Match or Mismatch?
How Congruent Are the Beliefs of Teacher Candidates, Cooperating Teachers, and University-Based Teacher Educators?

By Ye He & Barbara B. Levin

As is recognized by many teacher educators, teacher candidates enter their teacher preparation programs with individual attitudes, views, beliefs, or personal theories of teaching (Lortie, 1975; Pajares, 1992; Richardson, 1996, 2003). These views may or may not change, develop, or consolidate as a result of coursework and field experiences throughout the teacher preparation program. Nevertheless, in order to guide, assist, and encourage teacher candidates in their professional development, and prepare them to make decisions based on well-articulated visions of practice formed from moral considerations of justice, responsibility, and virtue (Shulman, 1998), we believe it is important for university-based teacher educators to be aware of their teacher candidates' beliefs, and the cooperating teachers' beliefs, and to compare these beliefs to their own beliefs.

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We also believe that the identification of matches or mismatches among beliefs could help teacher educators, cooperating teachers, and teacher candidates better understand each other's perspectives and be able to work together to maximize learning at both the university and the K-12 classrooms. Therefore, the purpose of this study is two-fold: (1) to identify

the content and sources of the expressed beliefs of a group of teacher candidates, cooperating teachers, and university-based teacher educators; and (2) to identify the matches and mismatches within the content and sources of those beliefs.

Literature Review

The study of teacher beliefs is not new. Many studies view beliefs as part of the episodic memory based upon personal experiences (Nespor, 1987). While beliefs and knowledge are closely related, beliefs tend to be more subjective and personal, and usually reflect individual judgment and interpretation of the knowledge a community of people agree upon (Lunderberg & Levin, 2004). Research suggests that the beliefs of teacher candidates serve as filters for interpreting knowledge and experiences, guiding their decision making and influencing their actions in the classroom (Clandnin & Connelly, 1987; Elbaz, 1981; Larsson, 1987). Beliefs, therefore, are an important factor in the change or lack of change during preservice teacher preparation and in their later professional development (Nespor, 1997; Pajares, 1992).

Teacher candidates enter their teacher preparation programs with personal knowledge and images of teaching based on their own learning experiences or observations, which Lortie (1975) described as the "apprenticeship of observation" (p. 61). As Calderhead and Robson (1991) describe: "Students derive an image of good teaching from one or more teachers they know, sometimes linking positive images to particular attributes of their own….This was the kind of teacher they could see themselves becoming" (p. 4). Teacher candidates may not always be explicitly aware of the images they hold, or able to articulate their beliefs, but their images of teaching are recognized as such a strong filter on teacher candidates' learning that some researchers found beliefs difficult to change (e.g., Marland, 1998; Putnam & Borko, 1997; Richardson, 1996, 2003) .

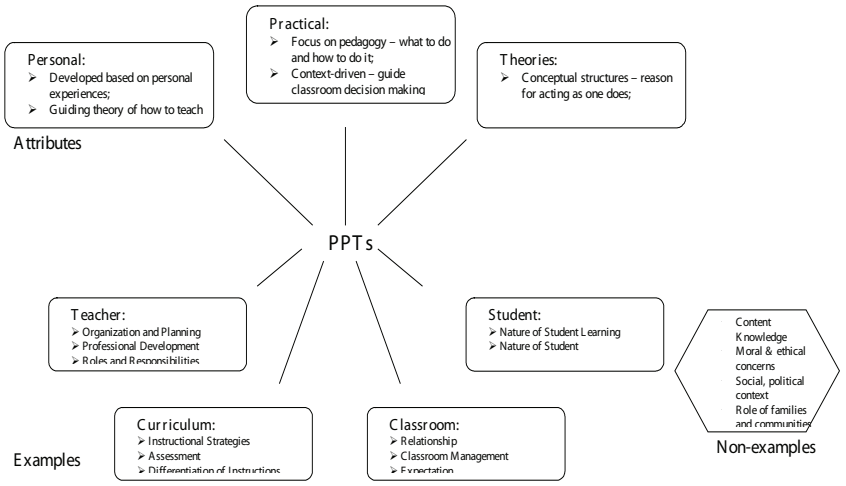
In attempting to examine beliefs of teacher candidates and the impact of teacher preparation programs on those beliefs, many researchers have studied teacher knowledge and beliefs from various perspectives to look at the interaction between teachers' beliefs (personal theories), their actions (in practice), and the role that context, implicit and explicit thought, and reflection play in these interactions. For example, Elbaz (1981) coined the term "practical knowledge" to describe teachers' beliefs and described how the structure of teachers' practical knowledge included rules of practice, practical principles, and images that guide actions. Other researchers used similar terms to describe analogous connections between teachers' beliefs and their practical experiences including such terms as: personal practical knowledge (Clandinin, 1986), practical arguments (Fenstermacher, 1986); practical theory (Sanders & McCutcheon, 1986), practical reasoning (Fenstermacher, 1986); practical philosophy (Goodman, 1988), theory of action (Marland & Osborne, 1990), schema (Bullough & Knowles, 1991), and personal practical theories (Cornett, Yeotis, & Terwilliger, 1990).

