Not a Moment to Lose: Mentoring Teacher Candidates for New Cultures and Climate

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Mentoring for early career teachers is well-documented. Less research exists on formal mentoring for pre-service teachers, but early attrition rates are so alarming that we cannot afford to lose any time in preparing novices for the challenges they will face. This research explored mentoring support provided to pre-service, or novice, teachers in a K-12 reading clinic at a state research university. The state has experienced dramatic expansion in linguistic and cultural diversity over the last 25 years, with a concurrent shortage of ESL-certified teachers. While the reading clinic does not provide formal ESL services, more than half the children who attend are English Language Learners. Novices tutoring in the clinic gained experience teaching ELLs as well as experience teaching reading. Since less than 10% of teachers trained at this university earn ESL endorsements, this experience is the only formal training for teaching ELLs that most novices receive. We detail the actions of one exemplary mentor, who had ESL training and experience, as she prepared novices to work with ELLs: negotiating the equity and social justice concerns that accompany learning for all students, especially ELLs and others who represent the changing demographics of our nation and our schools.

Introduction

The need for mentoring support in teachers' first years of practice is well-documented (Ingersoll & Strong, 2011) and necessary because much of the complexity of teaching must be learned on the job (Feiman-Nemser, 2001; Mahiri & Freedman, 2012). However, attrition rates for early career teachers are so alarming (Raue & Gray, 2015; Redding & Henry, 2018; U.S. Department of Education, 2011–2012) that we cannot afford to lose any time in preparing novice teachers for the challenges they will face (Papay, Bacher-Hicks, Page, & Marinell, 2017). New and early career teachers frequently work in the most challenging, difficult classrooms and schools (Darling-Hammond, 2010; Guarino, Santibanez, & Daley, 2006; Ingersoll & Strong, 2011) so exploring ways to better prepare them for the realities of classroom teaching during their preparation is vital. By doing so, we may even uncover ways to stem the tide of attrition during the early years of practice (Henry, Bastian, & Fortner, 2011; Ingersoll & Strong, 2011). Retaining a teaching corps who will stay long enough to develop practices that promote equity and social justice as well as academic achievement and excellence is crucial (Darling-Hammond, 2010; Harris & Sass, 2011; Papay & Kraft, 2015; Wiswall, 2013). We cannot afford to wait until induction to provide support that will lay the foundation for critically reflective, thoughtfully adaptive, and culturally relevant practices that enable a teacher to engage effectively with the challenges of teaching.

Focused mentoring during clinical experiences¹ that occur before student teaching is one way to provide such support. When mentoring is connected to clinical experiences such as teaching in a reading clinic, support is grounded in practice. Mentors can focus on instructional questions that come from the teaching practice of novice teachers, and can provide modeling and practice in critically reflective, thoughtfully adaptive responses. When the setting for the clinical experience is diverse, mentors can guide novice teachers to develop and enact these teaching practices in ways that are culturally relevant as well.

This research explored the mentoring support provided to novice teachers tutoring in a K-12 reading clinic at a large Midwestern research university. The state has experienced dramatic expansion in linguistic and cultural diversity over the last 25 years, and like the majority of the U.S., the teaching force in the state is predominantly middle class, white, and female (Tale & Goldring, 2017; U. S. Department of Education, 2016). The reading clinic exists to provide tutoring for students reading below grade level and parents/guardians voluntarily enroll their children. Although the reading clinic was established only to provide services for below-grade level students, students who enroll include both first-language English speakers and many English language learners (ELLs). These students come to the reading clinic to expand their English as well as their reading skills. As a result, novice teachers who tutor in this reading clinic gain experience working with linguistically and culturally diverse students and also develop skills for addressing reading delays.

The opportunity to tutor in such a multi-faceted environment is extremely beneficial, and adds a layer of complexity to the novice experience. Typical tasks of learning a new language can be confused with reading delays, and the literacy level attained in the student's first language influences literacy abilities in the new language (Farrell, 2009). Practices in this reading clinic and in the university's education department are evolving to meet the needs of the teachers they prepare, many of whom will take their first jobs in the highly diverse urban center near the university, but most novices who tutor in the reading clinic have not taken courses toward an English as a Second Language (ESL) endorsement. The reading clinic is their first experience working with ELLs.

Purpose of this Research

We explored the work of one mentor as she provided support to 15 novice teachers negotiating this reading clinic tutoring experience. We defined a novice teacher as someone in the final years of teacher preparation or first year of teaching practice (Berliner, 1988) and we explored the ways the mentor responded to questions and concerns raised by these novices during mentoring sessions. Our research question asked what mentoring moves (or responses) will the mentor use to sort through novices' concerns and need for detail while simultaneously establishing the foundations for critically reflective, thoughtfully adaptive, and culturally relevant practices.

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¹ Some of the participants in this study were student teaching at the same time as the clinical experience discussed in this study. Most will do their student teaching the very next semester. For all of them, this was the last year of teacher preparation (with the exception of one participant in his first full year of teaching, as described later).

Theoretical Framework

Since Shulman (1986) introduced the construct of pedagogical content knowledge (PCK), it has been the gold standard for teaching practice. The enactment of PCK, described as the amalgamation of content knowledge and pedagogy as well as the synthesized product of these knowledges that allows one to teach in ways that honor both the content and the students at hand (Shulman, 1986) is complex. PCK has been criticized as being theoretical without practical application (Borowski et al., 2012) and silent on issues of diversity and equity (Settlage, 2013). We agree that practical descriptions of development and enactment of PCK are missing from the literature, and we have worked to describe the actions experienced teachers take to enact PCK in practice (Hayden & Eades-Baird, 2016, 2017; Hayden, Moore-Russo, & Marino, 2013a). This research explores how initial development of PCK can be supported for novice teachers.

