Uncovering and Informing Preservice Teachers’ Prior Knowledge About Poverty

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Abstract
This study explored 30 preservice teachers’ knowledge on issues related to poverty. In an open-ended questionnaire, preservice teachers’ perceptions of poverty and how teachers should respond to students from poverty were explored. Results indicated that preservice teachers’ knowledge was nonspecific and lacked focus on the relationship among poverty, schools, and students. These results indicate a need for us as teacher educators to provide preservice teachers with (a) specific details about realities of poverty, (b) opportunities to discuss and observe the relationship among poverty, teachers, and schools, and (c) examples of children and families from poverty who have positive attributes.

Introduction
For many individuals and families, economic hardship is a prevailing way of life. According to the most recent data from the Bureau of Labor Statistics (2010), the unemployment rate in the United States is 10.0%. Currently, 13.2% of the nation’s citizens live below the poverty level (up from 12.5% in 2007) with children accounting for 19% of these data (United States Census Bureau, 2008). Poverty, however, is not distributed equally among groups of children. In 2008, 33.9% of Black children, 30.6% of Hispanic children, and 10.6% of White children lived in poverty, and all of these estimates are forecasted to rise (United States Bureau of the Census, 2008). Although more students from culturally and linguistically diverse backgrounds are living in poverty and attending school, the numbers of culturally and linguistically diverse preservice teachers enrolling in teacher education programs is decreasing, thus contributing to a predominantly white, middle-class teaching workforce (Hodgkinson, 2002).

Although cultural and economic mismatches often exist between teachers and students, certain teacher beliefs can overcome the potentially detrimental effects of such a mismatch. Effective teachers of students living in poverty hold high expectations for all students and explicitly tell students they are capable of learning (Zeichner, 2005). Furthermore, what teachers believe about their students has serious implications for the quality of instruction students receive, as research has shown that teachers’ beliefs play a powerful role in influencing instructional practices (Aragon, Culpepper, McKee, & Perkins, 2013; Bryan & Atwater, 2002; Jordan & Stanovich, 2003). In other words, teachers who believe all students are capable of learning are more likely to provide all students with effective instruction. It is therefore important that teacher education programs prepare...
preservice teachers to work with the diverse students they will face. An important first step we can take is increasing preservice teachers’ awareness of the realities of poverty and helping them form accurate conceptions of the relationship between poverty and education.

As preservice teachers enter teacher education programs, they bring prior knowledge and experiences they acquired from their families, personal experiences, and K-12 schooling; hence, their beliefs are ingrained and often developed long before they enter teacher preparation programs (Bennett, 2012; Swartz, 2003). These beliefs are frequently viewed by preservice teachers as reality and as a result, are challenging to influence. Preparation programs that have been successful in influencing preservice teacher beliefs included the following features: (a) a shared vision and alignment across coursework, teacher educators, and field experiences, (b) collaboration across university personnel and cooperating teachers, (c) extensive opportunities to situate knowledge and beliefs in practical settings, and (d) multiple opportunities over time to confront beliefs (Fang & Ashley, 2004; IRA, 2003).

To create preparation programs that meet preservice teachers’ specific needs and encapsulate these features, a necessary first step is to understand the prior knowledge preservice teachers bring to their preparation contexts. Once we uncover preservice teachers’ prior knowledge, we can use this information to make decisions about course and program curricula, structure, and direction. By embracing the concept of teacher as researcher, we are able to link our classroom instruction to meet the needs of our preservice teachers – specifically their knowledge (or lack thereof) of culturally and linguistically diverse students and students from poverty (Darling-Hammond, 2006; Cochran-Smith & Lytle, 1999). As teacher researchers, a logical first step was to identify our students’ incoming knowledge of culturally and linguistically diverse students and students from poverty. In pursuing this investigation our purpose was twofold. First, we wanted to identify the prior knowledge (regarding students from poverty) our preservice teachers brought with them to the program. Specifically, we wanted to identify accurate conceptions while also identifying any incorrect or incomplete conceptions. In doing so, we hoped to use this information to better structure our own courses by strengthening and building upon their accurate knowledge, while also dispelling their misconceptions. Second, we wanted to share our students’ responses as well as current research on poverty with others who might be interested in addressing issues of poverty in their own courses. A better understanding of preservice teachers’ incoming knowledge could inform teacher educators as we work to craft coursework and programs that will respond appropriately and adequately to preservice teachers’ perspectives.