Cornett (1990) defined personal practical theories (PPTs) as the systematic set of beliefs (personal theories) which guide teachers and are based on their prior life experiences (personal practices) derived from non-teaching activities and also from experiences that occur as a result of designing and implementing the curriculum through instruction (practice). Several studies have shown that teachers use their PPTs as their personal guiding theories in the pre-active (planning), interactive (teaching), and post-active (reflective) stages of their teaching (Chant, 2002; Clandinin, 1986; Cornett, 1990; Cornett, et al, 1990; Pape, 1992). These researchers asked teachers what guided their thinking about pedagogy, or interpreted their beliefs from what teachers said, said they intended to do, or what they actually did during observations of their teaching (Chant, 2002; Chant, Heafner, & Bennett, 2004; Cornett, 1990; Cornett, et al, 1990; Lundeberg & Fawver, 1993; Pajares, 1992; Richardson, 1996, 2003; Tatto & Coupland, 2003). Other researchers have shown that the beliefs of both teacher candidates and experienced teachers expressed as their PPTs during a process called "personal theorizing" drive the pedagogical decisions about teaching and learning of both novice and experienced teachers (Chant, 2002; Chant, et al, 2004; Cornett, 1990; Cornett, el al, 1990; Ross, Cornett, & McCutcheon, 1992). These previous studies of PPTs not only illustrated the relationship between teachers' beliefs and their classroom decision making, but also provided an approach to encourage teacher reflection and solicit teachers' explicit beliefs by articulating their PPTs.

In an effort to understand the attributes, content, and sources of teachers' PPTs, Levin and He (in press) collected and analyzed 472 self-reported Personal Practical Theories (PPTs) solicited from 94 teacher candidates over the course of three years. The findings indicated that teacher candidates' PPTs in this study were (1) based on personal experiences both as K-12 students and their practical experiences and observations in classrooms during their teacher preparation program; (2) became their guiding theories for how to teach; and (3) were mainly focused on pedagogy (what to do and how to do it); (4) were context-driven and used to guide their classroom decision making during their preservice field experiences; and (5) were the foundation of their conceptual structures, or reasons for acting as they did in teaching situations. In addition, four major content categories of teacher candidates' PPTs were identified as being about *Teachers, Instruction, Classrooms*, and *Students*. The findings of this study helped us establish a framework for categorizing the content and the sources of the PPTs expressed by a large number of our teacher candidates over time. The findings also aligned with the ways PPTs have been defined and studied by other researchers. Figure 1 provides a concept map defining the attributes of PPTs with examples and non-examples from this research.

The strong immediate impact of teacher preparation coursework and field experiences on the PPTs of teacher candidates, even prior to student teaching (He & Levin, 2005) led the authors to speculate that knowing their teacher candidates' beliefs could allow both teacher educators and cooperating teachers to better facilitate teacher candidates' development, especially if our beliefs were congruent

Figure 1. Concept Map.



and consistent with theirs. However, because of their individual educational backgrounds and teaching experiences, we assume that our participants' beliefs might be different, therefore we are interested in exploring the congruence of the PPTs among our teacher candidates, cooperating teachers, and university-based teacher educators. We also posit that the study of the beliefs across the three groups will help us (a) better understand the similarities and differences of the beliefs held by these three groups, and (b) provide empirical evidence to inform and improve the preparation of teacher candidates, and the professional development of our cooperating teachers and teacher educators.

Methods

Participants

The participants in this study included 41 volunteers from an elementary teacher preparation program at a medium-sized university in the southeastern United States as described in Table 1.