The initial steps for enacting PCK are 1) developing routines for reflecting on the responses of students and then 2) making adaptations in order to teach in ways that respond to the needs of students. But before one can reflect, one must first *notice* the responses of students, and this can be difficult for novices. Novices are typically inwardly and overly focused on their own performance (Berliner 1988; Roskos, Risko, & Vukelich, 1998; Hayden, et al., 2013a; Hayden, Rundell, & Smyntek-Gworek, 2013b), so it is the work of teacher educators and early mentors to show novices the importance of noticing their students' responses. Once novices notice student responses, teacher educators and mentors can guide them to reflect on what they notice, and then analyze and make thoughtful instructional adaptations that are grounded in real practice and that model the enactment of PCK based on those reflections (Duffy, 2005). When teachers at all grade levels notice, reflect, analyze, and then adapt their instruction, they enact PCK, and their teaching practice has the potential to become more culturally relevant and therefore responsive to diversity and equity concerns at a fundamental, "ground-floor" student level, and grounded in a focus on student learning (Hayden & Eades-Baird, 2016, 2017).

Shulman (1986) characterized PCK as developing over time in teaching practice, but we explored how an early boost could be provided through mentor-guided, explicit practice in noticing, reflecting, analyzing, and responding in thoughtfully adaptive, culturally relevant ways. With PCK as the organizing framework and ultimate goal for effective teaching, we sought to lay groundwork for studies exploring how early development of these specific tools for enacting PCK could be supported and grounded in culturally relevant practices for novice teachers.

Review of the Literature

Setting the Stage: The Climate of K-12 Education and Teacher Preparation

Calls for change are constant in teacher education, and reflect critiques and mandates confronted by K-12 systems (Cochran-Smith et al., 2018). Accountability for student learning, measured by high stakes tests with uncertain connections to learning, results in a narrowing of curriculum as K-12 schools channel diluted resources toward instruction that can provide solid results on assessments for as many students as possible (Au, 2007; David, 2011; Hamilton et al., 2007). Concurrently, greater attention to equity, diversity, and the dismantling of systems in schools that perpetuate oppression (Ladson-Billings, 2006) have led to disaggregating assessment results and other data in an attempt to focus instruction, "monitor equity" (National Forum on Education Statistics, 2016, p. 2), and remedy achievement gaps.

These pressing, essential K-12 concerns impact teacher preparation, as programs seek to provide teacher candidates with tools to address both the broad concerns inherent in mandates and the specific instructional skills needed to respond. Ball and Forzani (2010) called for the development of "new pedagogies of teacher education [and] disciplined documentation and study of ... approaches" (p. 12) to help novices study instruction and equity more closely. This research provides one response to that call.

Broad but Detailed: Tensions in Teacher Preparation

Foundations classes provide teacher candidates with opportunities to critique inherent inequities in our society and schools in order to build competency and capacity for working with a student population that is increasingly diverse as compared to the teacher population (Tale & Goldring, 2017; U. S. Department of Education, 2016). By contrast, instructional methods classes for reading teach detailed, micro-level strategies such as letter-sound correspondence and inferencing. The need to provide novices with preparation that is both broad and particular leads to experiences that can seem disjointed and disconnected, and Ball and Forzani (2010) noted that in the U.S., "we still lack a well-defined curriculum of practice for prospective teachers" (p. 11).

Literacy methods classes are especially heavy on basic skills instruction, and we teach the basics focus so well that novices may incorrectly come to believe that all teaching can be reduced to formulas. But "basic skills are not the end goal ... just a foundation for developing more important outcomes such as comprehension, higher order thinking, and the ability to prevail in a complex society" (Duffy, 2005, p. 300). Unfortunately, formulaic misunderstandings are heightened by novices' tendency to be concrete (Berliner, 1988), and to fall back on the teaching they observed in their own journey as a K-12 student, regardless of new learning during teacher preparation (Achinstein & Athanases, 2005; Boyd, Gorham, Justice, & Anderson, 2013; Snow, 2011). Novices can become overly focused on rules, procedures, and enacting lesson plans (Berliner, 1988; Risko et al., 2008; Hayden et al., 2013b). The reading clinic provides a perfect opportunity to mentor novices to think beyond basic, formulaic responses, and to counteract the "apprenticeship of observation" (Lortie, 1975) with the application of essential learning. In a meta-analysis of 82 empirical studies of teacher preparation for reading instruction, Risko et al. (2008) found a focus on three aspects of learning for novices, and we further organize the literature review around these.

Beliefs. Risko et al.'s 2008 review uncovered familiar deficit beliefs about ELLs and struggling readers, but also revealed that novices' beliefs change over time during their preparation. This finding was echoed by Sydnor (2014) who added that when teacher educators are explicit about their own beliefs, they can prepare novices for the "authoritative discourses they will encounter when they enter K-12 schools, so that they know ... they can be negotiated" (p. 118). Novices' deficit beliefs about culturally and linguistically diverse students and struggling readers are accompanied by assumptions that they, as classroom teachers, will not be responsible for teaching such students (Risko et al., 2008); this is where a reading clinic with strong mentoring can help. The supportive commentary of the mentor can counteract misguided beliefs by substituting specific instructional strategies and culturally sensitive considerations (Achinstein & Barrett, 2004; Daniel, 2014).

