between identity and the notion of self. Beauchamp and Thomas (2009) referred to this as understanding self within the outside context, such as a classroom or school. Thus the LBOTE preservice teacher's identity is "shaped and reshaped in interaction with others in a professional teaching context" (p. 178). It is during the practicum experience that the LBOTE preservice teacher's identity and teacher agency are continually influenced by ongoing engagement in the structural and cultural features of a school (Datnow, Hubbard, & Mehen, 2002). Lauriala and Kukkone's (2005) model of identity views the notion of "self" as composed of three personal dimensions: the actual self, the ought self, and the ideal self. The dynamic interactions among the different selves are useful in helping us to think about the identity development of the LBOTE preservice teacher. It is during the practicum experience that this connection between the personal dimension of self (linked to culture and background) and the professional self (preservice teaching) becomes important in teacher identity development.

The practicum experience, which provides the opportunity to link theory to practice within the school context, is based on a standard model for all preservice teachers. However, the standardization of mentoring assumes that "one size fits all," when it is clear that different capabilities may be exhibited by the LBOTE preservice teachers. Cultural and contextual factors may explain different responses in dialogue: directness or lack of directness in conversation (Fitch & Saunders, 1994; Strong & Baron, 2004). Differences in modes of spoken English may lead

to misunderstandings and misinterpretations in the mentoring relationship (Hyland & Lo, 2006). An example is the more direct style of Western speakers compared to Asian cultures where there is a preference for a more indirect, implicit style of speaking, with a concern for maintaining cohesion and harmony (Hall, 1971; Triandis, 1995). Supporting this argument, Le (2007) found that Vietnamese mentors "tended to dominate the feedback interaction more than their counterparts in the US context, and there was also a lack of politeness in suggestions and their advice" (p. 213).

Differences in power relationships during the practicum can also be attributed to cultural norms and expectations. Viewed from a Chinese cultural perspective, the teacher is seen as a hierarchical authority figure whose opinions should be respected and not openly questioned (Hyland & Lo, 2006). For instance, Nguyen and Hudson (2012) found that preservice teachers in a Confucian heritage culture, such as the Vietnamese culture, try to avoid conflicts and are hesitant to criticize or challenge their mentors during the practicum. The LBOTE preservice teacher may be reluctant to raise questions if he or she disagrees or misunderstands a point and may not challenge feedback or seek clarification from a mentor (Wang & Paine, 2002).

The LBOTE preservice teacher's emotions and feelings are fluid and influenced by the way certain situations are perceived and are often based on his or her cultural values, beliefs, and sense of competency (Stroll, 1999). Professional self-belief, identity, and personal vulnerability are closely interwoven with emotional vulnerability and sense of confidence. This self-belief is linked to experiences of openness and trust during the practicum and impacts learning and relationship building (Lasky, 2005). For the LBOTE preservice teacher, trust and collaboration are essential in the relationship. He or she will not risk "losing face" and may experience loss or pain (Lasky, 2005). Feelings of vulnerability can lead to a sense of powerlessness, betrayal, or defenselessness, a "lack of control" when forced to act in a way that is inconsistent with his or her core beliefs and values (Korthagen, Kessels, Koster, Lagerwerf, & Wubbles, 2001). The emotions that preservice teachers experience may "expand or limit the possibilities" in teaching (Zembylas, 2003, p. 122).

Learning to teach in a new environment, culture, and language is a complex undertaking. Wenger (1998) viewed connecting the personal and professional selves as linking teacher identity with practice. For the LBOTE preservice teacher, this linking can be a challenging process beginning with participation in a new sociocultural and contextual space (Johnson, 2009; Johnson & Golombek, 2011). The preservice teacher's personal and professional selves are influenced by sociocultural factors and the inherent contradictions within the different contexts (M. H. Nguyen, 2014) and their own life experiences in teaching and learning (Rogers & Scott, 2008; Sachs, 2005). For the LBOTE preservice teacher, contextual factors can either promote or hinder construction of teacher identity; it is a "constantly evolving phenomenon involving both a person and a context" (Beauchamp & Thomas, 2009, p. 177).

Teacher mentoring practices are socially constructed and relational with

strengths and limitations reflected in the practicum (Butler & Cuenca, 2012). For the LBOTE preservice teacher, cultural awareness and understanding are important in deepening the mentoring relationship. Intercultural empathy, competence, sensitivity, and mutual understandings within the school require teachers to have the ability to work with people from different cultures with openness and cultural empathy (Gokturk & Arslan, 2010; Kent, 2013; Kochan & Pascarelli, 2012). In addition, the LBOTE preservice teachers may benefit from the use of reflection as a mentoring activity, with prospective reflection—"reflection for action"—assisting in making explicit links between current teacher actions and future teaching situations (Urzúa & Vásquez, 2008). However, oral and written language difficulties together with affective factors arising from different social and cultural backgrounds can place significant limitations on LBOTE preservice teachers' reflection (Hourani, 2013). It is interesting to note that research suggests that mentoring in the school environment may at times reduce reflectivity by openly or subtly implementing an imposed cultural, political, or organizational agenda that impinges upon teachers' self-identity and/or cultural value systems (Enomoto, Gardiner, & Grogan, 2002). Cross-cultural mentoring can succeed as long as the mentor and mentee are both committed to the relationship, are open and sensitive to differences, and the purpose for mentoring is made explicit (Kent, 2013; Stanley & Lincoln, 2005)

Teacher mentors are often viewed as gatekeepers to the profession; practicums are viewed as high-stakes training, with face-to-face feedback potentially both supportive and threatening for LBOTE preservice teachers (Roberts, as cited in Hyland & Lo, 2006). The complexity of interpersonal relations is increased when practicum negotiations are carried out in the student's second language (Hyland & Lo, 2006).

Theoretical Background

This study uses the theory of *communities of practice* (Wenger, 1998) to understand the process and identify those factors that either promote or inhibit the formation of teacher identity for LBOTE preservice teachers. The importance of identity on teacher development has been extensively described in the literature (Hoban, 2007; Olsen, 2008; Sachs, 2005). The concept of teacher identity and formation is complex and dynamic with tensions and contradictions (Olsen, 2008). In a critical review of studies, Akkerman and Meijer (2011) defined teacher identity as "an ongoing process of negotiating and interrelating multiple I-positions in such a way that a more or less coherent and consistent sense of self is maintained throughout various participations and self-investments in one's (working) life" (p. 315). In Wenger's (1998) view, professional identity formation is an ongoing process of framing and reframing through experience and interactions with the member community.

In a review of identity studies, Beijaard, Meijer, and Verloop (2004) expressed a concern that in most studies, the concepts of professional identity were defined

differently or not defined at all and called for studies that offer methodological implications of research on teachers' professional identity. Various frameworks (e.g., Fairclough, 2003; Gee, 2000) for describing teacher identity have been conceptualized across the different theoretical approaches. Wenger (1998) described a community of practice as a group of people who share a concern or a passion for doing and learning together as they regularly interact. He emphasized that members of a community of practice mutually construct their identity through participating in the community. Wenger's argument links identity with practice where identity involves a complex set of relations in a community. It is appropriate to use this framework to study teachers' professional identity, as teachers are part of a school community of practice. By participating in a professional community, a teacher can be influenced by the community impacting their developing identity (Clarke, 2008; Danielewicz, 2001; Kwan & Lopez-Real, 2010; Tsui, 2007).

Wenger's Modes of Belonging

Wenger (2000, pp. 227–228) explored identity construction as "an experience" in terms of modes of belonging in social learning. These modes are considered the three attributes of a learner's identity and are necessary for healthy development:

- A1. Engagement: Doing things together, through which the participants can lay a foundation for joint enterprise and negotiation of meaning.
- A2. Imagination: Relating an image of ourselves to the world beyond the community of practice.
- A3. Alignment: Local activities become sufficiently aligned with other processes such that they can be effective beyond our own engagement.

This study explores the contributions to and the quality of identity that emerge from the interactions between the preservice teachers within the school context. As Wenger (2000) argued, "our identities are not necessarily strong or healthy. Sometimes, they are even self-defeating" (p. 239). In further clarification of a "healthy" identity, Wenger described three qualities of a learner's identity requisite for healthy development:

- B1. Connectedness: Involves personal connections with others sharing histories, experiences, and commitments.
- B2. Expansiveness: The extension of the relationships across communities.
- B3. Effectiveness: The participating of and in the social world of teaching and schools.

Wenger (2000) combined these qualities with the three modes of belonging into a matrix structure. Table 1 offers a model for our analysis on the participatory aspects of the construction of LBOTE teacher identity.

Research Design

This study uses a qualitative, case study research design following Yin (2003) to explore the experiences of two LBOTE preservice teachers during their practicums. This article explores how preservice teachers develop their professional learning with data collected during the practicum blocks from master of teaching cohorts in two leading Australian universities. Ethics was sought and approved for this study, with all participants deidentified.

Participants

The participants were volunteers from some 200 preservice teachers in two teacher education programs. More than one-third of the cohort identified as LBOTE

Table I
Key Questions for Matrix of Identity Dimensions for LBOTE Preservice Teachers

		Quality of identity	
Mode of belonging	B1: Connectedness	B2: Expansiveness	B3: Effectiveness
A1: Engagement	How does one's engagement within a school practicum contribute to forming deep connections with the mentor and others during the school practicum experience?	How does one's engagement within a school practicum experience contribute to interactions with others in the school practicum environmnt?	How does one's engagement within a school practicum experience contribute to effective action and participation within the school and classroom?
A2: Imagination	How does one's image of self and communit help toward forming deep connections with the mentor and others during the school practicum?	How does one's image of self and community help toward creating interactions with others in the school practicum environment?	How does one's image of self and community contribute to effective action and participation within the school and classroom?
A3: Alignment	How do established alignments contribute to forming deep connections with the mentor and others during the school practicum?	How do established alignments help toward creating interactions with others in the school practicum environment?	How do established alignments contribute to effective action and participation within the school and classroom?

Note. Based on Wenger (2000, p. 240) and Kwan and Lopez-Real (2010, p. 731).

in some form, for example, as international students, new migrants, refugees, or first-generation migrants. Those participants who had previously found professional experience challenging were most keen to take part in the research, seeing it as an opportunity to reflect on their experiences.

Participant 1: Laura. Laura's background is Korean. She completed her secondary school studies and bachelor of science (mathematics major) in Australia. Laura had some experience in tutoring but had never taught in a school and is a shy and reserved student, yet she is passionate about teaching. Laura's practicums were at large metropolitan boys and girls in single-sex state high schools. Both of her schools are considered multicultural.

Participant 2: Lee. Lee's background is Hong Kong Chinese. She is in her 30s. Lee completed her high schooling and undergraduate degree in linguistics in Hong Kong and is now retraining as a secondary teacher in TESOL and Chinese. Lee completed her practicums in an independent and a government school. Both of the schools are considered multicultural.

Data Collection

Data consist of individual semistructured interviews of the participants conducted after a teaching segment (post teaching interviews) and follow-up interviews at the conclusion of their practicums. The interview questions focused on their teaching and mentoring experiences during the practicums. In the interviews, facilitated by the researchers, the preservice teachers were asked to outline their experiences and interactions and how working with their peers and teacher mentors impacted their lesson planning and delivery. Both researchers were familiar with the value issues that arose during the practicums and were sensitive to these issues when conducting the interviews. To check for the reliability of the coding of the two transcripts, ratings of high and low importance were given and compared and reviewed for differences (Miles & Huberman, 1994). After a discussion of the coding and importance ratings, the researchers coded a third transcript independently and had 80% agreement on the code allocation and importance ratings.

All interviews were voluntary and were recorded and transcribed verbatim. These interviews occurred with 28 preservice teachers. However, findings for this article were derived from interviews with two of the volunteer participants because they reflected the range of views of the LBOTE preservice teachers in the study and clearly illustrated Wenger's (2000) identity dimensions.

Data Analysis: Case Studies I and 2

The analytical method was informed by Kwan and Lopez-Real's (2010) research. Data analysis was conducted by within-case analysis (Merrian, 1998). Using within-case analysis, the researchers first coded the entire data set separately

on each participant. Following Kwan and Lopez-Real's (2010) methods, a full transcript was read three times, and data relating to the three modes of belonging and the three qualities of identity were extracted as key themes to construct the identity profile of that preservice teacher. This data extraction was conducted independently by the two authors, then compared and revised until agreement was reached.

Findings

Case Study 1: Laura

Table 2 outlines the contributory factors for Laura's teacher identity.

School culture. The school culture plays an important role in developing Laura's teacher identity, building connections, expanding her experiences, and creating opportunities to view herself as a "real" teacher in this community. Throughout her three practicums, Laura completed her teaching practice in environments which, in her words, were "friendly, supportive, and professional." She said of her first school that the staff there made her feel "like [I was] part of the staffroom." Laura explained why she felt very comfortable in the school:

It's really good; the relationship between students and teachers is really fantastic and the relationship with deputy principals and the principal is quite good as well. I can see the whole school as one community, they're really friendly and involved me in everything.

This friendly and collaborative working environment made her feel positive about working collaboratively with teachers. She added, "Teachers are always supportive of one another, I really like this." She attended all the meetings and events of the faculty as a real faculty member. She did not feel marginalized from the issues that arose within the community of practice as constituted by the staff members of the whole school. At the end of her final practicum, she said, "It would be great if I could work with them."

Coincidentally, many of the teachers at this school were LBOTE themselves and spoke with accented English. Therefore Lee did not see herself as much different from other staff members. This type of alignment may result in a stronger sense of belonging to the community.

Building strong relationships. Strong relationships with the different stakeholders were reported to be an important factor to facilitate engagement in the school community. This supported the LBOTE preservice teachers' connectedness, expansion of relationships, and effectiveness of teacher engagement. First, by having a good relationship with her teacher mentors, Laura had opportunities to develop her teacher identity in terms of belonging, imagination, and alignment. During the first practicum, Laura had two teacher mentors: one of Indian background, the

other Asian. These mentors encouraged Laura to be engaged in a variety of school and staff activities. Laura said,

John tries to give me many opportunities, like marking, supervising, that sort of thing, so I feel like I'm actually working in that school in a permanent job, so that's how they make me feel like I'm part of the staffroom.

Her mentors provided opportunities to expand her community of practice. She

Table 2
Laura's Teacher Identity Matrix

	B1. Connectedness	B2. Expansiveness	B3. Effectiveness
A1. Engagement	Her strong relationship with the mentors contributes positively to their connection (shared understanding of LBOTE background)	Her strong relationship with the mentors helps her to extend relationship to others: students, staff.	Her extended relationships gave her confidence in her teaching and learning.
A2. Imagination	Her prior experience as a nonnative student encouraged her to consider activities with students.	Her prior experience as a nonnative student enabled her to have a closer relationship with her students.	Her prior experiences of learning as a nonnative student impacted her desire to be approachable and understanding with students, leading
	She viewed herself as a student teacher; thus she was open to learning more about	See saw herself as a student teacher; thus she saw the value of putting energy into	to better relationships with students and to being a better teacher.
	being a teacher in the school.	making connections and opportunities to connect with other teachers, peers, and students.	She saw herself as wanting to take advice from the mentor and other teachers and was willing to change her teaching.
A3. Alignment	School context is multicultural, collaborative and supportive, and this contributed to deep relationships with mentor, peers, and students.	School context is multicultural, collaborative, and supportive, enriching her teaching experience.	School context is multicultural, collaborative, and supportive of positive learning, expanding her view of teaching and sense of being a real teacher.

Note. Based on Wenger (2000, p. 240) and Kwan and Lopez-Real (2010, p. 731).

said that she found it easy to talk to and seek support from other teachers. Laura's personal attributes of being hardworking, respectful to others, open, and flexible were seen as contributing factors in building good relationships. Laura described the progress she made in terms of her teaching skills as a result of working with her mentors and observing other teachers: "I've got a lot more structure in my lessons, and I am better in behavior management." The quality mentoring helped her to refine her teaching style. Laura praised her second practicum mentor:

She's from Melbourne so she had different knowledge in mathematics, . . . different curriculum it's in more depth. It was really helpful for me to see other ways of teaching those concepts. That was the biggest lesson I learned from her. Another thing about her is she really loves her students so much, and I've picked up a bit of that from her.

Sharing a similar teaching philosophy and background with her mentors, Laura made significant progress in learning to be a teacher. At the end of her practicum, Laura said she wanted to be like her mentors, who were well organized and cared for their students.

Good rapport with students facilitated her progress toward becoming a caring teacher. Laura was passionate about becoming a teacher and helping students to reach their potential but viewed behavior management as one of her limitations. However, her good rapport with her students made her realize that she could do more for the students. She saw this as benefit to her relationship with the students and was happy to share her time and knowledge:

For the last lesson, I got my students to write something about me and most of them said it was really good because they could see that I was trying to help them. . . . Maybe I asked too much but they seemed to really appreciate it. It was really touching to see them saying that.

Through all the three practicums, she maintained a good relationship with the students and had few difficulties with student behavior. At the end of her last practicum, Laura said that she had made improvement in managing student behaviors.

In addition to a good rapport with staff, relationships with other practicum preservice teachers facilitated her teacher identity development. She praised her interactions with peers during the first practicum by saying that they had "mental, emotional support, because we're working together. I'm not the only one who's the baby in the staffroom." She mentioned that they often observed each other's lessons, commented on them, and shared resources. Having a peer during the practicum helped her to realize that she was not the only one who experienced difficulties. She said she had learned a lot from observing her peers and consequently made changes in her class. It can be seen that through interaction with her peers, she had more opportunities to reflect on her own teaching practice and that of her peers. Through collaboration, taking and producing artifacts, Laura and her peers were engaged in socially valued activities. Instead of working in isolation in their classes,

they were engaged with one another and realized that interaction with peers was an integral part of their teaching practice at the school practicum. According to Wenger's theory, this enabled them to establish and develop joint enterprise.

Educational and cultural background. Laura's constructed image of a LBOTE preservice teacher impacted her concept of self, as a teacher, and her role and practice in the school community. Her educational and cultural background impacted to a certain extent her teacher identity formation during the practicums. Although completing her practicum in a school with a high percentage of students from non-English backgrounds, Laura was not very confident with her English language abilities. She said, "Yeah, when I teach them about the content I'm fine because I know the content and the terms, but when I get them into trouble and tell them off I find it a bit hard." She realized that she would "have to be careful about [my] spelling, because English is [my] second language, and when [I'm] teaching [I] also have to teach them how to spell things as well." This was one of the reasons why she said she wanted to design more hand-outs for students, as they would reduce the amount of time she had to talk with them.

However, she believed that her Asian background brought her closer to her non-English-background students as well. She said that she identified with some international students and reflected on her first time in Australia when she also needed more support from teachers. Her high school teacher in Australia was an excellent teacher. She said,

I don't know, I want to break the barrier that students have. Some of the students say 'I hate maths' and stuff like that, but I want to change that by being approachable and understanding. I want to build a personal relationship with my students because when I look back on my high school life, if I liked the teacher then I liked the subject more.

Her prior background was a positive factor that resulted in deeper engagement with her students.

Her previous learning experience in her home country also influenced her teaching styles. Most of Laura's observed lessons were teacher centered. She always spent time explaining different mathematical concepts to her students rather than organizing student-centered activities for them. According to Laura, this may be the result of the teacher-centered approach used by her own Korean teachers of mathematics and her familiarity with this teaching approach. However, her perception of a student-centered approach was further strengthened at the university, where she was shown many hands-on activities to teach mathematics. She realized that she should change this. "I want it to be more student centered, and also how I organize my board, I think I have to improve that."

Case Study 2: Lee

Table 3 outlines the contributory factors for Lee's teacher identity.

School culture. The differing school cultures offered challenges in developing

Table 3
Lee's Teacher Identity Matrix

	B1. Connectedness	B2. Expansiveness	B3. Effectiveness
A1. Engagement	Her understanding of the importance of teacher responsibility and the need to build strong working relationships contributed to a shared understanding of teaching.	Her relationship with the mentor enabled her to accept help, e.g., the mentor stepped in to help with discipline, and this extended her relationship with mentor and peers.	Her relationship gave her encouragement and support to develop her own style of teaching in an "Australian" classroom.
A2. Imagination	Her initial perception as a beginning teacher and as a nonnative student herself made her conscious of mentors who were unaware of her cultural and education background and its impact on expectations and relationships.	Her prior experience as a nonnative teacher gave her the confidence to clarify her own background and explain her own linguistic challenges in teaching and her expectations of students. This enabled her to build closer relationships with students.	Her prior experiences as a nonnative teacher impacted her desire to be a role model for students and to work collaboratively with her peers. This led to a better relationship with her mentor and others, enabling more effective teaching and learning.
A3. Alignment	The school context was complex and challenging (second practicum); a casual teacher was appointed as a mentor, and this was not conducive to her developing relationships with mentor and peers.	The school context (first practicum) was multicultural and collaborative; her mentor was a teacher from a similar background with a similar subject area, and this broadened her experiences at the school.	The school culture is multicultural; staff have a tradition of sharing, collaboration, and valuing staff. This contributed to her feeling welcomed and valued as a teacher.

Note. Based on Wenger (2000, p. 240) and Kwan and Lopez-Real (2010, p. 731).

Lee's identity as a teacher. Prior to undertaking her master's in teaching, Lee had worked as a teacher in her home country, teaching English as a foreign language. Her first practicum placement was at an inner-city grammar school with small classes and a large population of international students. She felt well supported by the mentor; however, she was concerned that the experience might limit her exposure to mainstream Australian schooling. The staff in this school worked closely together and included her in staff meetings and events. She felt welcomed and included as a member of staff.

Her second practicum was in direct contrast. This school was a large metropolitan state high school with a diverse staff and student population. For this placement, Lee was assigned a mentor who was a casual replacement teacher, and Lee often felt isolated and poorly supported, even though she valued the opportunity to develop her own practice. Although Lee was confident with her teaching, she struggled with discipline and student engagement issues and sought support and guidance from her mentors. Lee commented on the differences she experienced from teaching in her home country: "I had been teaching English for 7 years, but my students were university students. Now when I faced the teenagers, I felt confused about how to teach them and how to get along with them."

Building strong relationships. Strong relationships with the different stakeholders were reported to be an important factor in facilitating engagement in the school community. As Lee had already worked as a teacher in her own home country, she undertook her placements with an understanding of the importance of building strong relationships with her mentor, staff, and the students. She considered this part of the responsibility of being a professional teacher. Lee talked about the challenges she was facing with class discipline: "The first time they saw me they tried to test me. I think they thought maybe, 'Oh, yeah, student teacher.'"