At the time of this study the undergraduate and graduate-level teacher candidates had between 250-400 hours of internship experiences tutoring individuals, teaching small groups, and leading whole class lessons in several of our Professional Development School (PDS) partnership sites, which were all public elementary schools. The amount of field experience varied by the number of semesters they had been in our program at the time of this study. Further, each teacher candidate had worked with at least two different cooperating teachers in different grade levels, but had not yet started their fulltime student teaching semester. All the cooperat-

Table 1. Participants

Teacher Candidates N=23			Cooperating Teachers N=8	Teacher Educators N=10
Undergraduates: Juniors	Undergraduates: Seniors	Graduate-level Students	9 White females	7 White females
5 White females 1 African-American Female	6 White females 1 African-American Female	10 White females	1 African-American Female	1 African-American Female

ing teachers who volunteered for this study were from one of our long-term PDS sites, and they had 3-10 years of experience mentoring interns and student teachers. The university-based teacher educators who volunteered to be interviewed for this study included full-time clinical faculty, retired teachers, and doctoral students with a range of 9-35 years of teaching experience and Masters or Doctoral degrees in education. These teacher educators taught methods courses and/or supervised interns and student teachers in various PDS sites. As groups, these participants were representative of the diverse array of teacher candidates, cooperating teachers, and teacher educators involved in our elementary education program.

Data Collection

In order to ascertain people's beliefs, researchers have typically asked teachers what they believe, or interpreted beliefs from what people say, say they intend to do, or do (Cornett, 1990; Lundeberg & Fawver, 1993; Pajares, 1992; Richardson, 1996). For this study, the researchers conducted a brief oral presentation regarding the concept of PPTs and provided examples of PPTs from previous studies as examples before soliciting volunteers (see Appendix A for information provided to all potential participants solicited for this study). Then, volunteer participants were asked during individually-scheduled interviews to (1) share PPTs that guide their teaching, (2) provide examples of how these played out in their classroom teaching, and (3) identify the source(s) of each PPT. In order to conduct interviews at each participant's convenience, three interview formats were offered to the participants: face-to-face, telephone, and online chat. The face-to-face and telephone interviews took about 15 to 30 minutes each, while the online chats were usually 30 to 45 minutes considering the time for typing. Each researcher conducted about half of the interviews.

During their interviews each participant offered 4-7 PPTs, and altogether 177 PPTs were collected from 41 participants. Member checking was employed after all the interviews were transcribed, and preliminary analysis was fed back to the participants for their individual written reactions.

Data Analysis

We used qualitative, interpretive methods to review the recorded and transcribed interviews of the 41 participants. A content analysis (Cohen & Manion, 2003) of the 41 transcripts was undertaken to investigate the thematic content of the transcripts, which served as a basis of inference for beliefs expressed by the participants in the form of their PPTs (See Table 2).

Initially, the researchers separated the content of each PPT from the sources of the PPTs based on the interview transcripts. Then, each researcher coded the content of all the PPTs independently using the framework established from the previous study (Levin & He, in press), and memos were developed to create a dictionary of words and phrases that emerged as potential categories and patterns in the interviews. After discussion between the researchers, discrepancies in coding and analysis memos were resolved and revised codes were established. After data from all interviews were recoded using these preliminary categories, a final set of themes was agreed upon to represent all the original patterns and categories found during the first-level analyses. Throughout this process we also double coded PPTs that clearly fit into more than one category. The final themes for the content and sources of each expressed belief were used when we recoded the data using NUD*IST 6 (2003) to allow further analysis and exploration. Table 3 provides examples of the major categories of the content of the 177 PPTs and sub-categories within each main category, as well as examples of specific PPTs in each content category: Teachers, Instruction, the Classroom, Students, Teaching and Learning, and Parents.