In another review of teacher preparation programs, Barnes and Smagorinsky (2016) found that novices' beliefs are influenced by multiple interests and cohorts, including their own experiences as K-12 students; learning from their preparation coursework; and the influences of parents,

friends, their cohort, and mentors. Coursework and mentoring are not necessarily the strongest influences. Integrating these multiple influences through practical experiences such as a reading clinic, and supporting such practical experiences with mentoring that makes explicit connections to preparation can help novices make sense of the many messages they receive during their preparation. When the mentoring dialogue is professional, purposeful, meaningful, and grounded in experience, it can serve to "enculturate [novices] into the profession" (Coombs & Goodwin, 2013, p. 58).

Knowledge and reflective reasoning. The many influences on novices' beliefs about students and teaching can lead to bewildering contradictions, as novices encounter different instructional ideologies and approaches (Barnes & Smagorinski, 2016; Riley & Crawford-Garrett, 2015). Programs reviewed by Risko et al. (2008) and Barnes and Smagorinski (2016) were largely grounded in constructivist theories for literacy teaching, but instructional topics were very broad, and included metacognitive strategies; informal assessments; family and early literacy; reading, writing, and literature methods; and reflections on equity and social justice. Once novices move into teaching, their daily activities will range from the mundane to the extreme: classroom set-up and logistics, managing unpredictable student behavior, and negotiating the political complexities of school systems with all the inherent racial and cultural divides of U.S. society. To manage these tasks, novices need to be able to think in ways that can be sociocultural, critical, and behaviorist in nature. Riley and Crawford-Garrett (2015) propose that "methods classes must be much more than a site of skill acquisition" (p. 77). Acknowledging contradictions and working toward coherence through mentoring in practical experiences can help.

Pedagogy. The potential for contradiction and confusion can be further complicated by the lack of connection between teacher preparation and the reality of classroom life. This disconnect has been well documented (Birmingham, Pineda, & Greenwalt, 2013; Bentley, Morway, & Short, 2013; McCann, Johannessen, & Ricca, 2005) and it puts novices, who must navigate both university and K-12 spaces, at a disadvantage. Finishing preparation with strong, engaged clinical experiences can smooth these pedagogical transitions, and meaningful mentoring is especially relevant in final semesters when novices engage in practical experiences like reading clinics that can mimic, in small ways, daily teaching practices to come.

Mentoring novices on the enactment of PCK can help them manage the multiple tasks and contradictions of teaching and begin to negotiate the shift from teacher candidate to teacher. This can be introduced through noticing critical incidents in practical experiences that cause disequilibrium (Hartford & MacRuairc, 2008), and learning to resolve it via reflection and thoughtful adaptation (Lytle, 2006; Shulman & Shulman, 2004; Hayden et al., 2013b). The most beneficial teacher preparation programs provide "opportunities for guided practice of teaching strategies in practicum settings with pupils" (Risko, et al., 2008, p. 252), and to support these opportunities, mentors must "be skilled at articulating teaching strategies, analyzing evidence, and supporting teacher growth every day" (Simos, 2013, p. 103-104).

Mentoring is also especially necessary to prepare novices to negotiate linguistic and cultural diversity, since those who do not have strong preparation to work with ELLs on reading comprehension may "fall back on mythology from the culture of the school [and] the broader culture" (Achinstein & Athanases, 2005, p. 843) rather than on intellectually sound practices.

Mentoring, especially for novices who work with ELLs, is often characterized as ineffective and short sighted, focusing on technical advice (Achinstein & Athanases, 2005) and lower level questioning techniques (Hill & Flynn, 2008). Daniel (2014) found a distressing lack of positive role models for novice teachers in school-based internships with ELL classrooms. Providing at least a foundational understanding of the strengths ELLs bring to their learning and their classrooms, referred to as *funds of knowledge* by Moll and colleagues (Moll, Amanti, Neff, & Gonzalez, 1992), and the tasks of learning a second language must happen at some level before novices leave their preparation. It should not be entrusted solely to student teaching and initial years of practice because when teachers enact "culturally and linguistically responsive pedagogy" (Daniel, 2014, p. 6) their interactions with ELL students become more meaningful, and students are more engaged in learning activities.

Mentoring

There are many models but no clear definition of mentoring (Crisp & Cruz, 2009; Dawson, 2014; Jacobi, 1991). Some programs focus specifically on mentoring teachers within schools (Glover, Gough, Johnson, Mardle, & Taylor, 1994; Kajs, 2002; Sanchez, Roegman, & Goodwin, 2016), centering on elements specific to that world (Dawson, 2014) with limited application beyond the school context. Such programs can vary widely in terms of the number of meetings and their structure (Ingersoll & Strong, 2011). Peer mentoring programs generally exist to provide either social and school culture support to beginning teachers or to help improve specific skills (Dawson, 2014). There are also national models for mentoring, funded and attended by multiple students and teachers, such as the Supplemental Instruction model developed by Martin and Arendale (1993) and the Peer Assisted Teaching Scheme developed by Carbone and Ceddia, (2012). More recent is the trend in computer mediated communication that allows for mentoring to occur at a distance and asynchronously, and contrasts with face-to-face or "offline" mentoring (Dawson, 2014).