Lee was very discouraged by the discipline problems in one of her secondary practicums. Her approach was to talk to her mentor and ask for support: "I talked to my supervising teacher about the situation on Thursday, and she stepped in and lent me a helping hand in classroom discipline." Having a mentor step in enabled Lee to step away from a challenging situation to reflect and work collaboratively with her mentor on possible solutions. Lee was also very critical of teachers who were reluctant to share both time and resources, which she considered an important part of the role of relationship building and essential in supporting the preservice teacher.

Lee also spoke about the need for mentors to have an awareness and understanding of the culture of the LBOTE preservice teacher. Unfortunately, Lee did not always find the relationship and support she wanted from a mentor, and in her second practicum, Lee was assigned a mentor who was a casual member of the staff and not a teacher in her subject area. Lee believed that this situation limited her opportunity to develop closer relationships in the school. She also felt the mentor

was not able to offer her the teaching support she needed. Lee talked about one of her practicum experiences:

The situation is so complicated because my supervising teacher, she was only there for 2 days. The original Chinese teacher actually just quit her job, so there's only a casual teacher. So most of the time I was there without a supervising teacher. . . . The casual teacher, she didn't want to do anything. So she just wanted me to do everything. So the good thing is I could learn a lot.

Lee felt isolated, with limited opportunities to discuss her developing practice with another colleague from her teaching area. She felt this impacted her understandings of teaching and learning within this school context.

Lee suggested that even though the experience was useful, she considered it inadequate for supporting preservice teachers. It impacted Lee's opportunity to discuss and explore her own teaching methodologies with a mentor and to engage in collaborative planning and reflection on the teaching and learning that were occurring.

Educational and cultural background. Lee's constructed image of a LBOTE preservice teacher influenced her perceptions of herself as a teacher, her role, and her practice within the school community. Lee's educational and cultural background had a significant impact on her teacher identity formation. From her prior experience as a teacher, Lee had firm ideas and beliefs of the value of collaboration, teamwork, and sharing. She also had strong ideas of the importance of modeling acceptance and tolerance toward other cultures in her classroom and the value of language as a learning area.

Lee's image of self was centered on her ability to minimize mistakes and overcome linguistic and cultural barriers as a LBOTE beginning teacher. The concept of "not losing face" was an important part of her culture, and it shaped her expectations, her self-image, and her developing professional identity. Lee described the importance she placed on maintaining the students' trust and her mentors' confidence with her teaching and management of the classroom evidenced by not making mistakes in her teaching:

I think the first thing that he looked at in my teaching is how I control the class-room in terms of behavior management. So he did tell me . . . take time to build trust . . . because they are good students. . . . So I cannot afford to make any single mistakes. If I do make a mistake they start to lose trust because you know the idea of good students . . . they take time to get rapport with you. One thing I remember my supervising teacher saying to me is, "Try to minimize mistakes."

For LBOTE trainee teachers, minor language errors can occasion general mirth and loss of face in the classroom. There are two important aspects to note from Lee's comments on this issue. First, she clearly felt that as a LBOTE preservice teacher, making language mistakes would impact her image as a capable, English-speaking professional and that she would lose the trust of the students and her mentor. In

addition, she was able to mitigate against making errors by establishing effective conversations with her students and by not taking her own mistakes too seriously: "At the beginning, they laugh at my accent in English and because their names are so hard to pronounce, especially from Arabic background. I couldn't pronounce them properly and then they were, ha ha, laughing." However, she resolved this problem effectively by having a friendly conversation: "Then I just take the time, OK, I say, 'You can teach me how to pronounce properly if I pronounce your name wrong." From this example, it is clear that such language mistakes can easily disrupt class interaction and, if not appropriately addressed, can lead to impaired effective classroom relationships.

In establishing a relationship with her mentor, Lee was frustrated by her experience at one of the schools. She believed that discipline problems for the preservice teachers are increased by the lack of routine and value placed on language learning:

I was shocked with the discipline problems of the Year 8 Chinese classes in my first days of teaching. Most of them didn't see any point of learning Chinese. Some of them didn't pay attention to the lesson at all, talking, laughing, moving around . . . in the lessons. . . . There is no routine in class at all.

In trying to establish an effective professional relationship, Lee was confronted with the issue of her supervising teacher not having the mentoring experience or expertise to support Lee's developing teaching skills:

Later, I realized that the original Chinese teacher just quit her job at the beginning of the term, and right now, the teacher is a casual teacher, and she is not a trained Chinese teacher. . . . She only had very limited Chinese language knowledge.

Lee believed good mentoring contributes to effective participation of the preservice teacher in the classroom and the school. She believed this occurs when the mentor and mentee share resources, when they engage in professional conversations, and when the school provides opportunities to develop supportive relationships with other school colleagues. Lee explained what is needed in establishing a community of practice in a school environment: "I think it is important . . . to have . . . experienced teachers sharing experience and teaching tips. . . . I also had this opportunity to share and talk to the other teachers, and they are really happy to share."

Lee's description of her experiences during the two practicums shows the value she placed on developing professional relationships, building trust, and establishing herself as a capable teacher. She believed that by avoiding mistakes, she could maintain both her students' and mentor's confidence in her abilities. Lee sees her identity as that of a teacher who encourages students to value languages, learning, and other cultures. She wants her students to be open to cultural diversity as well as learning a foreign language.

Lee's own cultural background, work, and school history strongly influenced the importance she placed on learning, developing trusting relationships, and not losing face in developing her teaching identity. However, it is clear that she found this difficult at times, particularly in her second practicum, where her mentor was less engaged in the mentoring process and where the school culture may have been a factor against sharing and valuing language learning. Lee's sense of disappointment may lay in her own high expectations, where she found it difficult to imagine that a mentor would not want to engage in a professional relationship with the preservice teacher or where a student many not want to learn a new language. The question to be considered is whether this is a cultural aspect specific to all LBOTE preservice teachers or whether Lee's own past work and schooling experiences have led to the higher value she placed on learning, on mentoring, and on supporting beginning teachers.

Discussion

Teacher professional identity is a complex issue, and there have been many approaches to conceptualizing this identity. In a review of identity studies, Beijaard et al. (2004) expressed a concern that in many studies, the concept of professional identity has been defined differently or not defined at all and called for studies that offer methodologies for research on teachers' professional identity. In this study, we relied on Wenger's (2000) concept of identity construction as "an experience" in terms of three modes of belonging to social learning. The use of the Wenger matrix framework offered an innovative tool as well as theoretical framework to guide the data collection and to understand identity formation and its quality. This provides additional evidence for the practicality of this framework in studies of identity and the quality of identity formation, which has been initially confirmed by Kwan and Lopez-Real (2010).

This study identified school context, cultural background, and the building of strong relationships as factors contributing to the quality development of LBOTE preservice teacher identity. The influence of the context, particularly the school culture, was reflected in both case studies. Feeling emotionally safe in the mentor relationships was important for the LBOTE preservice teachers to ensure that they would not risk "losing face" (Lasky, 2005). Feelings of vulnerability led to a sense of powerlessness, betrayal, or defenselessness and to a lack of control where they are forced to act in ways inconsistent with core beliefs and values (Korthagen et al., 2001). In Laura's case, her collaborative and supportive school culture contributed to her quality identity development and the further development of her teaching as well as to reaffirming her passion to be a good teacher. In Lee's case, by contrast, the different practicum schools presented different learning experiences and subsequently impacted how she felt as a beginning teacher. The school culture, student behavior, staff collaboration, and staff arrangements all contribute to the LBOTE preservice teachers' sense of belonging. LBOTE preservice teachers' identities were influenced by their own experiences in the practicum schools as well as by their past experiences of education. The school culture was an important factor in

fostering confidence and acceptance and thus significantly contributed to the quality of teacher identity development.

Laura felt part of the school community, and Lee's teaching ideals were validated. These findings support the argument made by a number of scholars (Beauchamp & Thomas, 2009; Beijaard et al., 2004; Flores & Day, 2006; Reynolds, 1996; Smagorinsky, Cook, Moore, Jackson, & Fry, 2004) who claim that the influence of context on teachers' professional identity is important. For beginning LBOTE teachers, whose teacher identities are tentative, the school context was seen to have a significant impact on their self-belief as a teacher. This also lends support to M. H. Nguyen's (2014) findings that contextual factors particularly influence a LBOTE preservice teacher's emotions, which can in turn "alter a teacher's identity in relation to the profession" (Beauchamp & Thomas, 2009, p. 180).

LBOTE preservice teachers may face additional challenges in developing their teacher identity in another cultural environment. LBOTE preservice teachers who have strong affinity with their culture may not share the common practice of their teaching places. Both Laura's and Lee's teaching pedagogy and their perceptions of being a teacher were influenced by their prior experiences in their countries and by their cultures. This study confirms that the core values and beliefs LBOTE preservice teachers bring to the practicum are sometimes quite different to those of the teacher mentors.

Relationships with mentors and others in schools are important in enabling LBOTE preservice teachers to develop a positive identity. This is true in Laura's and Lee's cases, which showed that building strong relationships with teacher mentors, students, and others in the school helped them to develop their teacher identity at all the levels to which Wenger (2000) referred. Laura's experience was more positive than Lee's, as she was able to develop stronger relationships with the stakeholders in her schools. This benefited Laura, as she was able to develop more fully her teaching practice. In Wenger's view, this would allow her more effective action and participation within the school and classroom. In comparison, Lee was not always able to develop supportive relationships, and this limited her opportunities to be engaged with the school and to further develop her teaching practices. It can be seen that the quality of her identity formation was hindered.

The LBOTE preservice teacher's developing identity is both complex and multilayered. A LBOTE preservice teacher shares similar issues and challenges as other preservice teachers; however, these issues become more pronounced when personal cultural values, beliefs, and expectations come into play. Wenger's framework is useful in exploring these factors and the impact they can have on the quality of identity formation during the professional experience. Understanding teacher identity formation for beginning teachers is of vital concern to teacher education as it informs our decision making about how best to prepare our future teachers (Beauchamp & Thomas, 2009; Beijaard et al., 2004). This study demonstrates that the identity development of LBOTE preservice teachers needs more consideration

if we are to meet their developmental needs during the practicum. Even though they shared similar issues to other preservice teachers, their concerns were complex and interwoven with cultural factors. Ongoing support for LBOTE preservice teachers during the practicum needs strengthening to ensure that the university has an overview of what happens in practice and how best to support LBOTE preservice teachers prior to, during, and after the practicum experience.

This study also argues that more attention should be paid to the role of context in the professional identity formation of LBOTE preservice teachers. The prepracticum experiences of these preservice teachers are important to familiarizing them to the school and the teacher mentors; as Danyluk (2013) reported, this "may have lessened the stress levels reported during the practicum" (p. 332). Familiarizing students with their school contexts with early school visits and school orientation programs is important to avoid confrontation and tension. Although confrontation and tension could lead to healthy identity formation (Wenger, 1998) and are generally inevitable (Pillen, Beijaard, & den Brok, 2013; Timostsuk & Ugaste, 2010), negative emotions, the preservice teacher's experience may limit the possibilities of learning. Thus choice of the practicum school context for LBOTE preservice teachers should be taken into consideration to ensure that the preservice teacher enters an environment that supports cultural awareness and where he or she is recognized and accepted as an LBOTE preservice teacher. It can be seen from Laura's and Lee's cases that they felt confident when sent to a multicultural school with multicultural staff and students. In addition, as Beauchamp and Thomas (2009) suggested, teacher educators should incorporate knowledge of the school community, context, and culture into the teacher education program.

This study points out that strong relationships with different stakeholders, especially with the teacher mentor, are critical to the LBOTE teacher's identity formation. Preparing LBOTE teachers with interpersonal skills, communication skills, and coping strategies would possibly help them feel more confident in building relationships. Teacher education programs should offer alternative forms of interaction in practicum schools for preservice teachers. In both participants' cases, relationships with school mentors were important in deciding the quality of the preservice teacher's learning. When these relationships are not fruitful, they will limit the preservice teachers' opportunities to learn. Building other types of communities of practice among preservice teachers, such as learning circles (Le Cornu, 2007), peer mentoring (H. T. M. Nguyen, 2013), critical friend groups (Judith, 2002), and pair placement (Bullough et al., 2003; Sorensen, 2004), may support their positive experiences of the school. Peer support can be an alternative source of learning and support for preservice teachers.

Findings in this study show how preservice teachers' cultural and educational backgrounds affect the dynamics of the quality of their identity formation. It is therefore important for those involved in the LBOTE preservice teachers' learning process, such as teacher mentors and university supervisors, to be able to recognize

and allow for these differences to provide effective support. The communication that occurs among teacher mentors, university supervisors, and preservice teachers should be strengthened to avoid any misunderstandings. Crutcher (2007) pointed out that mentors for those with different backgrounds must be adept at navigating the cultural differences. He also suggested focusing on strategies to ensure effective cross-cultural mentoring. As shown in both cases, the LBOTE teachers' identities were impacted by their cultural beliefs. This requires teacher education programs to pay more attention to cultural awareness in terms of communication, learning styles, teacher ideals and values of relationships, and appropriate pedagogy in certain contexts.

Acknowledgment

We express our gratitude to Dr. Rae Luckie for her insightful and critical comments on this manuscript.

References

- Akkerman, S. F., & Meijer, P. C. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education*, 27(2), 308–319.
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175–189.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20(2), 107–128.
- Bullough, J. R. V. (1997). Practicing theory and theorizing practice in teacher education. In J. Loughran & T. Russell (Eds.), *Purpose, passion, and pedagogy in teacher education* (pp. 13–31). London, UK: Falmer Press.
- Bullough, J. R. V., Young, J., Birrell, J. R., Cecil Clark, D., Winston Egan, M., Erickson, L., ... Welling, M. (2003). Teaching with a peer: A comparison of two models of student teaching. *Teaching and Teacher Education*, 19(1), 57–73.
- Butler, B. M., & Cuenca, A. (2012). Conceptualizing the roles of mentor teachers during student teaching. Action in Teacher Education, 34(4), 296–308. doi:10.1080/016266 20.2012.717012
- Clarke, S. (2008). Culture and identity. In S. Clarke (Ed.), *The Sage handbook of cultural analysis* (pp. 510–529). London, UK: Sage.
- Cruickshank, K. E. N., Newell, S., & Cole, S. (2003). Meeting English language needs in teacher education: A flexible support model for non–English speaking background students. *Asia-Pacific Journal of Teacher Education*, 31(3), 239–247.
- Crutcher, B. N. (2007). Mentoring across cultures. Academe, 93(4), 44-48.
- Danielewicz, J. (2001). Teaching selves: Identity, pedagogy, and teacher education. Albany, NY: State University of New York Press.
- Danyluk, P. (2013). The role of the prepracticum in lessening student teacher stress: Student teachers' perceptions of stress during practicum. *Action in Teacher Education*, *35*(5–6), 323–334.

- Datnow, A., Hubbard, L., & Mehen, H. (2002). *Educational reform implementation: A co-constructed process*. London, UK: Routledge.
- Enomoto, E., Gardiner, M., & Grogan, M. (2002). Mentoring women in educational leadership. In F. Kochan (Ed.), *The organizational and human dimensions of successful mentoring programs and relationships* (pp. 207–220). Greenwich, CT: Information Age.
- Fairclough, N. (2003). Analyzing discourse: Textual analysis for social research. London, UK: Routledge.
- Fan, S., & Le, T. (2009). Reframing teacher identities: ESL preservice teachers' perspectives of teaching and learning in Australia. Paper presented at the AARE 2009 Conference, Canberra, Australia.
- Fitch, K. L., & Saunders, R. E. (1994). Culture, communication, and preferences for directness in expression of directives. Communication Theory, 4(3), 219–245.
- Flores, M. A., & Day, C. (2006). Contexts which shape and reshape new teachers' identities: A multi-perspective study. *Teaching and Teacher Education*, 22(2), 219–232.
- Gee, J. P. (2000). Identity as an analytic lens for research in education. Review of Research in Education, 25(1), 99–125.
- Gokturk, S., & Arslan, S. (2010). The effect of cultural values on the quality of mentoring relationships. *International Journal of Educational Researchers*, 3(3), 31–42.
- Hall, E. (1971). Beyond culture. New York, NY: Anchor/Doubleday.
- Han, J. (2005). "World English speaking" student-teachers' entry into the education profession: The practicum as a stimulus to metamorphosis. Paper presented at the AARE 2005 International Education Research Conference, UWS, Parramatta.
- Hoban, G. (2007). Consideration for designing coherent teacher education programs. In J. Butcher & L. McDonald (Eds.), *Making a difference: Challenges for teachers teaching and teacher education* (pp. 173–187). Rotterdam, Holland: Sense.
- Hourani, R. B. (2013). Pre-service teachers' reflection: Perception, preparedness and challenges. Reflective Practice, 14(1), 12–30.
- Hyland, F., & Lo, M. M. (2006). Examining interaction in the teaching practicum: Issues of language, power, and control. *Mentoring and Tutoring: Partnership in Learning*, 14(2), 163–186.
- Johnson, K. E. (2009). Second language teacher education: A sociocultural perspective. New York, NY: Routledge.
- Johnson, K. E., & Golombek, P. R. (2011). A sociocultural theoretical perspective on teacher professional development. In K. E. Johnson Golombek (Ed.), Research on second language teacher education: A sociocultural perspective on professional development (pp. 2–12). New York, NY: Routledge.
- Judith, K. F. (2002). Developing a teacher identity: The impact of Critical Friends Practice on the student teacher. *English Education*, 34(4), 258–280.
- Kanno, Y., & Stuart, C. (2011). Learning to become a second language teacher: Identity-in-practice. Modern Language Journal, 95(2), 236–252.
- Kent, A. M. (2013). Cultural influences on mentoring programs and relationships: A critical review of research. *International Journal of Mentoring*, 2(3), 204–217.
- Kochan, F., & Pascarelli, J. (2012). Culture and mentoring in the global age. In *Handbook of mentoring and coaching in education* (pp. 184–194). Thousand Oaks, CA: Sage.
- Korthagen, F. A. J., Kessels, J., Koster, B., Lagerwerf, B., & Wubbels, T. (2001). *Linking practice and theory*. London, UK: Lawrence Erlbaum Associates.
- Kwan, T., & Lopez-Real, F. (2010). Identity formation of teacher-mentor: An analysis of

- contrasting experiences using a Wengerian matrix framework. *Teaching and Teacher Education*, 26(3), 722–731.
- Lasky, S. (2005). A sociocultural approach to understanding teacher identity, agency, and professional vulnerability in a context of secondary school reform. *Teaching and Teacher Education*, *21*(8), 899–916.
- Lauriala, A., & Kukkone, M. (2005). Teacher and student identities as situated cognitions. In P. Denicolo & M. Kompf (Eds.), *Connecting policy and practice: Challenges for teaching and learning in schools and universities* (pp. 199–208). Oxford, UK: Routledge.
- Le, T. P. A. (2007). School supervisors' feedback to student teachers: Inside out. *Journal of Applied Linguistics*, 4(2), 195–216.
- Le Cornu, R. (2007). Learning circles in the practicum: An initiative in peer mentoring. Paper presented at the 2007 ATEA conference Quality in Teacher Education: Considering Different Perspectives and Agendas, University of Wollongon, NSW, Australia.
- Merrian, S. B. (1998). *Qualitative research and case study application in education*. San Francisco, CA: Jossey-Bass.
- Miles, M. B., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook.*Thousand Oaks, CA: Sage.
- Nguyen, H. T. M. (2013). Peer mentoring: A way forward for supporting preservice EFL teachers psychosocially during the practicum. *Australian Journal of Teacher Education*, 38(7), 31–34.
- Nguyen, H. T. M., & Hudson, P. (2012). Preservice EFL teachers' reflections on mentoring during their practicum. In C. Gitsaki & B. B. J. Richard (Eds.), Future directions in applied linguistics: Local and global perspectives (pp. 158–178). Newcastle, UK: Cambridge Scholar.
- Nguyen, M. H. (2014). Preservice EAL teaching as emotional experiences: Practicum experience in an Australian secondary school. *Australian Journal of Teacher Education*, 39(8). doi:10.14221/ajte.2014v39n8.5
- Olsen, B. (2008). Teaching what they learn, learning what they live. Boulder, CO: Paradigm. Pillen, M., Beijaard, D., & den Brok, P. (2013). Professional identity tensions of beginning teachers. Teachers and Teaching, 19(6), 660–678.
- Premier, J. A., & Miller, J. (2010). Preparing pre-service teachers for multicultural class-rooms. Australian Journal of Teacher Education, 35(2). doi:10.14221/ajte.2010v35n2.3
- Reynolds, C. (1996). Cultural scripts for teachers: Identities and their relation to workplace landscapes. In W. R. M. Kompf, D. D. Bond, & R. T. Boak (Eds.), Changing research and practice: Teachers' professionalism, identities, and knowledge (pp. 66–77). Washington, DC: Falmer Press.
- Rogers, C., & Scott, K. (2008). The development of personal self and professional identity in learning to teach. In M. Cochran-Smith, S. Feiman-Nemser, & D. J. McIntyre (Eds.), *Handbook of research on teacher education: Enduring questions and changing contexts* (pp. 732–755). New York, NY: Routledge.
- Sachs, J. (2005). Teacher education and the development of professional identity: Learning to be a teacher. In P. D. M. Kompf (Ed.), Connecting policy and practice: Challenges for teaching and learning in schools and universities (pp. 5–21). Oxford, UK: Routledge.
- Sawir, E. (2005). Language difficulties of international students in Australia: The effects of prior learning experience. *International Education Journal*, 6(5), 567–580.
- Smagorinsky, P., Cook, L. S., Moore, C., Jackson, A. Y., & Fry, P. G. (2004). Tensions in learning to teach: Accommodation and the development of a teaching identity. *Journal*

- of Teacher Education, 55(1), 8-24.
- Sorensen, P. (2004). Learning to teach collaboratively: The use of subject pairs in the school practicum. *Canadian Journal of Educational Administration and Policy*, 32, 1–24.
- Stanley, C. A., & Lincoln, Y. S. (2005). Cross-cultural faculty mentoring. Change, 7(1), 44–50.Stroll, L. (1999). Realising our potential: Understanding and developing capacity for lasting improvement. School Effectiveness and Improvement, 10, 503–532.
- Strong, M., & Baron, W. (2004). An analysis of mentoring conversations with beginning teachers: Suggestions and responses. *Teaching and Teacher Education*, 20(1), 47–57.
- Timostsuk, I., & Ugaste, A. (2010). Student teachers' professional identity. *Teaching and Teacher Education*, 26(8), 1563–1570.
- Triandis, H. C. (1995). Individualism and collectivism. Boulder, CO: Westview Press.
- Tsui, A. B. M. (2007). Complexities of identity formation: A narrative inquiry of an EFL teacher. *TESOL Quarterly*, 41(4), 657–680. doi:10.2307/40264401
- Urzúa, A., & Vásquez, C. (2008). Reflection and professional identity in teachers' future-oriented discourse. Teacher and Teacher Education, 24, 1935–1946.
- Wang, J., & Paine, L. (2002, April 1–5). Forms and substances of mentor-novice interactions on novices' teaching: Lessons from Chinese teachers. Paper presented at the conference of the American Education Research Association, New Orleans, LA.
- 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(2), 225–246.
- Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.
- Yoon, T. (2012). Teaching English through English: Exploring anxiety in non-native preservice ESL teachers. Theory and Practice in Language Studies, 2(6), 1009–1107.
- Zembylas, M. (2003). Caring for teacher emotion: Reflections on teacher self development. Studies in Philosophy and Education, 22, 103–125.