Using the agreed upon coding scheme as described above, the content and the sources of the PPTs were first summarized for each of the five groups of participants: Juniors, Seniors, Masters-level teacher candidates, cooperating teachers, and teacher educators. Based on this first-level analysis, further comparisons across the five groups were conducted to identify matches and mismatches of the content and the sources of the PPTs both within and across each group of participants. However, to compare the similarities and differences of PPTs among the three groups of interest (teacher candidates, cooperating teachers, and university-based teacher educators) these data were combined to compare the aggregate of PPTs of the teacher candidates with those of the cooperating teachers and teacher educators during the second-level analysis in this study. While there was certainly variability within each group, as well as across all the groups of participants, all the content of the participants' PPTs were easily grouped into the major content categories of beliefs about Teachers, Instruction, the Classroom, Students, Teaching and Learning, and Parents. However, apparently because of their differing roles and amounts of teaching experience, the way PPTs were expressed by the three groups revealed different perspectives, and perhaps developmental differences, in how teacher candidates, cooperating teachers, and teacher educators thought about each category of PPTs.

Table 2. PPT Analysis Example from Graduate-level Teacher Candidates.

Data	Data Segmentation	Data Coding
Use of formal and informal assessment to meet individual student needs	PPT Statement	
Although assessment is seen as over used and a daunting task at times, I feel that assessment is a valuable and necessary part of classroom life. I believe in using several types of assessments that are considered both formal and informal assessments. I also believe that these assessments should only be given if they serve a purpose. This purpose should directly affect the student who took the assessment. In my classroom I will administer the typical beginning of the year assessments to know where my students are when they enter my classroom. I want to be sure I am meeting the needs they have now, not the needs they had at the end of the last school year. I also believe in assessing students in various subject areas that we work on throughout the year. I want to test my students for master so I know who and what I need to remediate. As far as informal assessment, I am a strong proponent of observation. When I mean observation, I do not just mean looking. I mean looking, recording, and looking at these recordings over a period of time. I not only want to see what a child has trouble with during class work, but also how they work with others. I find that observations allow the teacher to put the whole picture together.	Illustration of PPT	Instruction/ Assessment
The source of the idea of assessment and meeting individual student needs is from both my Educational Research Methods, as well as Differentiated Instruction. I learned the importance of not just testing children, but testing them for what they actually know and not what the book wants them to know. Dr. Bartz's class opened my eyes to correct testing procedures that have a positive outcome on the education of our students. As far as differentiated instruction, I have begun to learn how to use individual assessment results to help the individual child. We often want to use a "one size fits all" idea, but that practice is outdated and rather useless.	PPT Sources	University coursework

Table 3. Categories of PPT Content.

PPT Categories		PPT Examples
Teacher	Organization and Planning	• Prospective Teachers: Organization and teacher preparation are necessary for a classroom to be productive. • Cooperating Teachers: Being organized in thoughts and plans, not winging it but adjusting as needed. • Teacher Educators: No Example
	Roles and Responsibilities	• Prospective Teachers: I believe that the teacher should keep lines of communication open between themselves and the students at all times. • Cooperating Teachers: Supporting every learner (including teachers) wherever they are. • Teacher Educators: The understanding of learners' prior knowledge and backgrounds is important. Teachers should include learners' various cultural backgrounds, learning styles into consideration.
	Qualities of Good Teachers	• Prospective Teachers: A bored teacher is a boring teacher. • Cooperating Teachers: Be flexible or you will make yourself sick. • Teacher Educators: No Example
	Nature of Teaching	• Prospective Teachers: The teacher should not always stand in front of the room and lecture, but be a facilitator for group works and student leadership. • Cooperating Teachers: Teachers should be willing to try anything for their students. • Teacher Educators: The focus of teaching is student learning.
Instruction	Instructional Strategies	• Prospective Teachers: Modeling is very important for teachers to do. • Cooperating Teachers: No worksheets (or very few), lots of experiential activities, centers, cooperative learning and experimentation. • Teacher Educators: Instruction needs to be hands-on.
	Assessments	• Prospective Teachers: Use assessment to drive instruction. • Cooperating Teachers: No Example • Teacher Educators: No Example

Table 3. Categories of PPT Content (Continued).