In an effort to illuminate the diversity of mentoring, Dawson (2014) identified 16 mentoring elements, including objectives, roles, closeness of the mentoring relationship, time spent, rules and rewards, training for the mentor, and so on. Despite the prevalence of mentoring models and the many elements, Dawson (2014) contended that the diversity of both relationships and contexts for mentoring precludes a standardized definition. He called for research to specify the particulars, so that mentoring programs could be specialized to fit the needs of the recipients.

Methods

The reading clinic setting for this research has existed for more than 50 years, and operates within the education department of a Midwestern research university. Tutoring is provided to approximately 100 students each year, in fall, spring, (eight weeks each) and summer (four weeks) terms. The reading clinic serves students entering grades K-12, but the majority of students who are tutored are elementary-aged. Parents enroll their children, and tutoring during the school year occurs in 75-minute sessions, twice a week (150 minutes per week). Tutors complete the reading clinic experience to earn credit toward a reading endorsement, and are predominantly advanced undergraduates (juniors or seniors) along with a few graduate students. Mentoring sessions follow each tutoring session and are informal, with the mentor following the lead of the novices in discussion. The only structures in place are the dedicated time for mentoring and the small group arrangement, which is designed so the mentor-novice relationship will be conducive to supportive sharing.

Participants

The mentor. Data was initially collected from all three mentors working in the reading clinic, but this research describes the work of one focus mentor, Beth (all names are pseudonyms), a doctoral student who was in her first year of working in the reading clinic setting. Of the three mentors, Beth was the newest to the role and had the least number of years of teaching experience. Despite this, results of evaluations distributed to all the novices working in the reading clinic that semester revealed that her ratings were the highest of any of the mentors. Her mentoring practices were of interest for this analysis because of her role as a new mentor, her strong performance, and her combination of teaching experiences. Beth held a Master's degree in Curriculum and Instruction and a K-12 Reading Specialist Credential, and was certified in elementary education and early childhood education. She had earned hours toward an ESL endorsement but had not yet completed this credential. Beth had nine years of teaching experience including time in ELL classrooms, in high poverty schools, and in multi-age classrooms.

The novices. Fifteen novices comprised Beth's mentoring group: 14 female undergraduates and one male graduate student who was in his first full year of teaching after completing a one-semester substitute placement. All of the novices were white and none of them were endorsed or pursuing an endorsement in ESL education. Most tutored two students, and of the 27 students tutored by this group of novices, 18 were ELLs. Students were in Kindergarten, first, or second grades.

Table 1 Grade Levels, Number of Tutors Working with each Grade Level, and Numbers of Children

Grade level	Number of tutors	Total number of children	Number of English Language Learners
Kindergarten	4	7	4
First	9	16	12
Second	2	4	2
Totals	15	27	18

Data Collection and Analysis

Data collection occurred during the spring 2017 eight-week term. Novices used the first two weeks to establish a relationship with their students and gather initial assessment data. The final days of the term were used to re-administer assessments. This left five weeks for tutoring. Mentoring sessions occurred immediately following each tutoring session, and seven of the ten mentoring sessions were recorded and transcribed. The three other sessions during the five weeks were used to meet with the entire group of tutors in the reading clinic and their mentors. Since our analysis focused on the work of only one exemplar mentor, these whole group sessions were not recorded or analyzed. Audio-recordings captured the conversations the mentor had with novices during class transition times as well as the mentoring sessions, so recordings ranged from 20 to 40 minutes per session.

With a grounded theory design (Charmaz, 2006), analysis began with line-by-line coding of transcripts to develop initial codes, which were subsequently organized via focused coding into broader conceptual categories for Novice Concerns (Table 2) and Mentor Moves (Table 3).

Table 2

Novice Concerns Raised During Mentoring Sessions	
Initial Codes	Resulting Focused Code
Organization	
Behavior management	General Concerns
Time management	
Implementing strategies correctly	
Asking for specific direction	
 How to administer and score the Qualitative Reading Inventory 	
 How to complete lesson plan form 	
Providing a student scenario and decision or action taken	
Providing student scenario, seeking validation for decision/action taken	Specific Concerns
Providing a student scenario and asking for direction	
Providing student scenario and seeking validation: is this something I	
could try next?	
Sharing ideas and things they've done or seen	
Raising a concern/identifying a need	
Sharing a way they adapted instruction	
Supportive conversation: complimenting	Supporting Each Other
Making a suggestion to another novice	
Deeper analysis of student learning and/or behavior	
Taking action based on analysis and observation	More Advanced Thinking
Asking: How do I reflect on my teaching?	
Table 3	
Mentor Moves Utilized During Mentoring Sessions	
Initial codes	Resulting Focused Code
Noticing strengths of teaching practice	
Suggesting how to structure lesson	Company 1 Symmout

Initial codes	Resulting Focused Code
Noticing strengths of teaching practice Suggesting how to structure lesson Teaching tips: using clipboards, organization, developing annotation	General Support
system	
Time management	
Behavior management	Answering Specific Concerns
Engagement	
Teaching writing to emergent reader/writer	
Responding to task avoidance	
How to write a lesson plan and sub plan	
Breaking tasks down in steps for students	
Taking examples one step further: "what is most important to work on	
right now"	
Asking a professional question: "what are your responsibilities to bring to the lesson?"	
Explaining why we do what we do: connecting to best practice	
Prompting novices to notice, and use what they notice to make teaching decisions	Refining
Cautioning to look beyond surface level skills:	
•	
• "a focus on capitalization may inhibit writing product"	
• "drilling vocab doesn't really lead to reading"	

Behavior management: "everything you try you have to follow through"