Beginning Teachers' Perceptions of the California Teaching Performance Assessment (TPA)

By Conni Campbell, Carlos Cuauhtémoc Ayala, Gary Railsback, Frederick W. Freking, Corey McKenna, & David Lausch

Research has consistently shown that an effective teacher has the single greatest impact on student learning (Darling-Hammond, 2000; Rivkin, Hanushek, & Dain, 2005; Sanders & Rivers, 1996). Therefore it is essential that state policy makers and university decision makers develop and implement assessments that reliably identify effective teachers. Because traditional paper-and-pencil tests of content knowledge do not assess teaching performance, policy makers in California mandated the teaching performance assessment (TPA) system. The TPA was introduced in California in 2004 with programs piloting it and then became mandatory for candidates enrolling in preliminary programs in 2008. This study is the first to

Conni Campbell is a professor in the School of Education at Point Loma Nazarene University, San Diego, California, Carlos Cuauhémoc Ayala is a professor and dean of the School of Education at Sonoma State University, Rohnert Park, California, Gary Railsback is a professor in the School of Education at Azusa Pacific University, Azusa, California. Frederick W. Freking is a professor in the Rossier School of Education at the University of Southern California, Los Angeles, California. Corey McKenna is an associate professor in the School of Education at Whitworth University, Spokane, Washington. David Lausch ia a professor in the College of Education at the University of Wyoming, Laramie, Wyoming. ccampbel@pointloma.edu, carlos,ayala@sonoma.edu, grailsback@apu.edu, freking@usc.edu, cmckenna@whitworth.edu, & dlausch@uwyo.edu

explore the experiences of candidates who were required to pass a TPA to earn a teaching license.

The TPA seeks to measure the knowledge, skills, and competencies of teachers during the credential phase of their training. This assessment allows credentialing agencies to gain some insight into the potential effectiveness of teacher candidates. Teacher education programs have used course grades, fieldwork experiences, and clinical practice performance to determine candidate readiness for their own classrooms for almost a century. Recent legislation in many states, however, requires that candidates pass a standardized summative assessment of teaching performance to earn their teaching credentials (Stanford Center for Assessment Learning and Equity [SCALE], 2015). Although California has multiple years of implementation with three approved TPA models, and despite the recent advent of edTPA as a national-level teaching performance assessment, many question whether the TPAs have value. This is especially important for credentialing agencies, which may use the data to emphasize, measure, and support the skills and knowledge that all teachers need from their first day in the classroom. This article describes the various models of TPAs and examines the perceived value of TPAs from the perspective of newly employed teachers in California.

Multiple Models for Teaching Performance Assessment

At the turn of the 21st century, both federal and state K–12 education improvement efforts proposed sweeping changes in teacher assessment. During this time, states relied on written licensure tests to document readiness for K–12 classrooms. California took the lead in developing preservice TPA with Senate Bill 2042 (California Department of Education, 2008), mandating that all teacher education programs require a summative assessment of teaching performance as part of preservice teacher preparation. In addition, this assessment was mandatory for all multiple-subject (elementary) and single-subject (secondary) teacher candidates entering California preliminary credential programs after July 1, 2008, and had to be aligned with the Teaching Performance Expectations (California Commission on Teacher Credentialing, 2013a). The TPA models required a candidate to complete defined tasks relating to subject-specific pedagogy, designing and implementing instruction, student assessment, and a culminating teaching experience.

The first assessment, known as the California Teaching Performance Assessment (CalTPA; California Commission on Teacher Credentialing, 2013b), was designed by the Educational Testing Service at the request of the California Commission on Teacher Credentialing (CCTC). Teacher educators at Fresno State University developed the second assessment, the Fresno Assessment of Student Teachers (FAST). FAST is the only locally designed performance assessment approved by CCTC (Torgerson, Macy, Beare, & Tanner, 2009). The third commission-approved performance assessment, the Performance Assessment for California Teachers (PACT; 2013), was developed

by a consortium of teacher education programs led by teacher educators at Stanford University. According to Pecheone and Chung (2006),

many teacher educators at these campuses were dissatisfied by the content and format of the state's teacher performance assessment [CalTPA], which was designed as a generic assessment that applies across all grade levels and subject areas. Specifically, the [CalTPA] teacher performance assessment was developed as four separate and discrete performance tasks that are designed to be embedded in college or university preparation program courses. (p. 22)

All three formats of the California TPA assessments require trained assessors to rate candidates' performance using scoring rubrics that describe the level of performance in each of the required tasks (e.g., planning, instruction, assessment), culminating in a total score. Each model must also meet and maintain specified standards of assessment reliability, validity, and fairness to candidates. For example, CalTPA requires assessors to participate in an initial 1-day overall training followed by 2 days of training for each of the four TPA tasks. Assessors must be recalibrated every 6 months. After an institution has implemented the TPA using any of the three models, it must double score a sample of 15% of scores. If the double scores do not match each other, then the campus TPA coordinator is required to review the scores and determine a final score. In addition, all candidates receiving a nonpassing score from one assessor are also double scored.

California institutions using PACT have teacher education candidates complete the assessment toward the end of the program, when they are immersed in student teaching. The PACT assessment is a 3- to 5-day unit of instruction that includes lesson plans, video of instruction, and three representative samples of student work. The PACT is subject specific to the candidates' area of preparation and is divided into five tasks: context, planning, instruction, assessment, and reflection. Candidates receive a PACT handbook that describes the assessment and required artifacts, with guiding questions used to write a commentary for each task.

Twelve rubrics describing the four performance levels for each criterion are also given to candidates. The rubrics are developmental in nature, with an expectation of a Level 2 score to demonstrate proficiency to enter the teaching profession. There are three rubrics on planning: "Establishing a Balanced Instruction Focus," "Making Content Accessible," and "Designing Assessments." They are used to assess the lesson plans and planning commentary. The two instruction rubrics, "Engaging Students in Learning" and "Monitoring Student Learning During Instruction," are used to assess the teaching videos and instruction commentary. Three rubrics measure teaching performance on Assessment: "Analyzing Student Work From an Assessment," "Using Assessment to Inform Teaching," and "Using Feedback to Promote Student Learning." For the assessment task, candidates share their own assessment rubric, an overview of class learning during the teaching event, and three representative samples of student work, one of which should be an English language learner. The two reflection rubrics, "Monitoring Student Progress" and

"Reflecting on Learning," examine daily reflections provided by the candidate and reflection commentary. Finally, two rubrics measure candidate proficiency in developing their students' academic language: "Understanding Language Demands" and "Developing Students' Academic Language Repertoire." These rubrics measure teaching performance across the context, planning, instruction, assessment, and reflection tasks. There is no rubric for the context task.

Research articles and presentations at national conferences about PACT in California, and the growing demand for a national TPA, led to the formation of the Stanford Center for Assessment, Learning, and Equity (SCALE, 2013) and the edTPA (Darling-Hammond, 2010). The edTPA has been adopted by many educator preparation programs across the country and is required by many states for certification (American Association of Colleges for Teacher Education, 2014; Sato, 2014). Although Stanford University is the exclusive author and owner of the edTPA, the design and review team comprises more than 100 university faculty, national subject-matter representatives, and K–12 teachers.

Building and refining on the work of the PACT consortium, the edTPA has three tasks: planning, instruction, and assessment. Each task has five rubrics. Aspects of the PACT content and rubrics are embedded into each of the three edTPA tasks. For example, the context task in PACT is embedded into the planning task on the edTPA. It provides student demographic information of the classroom and school. The instruction task requires candidates to video subject-specific pedagogical approaches and integrates the recently adopted Common Core Standards and Next Generation Science Standards. The assessment task is very similar to PACT, with candidates submitting three representative samples of student work from one assessment in the teaching event. The reflection and academic language rubrics in PACT are embedded into all three of the edTPA tasks. Finally, the edTPA rubrics are scored on a 5-point scale to describe a greater range of teaching performance. States determine a minimum cumulative passing score.

Purpose and Development of the Study

In 2011–2012, the CCTC convened a Teacher Advisory Panel, consisting of teachers, administrators, education faculty, and community stakeholders, to make recommendations regarding the direction of credentialing programs. One subgroup of the Teacher Advisory Panel reviewed the literature (i.e., Greatness by Design) and surveyed stakeholders of TPAs to discuss the value of TPA from the perspective of the candidate. The purpose of the present study was to examine newly employed teachers' perceptions of the value of TPAs. The following research questions guided the research:

1. To what degree did the TPA assignment enhance the teacher candidate's understanding of the many decision-making processes in teaching?

- 2. To what degree did the TPA assignment convey the importance of postlesson evaluation and reflection on one's own teaching decisions?
- 3. To what degree did the TPA assignment enhance the teacher candidate's understanding of the implications of gathering and analyzing student data for instructional purposes?
- 4. To what degree did feedback given to the candidate provide more insight into the expectations of the teaching profession?

Review of the Literature

The majority of published research on the CalTPA has focused on the PACT version and specifically on the rationale for this high-stakes authentic assessment (Darling-Hammond, Newton, & Wei, 2013), content validity and reliability (Duckor, Castellano, Téllez, Wihardini, & Wilson, 2014; Wilkerson, 2015), interrater reliability (Porter, 2010), and the relationship between supervisors' predictions of candidate scores (Sandholtz & Shea, 2012).

One study focused on the single-campus TPA at Fresno State (FAST). According to the authors, the FAST model was developed to collect assessment data for an upcoming NCATE visit (Torgerson et al., 2009).

One aspect of the PACT version are the embedded signature assessments, or ESAs, that are included in courses prior to student teaching. Larsen and Calfee (2005) described ESAs as "campus-specific assignments chosen from standard criteria that track a teacher candidate's growth over time" (p. 151). While the California state law requiring the TPA went into place in 2008, most California universities were piloting TPAs several years before that (Okhremtchouk, Newell, & Rosa, 2013). The benefit of this long-term operation now is that candidate scores on the PACT can be linked to their students as a value-added measure. Newton (2010) linked PACT scores with four separate value-added estimates for 14 first- and second-year teachers with 259 students in third through sixth grades. For each additional point a teacher scored on PACT (evaluated on a 44-point scale), his or her students averaged a gain of one percentile point per year on the California Standards Tests as compared with similar students.

Little research has been published on the teacher candidates' views of these TPAs. One dissertation "examined survey responses of piloting and control group candidates before and after completing the PACT" in 2003–2004 (Chung, 2005, p. iv). Chung's findings suggest that the experience of completing the PACT promoted learning and growth in areas of teaching that were experiential gaps in the existing learning opportunities provided by the university and student teaching placements. Another study investigated 137 teacher education candidates' perceptions from one University of California campus (Okhremtchouk et al., 2009). Another single-campus study focused on analyzing test scores of 87 teacher certification

candidates in a large university in southern California, starting with a cohort in 2004–2005 and subsequent cohorts in 3 consecutive academic years: 2005–2006, 2006–2007, and 2007–2008 (Verdi, Riggs, & Riggs, 2012). The Verdi et al. study did not include candidate perceptions. Still another single-campus study at a large public university in southern California focused on 106 candidates preparing for math and science teaching and compared 23 undergraduates and 83 postbaccalaureate candidates (van Es & Conroy, 2009). The majority of this study focused on content analysis of the PACT exam, but it did conclude with an exit survey that focused on a self-evaluation by candidates about how prepared they were for teaching. Now that California institutions have greater experience with implementing PACT, there have been more published articles, with one whole journal issue focused entirely on PACT (Lit & Lotan, 2013; Peck & McDonald, 2013; Sloan, 2013; Whittaker & Nelson, 2013). Two additional studies were published in 2005 in *The New Educator* that were focused on more recent PACT implementations (Bunch, Aguirre, & Téllez, 2015; Gainsburg & Ericson, 2015).

Perceived Value of Teaching Performance Assessment

During the development of the PACT, the value of the TPA was discussed by developers and implementers (Pecheone & Chung, 2006). Two values stood out during these discussions. The first was the value to the program and the faculty of scoring the TPA to inform program improvement. The second value was the perceived value to the teacher candidate. A teacher candidate in the field would better understand the expectations of teaching by taking the TPA and would improve his or her effectiveness from feedback the candidate received about his or her TPA. Moreover, programs in California were expected to incorporate additional *key assessments*, known in some institutions as *signature assignments*, *embedded assignments*, or *content area tasks*, embedded into courses prior to the student teaching semester and in addition to the TPA to further enhance the program improvement value and teacher candidate improvement value. Though these expected values of the TPA were promoted, how much value these TPAs actually provided teacher candidates remains a question.

Research Methodology

Data Collection

This article utilized a mixed methods approach (Mertler & Charles, 2008). Both quantitative and qualitative data were collected via a 10-question survey using a Likert scale and an opportunity for open-ended comments from 1,000 participants.

Data Sources

The demographic data gathered from survey respondents included the type of credential being sought, the type of university attended, and the TPA model completed (see Table 1).

Of the 1,000 survey respondents, more than 74% identified enrollment in either a single-subject or multiple-subject credentialing program. A small number of respondents (2%) also identified enrollment in a special education credentialing program, whereas nearly one-fourth of respondents did not identify the type of credentialing program they completed.

Survey respondents reported attending a private university (54%), whereas smaller numbers reported attending either a California State University (CSU; 38%) or University of California (UC) campus (6%). All respondents had completed one of the three models of TPA and been issued a California credential prior to taking the survey. The TPA model taken by respondents included the CalTPA (58%), PACT (16%), and FAST (2%). One-fourth of respondents did not identify the model of TPA they completed, leading researchers to believe that respondents did not know the model of TPA they had completed as a teacher candidate or had forgotten the name of the assessment by the time they participated in the survey.

The quantitative data gathered information on the type of credential respondents were seeking at the time of TPA completion; the type of university attended;

Table I
Respondent Credential Type, University Type,
and Type of Teaching Performance Assessment Taken

	n	%	
Credential			
Single subject	467	47	
Multiple subject	533	53	
Special education ^a	45	5	
University			
University of California	57	6	
California State University	375	38	
Private	544	54	
Other	24	2	
TPA			
CalTPA	575	58	
PACT	157	16	
FAST	22	2	
Do not know	246	25	

Note. CalTPA = California Teaching Performance Assessment. FAST = Fresno Assessment of Student Teachers. PACT = Performance Assessment for California Teachers. TPA = teaching performance assessment.

^aStudents in special education also included multiple or single subjects.

to what degree the TPA did or did not enhance the respondent's understanding of distinct teaching aspects; and, if feedback was received, the degree to which that feedback was valuable. The qualitative data, gathered from the comments sections of the survey, further illustrated the positive and negative perceptions of the teacher candidates with regard to the TPA. The CCTC made available the e-mail addresses of Beginning Teacher Support and Assessment (BTSA) induction directors across California. Induction directors sent the survey to 1,200 newly credentialed preliminary elementary and secondary teachers who had completed TPA as one of the requirements of their preliminary teaching credential and who were participating in a beginning teacher induction program. As part of the panel, the research team created, piloted, and launched a survey about the value and efficacy of the TPA in October 2012. The survey asked teachers who were in their first or second year of teaching about the value, efficacy, and validity of the TPA they had completed in their credentialing program. Furthermore, these teachers were asked about the time commitment of the TPA and about any feedback they had received. The survey closed when 1,000 responses were reached on February 12, 2013.

Data Analysis

The data were analyzed in two phases. In the first phase, the survey responses of the new teachers were reviewed and data were disaggregated across the two most common models of TPAs: the CalTPA and PACT. Because the FAST model only included 22 participants, or 2% of the sample, these were excluded from the quantitative analysis. Because each survey item allowed for comments, these were reviewed to understand the reasons why new teachers responded as they did. To best accomplish this, five researchers randomly selected 25 new teacher surveys and identified the themes in those responses. The research team used qualitative data analyzing techniques that suggest, "as you read through your data, certain words, phrases, patterns of behavior, subjects' ways of thinking, and events repeat and stand out. . . . These words and phrases are coding categories" (Bogan & Biklen, 2003, p. 161). Based on researcher consensus, the following themes emerged: value, quality of time, quantity of time, validity, suggestions, emotional reactions, and other (see Table 2).

Each research member then coded 200 student surveys. The codes from the teacher surveys were entered into the qualitative software program NVivo (QSR International, 2014). For each theme, teacher responses were aggregated across all surveys, reviewed for consistency, and reported out to display what the new teachers were communicating within each of the larger themes.

Results

The results of the survey will be reported first for the CalTPA model, followed by results for the PACT model.

CalTPA and Enhanced Understanding of Teacher Practices

Respondents indicated whether they believed the CalTPA enhanced their understanding of three aspects of teaching: decision-making processes in teaching, postevaluation of teaching decisions, and gathering and analyzing data for instruction (see Table 3). The majority of respondents affirmed the CalTPA experience had enhanced their understanding of effective teaching practices across all three aspects to some degree, whereas 25% or less said they had experienced no enhanced understanding of teaching practices. Thirty-five percent affirmed enhanced understanding in decision-making processes in teaching to an "adequate or significant degree." Thirty-nine percent said CalTPA "somewhat" enhanced their understanding of the decision-making processes.

Additionally, 44% affirmed enhanced understanding of postevaluation of teaching decisions to an "adequate or significant degree," whereas 33% said CalTPA

Table 2
Coding Themes Found in Survey Responses

Definition
Does the statement contain information about the candidate's opinion or perception that the TPA is of good value or not? Example: "Too much paperwork."
Does the statement contain language as to the quality of the time? Example: "It took a lot of time that could have been better spent working for or with students" or "a waste of time."
Does the statement refer to the amount of time that the TPA took? Example: "TPAs are incredibly time consuming."
Does the statement made attend to the relationship between teaching, pedagogy, and the TPA? Do candidates feel that it is a good tool for learning about teaching? Do candidates feel that the TPA has nothing to do with teaching? Example: "I found it valuable to watch the video of myself teaching and reflect on my delivery."
Does the candidate's response offer any suggestions about how to change the TPA to improve it? Example: "Wish that I would have gotten more feedback about my TPA."
Does the response contain an emotional component that gives insight into the state of mind of the candidate? Example: "The whole thing was worthless and very stressful."
Does the response contain something we have not yet identified? If so, then code as "other important."

enhanced their understanding "somewhat" in this category. Forty-seven percent said the CalTPA enhanced their understanding in gathering and analyzing data for instruction to an "adequate or significant degree," whereas 34% said CalTPA enhanced their understanding "somewhat" in this category.

PACT and Enhanced Understanding of Teacher Practices

Table 3 also indicates whether respondents believed the PACT had enhanced their understanding in the three teaching aspects: decision-making processes in teaching, postevaluation of teaching decisions, and gathering and analyzing data for instruction. In each case, the majority of respondents affirmed that the PACT experience had enhanced their understanding of effective teaching practice across all three aspects to some degree, whereas 9% or less asserted that they had experienced no enhanced understanding of teaching practices. Fifty-three percent affirmed an enhanced understanding of decision-making processes for teaching to an "adequate or significant degree." Thirty-eight percent said PACT enhanced their understanding "somewhat" in this category. More than 61% of respondents affirmed enhanced understanding of postevaluation of teaching decisions to an "adequate or significant degree," whereas 34% said PACT enhanced their understanding "somewhat" in this category. A similar number of respondents, 60%, said the PACT enhanced their understanding in gathering and analyzing data for instruction to an "adequate or significant degree," whereas 34% said PACT enhanced their understanding "somewhat" in this category. Only 9%, 4%, and 6%, respectively, reported that the

 Table 3

 Degree to Which the CalTPA and PACT Enhanced Understanding of Teaching Practices

			on-making s in teaching	Postevaluation of Gathering and at teaching decisions data for instruction			
\mathcal{L}	ree of rstanding	n	%	n	%	n	%
CalT	PA.						
	Significant	88	9	124	12	143	14
	Adequate	260	26	317	32	332	33
	Somewhat	395	40	332	33	335	34
	Not at all	256	26	227	23	190	119
PAC'	Τ						
	Significant	236	24	255	25	242	24
	Adequate	293	29	363	36	363	36
	Somewhat	382	38	338	34	338	34
	Not at all	89	9	44	4	57	6

Note. CalTPA = California Teaching Performance Assessment. PACT = Performance Assessment for California Teachers.

PACT assessment did not enhance their understanding of these effective teaching practices at all.

In conclusion, survey data showed that the TPA experience, regardless of the model, enhanced understanding of teacher practices in three aspects: decision-making processes in teaching, postreflection of teaching decisions, and gathering and analyzing data to inform instruction. However, although both CalTPA and PACT users reported enhanced understanding as a result of the TPA experience, PACT users indicated a greater impact on their teaching practices than did CalTPA users.

TPA and Clinical Practice Experience

To obtain beginning teacher perceptions of the relationship between completing TPA and a successful clinical practice experience, two questions were asked. The first asked teachers to reflect on their perception at the time of student teaching, and the second asked them to see if their opinion afterward was different. Table 4 reports a cross-tabulation of TPA perceptions at the time of student teaching by the four models. A chi-square test of significance revealed a statistically significant relationship between candidates' perceptions and type of TPA, χ^2 (3) = 8.837, p < .05.