PPT Categories		PPT Examples
	Differentiation of Instructions	• Prospective Teachers: Teaching in a way that is differentiated so all students can be successful. • Cooperating Teachers: No Example • Teacher Educators: The understanding of learners' prior knowledge and backgrounds is important. Teachers should take learners' various cultural backgrounds, learning styles into consideration.
Classroom	General Classroom Environment and Community	• Prospective Teachers: The classroom should be a positive environment. • Cooperating Teachers: Building classroom community is essential. • Teacher Educators: It is important to create environment where all children are comfortable taking risks.
	Classroom Relationship	• Prospective Teachers: Teachers should keep lines of communication open between themselves and the students at all times. • Cooperating Teachers: No Example • Teacher Educators: Letting who I am as a person come through in my teaching and research is essential to what I do and who I am.
	Respect	• Prospective Teachers: Respect for all students and teachers is essential. • Cooperating Teachers: No Example • Teacher Educators: No Example
	Expectations	• Prospective Teachers: Students will perform to the level of their teacher's expectations. • Cooperating Teachers: Kids are capable so I need to set high expectations. • Teacher Educators: Teachers must have high expectations and be activists.
	Classroom Management	• Prospective Teachers: Classroom management has to be under control so that school is the place for children to learn to be creative and to use higher-level thinking. • Cooperating Teachers: I try to make school positive by building community through morning meeting activities. I use positive classroom management techniques. • Teacher Educators: No Example

Table 3. Categories of PPT Content (Continued).

PPT Categories		PPT Examples
Student	Nature of Students	• Prospective Teachers: I believe that all children have the ability to learn. • Cooperating Teachers: Students are independent in their learning, students look to others and themselves, not always to me. • Teacher Educators: Developing self-regulation and a sense of independence as learners is important.
	Nature of Student Learning	• Prospective Teachers: Learning is a life long process which can not be limited. • Cooperating Teachers: Students learn better by being involved in the lesson. • Teacher Educators: Learning should be authentic and should not occur just in the classroom.
Teaching and Learning		• Prospective Teachers: While the teacher is the one in control, everyone still has the chance to teach and to learn. • Cooperating Teachers: We all can learn (teachers included) from kids, from other teachers and by reflection. • Teacher Educators: Evaluation and feedback is also important in learning. Feedback from someone that's more knowledgeable and expert is helpful in learning process. Feedback should be a mutual process, not only from teachers to be students, but also from students to teachers, that helps the learning process. Learning is more of an interaction process.
Parents		• Prospective Teachers: All parents want the best of their kids. • Cooperating Teachers: Family involvement is important. • Teacher Educators: No Example

Findings and Discussion

As can be seen in the examples of PPTs in Table 3, all three groups reported PPTs that fit into the four major content categories (*Teacher, Instruction, Classroom,* and *Students*), which indicated matches in the content of their PPTs. However, two possible mismatches were noted: (1) how participants expressed their ideas about

the category labeled *Instruction*, and (2) different perspectives, which perhaps indicate a developmental pattern, in the focus and content of the PPTs about *Teachers, Classrooms,* and *Students*. Furthermore, with regard to the sources identified by the participants for each of their PPTs, it was noted that all the three groups of participants reported these as being from the three main source categories: family and K-12 backgrounds, teachers' observations and experiences, and teacher preparation coursework.

Next, we describe the content of the PPTs expressed in this study and describe the pattern we observed that appears to indicate differences in the scope or focus of the PPTs of teacher candidates, cooperating teachers, and teacher educators. We also discuss the sources of PPTs from each group of participants. We then discuss possible implications of this pattern for our teacher preparation program and make several recommendations for other teacher educators to consider.

PPT Cross-group Comparisons: Content of PPTs

As described above, during a second level analysis, we combined the three groups of teacher candidates into one group in order to compare and contrast their PPTs with the beliefs of the cooperating teachers and university-based teacher educators. This was done because the content analysis yielded differences in perspective among these three groups in how they talked about several categories of PPTs. These differences appear to be related to their roles, their teaching context, and the amount of teaching experience.

Comparing the PPTs provided by all three groups of participants in the 16 categories, it was noted that the teacher candidates' PPTs covered all the categories, while cooperating teachers and teacher educators provided PPTs regarding most of the categories, but not all. Further, we conjecture that the varying focus among the PPTs of our participants may be impacted by their different backgrounds and teaching contexts. For example, teacher educators in this study did not provide any PPTs related to *Organization and Planning, Qualities of Good Teachers, Assessments, Respect, Classroom Management,* or *Parents*. Cooperating teachers did not provide any PPTs regarding *Assessments, Differentiated Instruction,* or *Respect*. While these differences may be a reflection of the particular participants in this study and may reflect the different focus of their beliefs (for example, teacher educators did not consider classroom management as one of the major concerns), it also indicated the need for teacher educators and cooperating teachers to be aware of their teacher candidates' beliefs about classroom management.