Table 3 continued

Initial codes Resulting Focused Code

- ... a teaching decision or use of a strategy
 - Taking a break to calm student down
 - Allowing movement during lesson... by naming the specific teaching skill or knowledge a novice used, such as:
 - "Using data to inform teaching decisions"
 - "Moving from assessment to instruction"
 - "Evidence based instruction"
 - "Numbers are a form of literacy"
 - "Scaffolding"
 - "Providing visual and active support"
 - "Integrating word study with reading"
 - "The writing process"
 - "Teaching vocabulary within context"
 - "Being culturally sensitive to some of the stereotypes"

... by naming a skill set children are using or developing

- "the mechanics of writing"
- "the strategy of looking around for a model"
- Developing autonomy: "I am my own person and I'm accomplishing this task"

... by naming what the child needs:

- "building up stamina with writing"
- "external rewards"

Taking examples one step further: "what is most important to work on right now"

Asking a professional question: "what are your responsibilities to bring to the lesson?"

Explaining why we do what we do: connecting to best practice

Prompting novices to notice, and use what they notice to make teaching decisions

Cautioning to look beyond surface level skills:

- "a focus on capitalization may inhibit writing product"
- "drilling vocab doesn't really lead to reading"
- Behavior management: "everything you try you have to follow through"

Reassuring

Mentor sharing a personal example

Mentor sharing what previous novice tutors have done

Mentor asking novice to share what they and others have done

Checking in, asking about needs/worries and planning for novice needs

Releasing teaching decision to novice: "You decide"

Reinforcing

Refining

Creating Supportive Mentoring Climate

[&]quot;This is a safe space"

[&]quot;Permission"

[&]quot;Celebrations"

Results

Novice Concerns

We first reviewed concerns novices raised in mentoring sessions (Table 2). Initial concerns were about organization, student behavior, and time management and evolved from general to specific issues as time passed. Novices initially spent exhaustive time asking specific procedural questions for conducting required literacy assessments and filling out forms. This micro-focused approach is characteristic of novices, who concentrate on rules and procedures (Berliner, 1988) and are so inwardly focused, they may be unable to notice their students' responses (Hayden et al., 2013a, b).

As novices became comfortable with their tutoring role and Beth's support, they asked more pedagogical questions, continuing to counterbalance these with concrete procedural questions. They often waivered between micro-focused concerns and broader views. During session two of data collection, Beth's detailed description of inquiry-focused, student-centered, integrated planning was brought back to Earth by procedural questions from one of the novices, Samantha.

Beth: So to Jenny's point about where do we go from [here], now is the time that you look at your interest inventories and you know your student pretty well. Go back to that backward design model, look at what you want for the whole semester. Are you going to integrate a reading and writing project where your read-to and read-with [lesson sections] go along with your writing, and build upon those? Are you going to have a specific theme that you want to build on? Is there something you want to focus on that will be more of the attention span of your students? You might bring in a couple of titles for read alouds and have [students] make those choices and talk about what your plan is for the next few weeks, so they know that. Karen and I talked about, her girls really love the Rainbow Fairies series, so maybe doing a letter writing series where they're writing to the fairies, or they're writing their own type of fairy, so you're reading and writing continuously. And you'll find that though your lesson plans are very segmented they start kind of weaving into each other, they kind of overlap, and that's how they should start looking. So I would say to you, this is your palette now, it's your canvas to create your semester now that you know where your student is. Yes, Samantha?

Samantha: I have a question about the reading assessment. When we fill this out would we hand this in to somebody, or would it just be for our knowledge?

The Mentor's Work: Three Charges

Beth's actions as she attempted to move novices' discourse from concrete and procedural to reflective, thoughtfully adaptive, and culturally relevant were the focus of this analysis, and Table 3 present initial and focused codes describing her actions. Since a goal of mentoring in this reading clinic was to help novices notice and respond to needs of their students, lesson plan forms included sections for reflection and analysis. As time passed, novices were encouraged to use what they noticed in students' responses to plan future targeted lessons. Thus, Beth had overarching charges to 1) respond in ways that provided the concrete support novices requested, while 2) showing them the way forward by emphasizing tools of effective teaching practice and enacted PCK: noticing, reflecting, analyzing, and adapting.

The prevalence of ELL students in the reading clinic added a third charge and layer of complexity because novices were not only learning the tools of effective practice, they were also being challenged to think about teaching English to students who spoke a different first language. Since none of these novices was pursuing an ESL endorsement, working with ELLs was not something they had been prepared for in previous classes. The university offered a K-12 ESL endorsement through a different department that included courses in linguistics, grammar, and instruction, but ELL instructional methods were not integrated into literacy methods classes. As a result, novices' questions about working with ELLs permeated the data.

Concrete support and a safe space to establish reflective practice. Beth's first response to the novices' concerns was to establish the mentoring time as a "safe space", and the notion of space was both concrete and abstract. Even as Beth was advising novices on organizing the physical space to enhance students' learning, she established an abstract notion of the mentoring time as a space for sharing, support, and generating ideas:

So this space, this time, we're going to be talking about things such as getting ready for your word study, looking at your assessments, how can I support you in that. But it's also a time to visit with each other about, "This is what happened with my student tonight" "What would you all do?" or "I had this great break-through with my student tonight." So I want you to feel safe with this space ... you can share and we can talk about it.

Beth answered basic questions, and provided formal labels for strategies, skills, and knowledge novices were trying out. She reinforced times when novices allowed students to take a break or allowed movement during a lesson. She guided them to reflect on "what is most important to work on right now." When providing concrete support on how to use the lesson plan, she also provided a framework for how to think about the planning process.