Table 4 also compares the looking back perspective by the four models and was not statistically significant (p < .072). A second analysis was completed selecting just the three models that students identified and eliminating the "don't know" category. This second analysis was significant at the p < .05 level.

For the CalTPA group, more than 75% of respondents reported during the clinical practice portion of their teacher credential program that they felt the CalTPA "took away" from the clinical practice experience. When later reflecting on the value of

Table 4
Cross-Tabulation of Perceptions of TPA Taking Away
or Enhancing Clinical Practice Experience by TPA Model

	TPA completed, n (%)				
	CalTPA ^a	PACT ^b	FAST ^c	Don't know ^d	Total
At the time ^e					
Enhanced	141 (25%)	53 (34%)	8 (36%)	79 (32%)	281 (28%)
Took away	434 (76%)	104 (66%)	14 (64%)	167 (68%)	719 (72%)
Looking back ^f					
Enhanced	209 (36%)	75 (48%)	8 (36%)	92 (37%)	384 (38%)
Took away	366 (64%)	82 (52%)	14 (64%)	154 (63%)	616 (62%)

Note. N = 1,000. CalTPA = California Teaching Performance Assessment. FAST = Fresno Assessment of Student Teachers. PACT = Performance Assessment for California Teachers. TPA = teaching performance assessment.

 $^{-1}$ aN = 575. 6 N = 157. 6 N = 22. 6 N = 246. 6 * χ^{2} (3) = 8.837, p < .05. $^{6}\chi^{2}$ (3) = 6.995, p < .072.

the CalTPA during clinical practice, 64% still reported the CalTPA "took away" from their clinical practice experience (see Table 4). Only 24% of respondents felt the CalTPA enhanced their experience in their clinical practice assignments at the time they were taking it, and 36% affirmed that the assessment did enhance their experience as they now look back.

PACT and Clinical Practice Experience

Sixty-six percent of PACT users reported that taking the TPA during clinical practice "took away" from their experience. Though PACT users responded more favorably to the TPA in hindsight of having completed the TPA, 52% still reported the TPA "took away" from their teaching experience while they were in their clinical practice assignments (see Table 4).

In summary, when asked to assess whether the TPA enhanced or took away from their clinical practice experience, as perceived both *at the time* and *looking back*, the majority of both CalTPA and PACT users reported that the TPA "took away" from their clinical experience. The beginning teachers who utilized the FAST model at Fresno State, though a very small group (n = 22), responded similarly to both CalTPA and the overall percentage of 62%. The large group of students who did not identify their model on the survey also had very similar results to both the CalTPA and the overall percentage of the entire sample. PACT users gave a more favorable response than did users of any of the other three models.

CaITPA and Feedback

The majority of CalTPA respondents (61%) had not received any feedback from their credentialing programs about their TPA other than a passing or nonpassing score. Of those who did receive feedback, 27% felt the feedback they received was somewhat valuable, and 48% stated the feedback received was adequately or significantly valuable. Twenty-five percent felt the feedback received was "not at all" valuable to understanding effective teaching practices.

PACT and Feedback

Like the CalTPA respondents, the majority of PACT respondents (69%) had not received any feedback from their credentialing programs about their TPA other than passing or nonpassing scores. Respondents who had received feedback reported that the feedback was valuable, with 55% stating that the value was significant to adequate, whereas 31% felt the feedback was somewhat valuable and 14% reported that the feedback was "not at all" valuable to their understanding of effective teaching practices.

Consistent to both TPA models, most respondents were unable to report on the value of feedback because the majority of survey participants reported that they

did not receive any feedback from their TPA evaluators. Overall, fewer PACT users received feedback than did CalTPA users. However, both CalTPA and PACT users who did receive feedback on their TPAs affirmed its positive value, though PACT users responded more favorably than CalTPA users on the value of the feedback received.

Elaborating on the Qualitative Findings

Researchers were able to extract clear and common themes from the 1,983 comments collected across both of the TPA models. In Table 5, the node in the left column refers to the reoccurring themes as identified by the candidate respondents: the source was how many respondents commented on that theme and the reference was the total number of times the theme was referred to across all responses. Each of the narrative files was coded to distinguish between the types of California institutions and the TPA model a campus used. In the narrative examples used in this

Table 5
Student Responses Identified According to Node, Source, and Reference

Node	Source	No. references
Value		
Negative	133	317
Positive	74	120
Equal	2	2
Quantity of time		
Negative	85	116
Positive	1	1
Emotional reaction		
Negative	59	90
Positive	2	2
Equal	1	1
Validity		
Negative	30	49
Positive	67	93
Equal	1	1
Quality of time		
Negative	115	200
Positive	29	44
Other important		
Negative	4	5
Positive	1	1
Suggestion	41	46

portion, the first letter specifies type of campus (U = UC; C = CSU; P = private). The second letter specifies the TPA model (P = PACT; T = CalTPA). For example, a file coded 0974UP would mean UC and PACT. The numbers preceding the two letters refer to the randomly assigned number for the file.

Value of the TPA Based on the Qualitative Data

The value of the TPA, regardless of the model, was not obvious to many TPA users. When the responses were analyzed for this theme, more candidates responded negatively (n = 133) than positively (n = 74), and those who responded negatively repeated this theme almost three times as often (n = 317) as the positive references (n = 120). Beyond the number of times students responded negatively or positively around the theme of value, there were recurring subthemes within the larger category of value seen by candidates.

One reoccurring subtheme in the category of value was the relationship between what teacher candidates do with TPAs in their credentialing programs and what beginning teachers experienced in their BTSA inductions. Newly credentialed teachers in California participate in a 2-year BTSA program offered either through the district or county office of education and, at successful conclusion, are recommended to CCTC for their clear credential. While it might be assumed that the connection between TPA and BTSA programs would be developed somewhat consistently across the state, the responses of candidates were not uniform. Although respondents were frustrated at having to repeat the TPA experience later as a BTSA participant, some had a more positive experience moving from TPA to BTSA. More positive views of the link between TPA and BTSA were "I felt like the TPAs prepared me adequately for BTSA" (0974UP) and "TPA has helped me with my BTSA program and knowing how to gather information" (0888CP).

Some responses provided alternative views of the TPA experience. One respondent stated,

I feel that gathering and analyzing data was what I was doing in my credential program. . . . This additional TPA assignment/requirement was just an additional hoop to jump through when I was already overwhelmed at being in a classroom for the first time. Then to have to do the same sort of exercise again with BTSA is too much. No other profession has so many requirements to show mastery. It's too much. (0121UC)

Though many student teachers reported being stressed out during the experience, many saw the value of TPA as guiding them toward more effective teaching. One respondent said, "It was a complement to what I was doing in the classroom and it made it easier to teach after the case studies were completed. It was like a recipe for success" (0571UC).

A number of the respondents who reported positive value in the TPA saw the connection between lesson planning and student assessment. One responded, "How

to backwards design lessons and track student data was beneficial" (0816UP). Another positive aspect of the TPA was the requirement to videotape themselves in a classroom during student teaching, evaluate their own performance, and be evaluated by the TPA assessor. One respondent said, "Because I was required to analyze student data and video myself teaching, watching myself on video was eye opening" (0430UC).

Quantity of Time

Overwhelmingly, respondents reported that the assessment required an average of 22 hours to complete. Responses analyzed for this theme showed that many had more negative feelings (n = 85) than positive feelings (n = 1) about time spent on TPAs. They shared various versions of the sentiment "TPAs are incredibly time consuming" (0411CP). The direct result of time consumption on an external task meant to candidates that they were unable to spend adequate time preparing for essential "in-class" requirements, especially when student teaching.

Respondents stated that they felt unprepared for their student teaching, which led to negative experiences, both physical and emotional. One respondent stated, "It took my time away from planning and reflecting on lessons for student teaching and made me feel more stressed out" (0404CP). More specifically, at the same time as the TPA experience took away from a candidate's in-class preparation time and enhanced an already stressful situation, numerous candidates also commented that content they prepared for their TPAs only served their student teaching responsibilities in an extremely limited manner. One reported, "TPAs had a lot of work/questions that only pertained to one lesson plan" (0434CC). One solution offered by a small but significant group of candidates was to decrease time spent on TPAs by eliminating redundancy within the assessment. A respondent succinctly described the TPA experience in relation to quantity of time by stating,

The idea behind the TPA is good and I can see the value. In practice, however, the TPA took so much time it did not enhance the experience at all. A much shorter version without the redundancy of questions would probably have been more helpful. (0483UP)

Validity

The area of validity also generated positive comments. The most straightforward comment for validity of the assignment was "this assessment is valid with regards to being an effective teacher" (0427UP). The most common positive comments in the area of validity were around the practice of reflection, such as "constant reflection and data analysis is important to the teaching profession" (0404CP) and "it helped me be a reflective teacher and understand a teacher's job better" (0587CP). Less frequent but repeated by many confirming the validity of the assessment were "TPA taught me the importance of differentiation" (0444UP) and "to this day I still

incorporate strategies I learned through the TPA" (0413CC). Negative comments in the area of validity were variations of "this was an additional hoop, busy work" (0405 UP), "I only did enough to satisfy the assignment" (0868CP), and "[it was] irrelevant and meaningless" (0849CP).

Quality of Time

Negative comments on the quality of time were nearly 4:1 over positive ones. The most common negative comments were consistent with "it took away from the student teaching experience" (0402CC) or "it was a lot of busy work" (0437CC). Many student teachers were quoted as saying, "I was so focused on completing the assignment with a passing score that I was unable to fully devote myself to teaching" (0441CP).

Quality of time comments coded as positive had respondents stating that the TPA process "enhanced the student teaching experience" (0566CP), "how to write lesson objectives and make sure that I am assessing what I set out to teach" (0861PC), and "helped me see more clearly how assessment and planning are connected" (0885PU).

Emotional Reactions

Many of the respondent comments connoted a negative emotional reaction. One respondent said, "I felt burdened by it and stressed instead of having more energy and time to pour into student teaching" (0884CC), while another stated, "It was a ridiculous exercise in busy work and how much useless paperwork is involved in teaching" (0570CP). Some respondents felt stressed and that they had too many other responsibilities during the clinical practice experience.

Suggestions

The vast majority of the suggestions were to provide more feedback to future teacher candidates: "Would like more than just a numerical feedback, put so much work into the TPA I would've liked more feedback" (0999CP); "The TPA process was too long and did not provide feedback initially. I would have liked additional personal feedback rather than my own feedback on the teaching process" (0902CP).

Another suggestion was to eliminate the redundancy in the TPA, which could reduce the quantity of time. One respondent stated, "The process is good, but the written reflections and responses are entirely too repetitive and long. I wrote the same thing over and over again, because the prompts were redundant" (0959CP).

It was also suggested that there should be more time dedicated to student teaching and less time to this assessment: "I spent more time perfecting and creating a data program. It would have been more beneficial to use one like I have at my school. Then I could spend the time analyzing my practice" (0824UC).

Finally, respondents wished the TPA would be more connected with what they were currently working on as new teachers: "After all that work with TPA, then having to do the same sort of exercise again with BTSA, it's too much" (0405UP). This suggestion and others are based on the survey responses from beginning teachers who did not value the TPA as part of their learning or said it took away from the clinical practice experience.

Conclusions and Recommendations

Our data suggest several conclusions. First, the TPA experience enhanced understanding of teacher practices in three areas: decision-making processes in teaching, postreflection of teaching decisions, and gathering and analyzing data to inform instruction. A second conclusion is the overwhelming sentiment that the length of the TPA and the required time commitment on the part of the candidate are excessive, especially during the clinical practice experience. A third conclusion is a perceived lack of meaningful connection between the TPA process in the teacher preparation program and the BTSA program. Lastly, there is a clear absence of feedback provided to the candidate after such a significant commitment of time and effort on the assignment. Feedback is necessary for teachers to become more effective in their practice.

Out of these conclusions come four recommendations. The first recommendation is to reduce the overall length of the TPA while retaining the focus on key aspects of teaching, such as instruction based on student information, selecting effective assessments, and planning future instruction based on student performance data. The second recommendation is to find ways to make a more obvious correlation between the TPA and credentialing program courses, assignments, and other assessments, especially with regard to the clinical practice experience. The third recommendation is to link the candidate's TPA experience during the credentialing program with the expectations of the district's beginning teacher support system, creating a meaningful bridge from teacher training to initial employment. The final recommendation is to include additional ways to give feedback to teacher candidates.

We suggest that the TPA could reduce its overall length by making a stronger correlation and clearer relationship between the TPA and other credentialing program requirements. Respondents perceived the TPA as being an excessively long and repetitive assignment. By providing a more intentionally unified assessment approach, the teacher preparation program could decrease the time commitment associated with the TPA during an already impacted teacher training experience and allow other program assessments to cover important teaching aspects. By allowing the teacher preparation programs to take responsibility for assessing distinct aspects of teaching currently covered by the TPA, the TPA could be reduced in scope, and the relationship between the preparation program components and the TPA could be strengthened. Candidates could appreciate the integrated experience rather than disparage the requirements placed upon them.

Because candidates reported that the TPA interrupted clinical practice and may even have prevented them from advancing their instructional skills, programs should spread the work of the TPA over the entire preparation program. Also, teacher educators need to make more explicit connections between clinical practice and the value of TPA. Candidates need to see how their teaching reflections expressed in the TPA can improve their work during clinical practice. To make a clearer relationship between what is learned during credentialing program course work and what is asked on the TPA, preparation programs must help the students make the connection (e.g., this class prepares you for TPA 1 or Task 3 in these specific ways, or this task goes along with clinical practice because . . .). To strengthen the TPA—course work relationship, programs could embed assignments in methods courses reflecting the teaching aspects being assessed with the TPA. For example, when multicultural courses require teacher candidates to prepare a profile of the students in their fieldwork class, the importance of knowing all aspects of students before planning instructional experiences becomes clearer.

The third recommendation is that universities and school districts develop an explicit link between teacher preparation programs, the TPA, and district induction programs. Respondents in the survey were in the midst of an induction program, and many commented that the TPA experience could be better utilized in the induction program. If teacher preparation is part of a learning progression from undergraduate teacher candidate work to beginning teachers in classrooms (i.e., preservice to in-service), then it makes sense that all TPA models, including edTPA, be used in intentional ways along this continuum.

The fourth recommendation is to seek ways to provide feedback to teacher candidates about their performance on the TPA. Assessments coupled with feedback are crucial for student learning (Bransford, Brown, & Cocking, 2014), and almost all of the survey respondents wished they had received more feedback. Although a majority of respondents reported receiving no feedback, those who reported receiving feedback said it was adequately or significantly valuable. Assessment experiences without feedback are not growth experiences for the learner, the teacher, or the program. Feedback must be timely and specific to enhance learning, and well-designed assessments can provide specific, personalized, and timely information to guide both learning and teaching (McTighe & O'Connor, 2005). It is recommended that revised implementation standards for the TPAs, as well as edTPA implementation, detail appropriate ways for assessors to provide feedback that will further develop the candidate and inform teaching and learning, while retaining the necessary validity and reliability of these high-stakes assessments.

As the CCTC investigates the options for a revised system of assessment for TPAs, we suggest that the perspective of the candidates be carefully considered. Performance assessments yield evidence that reveals candidate understanding, and this authentic application calls for candidates to transfer knowledge, using what they know in new situations. The TPA enables candidates to apply their learning

thoughtfully and flexibly, thereby demonstrating their understanding of the many teaching aspects crucial to effective instruction, and perhaps resulting in a more coherent and fruitful assessment experience. Realizing this goal can provide teacher education programs the opportunity to reduce the length and scope of the TPA by sharing the assessment of teaching aspects across measures, provide meaningful feedback to teacher candidates, and link the TPA to district induction programs.

References

- American Association of Colleges for Teacher Education. (2014). *National Teaching Per*formance Assessment: The edTPA. Retrieved from http://edTPA.aacte.org/
- Bogan, R. C., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theories and methods* (4th ed.). Boston, MA: Allyn and Bacon.
- Bransford, J., Brown, A., & Cocking, R. (2014). *How people learn: Brain, mind, experience and school*. Washington, DC: National Academy Press.
- Bunch, G. C., Aguirre, J. M., & Téllez, K. (2015). Integrating a focus on academic language, English learners, and mathematics: Teacher candidates' responses on the Performance Assessment for California Teachers (PACT). *New Educator, 11*(1), 79–103.
- California Commission on Teacher Credentialing. (2013a). California teacher performance expectations. Retrieved from http://www.ctc.ca.gov/educator-prep/standards/adopted-TPEs-2013.pdf
- California Commission on Teacher Credentialing. (2013b). *Teaching performance assessment* (TPA). Retrieved from http://www.ctc.ca.gov/educator-prep/tpa.html
- California Department of Education. (2008). Senate Bill 2042. Retrieved from http://www.leginfo.ca.gov/pub/97–98/bill/sen/sb 2001–2050/sb 2042 bill 19980918 chaptered.html
- Chung, R. R. (2005). The Performance Assessment for California Teachers (PACT) and beginning teacher development: Can a performance assessment promote expert teaching practice? (Unpublished doctoral dissertation). Stanford University.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. Education Policy Analysis Archives, 8(1), 1–44.
- Darling-Hammond, L. (2010). Evaluating teacher effectiveness: How teacher performance assessment can measure and improve teaching. Retrieved from https://www.americanprogress.org/issues/education/report/2010/10/19/8502/evaluating-teacher-effectiveness/
- Darling-Hammond, L., Newton, S. P., & Wei, R. C. (2013). Developing and assessing beginning teacher effectiveness: The potential of performance assessments. *Educational Assessment, Evaluation, and Accountability*, 25, 179–204.
- Duckor, B., Castellano, K. E., Téllez, K., Wihardini, D., & Wilson, M. (2014). Examining the internal structure evidence for the Performance Assessment for California Teachers: A validation study of the elementary literacy teaching event for Tier I teacher licensure. *Journal of Teacher Education*, 65(5), 402–420.
- Gainsburg, J., & Ericson, B. (2015). (Relatively) smooth sailing: How a large state university successfully adopted the PACT teaching event. *New Educator*, 11(1), 24–36.
- Larsen, L. R., & Calfee, R. C. (2005). Assessing teacher candidate growth over time. *The Clearing House*, 78(4), 151–157.
- Lit, I. W., & Lotan, R. (2013). A balancing act: Dilemmas of implementing a high-stakes performance assessment. The New Educator, 9(1), 54–76. doi:10.1080/1547688X.2013.751314

Beginning Teachers' Perceptions

- McTighe, J., & O'Connor, K. (2005). Seven practices for effective learning. *Educational Leadership*, 63(3), 10–17.
- Mertler, C. A., & Charles, C. M. (2008). *Introduction to educational research* (6th ed.). Boston, MA: Pearson.
- Newton, S. (2010). Preservice performance assessment and teacher early career effectiveness: Preliminary findings on the Performance Assess for California Teachers. Retrieved from http://edtpa.aacte.org/wp-content/uploads/2012/07/Preservice-Performance-Assessment-and-Teacher-Early-Career-Effectiveness.pdf
- Okhremtchouk, I., Newell, P. A., & Rosa, R. (2013). Assessing pre-service teachers prior to certification: Perspectives on the Performance Assessment for California Teachers (PACT). Education Policy Analysis Archives, 21(56), 1–31.
- Okhremtchouk, I., Seiki, S., Gilliland, B., Ateh, C., Wallace, M., & Kato, A. (2009). Voices of pre-service teachers: Perspectives on the Performance Assessment for California Teachers (PACT). Issues in Teacher Education, 18(1), 39–62.
- Pecheone, R. L., & Chung, R. R. (2006). Evidence in teacher education: The Performance Assessment for California Teachers (PACT). *Journal of Teacher Education*, 57(1), 22–36.
- Peck, C. A., & McDonald, M. (2013). Creating "cultures of evidence" in teacher education: Context, policy, and practice in three high-data-use programs. *The New Educator*; 9(1), 12–28. doi:10.1080/1547688X.2013.751312
- Performance Assessment for California Teachers. (2013). What is PACT? Retrieved from http://www.pacttpa.org/_main/hub.php?pageName=Home
- Porter, J. M. (2010). *Performance Assessment for California Teachers (PACT): An evaluation of inter-rater reliability* (Unpublished doctoral dissertation). University of California, Davis.
- QSR International. (2014). NVivo 10 for Windows. Retrieved from http://www.qsrinternational.com/
- Rivkin, S. G., Hanushek, E. A., & Dain, J. F. (2005). Teachers, school and academic achievement. *Econometrica*, 73, 417–458.
- Sanders, W. L., & Rivers, J. C. (1996). Cumulative and residual effects of teachers on future student academic achievement (Research progress report). Retrieved from http://www. cgp.upenn.edu/pdf/Sanders_Rivers-TVASS_teacher effects.pdf
- Sandholtz, J. H., & Shea, L. M. (2012). Predicting performance: A comparison of university supervisors' predictions and teacher candidates' scores on a teaching performance assessment. *Journal of Teacher Education*, 63(1), 39–50.
- Sato, M. (2014). What is the underlying conception of teaching of the edTPA? *Journal of Teacher Education*, 65(5), 421–434.
- Sloan, T. (2013). Distributed leadership and organizational change: Implementation of a teaching performance measure. *The New Educator*, 9(1), 29–53. doi:10.1080/1547688X.2013.751313
- Stanford Center for Assessment Learning and Equity. (2013). edTPA. Retrieved from https://scale.stanford.edu/about
- Stanford Center for Assessment Learning and Equity. (2015). *edTPA participation map*. Retrieved from http://edtpa.aacte.org/state-policy
- Torgerson, C. W., Macy, S. R., Beare, P., & Tanner, D. E. (2009). Fresno Assessment of Student Teachers: A teacher performance assessment that informs practice. *Issues in Teacher Education*, 18(1), 63–82.
- van Es, E. A., & Conroy, J. (2009). Using the Performance Assessment for California Teachers to examine pre-service teachers' conceptions of teaching mathematics for understanding. *Issues in Teacher Education*, 18(1), 83–102.