The three groups of participants demonstrated different understandings about *Teachers* based on the descriptions they used to illustrate their PPTs, especially in how they talked about teachers' *Roles and Responsibilities*. Among the teacher candidates, participants expressed beliefs about how important it is for teachers to communicate with their students and build relationships with them. However, the cooperating teachers expressed that their major responsibility is to build a

learning community, which they said involves not only their students, but other teachers as well. Cooperating teachers also viewed themselves as role models for their students. Compared to the teacher candidates and cooperating teachers, the university-based teacher educators expressed beliefs that their responsibility is to reach out to students beyond the classroom, to prevent students from being struggling readers, and that their role is to be an activist who addresses injustices that are not limited just to school settings. These different perspectives as reflected in each group's PPTs that we categorized as being about *Teachers* seem to indicate a pattern influenced by the perceived roles of each group, which is constrained or enabled by the scope of their experience. That is, the teacher candidates seemed to focus on their roles as teachers in the classroom, while the cooperating teachers' responsibilities went beyond the classroom to include fellow teachers in the school community, and the teacher educators' beliefs about the role and responsibility of teachers went beyond the walls of the school. This ever-widening pattern of teachers' *Role and Responsibilities* was also seen in their beliefs about *Classrooms* and *Students*, which will be discussed later.

Both the teacher candidates, especially the graduate teacher candidates, and the university-based teacher educators stated PPTs regarding *Instruction* that focused on beliefs about the importance of differentiating instruction (see Table 3). Similar terms and expressions were used by these two groups in PPTs about differentiation, which they expressed as teaching lessons in more than one way to reach all types of learners and their individual needs. However, the cooperating teachers did not state many PPTs that could be categorized as being about *Instruction*, and those few were explicitly about specific instructional strategies that they believe facilitate building a learning community, such as group work, rather than about promoting differentiation of instruction for diverse learners. In fact, no cooperating teachers in this study use the terms differentiation or differentiated instruction in any of their PPTs.

A pattern, or difference in perspective, found in the participants' PPTs regarding *Classrooms* seemed to be closely related to their PPTs regarding *Teachers*. All three groups expressed their need to build relationships with students and provide a safe and comfortable learning environment for students in their classrooms. However, the teacher candidates tended to be more concerned with the general classroom environment and classroom management issues, while the cooperating teachers emphasized the classroom as a community, and the university-based teacher educators viewed the classroom and school community as influenced by factors outside the classroom. Thus, PPTs about *Classrooms* provided another, and perhaps clearer, example of the different perspectives we observed across the three groups. That is, teacher candidates' PPTs about *Classrooms* are mainly focused within the classroom, while the cooperating teachers expressed beliefs with a more expanded focus going from the classroom out to the whole school, and the teacher educators expressed beliefs that go beyond the classroom and school to include influences in the wider community.

Comparing participants' PPTs regarding *Students*, the teacher candidates' beliefs toward their students' abilities in learning and the developmental nature of learning appear to be tied to their understanding of classroom instructional strategies for facilitating student learning, while the cooperating teachers focused on building a learning community in their classroom and in the school, and the teacher educators expressed their beliefs that socio-cultural factors influence student learning and linked their beliefs to their roles and responsibilities. This difference in perspectives indicated to us another ever-widening pattern of beliefs that appears to be based on the different roles, responsibilities, and experience levels of the participants in this study.

Participants in all three groups expressed a small number of PPTs related to *Teaching and Learning*; however, the focus of these PPTs demonstrated slight differences across groups. The teacher candidates believed that teachers could also learn from students even though they are the ones in control; the cooperating teachers believed that teachers definitely learn from their students, from other teachers, and through self-reflection; and the teacher educators viewed teaching and learning as an interactive process.

PPT Cross-group Comparisons: Sources of PPTs

Comparing the sources of participants' PPTs, it was noted that the sources of teacher candidates' PPTs were relatively evenly distributed among their family background and previous K-12 learning experiences, their teaching experiences and observations, and teacher preparation coursework. Among the 177 PPTs, 77 (31%) reported their source as coming from their family background and learning experiences, 100 (40%) from teacher experiences and observations, and 73 (29%) from teacher preparation coursework. This study confirmed the findings from previous research (He & Levin, 2005) where a similar distribution was observed in that most of the teacher candidates' PPTs (69%) had their source in the coursework and required field experiences, indicating that their teacher preparation program has a strong influence on their beliefs, at least prior to student teaching.