The Results [section of the lesson plan] is what happened during the lesson. So not your reflection, but like, "We didn't get to this part" or "We ran out of time so I will do that Tuesday." That's a little space for yourself. But it's really good for me to see your process of thinking. I don't want you to have to do long details, but I do want you to practice explaining why you're doing something and I want to see what you planned versus what actually happened.

Scaffolding PCK by leveraging reflective practice for thoughtful adaptation. By establishing this framework of thinking reflectively about planning and instruction, Beth scaffolded thoughtful adaptation. Enacted PCK incorporates noticing, reflecting, analyzing, and adapting (Duffy, 2005; Hayden & Eades-Baird, 2017; Hayden et al., 2013a) and another example from week two of data collection (below) demonstrates how Beth encouraged novices to notice and share specific tutoring experiences and responses, and how she modeled connecting reflection to analysis and adaptation.

Noticing and reflecting. Beth first noticed and reflected on a tutoring event from one novice, River, and then posed a professional question for the group to consider, encouraging collaboration in the mentoring space.

River is working with [two children] who are very emergent ... she said tonight, what does writing look like with early emergent? Have any of you [who have] worked with

young children ... have any ideas what writing might look like with emergent writers, or things that you've seen, or things that you're doing?

Analyzing. Multiple novices took up Beth's invitation to collaborate by sharing what they had learned in methods classes, "We learned that with early emergent writers, you just work on the basic motor skills, like have them play with playdoh and that kind of stuff." Others shared ideas for practicing letters with hands-on activities like tracing with shaving cream and using candies to form letters. River noted, "I've been doing that a lot, but [student] is getting kind of bored."

Next, Beth encouraged the group to think beyond letter formation, and provided a model for thinking analytically about the needs of the student. She offered a description of the conceptual awareness emergent writers would need to develop after they mastered the physical actions, and she encouraged novices to take on this way of reflecting and analyzing what students need in order to move beyond concrete letter formation and develop an understanding of why we write.

I think those [ideas] are great, but if we're looking [past] the mechanics of writing, which is what [student] tires very quickly with, then you're looking at the writing process. For example, last semester [this student] did a letter book. He would draw pictures to go along with the letters. It's becoming familiar with the idea that letters are symbols and they represent thoughts, they represent ideas.

Once Beth established this need for more analytical thinking, novices offered additional concrete activity suggestions to River, including dry erase boards and site word games. However, one novice, Libby, asked analysis questions, albeit still somewhat at the concrete level.

Libby: Is it [the student's] writing that needs more work? Just practice writing, or recognizing?

River: I think he knows [letters].

Beth: And he didn't last semester, so ...

Libby: Can he spell yet, like can he make words yet?

Adapting. Beth synthesized this analysis and suggested a thoughtful adaptation. "So I would consider that [activity] your word study, and then build off that for writing, like maybe you're gonna have a shared sentence where you [leave out] a word or a blend that he can fill in." In this exchange, Beth accepted and extended the concrete responses novices brought from their methods classes, modeling how to analyze student responses and adapt instruction to develop deeper knowledge and critical concepts students needed. She continued this exchange by sharing a personal example from her student teaching experience in which she used a cut-up sentence technique, where a teacher writes a sentence on a paper, then cuts individual words apart so the student can re-assemble the sentence, to model how she was able to use reflective practice to develop an adaptation.

My cooperating teacher was [resolved] that all the words be [cut] the same size, and I had just done research that said that if you cut the sentence [pieces] to fit the size of the word it would be a visual cue for students. So, 'caterpillar' would be much longer than 'is'. She questioned me on that, and I read the research and showed her why I was doing that. Either way is fine, but I was able to support why I chose that way.

Permission to adapt. Beth used this personal example to give novices permission to be adaptive and base decisions about the use of time on analysis of students' needs.

Seventy minutes is a long time to be doing reading and writing exercises [with primary grade students]. So I would like you to [think] about 45 minutes of instruction, and that other chunk of time, whether it's at one time or spread out, can be doing large motor. If you want to take the first 10 minutes and go do a nature walk, and you're talking, especially if you have ELLs who you want to be engaging in conversation. Don't feel constrained to this building or room. Mary went to the hall tonight and they did finger painting and then wrote about their paintings. That engages motor skills, gets them moving, doing something different. I wanted to give you all permission to think outside the box that way, and whatever works best for the student. Give yourself permission.

Beth's use of permission continued throughout the five weeks of data collection as she worked to provide a metaphorical bridge between novices' experiences as teacher candidates/students and their budding experience as tutors/teachers. On the final night of mentoring she elaborated on this transition.

I am seeing you evolving from student to teacher. I see you taking things that you're learning in other classes and applying them right away. And your tutoring time is a place to experiment with things you might want to try with a whole classroom, or you might not have had an opportunity to try before. So you are really stepping into those shoes.

A third charge: Enacting culturally relevant practice for teaching ELLs. Since 18 of the 27 students tutored at the reading clinic were ELLs, the tutor in the reading clinic also needed to notice and adapt in order to meet the unique needs of ELLs. This included sorting out the differences between typical developmental tasks of second language learning and delayed reading skills. But even more, it required an understanding of how second language learners are sometimes positioned as delayed, deficient, or inherently weak in overall language proficiency when in fact, proficiency in more than one language can enhance literacy development (Haneda, 2006; Jimenez, Garcia, & Pearson, 1996; Reyes & Azuara, 2008). This understanding was crucial to establish a pedagogical basis for the selection of texts and activities that would reveal reflective, adaptive practices that were grounded in culturally relevant practices.