Campbell, Ayala, Railsback, Freking, McKenna, & Lausch

- Verdi, M. P., Riggs, M. L., & Riggs, I. M. (2012). The California Teaching Performance Assessment task for assessing student learning: What do teacher education candidates really learn? *Teacher Education and Practice*, *25*(3), 336–349.
- Whittaker, A., & Nelson, C. (2013). Assessment with an "end in view." *The New Educator*, *9*(1), 77–93. doi:10.1080/1547688X.2013.751315
- Wilkerson, J. R. (2015). The need for instructional sensitivity and construct clarity in PACT: A commentary on "Examining the internal structure evidence for the Performance Assessment for California Teachers." *Journal of Teacher Education*, 66(2), 184–192.



Published by Caddo Gap Press for the California Council on Teacher Education each winter, spring, summer, and fall. Now in its fourth decade of publication, *Teacher Education Quarterly* has emerged as the leading scholarly publication in the teacher education field. Each volume focuses on a major current topic in the preparation, study, and training of education professionals, in articles written by the top researchers and practitioners in their fields from across the country.

Teacher Education QuarterlySubscription Form

	Subscription Form
(\$10	se enter my subscription to <i>Teacher Education Quarterly</i> 0 for individuals; \$200 for institutions; \$50 for students) for ext four issues (if outside U.S., add \$60 postage)
Name	
Address	City/State/Zip
E-mail addr	ess
Charge to:	☐ Check enclosed (Payable to Caddo Gap Press)☐ Visa☐ Mastercard
	Exp. Date
	Mail Completed form to Caddo Gap Press eary Boulevard, PMB 275, San Francisco, California 94118, U.S.A. 415/666-3012; E info@caddogap.com; W www.caddogap.com
Su	bscriptions may also be ordered on line via the website above.



A Longitudinal Investigation of the Relationship between Teacher Preparation and Teacher Retention

By Guili Zhang & Nancy Zeller

Few issues in education threaten the nation as seriously as the present and growing shortage of teachers. Teacher attrition is high among teachers across the nation and is one of the most serious causes of teacher shortage (Ingersoll, 2004). As policy makers rush to address this problem, research is needed to examine the retention effects of policy decisions regarding various elements affecting teachers' decisions to remain in or leave the profession.

In recent years, there has been growing popularity of alternative teacher certification, which is largely due to the serious teacher shortage across the country (Cochran-Smith et al., 2011). In 2004, 43 states, plus the District of Columbia, reported having some type of alternative route for certifying teachers, whereas only 8 states said they had alternative routes in 1983 when the National Center for Education Information began collecting such data. In states like California, New Jersey, and Texas, which have been pursuing alternative routes since the mid-1980s, 20% or more of new teachers enter the profession through alternative routes.

Guili Zhang is an associate professor and Nancy Zeller recently retired as a professor, both with the Department of Special Education, Foundations, and Research in the College of Education at East Carolina University, Greenville, North Carolina. Email addresses: zhangg@ecu.edu & zellern@ecu.edu

Alternative route certification programs (ARC) have been specifically designed to recruit, prepare, and license talented individuals who already have at least a bachelor's degree. Candidates must pass a rigorous screening process. ARC programs are field based and include course work or equivalent experiences while teaching. Candidates of the program work closely with their mentors in preparation to meet the high performance standards required for completion of the program (Office of Innovation and Improvement, 2004).

In the report of the Education Commission of the States, the commission raised the important question of whether there are alternative route programs that graduate high percentages of effective new teachers with average or higher than average rates of teacher retention (Allen, 2003). The report concluded that retention rates for alternative routes can be comparable to those of traditionally prepared teachers over the short term, but with regard to long-term retention, the research on this issue has to be regarded as inconclusive. This study aims to look at long-term retention effects of alternative route teacher preparation programs and traditional teacher preparation programs.

Purpose

Teacher retention is important because teacher turnover creates instability and costs and negatively impacts teaching quality—especially in schools that most need stability (Donaldson & Johnson, 2011). During an interview in 2013, professor and researcher Richard Ingersoll stated that anywhere between 40% and 50% of teachers will leave the classroom within their first 5 years. This percentage includes the 9.5% who leave before the end of their first year (Riggs, 2013).

Ingersoll (2004) used the term the *revolving door effect* to describe the frustrating cycle that occurs at at-risk schools that continually search for new teachers to replace the ones who leave. When qualified teachers leave in just a few years, they need to be replaced by novice teachers, which incurs substantial costs. According to the U.S. Department of Labor (as cited by Alliance for Excellent Education, 2005), school systems in the United States spent \$4.9 billion on teacher turnover in 2005. More important than monetary cost is the cost to student academic well-being: Continuously replacing experienced, effective teachers with novice teachers causes students to be taught by a stream of inexperienced, first-year teachers.

Research is needed to explore new, alternative routes to teaching careers that can result in good retention. The purpose of this study was to examine one important factor related to teacher retention: *type of teacher preparation*. There appears to be three main routes to a teaching career:

- Teachers can complete a *regular*, accredited, baccalaureate-level college- or university-based teacher education program.
- Teachers can enter the profession through a lateral entry alternative

licensure program: a sink-or-swim route to teaching that allows qualified individuals to obtain a teaching position and begin teaching immediately, while earning a license as they teach. Lateral entry teachers must complete specific courses toward licensure within a specified period of time. To be considered for lateral entry, individuals must have a bachelor's degree from an accredited college or university.

• Teachers can complete a *special alternative licensure program* designed to ease non–education majors into teaching and support them in a teaching career. For example, the NC Teach program in North Carolina is one such alternative method of preparing new teachers. NC Teach focuses on recruiting, preparing, and supporting high-quality, mid-career professionals who want to enter teaching through an alternative licensure route. NC Teach is a year-long program with 5 weeks of essential skills in the summer. It is designed for persons who have less than 1 year of teaching experience or who plan to teach while earning a license. It involves 12 semester hours of graduate work.

Perspectives

As the need for teachers has mushroomed out of control nationwide, researchers have attempted to identify factors related to teacher retention. Among factors studied have been the role of the principal (David, 2003), and the administration in general, which encourages and promotes teachers' ideas (Inman & Marlow, 2004). Closely related is the factor of mentoring or counseling (Brown, 2003; David, 2003; Hoerr, 2005; Inman & Marlow, 2004). Inman and Marlow (2004) also found that collegiality and positive attitudes about teachers in the community are related to teacher retention. Johnson and Birkeland (2003) identified both school support and success with students as positive factors in retention. Hanson, Lien, Cavalluzzo, and Wenger (2004) found that higher teacher pay increases the likelihood that a person will continue to teach. Buckley, Schneider, and Shang (2005) found that facility quality in Washington, D.C., was an important predictor of teachers' decisions to leave their positions, even when controlling for other variables. Reynolds and Wang (2002) explored the effect of having attended a graduate program linked to a professional development school (PDS) and found no difference in retention rates between teachers who had attended a PDS-linked program and those who did not.

In 2011, the Gates Foundation (as cited in Smollin, 2011) polled 40,000 teachers about job satisfaction. The results showed that the majority of those polled teachers agreed that supportive leadership, time for collaboration, access to high-quality curriculum and resources, clean and safe buildings, and relevant professional development are even more important than higher salaries. Working conditions in many public schools remain far from ideal, especially for beginning

teachers, who are most likely to be assigned to the highest need schools. Despite the added challenges they face, these teachers are often given few resources and little professional support (Smollin, 2011).

Researchers have also come to conclude that teacher attrition rates are, in part, due to the level of education received as well as the quality of the program itself. Jorissen (2002) believed it is the level of preparation that influences satisfaction in teaching, which inevitably determines a teacher's decision to stay or go. Jorissen summarized that the longer preparation programs, which combine pedagogical training with a supervised field experience, are more likely to produce teachers who are satisfied and committed to remaining in teaching.

A multitude of ARCs are available to prospective teachers, some displaying higher success rates than others. Those who support alternative route to certification programs claim that the participants are highly motivated to enter the teaching profession and that they fill critical shortages in specific subjects and school districts (Alger & Norman-Gloria, 2009). Teach for America (TFA) is the most well renowned alternative certification program in the United States. Much research has shown that TFA produces the same quality teachers as the traditional university program, although student test scores sometimes show otherwise (Wilson, 2011). Often, the great debate focuses on the value of teachers' subject-matter knowledge and their pedagogical skills; the amount of preparation a new teacher receives in these areas is determined by the path he or she followed into teaching (Ingersoll, Merrill, & May, 2012). Many attribute the success of TFA to minimized traditional teacher preparation requirements, also known as deregulation. Deregulation advocates argue that the course work offered by traditional preparation programs can be arbitrary, unchallenging, and excessive (Maier, 2012). Maier also showed that TFA members, unlike their traditionally prepared colleagues, are provided a valuable credential as a reward for their 2-year service. If this reward also contributes to turnover, then it does so at a cost to the students, parents, and communities that TFA serves. At this point, nearly two-thirds of TFA teachers continue as public school teachers beyond their 2-year commitments (Donaldson & Johnson, 2011).

Another form of ARC is the PDS. Most of the published studies of PDS retention and preparation favor PDS preparation over more traditional types of teacher education and have found no differences between PDS and non-PDS graduate retention from one institution, but the percentage of PDS graduates who expected to remain in teaching exceeded the percentage for non-PDS graduates. Moreover, PDS graduates felt more satisfied with their preparation than did non-PDS graduates (Reynolds & Wang, 2005). Latham and Vogt (2007) also found that PDSs significantly and positively affect how long teachers remain in education. Individuals who completed the Alternative Certification for Teaching (ACT) program also reported feeling well prepared for teaching and were supported by a statistical comparison of attrition rates to traditional programs. The ACT program has shown to be one of the most preferred alternative routes to teaching (Stanley & Martin, 2009). The

Teaching Fellows program is a highly competitive and desirable urban alternative certification program in New York City that was developed in response to teacher shortages. This program was found to have a higher attrition rate than most ARCs, likely because of the high level of intensity and demanding immersion experience (Malow-Iroff, O'Connor, & Bisland, 2007).

In North Carolina, educators have developed a number of special alternative licensure programs (Simmons & Mebane, 2005). Regarding other states, a report of the National Commission on Teaching and America's Future (Hunt & Carroll, 2002) identified high-quality alternative licensure programs in California, Colorado, and Missouri, programs that have reported retention rates of 80% or higher. Fox and Duck (2001) described a similar program at George Mason University, and Heyman (2002) compared a special alternative licensure program with the traditional licensure program at the Metropolitan State College of Denver.

To address growing shortages of qualified teachers, while providing the best education opportunities for all students, the School District of Hillsborough County, Florida (SDHC), created its Alternative Certification Program, offering teaching and training opportunities to noneducation majors. In the 1980s, Florida's State Department of Education had put alternative programs in the state universities, but over time it became clear that the alternatives were no longer alternative. According to SDHC's director of training and staff development, these alternatives had "folded right into the university as a straight graduate program." In 1997, the legislature decided to give districts the option of creating their own alternative programs. Hillsborough's program was created in 1998–1999. SDHC's general hiring practice for a long time was to first seek experienced teachers from other districts, then experienced teachers from other states, followed by student teachers and, finally, alternative route teachers (Office of Innovation and Improvement, 2004).

Between July 1998 and June 2004, 530 teachers completed the ACP, with 87% remaining in the district. The overall completion rate of candidates is 98%, and the retention rate is 85%. The program attributes its success to its flexible, low-cost method for noneducation majors to enter the teaching field quickly. Based on lessons learned, program officers have stressed the importance of "buy-in" from administrators, human resources, and district staff development teams before starting up. Building principals who will host the candidates need to believe in the program; the human resources department, which hires the teachers, needs to be kept in the loop, especially if it deals with certification issues; and district staff development teams need to know the weaknesses of the candidates and be prepared to offer assistance or additional professional development (Office of Innovation and Improvement, 2004).

Cleveland (2003) conducted a study that suggested that ARC programs address the shortage by increasing the pool of qualified teachers and attracting knowledgeable and enthusiastic individuals into the field. He believed these alternative routes attract specialists in various fields who would otherwise not have time to obtain a

traditional teacher degree. Easley (2006) agreed and explored the success rates of teachers who took an alternative route. His research supported the findings that only 15% of ARC graduates intend to leave the profession, whereas the general attrition rate is much higher. Furthermore, ARC graduates are more likely to be grounded in well-formed judgments about the realities of teaching, whereas traditional undergraduate certification candidates find the profession to be more overwhelming and stressful than anticipated (Easley, 2006).

Scribner and Heinen (2009) believed that ARC programs vary in quality, the same as traditional programs, and can therefore not be generalized as being better or worse than the latter. These researchers evaluated the pros and cons of alternative programs, gaining a better understanding of how they differ in form, function, and quality of preparation. Harris, Camp, and Adkison (2003) examined the effectiveness of three routes to teaching used in Texas: alternative certification programs (ACPs), similar to lateral entry programs in North Carolina; Centers for Professional Development and Technology; and traditional certification programs. They found that the traditional certification programs resulted in greater retention and that ACPs resulted in attrition at higher rates than the other types of preparation.

Results of a survey conducted by Justice, Greiner, and Anderson (2003) suggest that teachers who feel inadequately prepared to teach at the time of receiving their first teaching assignment are much less likely to choose the same route into teaching again. These data reveal that 40% of teachers say they would choose the emergency teaching program (alternative certification) again, as compared to 88% of traditionally trained teachers, who feel well prepared to teach. It has been said that alternative programs do not allot enough time for a teacher to develop self-efficacy before entering the classroom, which in turn affects student achievement and scores when they begin teaching. Low student achievement is a contributing factor in early career attrition rates, which some researchers have found stem from low self-efficacy in ARC graduates (Elliott, Isaacs, & Chugani, 2010).

Nagy and Wang (2007) completed a study on all aspects of ARC programs. Some of their research suggested that substantial numbers of ARC teachers lack an understanding of pedagogy, instructional strategies, classroom management, and students' social and academic developmental issues. Oddly, the results of their study displayed that a mere 13% of ARC teachers intend to leave the teaching field that year. Darling-Hammond (2003) stated that the more training prospective teachers receive, the more likely they are to stay. She provided data showing that both 4-year and 5-year teacher education graduates enter and stay at higher rates than do teachers hired through alternative programs that give them only a few weeks of training. Another studying favoring traditional methods found that more than one-fifth of classroom teachers leave their positions within the first 3 years of teaching; in urban schools, up to one-half of all new teachers leave teaching within the first 5 years. Moreover, 35% of emergency credentialed teachers leave within the first year of teaching, and more than 60% never receive a credential at

all; however, 70% of prepared teachers remain after 5 years of teaching (Burstein, Czech, Kretschmer, Lombardi, & Smith, 2009).

In a national sample of teachers in 2008, it was found that although the attrition of ARC teachers is higher than that of teachers from traditional pathways, the differences are relatively small, with 82.3% of alternative route teachers and 85.6% of teachers from university-based programs remaining in their schools over a 1-year period (Grossman & Loeb, 2010). In this same study, it was noted that attrition rates vary from program to program.

Certain areas of study have demonstrated a much higher attrition rate than others. Special education, math, and science teachers are currently in greatest demand because of the skyrocketing turnover rate. LaTurner (2002) investigated these issues by examining the relationship between teacher preparation, or path to teaching, and commitment to teach math and science. His research showed a high level of short-term commitment to teach but a relatively lower level of long-term commitment from those who are alternatively certified. Connelly and Graham (2009) investigated the effects of student teaching in teacher preparation programs on teacher attrition rate. Because much research has suggested that a great deal of preservice student teaching is critical for adequate preparation, particularly in special education, these researchers insisted that the lack of student teaching in ARCs contributes to the high rate of attrition. Robertson and Singleton (2010) completed a study where a quantitative design was implemented to determine how the retention rates of individuals who were alternatively prepared to teach special education compare with the attrition rates of those individuals who completed the traditional education program. It was found that although graduates reported similar experiences in the two programs, the alternatively certified remained teaching special education longer than the traditionally trained.

Also said to contribute to the high attrition rate in these three subject areas may be heavy concentration upon one subject in ARC programs, inadequately preparing pupils for the teaching world in its entirety (Stanley & Martin, 2009). Of course, this does not always render true. The alternative Early Childhood Studies/Education Program with a degree of science has found a higher retention rate than other educator programs as well as higher motivation because it includes more classroom experience and emphasis on understanding developing children and children with special needs (Xu, Gelfer, & Filler, 2003). Xu et al. believed that the realities of a multiracial, multiethnic, and multiability student population demand a unique and nontraditional approach characterized by an individualization sensitive to group identity. This particular program is all-inclusive, with an emphasis on student diversity, to which researchers attribute its high success rate. Another successful program is TIME 2000, which trains up-and-coming math teachers in Queens, New York, Out of 68 graduates of TIME 2000 since 2002 who began teaching as soon as they graduated, only 3 have left the field. Much credit is given to mentorship and subject focus (Artzt & Curcio, 2008).

Research has varied in terms of support of traditional or alternative certification methods. Despite the increase in popularity of ARCs, an immense amount of research supports the traditional teaching degree. Sander (2007) said that states' opposition to ARC programs has been due to a desire to maintain high standards in teacher preparation and, to some extent, a denial that a teacher shortage exists on a large scale. Opponents have pointed out that other professions do not question the need for internships, stringent college preparation programs, and high standards in preparing an individual for work in the field. Sander saw it to be much more costeffective to create teacher licensure and certification programs that head off attrition issues before they begin, although he found that insufficient data were available on long-term retention rates of alternative programs. While one study may show that traditionally trained teachers have higher retention rates than ARC teachers, another will find the general lack of commitment to teaching as a long-term career in those alternatively trained teachers (Suell & Piotrowski, 2007). Despite the research on comparison of the two methods of certification, there is no concrete decision as to which one produces better, especially long-term, results.

Of special interest to our study is the report of the Education Commission of the States (Allen, 2003), in which the following question is addressed: "Are there 'alternative route' programs that graduate high percentages of effective new teachers with average or higher-than-average rates of teacher retention?" (p. 6). The report concluded that retention rates for alternative routes can be comparable to those of traditionally prepared teachers over the short term, but with regard to long-term retention, "the research on this issue has to be regarded as inconclusive" (p. 7).

Methods

During the spring semester of the academic year 2003-2004, 20 doctoral students in educational leadership were enrolled in an educational research course at East Carolina University. As part of the requirements for the course, students, under the guidance of the instructor, were to replicate Johnson and Birkeland's (2003) study of teacher retention in Massachusetts between 1999 and 2002. It was hypothesized that circumstances, especially with regard to teacher preparation, were significantly different in rural eastern North Carolina when compared with the urban Massachusetts setting for the Johnson and Birkeland study. Each of the 20 doctoral students in the class were required to interview three initially licensed new teachers in eastern North Carolina, each of whom represented the three different possible types of preparation: regular teacher education program, lateral entry (a sink-or-swim alternative licensure program), and NC Teach (a statewide alternative teacher licensure program that focuses on recruiting, preparing, and retaining high-quality, mid-career professionals who want to enter teaching through an alternative licensure route). The teacher-interviewees were identified and contacted individually by the doctoral student interviewers.

Among the 60 interviewees, 41 were first-year teachers, and the remaining 19 were second-year teachers. The interviewees represented a mix of urban, rural, and suburban school settings in eastern North Carolina. Demographic and other relevant data (level taught, discipline taught, parents' occupation) were collected. The 22-question interview protocol, shown in the appendix, was adapted from that used by Johnson and Birkeland (2003). Each of the interviews was audio-taped and then transcribed and imported into NVivo 2 for qualitative data analysis. NVivo is a highly advanced program for supporting qualitative data analysis. This software permits the manipulation of interview data and allows researchers to visually code and link interviews and assign attributes to each interview once data are imported. The most powerful feature of NVivo is its "query," or search, function, allowing researchers to search by text, code, attribute, and combinations of variables (see Bazely & Richards, 2000; Richards, 1999, 2005).

Of the 60 interviewees, 22 were regularly prepared teachers, 20 were lateral entry teachers, and the remaining 18 were NC Teach teachers. Three follow-ups were carried out within the next 7 years, with the goal of finding out whether each of these 60 teachers was still in the teaching profession. In spring 2005, the 60 teacher–interviewees were contacted regarding their status (were they still teaching, or had they left the profession?). In spring 2006, the teacher–interviewees were contacted again regarding their status. In 2005, the number of teachers who were still teaching was 19 for regularly prepared teachers, 12 for lateral entry, and 17 for NC Teach. In 2006, the numbers of teachers who were still teaching in each category were 19, 9, and 16, respectively. In 2011, the numbers of teachers retained in the teaching profession were 19, 7, and 12, respectively.

Nine variables were studied qualitatively and quantitatively to determine their effects on teacher retention: age, career plans expressed during the first year of teaching, having children, ethnicity, gender, level (elementary, middle school, or high school), marital status, parents' occupation, and type of preparation.

Qualitative Data Analyses and Results

The focus of the qualitative analysis in this study was to determine if any of the variables had an impact on teacher retention. In spring and summer 2006 (Year 3 of the study), the "query" function of NVivo 7 was used to generate matrices (similar to cross-tabulations) for each the following targeted variables and the outcome variable retention: age, having children, ethnicity, gender, school level (elementary, middle school, or high school), marital status, and parents' occupation (education vs. noneducation).

We then engaged in a rigorous analysis of the transcript data. We first independently coded the transcript data and found a high intercoder reliability (Cohen's κ = .89) between the two coders' work. We then sought information about respondents' levels of teaching readiness and looked for patterns in their characteristics

and responses related to their retention status. Finally, in refining our findings, we relied on an iterative testing process, moving back and forth from the factors that we had identified to the details of the interview data and the retention status.

First, no clear age pattern was discovered for those who left teaching. Teachers who left teaching were young, middle-aged, or older, which indicates that teacher retention did not seem to be impacted by age for this group of participants. Similarly, teachers who left teaching varied in terms of gender, ethnicity, school level, marital status, parents' occupation, and whether they had children. In summary, none of the background variables (age, having children, ethnicity, gender, school level, marital status, or parents' occupation) appeared to have made a difference in retention.

However, among the "leavers," there were proportionally more respondents prepared by lateral entry than by the other two teacher preparation types. We further discovered that more lateral entry teachers reported being less sufficiently prepared to teach in the way that they were expected to teach. They found teaching to be unlike what they had expected and experienced greater challenges overall.