Methodology

At the time of this study, the first and second authors of this paper were doctoral students who often co-taught and co-planned their courses. For this particular course the second author was the course instructor, and the first author helped with course planning as well as data collection, analysis, and manuscript preparation. Together we wanted to identify preservice teachers’ incoming knowledge about poverty, so we administered an open-ended questionnaire with five items related to poverty. In the following sections participant selection, data collection, and data analysis procedures are described.

Participants

Thirty students enrolled in an undergraduate course on diversity and inclusive practices taught by the second author, participated in this study. These preservice teachers were selected because the content of the course aligned particularly well with issues of poverty. Furthermore, this course was taught during their first semester of education coursework. Surveying preservice teachers at this point in their coursework gave us insights about the initial knowledge and beliefs they brought to their teacher education program.
The 30 preservice teachers, all juniors belonging to the same cohort, were in their first semester of the Unified Elementary ProTeach Program (UEP), a 5-year Bachelors/Masters certification program. The UEP Program is comprised of field placements each semester and coursework in the School of Teaching and Learning and the Department of Special Education. UEP coursework and field experiences are designed to prepare teachers to teach children from diverse backgrounds. In addition, all UEP preservice teachers belong to a cohort that remains the same throughout the duration of the 3-year program. The participants’ gender and ethnicity were as follows: 2 male, 28 women, 1 Black, 5 Hispanic, and 24 White. The identities of the participants were kept confidential, and therefore, the questionnaire results were not broken down according to the gender and/or ethnicity groupings noted above.

Data Collection

During the first week of classes, students were asked to complete a questionnaire consisting of the following five open-ended questions: (a) Describe your class of students your first year teaching (predict what the class will be like). (b) What does the term poverty mean to you? (c) What are children who grow up in poverty like (look like, act like, etc.)? (d) How does poverty impact students and their achievement? (e) How should teachers respond to students who come from poverty? These five questions were selected because they encouraged preservice teachers to think about and respond to poverty from a variety of vantage points. From these five questions, we were able to discern preservice teachers’ incoming knowledge about (a) the definition of poverty, (b) individuals who live in poverty, and (c) how poverty impacts schooling.

Data Analysis

Students’ questionnaire responses were open-coded line-by-line and question-by-question. Once this step was completed, all open codes were compiled and axial coding began. During axial coding, we reassembled the data by making connections among categories and subcategories (Strauss & Corbin, 1990). The axial codes helped us summarize the preservice teachers’ knowledge and are italicized in the findings section. From the axial codes, we developed broad themes for each of the questions. For example, in Question 2 (What does poverty mean?) we open coded one preservice teacher’s response in the following way: struggle to meet basic needs, no school supplies, hungry, and unemployed. We continued this step for each of the 30 preservice teachers, and then developed the following axial codes for this question: no monetary support, lack of food, lack of supplies, and unmet needs. For example, the broad theme for Question 2 was: poverty means low-income and lack of resources. Once we had established broad themes, we referred to existing literature to compare the preservice teachers’ incoming knowledge to data related to poverty and schooling.

Findings

We were surprised by the similarities in how preservice teachers described poverty, its impact on students’ achievement, and how they believed teachers should respond to students living in poverty. In the following sections, we present their responses to the questionnaire. For each question we summarize the findings and then present research that either (a) confirms preservice teachers’ prior knowledge or (b) highlights misconceptions and/or gaps in their knowledge and understandings about poverty.

Question 1: What Will Your Future Students Look Like?

Twenty-five of the thirty preservice teachers believed their future classrooms will consist of diverse students. They used the following terms to define diversity: culturally diverse, special education, urban, ESOL, poverty, struggling academically, rural, and lower class. One preservice teacher wrote the following about the school she plans to teach in, “Most likely it will be in an urban setting where there is a need for good teachers. I see myself having a very culturally diverse class.” The remaining five of thirty preservice teachers believed their
classrooms will have minimal diversity and described their future schools as: small, white, private, religious, and middle to upper class. All five of these preservice teachers wrote of returning to their hometown, with one teacher writing, “I would like to teach back home. If I do, my class will be almost entirely white, middle to upper-middle class students. There may be a few African American students, but they would probably fall within the same socioeconomic bracket.”