Foundational understandings for teaching ELLs. Since the reading clinic was not designed with an ELL focus and none of the novices had been trained to work with ELLs, Beth's mentoring moves focused on developing foundational understandings for teaching ELLs. This included the understanding that similar approaches to reading and writing instruction can be used, but with additional supports (Deussen, Autio, Miller, Lockwood, & Stewart, 2008). Samantha initiated a discussion of this difference by saying, "I'm finding that [my student is] struggling with her reading because she's not remembering letters. She keeps wanting to say 'dream' but she's saying 'bream'. She was getting her 'd' and 'b' mixed up."

While the confusion of b/d is very common for all early readers in English, a first-language English speaker would typically have semantic knowledge to recognize that 'bream' cannot be correct. An ELL does not have the ready support of semantic knowledge or an extensive bank of English words to support easily making this correction (Farrell, 2009). As a result, emphasizing letter-sound correspondence alone is less effective for ELLs and in the next vignette it is

important to note that Samantha did not emphasize sounding out the word, but instead provided just enough letter-sound support for her student to read the word.

If I give a hint, if I help her a tiny little bit with that one letter that she's struggling with, she has the whole word. Even hard words, it's just that she's forgetting those letters. I think she'd be at a higher level reading-wise if she wouldn't forget those couple of letters.

Samantha also noticed that her student's difficulty with basic decoding may have been masking higher level reading skills. Grabe (1991) described this discontinuity: ELLs will not have the extensive store of English word knowledge that first language learners of the same age possess. They will need different skill work than their first-language English speaking peers, and this skill work may be at a level that does not seem age-appropriate. The advantage is that although an ELL may need to work on earlier skills, they will bring "a more well-developed conceptual sense of the world ... more factual knowledge about the world, and ... [the ability to] make elaborate logical inferences from the text" (Grabe, 1991, p. 386-387) that will generally result in quick progress (Deussen et al., 2008).

Another novice, Ann, noticed the importance of vocabulary development.

I've noticed his vocabulary. Like, recognizing what that means. We read a book that was about China and he really liked that because he could share things from his home country with me and there was some writing in Chinese and he [said], "I know what that means, but I don't know how to tell you in English what that means." And a lot of times he [says], "I don't understand what that word means" and I'll explain it to him and [he understands]. So I feel like I need to be going over vocabulary and showing visuals.

An initial and ongoing emphasis on vocabulary development is critical for ELLs (Farrell, 2009). Beth reinforced this and highlighted another essential skill: the ability to build relationships with attention to social-emotional needs (Gandara & Santibanez, 2016), saying, "One of the things you can celebrate tonight is that you've established a relationship with him, that he feels comfortable to say to you 'I don't know what that means.' Not all students feel safe to do that."

Understanding and practicing equity. For all students, access to basic literacy is an issue of equity, since before one can critique the status quo, one must have the literacy tools to access knowledge (Moje, 2007). Providing foundational skills for language and literacy access to all students, including ELLs, is therefore a practice of socially just instruction. Additionally, Moje (2007) argues that "[e]quity is not a stable function whose parameters can be decided a priori but is rather a function of what people bring to an activity and the kinds of resources an activity can provide" (p. 4). Teachers who hope to enact equitable teaching practices must develop skills that enable them to respond to the needs of individual students. These skills include the tools of enacted PCK: noticing, reflecting, analyzing, and adapting. Since a foundational understanding for teaching ELLs includes awareness of the varied strengths and challenges they will bring to learning, skill with these PCK elements will enhance the abilities of teachers to respond to ELLs in ways that foreground equity and culturally relevant practices.

Another element of the equity work taken on by Beth was characterized by Achinstein and Athanases (2005), who argued that a mentor focused on equity guides teachers to know more than technical skills, and "[reframes] novices' thinking about culturally and linguistically diverse learners and their challenges of practice" (p. 846). Beth guided her group of novices to notice

and reflect on more than the mere reading skills their ELL students needed to master. She encouraged novices to include considerations of cultural respect for the language skills and knowledge that ELLs possessed. At a more pragmatic level, she encouraged novices to consider cultural and language knowledge when making book selections for lessons. One novice, Jenny, shared an experience illustrating respect for language.

This summer I worked with 4-year olds in China and at the end when I left, they taught me Chinese, so I know numbers in Chinese. But just learning from one another, so that he feels like you aren't up here teaching to him, but he's up there with you, teaching you.

By sharing the stage with her student, Jenny honored the knowledge her ELL student brought to the reading clinic and modeled the acceptance that establishes a supportive environment (Gandara & Santibanez, 2016). Jenny's sharing prompted Ann to reflect on the cultural appropriateness of her book selection.

I was just thinking about the book that I shared, I didn't even know that it was about China; we were looking for *The Magic School Bus* [books] because he really loves that and just happened to [find this book]. I saw some of the info might be stereotypical so, thinking for later, I definitely want to review that. I avoided [other books]. I looked at it as I'm just not gonna read that.

Beth encouraged Ann to trust her reflection and provided a label for this type of culturally relevant knowledge: "You're talking about being culturally sensitive to some of the stereotypes."