In addition, the same procedure was followed with type of preparation and the outcome variable retention. In this analysis, there appeared to be a difference in retention in relation to type of preparation, with lateral entry lagging behind the other two types of preparation. Finally, with the assistance of NVivo, reports were generated so that interviews of those no longer teaching could be compared with interviews of continuing teachers in terms of the career plans they expressed during the first year of teaching (and other key questions as well). The result of this analysis was the discovery that career plans expressed during the first year of teaching were completely unrelated to subsequent behavior regarding staying in or leaving the teaching profession. Many lateral entry teachers, although initially seeming so positive about careers in teaching, eventually appeared to fall victim to the sink-or-swim environment.

Quantitative Data Analysis and Results

Relationship Between Retention and Teacher Preparation

Because of the findings linking type of preparation to retention, these data were further analyzed using quantitative methods to test whether the association between teacher preparation type and retention is statistically significant. To summarize the data collection procedure, during February and March 2004, 60 initially licensed teachers in eastern North Carolina were interviewed; the same participants were contacted again in spring 2005, in spring 2006, and then again in spring 2011 regarding their teaching status. Table 1 cross-classifies the second-year, third-year, and seventh-year teacher retention data according to type of preparation and retention status. For the lateral entry type in Year 2, for instance, 12 out of 18 teachers

were still teaching and 6 were no longer teaching, whereas for the NC Teach type, 17 out of 18 were still teaching and only 1 was no longer teaching.

On the basis of these data, the retention percentages are calculated and reported numerically in Table 2 and graphically in Figure 1. For such data, it is important to know whether an association exists between teacher preparation type and retention. Is teacher preparation type a factor that impacts teacher retention? Are teachers prepared by one method more likely than those prepared by other methods to remain in the teaching force, or are teachers equally likely to remain in the teaching force regardless of how they are prepared?

A logistic regression model is the appropriate statistical model for binary response variables for which the response measurement for each subject is a "success" (e.g., retention) or "failure" (e.g., dropout; Agresti, 1996). It estimates the effect each explanatory variable has on the categorical outcome variable. In this study, using SAS, a logistic regression model was formulated to test for and estimate the dependency and predictive relationship between the outcome variable retention and explanatory variable teacher preparation type. The explanatory variable teacher

Table I

Cross-Classification of Retention in Years 2, 3, and 7 by Type of Preparation

	Retained in the profession		
Preparation type	Retained	Left	
Year 2			
Regular	19	3	
Lateral entry	12	8	
NC Teach	17	1	
Year 3			
Regular	19	3	
Lateral entry	9	11	
NC Teach	16	2	
Year 7			
Regular	19	3	
Lateral entry	7	13	
NC Teach	12	6	

Table 2
Retention Rate by Teacher Preparation Type

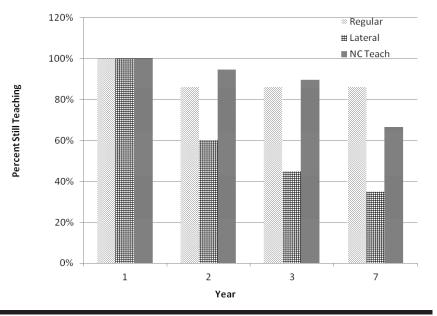
	Year			
Preparation type (%)	1	2	3	7
Regular	100.00	86.36	86.36	86.36
Lateral entry	100.00	60.00	45.00	35.00
NC Teach	100.00	94.44	89.89	66.67

preparation type is a categorical variable with three categories: regular, lateral entry, and NC Teach. The maximum likelihood estimates of the parameters and the Wald chi-squared statistics on the predictors' effects are obtained.

The results indicate that the retention likelihood for lateral entry teachers is significantly lower than the retention likelihood for NC Teach teachers in Years 2, 3, and 7 (maximum likelihood estimates = -1.289, Wald χ^2 = 6.56, p = .01 for Year 2; maximum likelihood estimates = -1.442, Wald χ^2 = 10.656, p = .001 for Year 3; maximum likelihood estimates = -1.259, Wald χ^2 = 9.415, p = .002 for Year 7). The results further suggest that there is no statistically significant difference between retention likelihood for regular and NC Teach teachers in Years 2 and 3 (maximum likelihood estimates = 0.151, Wald χ^2 = .073, p = .787 for Year 2; maximum likelihood estimates = 0.604, Wald χ^2 = 1.424, p = .23 for Year 3), but for Year 7, the retention likelihood was higher for regular than for NC Teach teachers (maximum likelihood estimates = 1.205, Wald χ^2 = 6.498, p = .01).

To summarize, lateral entry teachers' retention likelihood is lower than that of regular and NC Teach types over both the short and long term (in Years 2, 3, and 7). During the first 3 years, regular and NC Teach teachers have similar retention rates; however, in the long term (at Year 7), regular teachers' retention likelihood is higher than that of the NC Teach teachers.

Figure I
Retention Rate by Teacher Preparation Type



Retention Probability Based on Preparation Type

To facilitate better understanding, the predicted probabilities of retention are calculated using the estimated parameter values from the logistic regression analysis. The predicted probability of Year 2 retention for regular teachers is 86.3%. By comparison, lateral entry teachers' predicted second-year retention probability is 59.8%, and the NC Teach teachers' predicted second-year retention probability is 84.4%. The results indicate that NC Teach teachers are roughly 25% more likely to be teaching in Year 2 than lateral entry teachers, and regular teachers are roughly 27% more likely to be teaching in Year 2 than lateral entry teachers (see Table 3).

The predicted probabilities of Year 3 retention are 86.3% for regular teachers, 45% for lateral entry teachers, and 77.6% for NC Teach teachers. Consequently, by Year 3, lateral entry teachers' retention probability is roughly 41% lower than that of regular teachers and roughly 33% lower than that of NC Teach teachers.

By Year 7, the predicted retention probabilities are 86.3% for regular teachers, 35% for lateral entry teachers, and 65.5% for NC Teach teachers. Therefore, at Year 7, lateral entry teachers' retention probability is roughly 51% lower than that of regular teachers and roughly 31% lower than that of NC Teach teachers. The predicted retention probability results for all three years are shown graphically in Figure 2.

The predictive efficacies of the models are examined by looking at the coefficient of determination, the generalized R^2 . The generalized R^2 represents the amount of variance in retention explained by type of teacher preparation, that is, how much teacher preparation impacts retention. The Nagelkerke adjusted R^2 (labeled maxrescaled R^2 in SAS; Nagelkerke, 1991) was used, which overcomes a disadvantage of the generalized R^2 ; that is, the generalized R^2 cannot attain a value of 1. The Nagelkerke adjusted R^2 for the Year 2 logistic model is 19.46%, indicating that teacher preparation type accounted for 19.46% of the variance in Year 2 retention likelihood. Moreover, the Nagelkerke adjusted R^2 for the Year 3 logistic model is 26.37%, suggesting that type of teacher preparation accounted for 26.37% of the variance in Year 3 retention likelihood. Similarly, at Year 7, teacher preparation type accounted for 25.75% of retention likelihood.

Overall, the results suggest that about one-fourth of teacher retention likelihood is explained by teacher preparation. It is evident that teacher preparation has a

Table 3
Predicted Retention Probability by Teacher Preparation Type

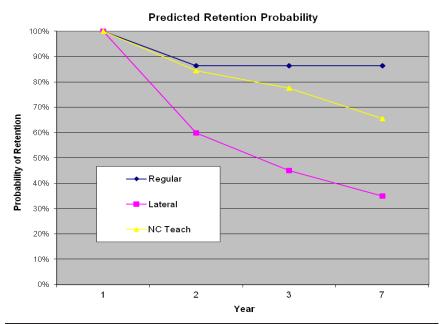
	Year			
Preparation type (%)	2	3	7	
Regular	86.3	86.3	86.3	
Lateral entry	59.8	45	35	
NC Teach	84.4	77.6	65.5	

significant impact on retention; that is, teacher retention likelihood partially depends on the type of preparation teachers receive. Although type of teacher preparation is an important factor that explains teacher retention, predicting retention is more complex and will require further consideration and examination of other factors.

In summary, the results reveal that the retention likelihood for lateral entry teachers is significantly lower than the retention likelihood for NC Teach teachers and regular teachers in Years 2, 3, and 7. Although there is no statistically significant difference between the retention likelihoods for regular and NC Teach teachers in Years 2 and 3, at Year 7, regular teachers' retention likelihood is higher than that of NC Teach teachers. Specifically, in Year 2, NC Teach teachers are roughly 25% more likely to be teaching than lateral entry teachers, and regular teachers are roughly 27% more likely to be teaching than lateral entry teachers. In Year 3, the predicted retention probability for regular teachers is 86.3%, for lateral entry teachers is 45%, and for NC Teach teachers is 77.6%. It is clear, then, that at Year 3, lateral entry teachers' retention probability is roughly 41% lower than that of regular teachers and roughly 33% lower than that of NC Teach teachers. At Year 7, lateral entry teachers' retention probability is roughly 51% lower than that of regular teachers and roughly 31% lower than that of NC Teach teachers.

It is worth mentioning that of all the variables more broadly investigated in the

Figure 2
Predicted Retention Probability by Type of Teacher Preparation



study (age, career plans expressed during the first year of teaching, having children, ethnicity, gender, school level [elementary, middle school, or high school], marital status, parents' occupation, and type of preparation), only type of preparation appears to have obvious predictive validity for retention in the teaching profession.

Discussion

The report of the Education Commission of the States (Allen, 2003) is of special interest, especially with regard to the question, "Are there 'alternative route' programs that graduate high percentages of effective new teachers with average or higher-than-average rates of teacher retention?" Short-term retention rates for alternative routes, according to the report, can be comparable to those of traditionally prepared teachers, but with regard to long-term retention, "the research on this issue has to be regarded as inconclusive." The current study shows that long-term retention gets worse for alternative route teachers. However, this study spans only 7 years; longer term retention, such as retention over 8–20 years or even longer, is still an issue to be addressed by future studies. Additionally, this study only included 60 teachers. A larger, randomly selected sample in a future study could add to the certainty of the findings and improve the size of the population to which the findings can be generalized.

One explanation for the lower retention rate of lateral entry teachers can be found in the research of Evans (2011), who claims that lateral entry teachers are "more likely to work in disadvantaged schools with high populations of poor and non-White students, whereas, fully certified teachers are more likely to work in more affluent, advantaged schools" (p. 271). The result is that the schools "with the greatest needs are staffed by those with the weakest training, leading . . . to the reproduction of social and education inequality" (p. 271). Future studies are needed to examine the types of schools and the school environments in which the teachers teach to assess the effect of disadvantaged schools on the retention of lateral entry teachers. Certain aspects of school environments, such as student behavior or insufficient school support, are often cited as reasons that teachers change schools or leave teaching and can certainly play a role in the career decisions of lateral entry teachers. If a strong effect is found, then one might conclude that preparation type is only partially responsible for the high attrition among lateral entry teachers.

Another explanation may reside in the teachers themselves. Students in teacher education programs seek jobs that remind them of their clinical experiences and how they were socialized into prioritizing learning and focusing on pedagogy. They seek out employers, regardless of student populations, with the same cultures and organizational structures of their universities. In contrast, the lateral entry students have no experiential base on which to draw when it comes time to seek a job in a school. They do not have the experience to expect good mentoring or leadership.

The first priority is a paycheck. Is it any wonder that there is a retention difference between the two types of teachers?

However, the primary reason that lateral entry teachers are retained at a lower rate than regularly prepared and NC Teach teachers may be that they simply are not as well prepared for the classroom as the other two types of teachers. In comparison, the regularly prepared teachers have spent 4 years studying both their content area and professional pedagogy and have at least one semester of full-time student teaching. The NC Teach teachers have spent a summer in full time, plus the two following semesters part time, studying courses in pedagogy. The lateral entry teachers have no preparation in pedagogy at all when they begin; only after starting teaching do they begin to take pedagogical classes part time.

Our study partially confirms the findings of Harris, Camp, and Adkison (2003) that the traditional certification program results in greater retention than ACPs (i.e., lateral entry). The significance of the results of the current study is apparent: Policy makers who invest resources in special alternative licensure programs invest wisely, as the specially supported teachers appear to persist in their teaching careers at roughly the same rate as regularly prepared teachers, at least during the first 3 years. At the same time, it seems obvious that the lateral entry alternative licensure path presents many obstacles for the novice teacher to overcome. Consequently, it would make sense for policy makers and education leaders from universities and communities to strengthen existing alternative licensure programs as well as to continue to improve special alternative licensure programs such as NC Teach.

However, teacher retention and attrition are not solely dependent on method of preparation: Access to teaching resources; personal background; competency knowledge; and perceived support from school districts, teacher preparation programs, and pupils' parents must also be considered (Lee, Patterson, & Vega, 2011). For example, Freedman and Appleman (2009) concentrated their research on preparation of teachers specifically serving in high-poverty areas and found that regardless of method of education, teachers continue teaching if they can adopt multiple educational roles inside and outside the classroom and receive professional support during the whole of their careers. Whether pathways to credentialing are traditional or alternative, teacher preparation programs must examine a variety of variables associated with effective teacher performance and retention.

References

Agresti, A. (1996). *An introduction to categorical data analysis*. New York, NY: John Wiley. Alger, G., & Norman-Gloria, C. (2009). Morale of beginning secondary science teachers: A comparative analysis of teacher preparation programs. *Current Issues in Education*, 12(10), 1–27.

Allen, M. (2003). *Eight questions on teacher preparation: What does the research say? A summary of the findings*. A summary of a report to the Education Commission to the States. Retrieved from ERIC database. (ED479051)

- Alliance for Excellent Education. (2005, August). *Teacher attrition: A costly loss to the nation and to the states* (issue brief). Retrieved from http://www.all4ed.org/publications/TeacherAttrition.pdf
- Artzt, A. F., & Curcio, F. R. (2008). Recruiting and retaining secondary mathematics teachers: Lessons learned from an innovative four-year undergraduate program. *Journal of Mathematics Teacher Education*, 11(3), 243–251. doi:10.1007/s10857-008-9075
- Bazely, P., & Richards, L. (2000). The NVivo qualitative project book. Thousand Oaks, CA: Sage.
- Brown, S. (2003). Working models: Why mentoring programs may be the key to teacher retention. *Techniques: Connecting Education and Careers*, 78(5), 18–21.
- Buckley, J., Schneider, M., & Shang, Y. (2005). Fix it and they might stay: School facility quality and teacher retention in Washington, D.C. *Teachers College Record*, 107(5), 1107–1123.
- Burstein, N., Czech, M., Kretschmer, D., Lombardi, J., & Smith, C. (2009). Providing qualified teachers for urban schools: The effectiveness of the accelerated collaborative teacher preparation program in recruiting, preparing, and retaining teachers. *Action in Teacher Education*, 31(1), 24–37.
- Cleveland, D. (2003). A semester in the life of alternatively certified teachers: Implications for alternative routes to teaching. *High School Journal*, 86(3), 17–34.
- Cochran-Smith, M., Cannady, M., Mceachern, K., Piazza, P., Power, C., & Ryan, A. (2011).
 Teachers' education, teaching practice, and retention: A cross-genre review of recent research. *Journal of Education*, 191(2), 19–31.
- Connelly, V., & Graham, S. (2009). Student teaching and teacher attrition in special education. *Teacher Education & Special Education*, 32(3), 257–269.
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, 60(8), 6–13.
- David, T. (2003). Beginning teacher mentoring programs: The principal's role. In J. Rhoton
 & P. Bowers (Eds.), Science teacher retention: Mentoring and renewal (pp. 145–154).
 Arlington, VA: National Science Teachers Association.
- Donaldson, M., & Johnson, S. (2011). Teach for America teachers: How long do they teach? Why do they leave? *Phi Delta Kappan*, 93(2), 47–51.
- Easley, J. (2006). Alternative route urban teacher retention and implications for principals' moral leadership. *Educational Studies*, 32(3), 241–249.
- Elliott, E. M., Isaacs, M. L., & Chugani, C. D. (2010). Promoting self-efficacy in early career teachers: A principal's guide for differentiated mentoring and supervision. *Florida Journal of Educational Administration & Policy*, 4(1), 131–146.
- Evans, L. (2011). Job queues, certification status, and the education labor market. *Educational Policy*, 25(2), 267–298.
- Fox, R., & Duck, L. (2001, March). The Teacher Education Licensure Fulfillment (TELF) initiative: A partnership venture for alternative licensure. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Dallas, TX.
- Freedman, S., & Appleman, D. (2009). "In it for the long haul": How teacher education can contribute to teacher retention in high-poverty, urban schools. *Journal of Teacher Education*, 60(3), 323–337.
- Grossman, P., & Loeb, S. (2010). Learning from multiple routes. *Educational Leadership*, 67(8), 22–27.
- Hanson, M. L., Lien, D. S., Cavalluzzo, L. C., & Wenger, J. W. (2004). Relative pay and

- teacher retention: An empirical analysis in a large urban district. Arlington, VA: National Science Foundation.
- Harris, S., Camp, W., & Adkison, J. (2003, January). New structures and approaches for teacher preparation: Do they make a difference in teacher retention? Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, New Orleans, LA.
- Heyman, E. (2002, February). A comparison of the alternative and traditional licensure programs at Metropolitan State College of Denver. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, New York, NY.
- Hoerr, T. R. (2005). Meeting new teachers' personal needs. Educational Leadership, 62(8), 82–84.
- Hunt, J., & Carroll, T. (2002, August). *Unraveling the "teacher shortage" problem: Teacher retention is the key*. Report presented at the Symposium of the National Commission on Teaching and America's Future and NCTAF State Partners. Retrieved from http://www.nctaf.org/documents/Unraveling_Shortage_Problem.doc
- Ingersoll, R. (2004). Why do high-poverty schools have difficulty staffing their classrooms with qualified teachers? Washington, DC: Center for American Progress.
- Ingersoll, R., Merrill, L., & May, H. (2012). Retaining teachers: How preparation matters. *Educational Leadership*, 69(8), 30–34.
- Inman, D., & Marlow, L. (2004). Teacher retention: Why do beginning teachers remain in the profession? *Education*, 124(4), 605–614.
- Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. American Educational Research Journal, 40(3), 581–617.
- Jorissen, K. (2002). Retaining alternate route teachers: The power of professional integration in teacher preparation and induction. *High School Journal*, 86(1), 45–56.
- Justice, M., Greiner, C., & Anderson, S. (2003). Determining the influences of traditional Texas teachers vs. teachers in the emergency teaching certification program. *Education*, 124(2), 376–389.
- Latham, N. I., & Vogt, W. (2007). Do professional development schools reduce teacher attrition? *Journal of Teacher Education*, 58(2), 153–167.
- LaTurner, R. J. (2002). Teachers' academic preparation and commitment to teach math and science. *Teaching and Teacher Education: An International Journal of Research and Studies*, 18, 653–663.
- Lee, Y., Patterson, P. P., & Vega, L. A. (2011). Perils to self-efficacy perceptions and teacher-preparation quality among special education intern teachers. *Teacher Education Quarterly*, 38(2), 61–76.
- Maier, A. (2012). Doing good and doing well: Credentialism and Teach for America. *Journal of Teacher Education*, 63(1), 10–22. doi:10.1177/0022487111422071
- Malow-Iroff, M. S., O'Connor, E. A., & Bisland, B. (2007). Intention to return: Alternatively certified teachers' support, ideology and efficacy beliefs. *Teacher Development*, 11(3), 263–275. doi:10.1080/13664530701644573
- Nagelkerke, N. J. D. (1991). A note on a general definition of the coefficient of determination. *Biometrika*, 78, 691–692.
- Nagy, C. J., & Wang, N. (2007). The alternate route teachers' transition to the classroom: Preparation, support, and retention. NASSP Bulletin, 91(1), 98–113.
- Office of Innovation and Improvement. (2004). Innovations in education: Alternative routes

- to teacher certification. Washington, DC: U.S. Department of Education.
- Reynolds, A., Ross, S., & Rakow, J. (2002). Teacher retention, teaching effectiveness, and professional preparation: A comparison of professional development school and nonprofessional school graduates. *Teaching and Teacher Education*, 18(3), 289–303.
- Reynolds, A., & Wang, L. (2005). Teacher retention: What role does professional development school preparation play? *New Educator*, 1(3), 205–229.
- Richards, L. (1999). Using NVivo in qualitative research. Thousand Oaks, CA: Sage.
- Richards, L. (2005). Handling qualitative data: A practical guide. Thousand Oaks, CA: Sage.
- Riggs, L. (2013, August). Why do teachers quit? And why do they stay? The Atlantic. Retrieved from http://www.theatlantic.com/education/archive/2013/10/why-do-teachers-quit/280699/
- Robertson, J., & Singleton, J. D. (2010). Comparison of traditional versus alternative preparation of special education teachers. *Teacher Education & Special Education*, 33(3), 213–224. doi:10.1177/0888406409359904
- Sander, K. L. (2007). Alternative routes to certify career and technical education teachers. *Techniques: Connecting Education and Careers*, 82(6), 31–33.
- Scribner, J., & Heinen, E. (2009). Alternative teacher certification: A program theory analysis. Teacher Education Quarterly, 36(2), 179–197.
- Simmons, S., & Mebane, D. (2005). NC Teach and NC Teach online: Viable alternative routes to teaching in North Carolina. *Action in Teacher Education*, 27(1), 45–52.
- Smollin, M. (2011, August). Five reasons teacher turnover is on the rise: Money and respect are only two things quality educators want more of. Retrieved from http://www.takepart. com/article/2011/08/09/five-reasons-teacher-turnover-rise
- Stanley, B., & Martin, E. (2009). Research based alternative certification: An answer to teacher attrition. Southeastern Teacher Education Journal, 2(3), 101–111.
- Suell, J., & Piotrowski, C. (2007). Alternative teacher education programs: A review of the literature and outcome studies. *Journal of Instructional Psychology*, 34(1), 54–58.
- Wilson, S. M. (2011). How can we improve teacher quality? *Phi Delta Kappan*, *93*(2), 64–67. Xu, Y., Gelfer, J., & Filler, J. (2003). An alternative undergraduate teacher preparation program in early childhood education. *Early Child Development and Care*, *173*(5), 489–497.

Appendix

Protocol for Interviews Conducted in Spring 2004

- 1. What school level do you teach (elementary, middle, or high school)?
- 2. Are you married?
- 3. Do you have children?
- 4. What is it like to teach here?
- 5. Has teaching been what you expected? Why? Why not?
- 6. What did you expect before you entered?
- 7. How did you decide to teach?
- 8. Did your parents influence you?
- 9. What do/did your parents do?
- 10. People come to teaching by different pathways. What type of teacher preparation have you had?
- 11. Are you certified by the state?