Cooperating teachers and teacher educators attributed the sources of their PPTs regarding *Teachers*, *Instruction,* and *Students* mostly to their teaching experiences and observations, and the combination of their own teacher preparation coursework and their teaching experiences. For teacher candidates, their beliefs regarding *Organization and Planning, Classroom Management*, and *Instructional Strategies* appeared to be greatly influenced by their teacher preparation coursework and their observations, while their beliefs about *Classrooms* and *Students* were mostly attributed to their own prior learning experiences before coming into their teacher preparation program.

Although the sources of all the PPTs in this study were sorted into three major categories, another difference across groups is interesting. In terms of family background and K-12 learning experiences, the teacher candidates and teacher

educators appeared to have more diverse family backgrounds and K-12 experiences than the cooperating teacher group. When participants commented on the influence of the teacher preparation coursework, the teacher candidates and cooperating teachers usually referred to their undergraduate courses, readings, or professional development workshops, while university-based teacher educators tend to refer to their graduate studies and their own readings and research. It was also noted that both the cooperating teachers and teacher educators commented on learning from the teacher candidates and related it to their beliefs about the reciprocal nature of teaching and learning, which other researchers have also noted (e.g., Brink, Laguardia, Grisham, Granby, & Peck, 2001).

Summary and Implications

Based on the analysis undertaken for this study, it was observed that participants from each group reported PPTs that were categorized as being about *Teachers, Instruction, Classroom, Students,* and *Teaching and Learning*. However, differences in how the PPTs of teacher candidates, cooperating teachers, and teacher educators were expressed seemed related to differences in their perspectives based on their differential roles, responsibilities, and level of teaching experience. As a group, the teacher candidates' PPTs were focused on their roles as teachers in the classroom and the importance of building relationships with students. With more classroom teaching experience, the cooperating teachers in this study emphasized building a learning community in their classrooms, but the learning community also included other teachers in their school. The PPTs of the university-based teacher educators demonstrated their concern with facilitating student learning and the influence of socio-cultural factors beyond classroom settings. With regard to the sources of their beliefs expressed as PPTs, each group had a similar pattern that showed a relatively even distribution among their family background and previous K-12 learning experiences, their teaching experiences and observations, and teacher preparation coursework.

For us, recognizing similarities and differences, or matches and mismatches, among the expressed beliefs of our teacher candidates, cooperating teachers, and university-based teacher educators offers insights regarding all the constituents in our teacher preparation program. First, we believe it is important for university-based teacher educators to recognize the focus of the content of their PPTs compared to their teacher candidates. Because of their teaching experience and their background, teacher educators' personal theories regarding respect, classroom management, or planning and organization may not be the focus of their teaching beliefs any more, but these are salient for teacher candidates. Therefore, we assert that understanding what teacher candidates' believe, and purposefully sharing experiences and/or theories regarding the issues they are concerned about, may help better prepare them for classroom teaching. Second, university-based teacher educators need to

be aware of cooperating teachers' beliefs so that they can better work together to provide consistent support for them and for their teacher candidates throughout the teacher preparation program. For example, in the case where a concept such as differentiated instruction is a focus for both teacher candidates and teacher educators, we see an opportunity to provide professional development about differentiation of instruction for our cooperating teachers so they can facilitate its implementation in their classroom settings for the benefit of their students and the teacher candidates. Finally, observing differences in perspectives among the PPTs of the teacher candidates, cooperating teachers, and university-based teacher educators in this study, while not surprising from a developmental perspective, reminds all who work with beginning teachers of the need to assist them in better understanding that the teaching profession includes more than just working with individual students in classrooms. Both university-based teacher educators and cooperating teachers need to work hard to prepare our teacher candidates for their roles in the school and community, as these contexts certainly influence their students and their teaching. Therefore, we see a need to provide opportunities for our teacher candidates to move outside their internship classrooms in order to learn more about the school and surrounding community.