While most of Beth's mentoring moves for working with ELLs focused on foundational aspects, she did so with an emphasis on respect and culturally relevant practice. She highlighted the importance of establishing an environment that respected language and cultural differences as well as strengths (Gandara & Santibanez, 2016) and included selecting instructional materials that reflected this respect. She reinforced teaching decisions that focused on vocabulary building (Collins, 2005; Farrell, 2009) and incorporated targeted, fundamental skill practice while building conceptual understandings at higher levels (Farrell, 2009; Grabe, 1991).

Discussion

High attrition rates for new teachers have established a need to explore ways to better prepare novice teachers for realities of classroom teaching before they leave preparation programs. Providing improved models for supportive clinical experiences that ground theory in practice and occur before graduation (Ball & Forzani, 2010) could be one way to do this. These models should include an emphasis on the critically reflective, thoughtfully adaptive, and culturally relevant practices that enable teachers to engage effectively with the challenges of teaching. PCK can provide both the theory to support these practices and the tools to enact them.

PCK is frequently invoked to support educational research, including this research, but descriptions of exactly how it is enacted are less widely available. This research focused on the methods one mentor used to establish the foundations for enacted PCK with a group of novice teachers. She encouraged them to notice their students' responses to instruction, reflect on and analyze these responses, and then develop thoughtfully responsive instructional adaptations. By describing, modeling, and enacting PCK in these ways, the mentor provided a model that novices could use to connect reflective practices to thoughtful adaptation, which is necessary for all teaching, and especially important for teaching in ways that are culturally considerate.

Additionally, since many of these novices were also teaching an English Language Learner for the first time, they had the opportunity to benefit from learning in an atmosphere that emphasized the development of culturally relevant practices, with a mentor who was uniquely qualified through preparation, experience, and expertise to guide their development.

From Concrete to Thoughtful: Scaffolding PCK and Culturally Relevant Practice

Novice teachers finish their preparation with a wealth of content and pedagogical knowledge, but they lack practice in combining these two bodies of knowledge in ways that honor both the content and the students at hand. Daily life in schools is routinely changeable at best, unpredictable at worst, and what novices need most as they make the transition from teacher candidate to teacher are solid models of how to enact their knowledge about teaching. The shortage of teachers formally trained with an ESL endorsement indicates that models for teaching ELLs should be included in this transition support. Beth's establishment of a safe space in the mentoring sessions encouraged noticing students' responses to instruction, which is the crucial first step of enacting PCK. Beth used what novices shared in their mentoring sessions as opportunities for reflection and encouraged analysis, even of something as concrete as a student's fatigue with practicing letter formation, to introduce the development of more abstract conceptual knowledge. In this way, she was able to establish the foundations of enacted PCK, even with the mostly concrete, procedural reflections engaged in by her group of novices.

Perhaps even more relevant was Beth's ability to provide some of the foundational understandings needed for teaching ELLs and elaborate on the budding awareness novices brought to their teaching of ELLs. This included noticing that difficulty with letter-sound correspondence did not mean knowledge of word meanings was deficient, noticing that students understood the meanings of certain words even if they could not connect a vocabulary label with those understandings, and seeing with fresh eyes the cultural stereotypes present in children's books. Beth provided conceptual labels for these understandings, and encouraged novices to analyze and make adaptive decisions about their selection of materials and activities in order to meet the needs of students in pedagogically and culturally relevant ways.

Conclusions

We examined the work of one exemplary mentor and a small group of novice teachers, and as such, results of this analysis should be interpreted with caution. However, the demographics of the novices and the students they tutored represent the current state of K-12 education in the U.S. The student population is increasingly diverse in both culture and language, but teachers remain mostly middle class, white, and female. There are not enough teachers certified in ESL to meet the growing linguistic diversity that is present, and all regions of the U.S. face specific teacher shortages. It is not unreasonable to say that all teachers entering the field will need to have an awareness of both the subtle and obvious challenges students face when they are learning English as a second or subsequent language and concurrently learning to read. Until ESL programs and courses that prepare teachers to work with ELLs are more widespread, a mentored reading clinic experience like this one may be the only way that novice teachers can develop understandings that are foundational and culturally relevant to working with ELLs. This consideration supports this study as an important contribution to the literature on pre-service teaching.

Early teacher preparation with methods such as described here could have a positive impact on teacher induction and attrition from high-need, challenging school sites that are often the first placements of new teachers. Longitudinal studies are needed, but work is already being done in analyzing the adaptive actions of teachers in practice and learning how mentors and teacher educators can build these processes (Vaughn & Parsons, 2013; Hayden et al., 2013a, 2013b; Hayden & Eades-Baird, 2017), and follow novices into their teaching practice to continue the support (Parsons, Malloy, Vaughn, & La Croix, 2014). This study's group of novices had the experience of working with ELLs in a supportive environment, and they had the ear and expertise of a mentor who had training and experience in working with ELLs. As such, they entered the teaching world with some extra capital to build upon, and perhaps, a bit more resilience. Taking the long view, exploration of the impact such early support could have on retention of teachers is important, and it is the goal for future research in the setting described here.

Finally, the question remains, what is the best way to mentor and support novice teachers? Computer-mediated communication makes mentoring available any time and any place, and peer-assisted models provide essential social and emotional support. The face-to-face, real time mentoring provided by an experienced teacher during this reading clinic experience, while relatively *old-school* given the prevalence of technological ways to communicate without meeting face to face, may be exactly what novice teachers need. This model provided a high level of personal support for negotiating new learning and preparing novices to address the equity and social justice concerns that accompany learning for all students, including ELLs and others who represent the changing demographics of our nation and our schools. Such preparation is of vital importance to the students novices will teach and the culture of public education they will usher in.

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