Relationship between Teacher Preparation and Teacher Retention

- 12. How did you come to teach at this school?
- 13. Can you describe the types of support you've received as a new teacher, within either the school or the district?
- 14. Is the support that you have received what you needed?
- 15. Do you feel sufficiently prepared to teach in the way that you're expected to teach here?
- 16. Do you watch other teachers teach?
- 17. Do you need to seek information or advice about what and how to teach?
- 18. Does teaching offer you a "good fit" as a career?
- 19. How long do you plan to stay in teaching?
- 20. Will age, gender, or ethnicity influence your plan to stay in teaching?
- 21. Will family influence your plan to stay in teaching? Will your marital status influence your plan to stay in teaching?
- 22. Will your parents' occupation influence your plan to stay in teaching?



Professional Identity Formation as a Framework in Working with Preservice Secondary Teacher Candidates

By Betina Hsieh

Over the last 10 years, a growing body of literature has focused on professional identity as related to teachers' sense of their own roles and their professional thinking (Assaf, 2008; Chong & Low, 2009; Cohen, 2008; O'Connor, 2008). The ability to construct a teacher self based on one's experiences, beliefs about teaching, and professional environments has been found to be critical to establishing a strong sense of self-efficacy among teachers (Settlage, Southerland, Smith, & Ceglie, 2009), thereby promoting their likelihood to remain in the profession (Day, Elliot, & Kington, 2005). Although some work has focused on the role of preservice teacher education in providing models for teacher candidates as they establish emergent professional identities (Olsen, 2008; Ronfeldt & Grossman, 2008), little explicit work has used professional identity as a framework for instruction in preservice education. In this article, using the context of a secondary literacy course, I argue that personal experiences, praxis-based reflective opportunities, and pedagogically minded assessments are important in shaping an emergent professional identity that effectively integrates literate practices with content instruction. This is a particularly relevant area to explore given the emphasis of the Common Core State Standards on disciplinary literacy in all

Betina Hsieh is an assistant professor in the Department of Teacher Education of the College of Education at California State University, Long Beach. betina.hsieh@csulb.edu

content areas (National Governors Association Center for Best Practices & CCSSO, 2010) and in light of the traditional struggle of teacher educators (TEs) to support teacher candidates (TCs) in understanding the importance, relevance, and value of literacy to their roles as teachers, particularly outside of the humanities (Almerico, 2011; Barry, 2002; Cantrell, Burn, & Callaway, 2008). Keeping in mind a professional identity framework, TEs, both inside and outside of literacy, can better understand the influence of personal and professional experiences in shaping TCs' perspectives on classroom instruction to help TCs develop practical knowledge and understand the value of particular pedagogical frameworks in their specific contexts.

Professional Identity Development

The field of teacher professional identity is based on a view of teachers as professionals engaged in ongoing forms of development to establish a distinct sense of what their roles, purpose, and values are as professionals. According to two major literature reviews on the field (Beauchamp & Thomas, 2009; Beijaard, Meijer, & Verloop, 2004), one of the most difficult aspects of understanding teacher professional identity is the absence of clear, consistent definitions of this concept. Despite the lack of an agreed-on definition of professional identity, Beijaard et al. discuss several key features that emerge from the early professional identity literature, including the ongoing process of identity construction and the importance of considering individual and contextual factors related to identity. Factors influential in professional identity establishment include personal factors (e.g., experiences as students, conception of work), programmatic factors (e.g., teacher education contexts), and/or workplace or political contextual factors (e.g., isolationism vs. collaboration in the workplace setting, accountability measures that define good teaching in particular ways). Teachers, as active agents, continually negotiate their professional identities, based on prior beliefs, values, and experiences, in light of ongoing experiences and contexts, making choices to integrate and adapt their senses of their "teacher selves" or to retain essential elements of their professional identities based on their experiences and environments.

As noted, personal factors play a large role in shaping one's teacher professional identity. Prior works connecting personal and professional identity focus on discrete areas such as the roles of experiences (Olsen, 2008), emotion (O'Connor, 2008; Reio, 2005; Shapiro, 2010), self-efficacy (Settlage et al., 2009), conception of work (Sutherland, Howard, & Markauskaite, 2010), and knowledge and/or passion (Chong & Low, 2009; Hobbs, 2012) as influencing teachers' professional identity development. Taken together, these studies demonstrate that how a teacher perceives himself or herself and his or her role in the classroom, based on his or her own experiences and sense of self, are critical in the establishment of the teacher's professional identity, particularly upon entering the field, when professional classroom-based experiences are somewhat limited.

Preservice teacher education's role in identity development has been connected to early professional models and theoretical understandings of professional identity (Flores & Day, 2006; Olsen, 2008). In preservice programs focused on supporting the establishment of a professional identity, TCs may receive support in negotiating multiple images of teacher professionalism that they encounter (i.e., negotiating personal experiences outside of the program and preprofessional experiences inside and outside of the program) to form their own sense of professional identity (Ronfeldt & Grossman, 2008). Programs can also challenge candidates to actively examine and discuss beliefs about effective teaching as they build professional identities (Breault, 2013). Explicit examination of effective teaching beliefs and practices may come through apprenticeship opportunities (Van Huizen, Van Oers, & Wubbles, 2005), may involve TCs engaging in conversation with one another to reflect on and interrogate previous perceptions of professional identity (Doecke & McKnight, 2002), or may involve partnerships between TEs at the university level and mentors at sites who introduce content expertise, theoretical understanding, and practical experiential knowledge as lenses through which preservice TCs can construct their emergent professional identities (Burn, 2007). In each of these cases, preservice teacher education programs presented TCs with multiple models of teaching and supported their negotiation of these models as part of their development rather than focusing on skills and strategies divorced from a teacher self.

Professional Identity as a Framework for Instruction

Because professional identity establishment has been viewed as an ongoing, iterative, developmental process, it has not been explored as a tool or framework with principles to guide pedagogical practice at the preservice teacher education level. Negotiating personal educational experiences in light of new instructional practices has generally been seen as a pedagogical task or professional learning experience (designed to increase professional knowledge) rather than in relation to professional identity. However, my previous work (Hsieh, 2015) exploring the interplay between praxis (theory-based practice) and personal educational experiences found the negotiation of praxis and personal experience as critical to professional identity establishment. Furthermore, this initial study found that professional identity orientation (or the ways in which teachers negotiated their identities in negotiating personal, theoretical, and practical contextual frameworks) was a powerful factor in influencing teacher receptiveness to professional development opportunities. In relation to secondary TCs' attitudes toward literacy, Lesley (2011) found that personal experience shapes attitudes toward pedagogical learning. In combination with my findings about teacher professional identity orientation and interest in disciplinary literacy practices, I began exploring the ways in which a literacy course designed on principles related to professional identity establishment might impact preservice TC learning in relation to professional development. The following research questions thus drive this study:

- 1. What models of literacy instruction do TCs bring to a content area literacy (CAL) course?
- 2. How do these previous models impact TC perceptions of the relevance of literacy to their professional work?
- 3. How do newly introduced models and practices impact TCs' emergent professional identity as demonstrated through their professional practices?

Methodology

This article examines professional identity as drawn from previous models TCs bring into a course and as negotiated through the course, as TCs encounter new practices, models, and opportunities for reflection. The study focuses on a single postbaccalaureate mixed-discipline, CAL course taught over a 15-week semester. The course was taught using sociocultural perspectives of literacy (Bakhtin, 1981; Moll, Amanti, Neff, & Gonzalez, 1992; New London Group, 1996; Rosenblatt, 1968; Vygotsky, 1978) as a framework for instruction, with a heavy emphasis on pedagogy. Language- and literacy-based strategies were drawn in part from two course texts, Vacca, Vacca, and Mraz (2011; CAL strategies) and Echevarria, Vogt, and Short (2012; strategies for support language development with English language learners) as well as being modeled explicitly for TCs during each course session.

The course followed a general structure in which candidates were assigned readings from the course texts related to a particular aspect of literacy or language development (e.g., vocabulary, writing to learn, textbook reading) each week and attended a lecture in which several strategies were modeled for students, using particular content area material as a model (e.g., gallery walk jigsaw readings on systems of the body or a think-aloud that modeled metacognitive thinking in relation to analysis of a math textbook using text features of the text). Each strategy was discussed in one of the course texts, introduced in class by the instructor, demonstrated using authentic secondary text material (with TCs taking the part of content area secondary students), and then debriefed in partners or small groups before being discussed as a whole class. TCs were also asked, in weekly exit slips, to reflect on their specific "take-aways" in relation to each topic.

In addition to weekly lectures and reading, TCs participated in regular discussion boards and had course assignments (e.g., a literacy autobiography, final reflection) in which TCs examined their literacy experiences as students. The TCs were also required to submit four lesson plans that asked them to apply specific literacy strategies to their content area standards and give a rationale for why the strategies were selected and five blog posts, each of which asked them to reflect on the way their thinking

and practice were being shaped by either the course readings, an outside reading or resource, course lectures, or a combination of any of these sources.

Data Sources

Drawing from a larger study of 150 secondary TCs across multiple semesters, data for this study were examined from 52 secondary TCs enrolled across the three sections of the CAL course that I taught in a single semester. Participation in the study was voluntary, with an approximate participation rate of 67% across all sections. Pre- and post-surveys were administered to determine whether TCs reported professional growth and learning in their perspectives on literacy and their professional practice in relation to literacy-based practices (see Table 1). Across all content areas, in all survey categories, TCs, as a group, showed significant growth. The statements related to literacy's perceived relevance and candidate self-efficacy are included in Table 1 for the semester from which the focal cases were drawn.

Content areas represented in the sections were diverse (n = 10), with a majority of study participants coming from math and English (n = 11 for both). From the initial survey data, a closer examination of the nature of change for TCs in relation to professional identity was conducted. Evidence and findings of this article were drawn from course-based assignments (n = 9) that were designed to reflect elements specifically related to a professional identity framework. Prior experiences with literacy as learners and observers were recorded in literacy autobiographies; praxis-based reflective evidence asking students to relate theory and text-based learning to pedagogical implications were recorded in five blog posts throughout the semester; pedagogical impact and professional thinking were demonstrated in TCs' abilities to integrate literacy strategies into three content-based lesson plans.

Table I
Paired t-Test Survey Data

	M (SD)		
Statement	Presurvey	Postsurvey	Two-tailed <i>p</i> -value
Literacy is relevant to my content area. (relevance)	4.52 (0.66)	4.87 (0.34)	.0003
Teaching literacy is an important part of my role as an educator. (relevance)	4.52 (0.69)	4.89 (0.38)	.0006
I feel confident in my ability to integrate literacy skills into my instructional practice. (self-efficacy)	3.47 (0.99)	4.56 (0.60)	.0001

Data Analysis

Data analysis focused initially on a subgroup (n = 17) of students who showed the most growth according to statistical pre- and postdata collected as part of a larger study, with 3 focal students selected from this group for closer case study analysis; Sophia (English), Kristina (math), and Paul (music). In addition to showing strong growth in the pre- and postsurvey data analysis, the focal students were selected to reflect a range of secondary areas (humanities, STEM, and fine arts), including the two most represented content areas in the participating group. These three cases allowed me to more deeply explore professional identity development in relation to literacy, a focus that was not present in content-specific pedagogy and methods courses. After selecting the focal students, I used constant-comparative analysis (Glaser & Strauss, 1967) to examine their literacy autobiographies, course blogs, and course lesson plans for precourse experiences related to literacy learning (generally and discipline specific), professional understandings related to literacy as they evolved throughout the course, and citations related to literacy theory. Analysis took place first through general theoretical memos and then using codes related to the professional identity framework: personal "experiences" with literacy, "classroom learning," and "praxis"-based reasoning. Codes and theoretical memos were cross-referenced and examined for themes related to professional identity development, literacy relevance, and literacy self-efficacy. These initial categories were measured by quantitative survey questions (see Table 1) before being discussed and refined with a graduate student assistant and research partner to promote interrater reliability with data and consistency of findings.

Initial Identities:

Drawing From Prior Ideas and Student Experiences

The importance of the cultural, disciplinary, personal, and linguistic knowledge that students brought with them to text- and language-based interactions was highlighted in students' literacy autobiographies. The literacy autobiography asked students to tell their history of language and literacy learning, considering home experiences with language, literacy development in school, literacy development in their disciplines, and whether they considered themselves readers and writers as adults. By introducing the concept of *funds of knowledge*, which Moll et al. (1992) discussed as the local- and community-based resources students bring into a classroom, connections were made between literacy histories and experiences and how they shape current understandings of literacy, both for TCs and their prospective students. The use of the funds of knowledge framework and literacy autobiography connected to professional identity in having TCs specifically draw from their prior experiences as a frame of reference from which to begin an examination of the relevance of the course concepts to their own future pedagogical practice.

All three focal students drew powerfully from their literacy histories, discussing ways in which their experiences with literacy had shaped their experiences as students and perspectives as future teachers. Whereas Sophia had positive home and school experiences with literacy that provided her with clear models of literary instruction and identity, both Kristina and Paul discussed a lack of connection between home and school environments that led to mixed experiences with literacy. Kristina discussed an absence of adult models from which to base an idea of literacy instruction, particularly in her content area of mathematics, and an independent approach to literacy generally. Paul, similarly, lacked models of disciplinary literacy integration in music and was critical toward most of his teachers, who failed to support his general literacy development. He did, however, have one particular high school teacher who inspired him to see the importance of literacy development and teaching and supporting the development of literacy skills through instruction. Paul's experience with this particular teacher (who was outside of his content area) drove him to think deeply about his own role in promoting music literacy development with his students as a music teacher.

Sophia described in her autobiography an early love of literacy in Spanish in her home country that was fostered by her mother but was then interrupted temporarily by her immigration to the United States:

Reading for me began at a young age back in Costa Rica when my mom would read to me after school. After kindergarten let out she'd sit down next to me and read to me the most wonderful stories. It wasn't long before I wanted to read on my own. We practiced daily and I remember the day that I was finally able to read *Los Pendientes* all by myself. A few months after that, my mother, sister, and I moved to California and I had to start again.

Sophia's early model of literacy, with her mother as teacher, revolved around safety and repeated practice. Despite the temporary interruption to Sophia's early literacy, she recalled with fondness the patience and dedication of early English as a second language (ESL) teachers who supported her literacy transition to English and promoted her love of language and literacy in a very similar way:

It was difficult, to say the least, to get a full grasp on the English language. [My ESL teachers] sat with me hours on end with repetition techniques and having me write short prompts. There were so many rules, and exceptions, and odd memorizing that I had to do. But their patience and understanding were astounding, and when I finally got it, I loved it.

Sophia attributed her successful language transition to English directly to the patience and understanding of her ESL teachers. Although the skills-based repetition that Sophia mentioned could have been construed as boring and tedious, she portrayed the dedication of her teachers as inspiring and reflective of the patience necessary to support language development. With her solid literacy skills in her native language that had also been born of repetition and patience, Sophia development.

oped a cohesive model of literacy instruction. Sophia's model of teaching included teachers with virtues such as patience and understanding. This view of a teacher's role in providing persistent support for students is a theme drawn from her experiences that provided a clear model for her own practice. Sophia's thoughts, from the beginning of the course, were focused on ways to support her students in seeing the value of reading and writing in their own lives and schooling experiences, just as her teachers had supported her when she was younger.

Unlike Sophia, Kristina felt that there was an absence of relevant literacy support from teachers. Although she had a strong literacy background at home, most of her personal reading was independent. Kristina discussed the up-and-down journey of her literacy development at school, particularly with an early literacy focus on oral reading:

Even though I loved reading as my own personal escape, I was extremely shy . . . so I had a lot of trouble reading in front of classes. We frequently moved . . . so each time I changed schools I would get retested and put into a different reading level. At most schools I was considered to be well above the average reading level, but in some classes where they put an emphasis on reading aloud, I was considered to be average or even below reading level.

Unlike Sophia and her transition to the United States, which was difficult but consistent, with patient teachers who supported the early literacy foundation her mother had built at home, Kristina noted how the numerous transitions that she went through in her early schooling led to frequent reclassification in reading, sometimes based primarily on her oral reading skills rather than on her comprehension levels. Although Kristina used reading personally as an escape from difficult childhood situations that she faced, her home—school experiences did not consistently validate or support her early literacy development, and she did not mention a significant adult teaching figure who supported these transitions.

Kristina did not initially identify literacy as an important part of her contentbased instruction, based on her own experiences with her content learning:

I never really felt the need to read math textbooks. For one thing, I was generally advanced in my class, so I didn't need to access the information through the textbook because I already knew it. The other problem, though, was definitely that the information was inaccessible. There wasn't any interesting story line to the text, they [the textbooks] used vocabulary that was too difficult, they tried to explain abstract concepts without many useful visuals. As I progressed in school, I read my textbooks less and less.

Kristina, in her analysis of her literacy experiences in mathematics, brought forth two reasons that she did not use texts in her content area. First, she noted not needing textbooks to support her understanding of the information because she already knew it. Although she did not specify how she gained this knowledge, likely classroom-based instructional methods replaced the textbook as her source of information. Kristina also noted the lack of accessibility of textbooks. Kristina found math textbooks to be "less and less" of a resource to her during her secondary math experiences.

Aside from briefly mentioning her mother, who told her to look things up when she had questions and provided resources at home, Kristina did not discuss any significant adult literacy models in her autobiography. Rather, Kristina determined the relevance of literacy to her life and content based on what she could figure out on her own without support. Literacy, in Kristina's schooling experiences, was inconsistent at best and inaccessible or irrelevant at worst, leaving her without a strong model on which to construct a professional identity as a teacher of literacy in relation to math. Without models of literacy integration in the classroom, Kristina entered the course somewhat skeptical of the relevance of literacy in mathematics but open to exploring literacy-related strategies as resources to her teaching, even if she didn't know what those might look like in relation to her content area.

Whereas Sophia had strong positive literacy teaching models and Kristina did not discuss significant literacy teacher role models, Paul, a music teacher candidate, characterized his experience with literacy in schools as largely stigmatizing and detrimental. In his literacy autobiography, he spoke of the home—school dichotomy he felt and how it impacted his identity as a reader and a student:

Reading at home was always enjoyable. . . . Reading in school . . . contained anxiety and feelings of inadequacy. . . . Though I enjoyed reading at home, I often felt inadequate and lost at school. . . . As my friends and I made the transition from elementary school to middle school, I continued to see them succeed while I struggled to keep up. . . . I found myself separated from them. My self-esteem took a dive and I struggled to pass my classes. . . . Throughout this time I continued to read at home for my own enjoyment, yet I could not transfer my reading abilities to my work in the classroom.

For Paul, lack of success and feelings of inadequacy with reading at school led to a social separation from many of his friends and impacted his own self-esteem as he struggled to pass classes and transfer reading abilities from home to work done at school. Many of these early experiences were painful and left a tone of anger related to literacy in his autobiography. Similar to Kristina, in his early literacy development, Paul did not mention a strong example of a teacher or school-based adult figure who supported his literacy development. However, unlike Kristina, Paul later discussed the impact of a single teacher in high school who held him to high expectations (teaching a "regular" class with similar strategies and expectations to an "honors" class) and supported him in the development of stronger general literacy skills. Because of the impact of this teacher (who was not a music teacher), Paul noted the importance of teachers (generally) in impacting and supporting the literacy skills of their students in all content areas, including his own. He spoke of music literacy in the following way in his literacy autobiography, drawing connections to his own experiences with literacy:

As a music teacher, content literacy involves the ability to read, interpret, understand, and communicate musical thoughts. The struggles I had in reading and writing in school are similar to challenges that many students face in a performance ensemble class. They may enjoy music but find the process of reading and performing music in class difficult because they have not been given the necessary skills to understand what they are (or should be) doing.

Here Paul explicitly connected music literacy as a form of disciplinary literacy that, while seemingly different in terms of text type, actually could be seen as similar to students' struggles with any form of literacy. Paul took a view of literacy as skills-based and teachable, noting that, by developing particular literacy skills, students could better "read, interpret, understand, and communicate musical thoughts." Just as Paul's own experiences struggling with more standard text-based literacy and getting support from a single teacher helped him to develop more nuanced general literacy skills (and a metacognitive understanding of these skills), his goal, even from early in the course, was to support students in developing similar skills related to a music literacy context.

In each of their cases, the three focal TCs brought experiences with informal and formal literacy teaching and learning that shaped their perspectives entering the class. Sophia brought powerful and cohesive models of patient, understanding language teachers who helped her develop competency in (and eventually a love for) her content area. With these strong models, Sophia was eager to learn literacy strategies that could provide similar supports for her own future students. Kristina, largely left to determine the relevance of literacy on her own without teacher models, based her view of literacy's power on early encounters with literature, entering the course with uncertainty about how literacy could authentically connect to mathematics. Paul, like Sophia, found the role of the teacher in literacy development to be incredibly powerful but lacked teacher models in his own content area, similar to Kristina. This led him to approach the course thinking deeply about how to adapt more general literacy strategies to context-specific applications related to music.

Praxis-Based Experiences:

Connecting Texts and Practice to Impact Professional Identity

All three focal TCs brought to the study powerful literacy experiences that shaped their initial views of literacy in relation to content teaching; however, these personal experiences with literacy were solely one, albeit powerful, part of their professional identities. A key objective of the study was to examine the ways in which new models for literacy integration in content-based instruction might impact students' professional identity, as introduced through the modeling of praxis-based (research-grounded, pedagogical) strategies that took place during the course. Through interweaving literacy strategies with an introduction to a sociocultural

literacy framework, the goal for TCs was that the course work impact their professional practice both by drawing from and influencing their professional identities.

For students outside of the humanities, like Kristina and Paul, the general CAL strategies found in the textbook (even when modeled with specific content-based applications in class) did not occur as authentic models for literacy integration. As this happened, both Kristina and Paul looked for outside resources to support their disciplinary literacy instruction. Through their interactions with texts, either assigned or chosen, Kristina, Paul, and Sophia began developing stronger connections between their professional identities as content teachers and the literate practices they were encountering. The focal students demonstrated how, drawing from both course texts and outside texts, they were pushed to think about literacy in new ways related to their professional practice. In doing so, candidates began considering their professional identities in relation to literacy-based instruction.