In summary, we believe that it is important for teacher candidates, cooperating teachers, and university-based teacher educators to become aware of each others' beliefs because those belief systems guide the actions of all those involved in the profession. Further, a general match between the beliefs of cooperating teachers and teacher educators can better support the development of teacher candidates through the consistent messages they receive from both their courses and their field experiences during the teacher preparation program. It is also beneficial to encourage teacher candidates and their cooperating teachers to engage in focused, purposeful peer observations. It is also important for our teacher candidates to engage in conversations about their similar or different beliefs with their cooperating teachers and university-based teacher educators. Based on the findings of this study, we assert that in our teacher preparation program, such peer observations and discussions about each other's teaching beliefs and practices may be able to facilitate the development of meta-cognitive understanding of teaching among the teacher candidates and help them develop and later enact their visions. However, this is an empirical question that remains to be evaluated.

Limitations and Future Direction

Although the results of this small-scale study are not generalizable to other teacher preparation programs, it is our recommendation that eliciting beliefs in the form of PPTs, and then analyzing and comparing them across groups of teachers, is replicable in other settings. However, to build upon the findings from this study, more interviews need to be conducted to generate a larger sample size for the com-

parative analysis of PPTs across more and/or larger groups in order to replicate the findings of this study. Further, while our participants are fairly representative of the makeup of our elementary education majors, a more diverse group of participants in terms of gender and ethnicity would enhance the generalizibility of the findings. Further, collecting the PPTs from our teacher candidates during courses or seminars in which the researchers are not directly involved would further strengthen the validity of the study and minimize potential researcher bias. Finally, we would like to conduct classroom observations in addition to the interviews in order to better understand the relationship between teachers' PPTs and their classroom teaching, and also collect follow-up observations of the participants in this study in order to identify any development or changes of their beliefs and actions overtime.

Conclusions

In conclusion, we believe this study has implications for the organization of teacher preparation programs. We believe that teacher preparation programs should be providing continuous opportunities for their teacher candidates, cooperating teachers, and university-based teacher educators to examine their PPTs as they related to their actions during internships, student teaching, and other field experiences. Engaging teacher candidates, cooperating teachers, and university-based teacher educators in sharing their beliefs, in the form of their PPTs, throughout the teacher preparation process may be a useful tool for developing reflective practice, articulating conceptual frameworks, learning to work effectively with diverse learners, and for fostering commitment to lifelong learning. Furthermore, the identification of matches or mismatches may also help teacher educators, cooperating teachers, teacher candidates and policy makers better understand each others' perspectives and use this knowledge to improve teacher education for the benefit of today's students. For the teacher candidate, learning opportunities are very likely developmental in nature and should include a range of opportunities to work individually with students, take on more responsibilities within the classroom, and also become engaged with the school and community by taking on some of the numerous roles and responsibilities of the classroom teacher who serves the broader community.

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Appendix A.

PPT Presentation to Potential Participants Prior to Interviews

Purpose

The PPT presentation is designed to define and give examples of PPTs to participants before soliciting their participation in this study. Participants will be given a copy of this as a handout along with copies of the Oral Presentation and Short Consent Form.

Definition of PPT

The systematic set of beliefs (theories) which guide the teacher and come from life experiences (personal) and classroom experiences (practical).

Examples of PPTs

• PPTs of Mr. Brewer
  1. Relationships are the key to education
  2. All people/students can learn
  3. No bad students; Bad behaviors/environments and situations
  4. Everyone is an educator
  5. Respect must not be taken away; It must be given fully with no boundaries
• PPTs of Ms. Dees
  1. Treat students the way you want to be treated
  2. Do your best and make good choices, emphasize respect, restraint, and responsibility
  3. Quality versus quantity
  4. Learning is not limited

• PPTs of Ms. Hefferman
    1. Respect and caring
    2. Never satisfied - never content
    3. I don't have the answers - but will listen, let you know I care
    4. No gossip
    5. Students can come to me for truth about what's going on
• PPTs of Mr. Lange
    1. Environment conducive to learning
    2. Control, not necessarily order
    3. Respect through expectations
    4. Teacher as organizer and motivator
    5. Student involvement and input
    6. Students leave with more knowledge and information
• PPTs of Ms. Miller
    1. Teacher and students work to establish a family environment
    2. Teacher should try to be fair to all students
    3. Teacher should help students learn how to learn and enjoy the process
    4. Teacher should help students meet objectives

Prompts for reflections

- I am at my best when…
- Students say they like me when…
- Friends/family say I am…
- Supervisors think that I…
- I loved school when…
- The things I agree with from my UNCG classes are...