Intersections of Content-Based Instruction and Literacy Learning Impact Professional Perspectives

Sophia's strong personal connections with literacy learning, literature, and her own teachers led to a deep investment in her professional identity as a teacher of students and a teacher of English. Ironically, this sometimes led Sophia to wrestle with particular concepts that she felt were important for her future teaching but that were not always initially clear. Her deep urgency and desire for greater professional growth pushed Sophia toward particular texts focused on English language learners (ELLs). Referring to her emergent understanding of language development strategies for ELLs, concepts discussed in a course text (Echevarria et al., 2012) and in lecture, Sophia noted,

These [concepts] aren't just words on a blackboard but strategies I'll use in my career for the rest of my life. There are students out there who will depend on my proper integration of SDAIE [specially designed academic instruction in English] strategies and that I am upholding the learning objectives I've listed on the projection screen. Suddenly the weight of the world is on my shoulders when I remember that this is my career that I'm preparing for.

Sophia, in struggling with the "proper integration" of SDAIE strategies, drew on her views of the teacher as a central figure in learning and literacy development. The importance of her commitment to teaching and to her students' language development was clear, as this knowledge was not just theoretical (or "words on a blackboard") to her but reflected "strategies I'll use in my career for the rest of my life." Despite her commitments, Sophia struggled with how to embed these specific strategies into her teaching. Because Sophia's initial models of language teaching were based on dispositional qualities, like patience and understanding, rather than an awareness of specific language-based pedagogical strategies, it seemed

to be initially difficult for her to understand and integrate new strategies as they were presented to her or as she read about them. Her negotiation with these new concepts and adoption of these new ideas proved challenging, possibly because of the strength of more traditional models of repetitive drills that supported her own learning experiences. Sophia's negotiation of these new concepts was critical to her professional development as she sought to be the best literacy instructor that she could be, pushing herself to incorporate a more strategically and pedagogically based model of teacher identity into her existing framework of an ideal teacher as someone who is patient and understanding.

Kristina also encountered a new model of literacy-aware instruction. Interestingly, just as Kristina struggled as a student to relate to textbooks in her content area, she initially also struggled as a TC to connect the assigned textbook to authentic mathematics-based instruction. However, Kristina found a clear relationship between the course concepts and her own instructional practice by reading an external text and connecting it to the ideas that she encountered in the course. In an early blog post, Kristina discussed an epiphany about the importance of literacy-related principles in conjunction with content area material:

In our textbook, Content Area Reading: Literacy and Learning Across the Curriculum (Vacca et al., 2011), it is emphasized how it is important to activate prior knowledge in order to encourage readers to want to continue reading. They talk about how self-efficacy, or a student's judgment of how well he or she is able to understand a text, and motivation, a student's readiness to explore new text, both play a key role in how well the student will be able to read and comprehend new information.

Kristina first drew from literacy-related principles found in the text, then connected this information on activating prior knowledge to promote content area comprehension to an online article that she had found (independently) on imaginary numbers (Azad, 2013), using the principle of prior knowledge in relating imaginary numbers to negative numbers:

In the online article "A Visual, Intuitive Guide to Imaginary Numbers," the author, Azad, first relates the new concept of imaginary numbers to negative numbers. He includes a chart comparing the two types of number systems and how they are related before diving in and showing why the relationships hold true. Doing so helped me to see how imaginary numbers actually can make intuitive sense and gave me one of the biggest "AHA!" moments I've had in a long time.

In addition to drawing on the idea of relating prior understandings to new learning, this article invoked other principles discussed in class, such as graphic organizers (charts), visualization, and real-world examples. By engaging with the authentic, math-based concept of imaginary numbers and gaining insight into how interacting with imaginary numbers could draw from knowledge of other number systems, Kristina developed a new perspective on the relevance of teaching math with literacy-related strategies:

Before I'd read that article, I'd only been taught how to use imaginary/complex numbers, not what they meant or how they related to me. Relating new concepts to prior knowledge improves self-efficacy, makes it interesting, and makes you feel like you're able to tackle a new topic.

Kristina's final take-away from the article echoed the textbook passage that she initially quoted in her blog. Just as activating prior knowledge can improve self-efficacy with traditional texts, Kristina discovered the ways in which connecting prior knowledge can also serve as an important tool in helping students engage with and tackle new topics, ideas, and representations (or texts) in mathematics.

While Kristina's main complaint about textbooks was their lack of relevance and utility in terms of her (personal) learning, by connecting the course textbook to a discipline-specific online article, Kristina demonstrated a praxis-based connection that supported her understanding of connecting prior knowledge in mathematics and how this literacy-based learning principle could be used in her classroom, thus impacting her professional perspectives and professional identity. As in her student experiences with literacy, Kristina found authentic connection through a text that she read "on her own." However, in a teacher education setting, this outside reading was framed within the context of her professional understandings and models presented in the course. Her professional identity was being reshaped by learning experiences with texts, as she began to connect literacy-based principles with mathematics concepts, establishing new models and ideas for literacy—math integration. Although Kristina constructed her personal understandings semi-independently, blog posts, assigned as reflective tasks, provided opportunities to frame her understandings in a larger context that connected theory and practice.

Entering the course, Paul sought to develop students' literacy in relation to his content area, music, to make a powerful impact on students' literacy development, as his own high school teacher had done for him. However, Paul lacked content-specific models for musical literacy development, and he often found the general strategies presented in texts to lack clear connections to the music classroom. Because he, like Kristina, struggled with the authenticity of examples found in course texts, he began to look at texts outside of the course to help support his thinking and movement toward his professional goals. In doing so, Paul developed a nuanced framework for musical literacy development in response to an online source. Paul cited this quote from Afflerbach, Pearson, and Paris (2008), taken from a Grant Wiggins (2013) blog critiquing common definitions of reading strategies, which he had found on his own:

The progression from effortful and deliberate to automatic use of specific actions while reading occurs at many levels—decoding, fluency, comprehension, and critical reading. Beginning readers need to associate visual patterns of letters with their phonemic pronunciations. A hoped for consequence of instruction is that students' decoding progresses from deliberate to fluent actions.

Professional Identity Development

Paul then used these four levels as a starting point to frame his thinking around music literacy and performance, forming an argument about levels of music literacy and performance development:

Decoding . . . : At this [very basic] level, a musician must be able to look at notes on a staff and understand what they are and how to play them on a given instrument. . . .

Accuracy . . . : Prefluency—the ability to play notes and rhythms of an excerpt of the music accurately at a steady (not performance) tempo. . . .

Fluency: At this level the musician can play his or her music accurately at or near performance tempo. Once a musician can play his or her part fluently, ensemble rehearsals can really be effective.

Ensemble: At this level, the musician thinks about other musicians and what they play, in addition to what he or she is playing. The parts begin working together toward a coordinated, coherent reading of the music.

Interpretation: At this level, the ensemble works beyond mere coordination to making a single, unified musical statement. As an ensemble, the musicians address issues of balance, articulation, and style.

Paul developed this framework in thinking about literate practice and applied it specifically to the disciplinary work that musicians do. His development of this music-based literacy framework tied closely to his personal literate identity, in his desire to see the big picture of literacy and be able to apply literate practices across multiple contexts, as well as connecting to his professional identity as an aspiring music teacher. He did not simply adopt an established literacy framework by mapping corresponding musical skills onto it; rather, he adapted a reading framework to be authentic to stages of ensemble musical performance that were at the core of his instructional practice. Because Paul was concurrently teaching at a private high school, he was able to implement his framework, noting in his blog that "students responded well to it and felt like it gave them a better context for asking questions, as well as their own evaluation of how they were performing." Paul's professional identity and professional practice were informed by his thinking about literacy frameworks in relation to content-based instruction, and he felt empowered to take steps toward making an impact on students' musical literacy development through his newly developed ideas.

For all three TCs, the opportunity to engage with new perspectives and practices related to literacy and content instruction impacted professional perspectives, thus prompting professional identity negotiation. All three TCs moved beyond their anecdotal and personal experiences as students to develop a broader perspective on literacy integration through textual interaction. This was supported and observed in opportunities for reflection prompted by student professional blogs.

Students Integrate Literacy Into Lesson Planning:

Examining the Impact of New Literacy Models and Ideas on Practice

Evidence of the expanded literacy perspectives TCs gained in relation to their professional identities could be seen in their ability to integrate literacy-based practices into content area lesson plans. Authentic disciplinary literacy integration reflected evolving models of literacy's relevance in the content area classroom. Each candidate employed literacy and language-based strategies in content-specific lesson plans. However, each focal TC did so in nuanced ways reflective of his or her professional identity, demonstrating a connection between professional identity and professional practice. Sophia, true to her allegiance to the strong professional models from her personal experience, often relied on traditional literacy strategies in the English classroom, trying newer strategies only when they had been modeled in class. Kristina, seeking relevant approaches to integrating literacy-based principles into mathematics content, used course-demonstrated models exclusively as strategies to supplement and support her mathematics instruction. And Paul, true to his stated goals, adapted general literacy frameworks and strategies to music-specific texts and contexts.

Sophia, in her vocabulary lesson plan, chose traditional strategies of finding words in a text, making vocabulary lists with flashcards, and using a quiz for assessment. These methodologies were consistent with standard instruction in the English classroom and with the models of repetition that she had encountered as a student. These strategies were also consistent with Sophia's positive experiences with traditional literacy instruction, including repetitive memorization, mentioned specifically in relation to her vocabulary learning as an ELL. For her reading comprehension plan, Sophia chose to look at a historical, expository text, the Declaration of Independence, to help students examine rhetorical strategies. In this plan, she used her least traditional strategy, a think-aloud protocol, to model for students how to analyze an argumentative text using a rhetorical strategies (ethos, pathos, logos) framework. The choice to examine an expository, historical text and integrate a less traditional strategy could be tied to Sophia's desire to push herself beyond her own experiences to be a better teacher for students who are not like herself, something that she discussed in a blog post related to a comment that her first lesson plan was very "traditional." She incorporated this strategy after a lecture-based model of the think-aloud protocol in relation to an expository (math-based) text. In her third lesson plan, Sophia returned to a more traditional narrative, creative writing prompt in response to literature, again showing a loyalty to traditional forms of literacy instruction in the English classroom. Although Sophia consistently saw the importance of integrating explicit literacy instruction into her practice as a core part of her professional identity, her lesson plans demonstrated her struggle to move away from more traditional strategies central to her own learning experiences and professional models, despite the introduction of alternative strategies and models.

In Kristina's lesson plans, there was a focus on scaffolding authentic content

through language-based and literacy-informed strategies. Like Sophia, Kristina used the think-aloud protocol to help students understand how to analyze text using a content-based framework; however, Kristina's texts were percent-mixture word problems based on real-world scenarios rather than traditional literary or expository texts. Kristina's other language- and literacy-based strategies included guided or scaffolded (CLOZE-based) notes, think-pair-shares, and graphic organizers, all of which were used to support student thinking about and understanding of mathematics content. Each plan was clearly a math lesson plan first that used language- and literacy-based tools (in the form of strategies) to support understanding, a reflection of Kristina's commitment that literacy integration be relevant to mathematics and practical and useful in supporting students' understandings related to the content. Unlike Kristina's personal experience of having to seek out and find connections completely on her own, however, all of the strategies incorporated into her lesson plans were ones demonstrated at least once (and often used more frequently) in lecture. Once Kristina initially developed a connection between math content and literacy-based strategies to promote understanding, she was able to integrate these strategies in ways that allowed her to create relevant mathematical applications despite having no professional models from which to draw prior to entering the course. Her ability to connect the importance of ideas like background knowledge (schema) and expanded notions of text as symbolic language to be interpreted helped Kristina to use more general CAL strategies in ways that supported students' organizing their thinking in mathematics. Kristina's ability to integrate literacy into math demonstrates the importance and potential impact that praxis-based modeling can have on professional practice through integrating new professional models and pushing professional identity integration.

Finally, Paul, consistent with his desire to focus on music-specific disciplinary literacy, used authentic music-based texts, particularly in his vocabulary and comprehension lesson plans, both of which revolved around musical scores. In using scores, Paul was able to adapt traditional text-based strategies (e.g., graphic organizers, exit slips, examining text features, and reflective journals) in nuanced ways to help students understand key score-based structures and vocabulary, thus supporting their decoding, fluency, and interpretation of these musical texts. In his third lesson plan, rather than having students compose, Paul used an authentic example of writing to learn in having students metacognitively analyze and respond to their own performance through the use of a role-audience-format-topic prompt asking students to write a letter to the conductor (Paul) noting the strengths and weaknesses of the performance based on specified evaluation criteria. Consistent with his initial professional identity in relation to literacy, Paul adapted general literacy strategies to a music context, using disciplinary understandings to shape traditional strategies in ways that supported his music students to become stronger not only in musical performance but also in music literacy. This focus on music literacy was clearly central to Paul's professional identity and his commitment to support his students' overall development. The course supported Paul's professional identity through enabling him to enact his initial commitments and providing resources and models that extended beyond his personal experiences as a student.

Connecting the Dots:

Professional Identity and (Literacy-Based) Teacher Preparation

While all three focal students initially drew from diverse personal experiences to frame their professional identities and perspectives toward literacy instruction in their content areas, the experiences, models, and texts presented in the context of preservice course work prompted negotiation of their professional identities in powerful ways. The impact of a single course on emergent professional identity, as seen through these focal students, holds important implications for the field of teacher education more broadly and calls for further investigation.

Sophia's personal identification with cohesive models of literacy instruction led to a deep conviction about the importance of literacy instruction but also resulted in a struggle with new ideas presented in the class, as indicated by her gravitation toward more traditional literacy-based instruction. Kristina's lack of professional models who effectively integrated literacy and mathematics made her initially skeptical of connecting literacy and mathematics, but her independent association with literacy and emphasis on relevance led her to look for practical applications of literacy that were grounded in supporting authentic content-based understanding. Paul's general difficulty with school-based literacy combined with the impact of one high school teacher who supported his own literacy development led to his desire for future students to have a well-established foundation in music literacy, a belief that helped him establish a lens through which to adapt literacy strategies that he encountered to specific music-based contexts. Each TC drew from his or her personal identity in his or her interaction with materials in the TCs' preservice education to move toward a professional identity that integrated literacy-based strategies with professional practice.

In looking at the three case studies presented here, several key implications for TEs' practice and research emerge. First, this study demonstrates the importance of explicitly integrating assignments that allow for various forms of reflection by TCs. When TCs are encouraged to discuss previous models of teaching that they have encountered as students and interrogate those models in light of new ideas presented in course work, they begin the process of actively negotiating a professional identity. Given that models of teaching are highly influential on professional identity, it is important to understand TCs' prior experiences with their own learning (and the new models presented in various course work) to address and present key ideas to support their development. These opportunities for reflection lead to deeper understandings of the growth and impact of teacher education course work

on individual TCs and can be a powerful tool for TEs in promoting professional dispositions of reflection and growth among candidates.

Additionally, this study demonstrates the importance of providing theoretically contextualized demonstrations of practice to support the development of teaching models central to professional identity. Just as reflecting on previous models of teaching encountered as students is important, for TCs, experiencing alternative (or reinforcing) models in preservice teacher education is equally important in establishing an emergent professional identity. TCs who may not have had strong pedagogical models can benefit from both theoretical background behind various methods and forms of instruction as well as the demonstration of new pedagogical strategies with content-relevant texts and contexts in class. To prompt the negotiation of teacher professional identities, new practices and ideas must be introduced explicitly to TCs.

Finally, more research must be done on the impact of preservice teacher education course work on establishing an emergent teacher professional identity. While this study indicates the potential impact that an identity framework can have in instructional design of a preservice course (i.e., allowing for opportunities for reflection, providing alternative models, assessing impact through praxis-based assignments) and demonstrates the ways in which TCs actively negotiated their professional identities in relation to new and/or additional ideas that contrast with previous personal experiences as students, it leaves questions about the long-term impact on this type of course work on professional identity. To investigate this, longitudinal studies would need to be conducted, following teachers from their preservice course work through student teaching and early teaching practice. Further research also might expand the idea of using professional identity as an instructional and analytical framework beyond the impact of a single course in a single area (literacy) to examine ongoing opportunities for reflection on new models presented throughout a program and the impact on emergent professional identity. This line of research may provide nuanced perspectives on the value of teacher education for new teachers entering the field.

Educator preparation and teacher professional identity are complex fields. However, looking at the concomitant development of professional identity with professional practice allows TEs to think about and intentionally draw from TCs' personal experiences, as well as research and classroom-based practical experiences to make the preservice experience more cohesive and relevant for candidates. In this way, TEs can encourage more "AHA!" moments as TCs explicitly build on the schema acquired through their own student experiences, examining those experiences reflectively with the lens of future educators, and apply their new understandings to their pedagogical practice. Furthermore, TEs can equip TCs, through texts, modeling, and reflection, to reconsider their student experiences as well as addressing gaps in student experiences as TCs establish their emergent professional identities. Using a professional identity framework can thereby be a powerful tool in both practice and

research. as the field explores ways to make preservice teacher education relevant and effective for all preservice candidates.

Note

¹ Praxis refers to the intersection of theory and practice or the use of theory to justify particular practices.

References

- Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher*, 61(5), 365–373.
- Almerico, G. M. (2011). Secondary content area reading: Challenging sell for professors in teacher education programs. *Research in Higher Education Journal*, *14*, 2–16.
- Assaf, L. C. (2008). Professional identity of a reading teacher: Responding to high-stakes testing pressures. *Teachers and Teaching: Theory and Practice*, 14(3), 239–252.
- Azad, K. (2013). A visual, intuitive guide to imaginary numbers. Retrieved from http://bet-terexplained.com/articles/a-visual-intuitive-guide-to-imaginary-numbers/
- Bakhtin, M. M. (1981). The dialogic imagination: Four essays. Austin, TX: University of Texas Press.
- Barry, A. (2002). Reading strategies teachers say they use. Journal of Adolescent and Adult Literacy, 46(2), 132–141.
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175–189.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20, 107–128.
- Breault, R. A. (2013). "She was great, but...": Examining preservice recollections of favorite and most effective teachers. *The Professional Educator*, 37(1), 11–24.
- Burn, K. (2007). Professional knowledge and identity in a contested discipline: Challenges for student teachers and teacher educators. Oxford Review of Education, 33(4), 445–467.
- Cantrell, S. C., Burn, L. D., & Callaway, P. (2008). Middle- and high-school content area teachers' perceptions about literacy teaching and learning. *Literacy Research and Instruction*, 48(1), 76–94.
- Chong, S., & Low, E.-L. (2009). Why I want to teach and how I feel about teaching—Formation of teacher identity from pre-service to the beginning teacher phase. *Educational Research for Policy and Practice*, 8(1), 59–72.
- Cohen, J. L. (2008). "That's not treating you as a professional": Teachers constructing complex professional identities through talk. Teachers and Teaching: Theory and Practice, 14(2), 79–93.
- Day, C., Elliot, B., & Kington, A. (2005). Reform, standards and teaching identity: Challenges of sustaining commitment. *Teaching and Teacher Education*, 21, 563–577.
- Doecke, B., & McKnight, L. (2002). Forming a professional identity: Conversations between English methods students. Paper presented at the annual meeting of the Australian Association for Research in Education, Brisbane, Australia.
- Echevarria, J. J., Vogt, M., & Short, D. J. (2012). *Making content comprehensible for English learners: The SIOP model* (4th ed.). Upper Saddle River, NJ: Pearson.

- Flores, M. A., & Day, C. (2006). Contexts which shape and reshape new teachers' identities: A multi-perspective study. *Teaching and Teacher Education*, 22(2), 219–232.
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago, IL: Aldine.
- Hobbs, L. (2012). Examining the aesthetic dimensions of teaching: Relationships between teacher knowledge, identity and passion. *Teaching and Teacher Education*, 28(5),718–727.
- Hsieh, B. (2015). The importance of orientation: Implications of professional identity on classroom practice and for professional learning. *Teachers and Teaching: Theory and Practice*, 21(2), 178–190.
- Lesley, M. (2011). Understanding resistance: Preservice teachers' discourse models of struggling readers and school literacy tasks. *Journal of Adolescent and Adult Literacy*, 55(1), 25–34.
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, 31(2), 133–141.
- National Governors Association Center for Best Practices & CCSSO. (2010). *Common Core State Standards*. Washington, DC: Authors.
- New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–92.
- O'Connor, K. E. (2008). "You choose to care": Teachers, emotions and professional identity. *Teaching and Teacher Education*, 24(1), 117–126.
- Olsen, B. (2008). Teaching what they learn, learning what they live: How teachers' personal histories shape their professional development. Boulder, CO: Paradigm Press.
- Reio, T. G. (2005). Emotions as a lens to explore teacher identity and change: A commentary. *Teaching and Teacher Education*, 21(8), 985–993.
- Ronfeldt, M., & Grossman, P. (2008). Becoming a professional: Experimenting with possible selves in professional preparation. Teacher Education Quarterly, 35, 41–60.
- Rosenblatt, L. (1968). *Literature as exploration*. Champaign, IL: National Council of Teachers of English.
- Settlage, J., Southerland, S. A., Smith, L. K., & Ceglie, R. (2009). Constructing a doubt-free teaching self: Self-efficacy, teacher identity, and science instruction within diverse settings. *Journal of Research in Science Teaching*, 46(1), 102–125.
- Shapiro, S. (2010). Revisiting the teachers' lounge: Reflections on emotional experience and teacher identity. *Teaching and Teacher Education*, 26(3), 616–621.
- Sutherland, L., Howard, S., & Markauskaite, L. (2010). Professional identity creation: Examining the development of beginning preservice teachers' understanding of their work as teachers. *Teaching and Teacher Education*, 26(3), 455–465.
- Vacca, R. T., Vacca, J. A. L., & Mraz, M. (2011). Content area reading: Literacy and learning across the curriculum. Boston, MA: Pearson.
- Van Huizen, P., Van Oers, B., & Wubbles, T. (2005). A Vygotskian perspective on teacher education. *Journal of Curriculum Studies*, 37(3), 267–290.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.
- Wiggins, G. (2013). On so-called "reading strategies"—The utter mess that is the literature and advice to teachers. Retrieved from https://grantwiggins.wordpress.com/2013/03/04/on-so-called-reading-strategies-the-utter-mess-that-is-the-literature-and-advice-to-teachers/