According to the 2008 Census data, whose definition of diversity is limited to race, ethnicity, language, and socioeconomics, the U.S. population is becoming increasingly diverse (Denavas-Walt, Proctor, & Smith, 2008). One in every three school-aged students comes from a racial or ethnic minority background, 1 in 7 speaks a language other than English in the home, and 1 in 5 lives in poverty. In essence, the 25 preservice teachers who believed their future classrooms will be diverse are probably right (Villegas & Lucas, 2002). Ironically, even with increasing diversity, the five preservice teachers who believed their future classrooms would have limited diversity, could also be correct. White students, as a rule, are the most segregated, with less than 1% of all White students attending majority minority schools (Books, 2007).

**Question 2: What Does Poverty Mean?**

The preservice teachers’ responses indicated that they understood poverty as low-income and/or a lack of resources. This is accurate; however, within their answers the preservice teachers described poverty using generalities, which is to be expected considering their limited time in the teacher education program and, likely, their life experiences. The lack of specific details within their answers, however, alerted us to the fact that they do not fully understand the true severity of living under such economic distress.

Seventeen of the preservice teachers surveyed wrote that poverty meant low income. Preservice teachers described low income in the following ways: poor, no money, and living paycheck to paycheck. The following quote is a representative response, “I believe poverty is someone who lives off a very small income or no income at all. They can be homeless or live in poor conditions. Life is much more difficult for those who live in poverty.” This preservice teacher mentioned issues related to poverty, but provided no specific details of the true financial situation of people who are living in poverty. Only 3 preservice teachers out of the 30 surveyed mentioned government financial aid and noted that it is “relatively hard to come by.” These students spoke of the assistance families in poverty might receive in general terms, such as “outside aid” and “government support”, with no mention of the stressors that accompany the application process one must undergo to receive government assistance. Again, if preservice teachers have never experienced poverty, it would be difficult for them to fully grasp the process of receiving government assistance and the bureaucracy that accompanies it.

A natural correlate to living under financial strain is an inadequate supply of resources. Twenty of the preservice teachers wrote about poverty meaning a lack of resources such as food, shelter, and clothing. One preservice teacher wrote, “Can’t afford to buy the child anything but necessities and even those are a struggle. The child may be hungry and have no supplies.” This lack of specificity was common within the preservice teachers’ responses, which could be a result of survey questions that were a bit broad, lack of knowledge on the part or preservice teachers, or a combination of both.

The reality is that an alarming number of people in this country are suffering from extreme economic hardship. In 2009, according to the updated poverty guidelines, a family of one is considered living in poverty if its annual income is less than $10,830. A family of four is considered living in poverty if its annual income is less than $22,050 (U.S. Department of Health and Human Services). The three preservice teachers who referred to “outside aid” and “government support”, were
most likely alluding to programs such as the Temporary Assistance for Needy Families (TANF), the Food Stamp Program, and the Supplemental Security Income (SSI) program. Receiving federal assistance, however, is challenging, with fewer people receiving it than are eligible. Part of the challenge is that federal aid applicants must maintain folders full of documents that include receipts, work pay stubs, immunization records, and tax returns (Shipler, 2005). A missing document can be the difference between receiving aid and being denied. Often forced to wait in long lines and fight through bureaucratic red tape, welfare applicants are frequently discouraged by the time-consuming process that interferes with their responsibilities to their jobs and families (Shipler, 2005). People living in poverty also have trouble affording many of life’s necessities, with housing being one of the most important. Affordable housing is hard to find, as the cost of rent continues to rise faster than workers’ wages (Rank & Hirschl, 2005). This means that people in poverty spend a majority of their income on rent, leaving little money left over for food, clothing, transportation, and health care.

It is probably not surprising that the preservice teachers were not able to include specific details about the nature and extent of poverty for people in our country. It is unlikely that many people have such specific knowledge. Sharing and discussing this information, however, can help preservice teachers form a deeper and more complete understanding of what living in poverty means from a financial standpoint. Saying that poverty simply means low income is shrouding a more complicated social issue.

Question 3: What Do Children Who Live in Poverty Look Like?

Twenty-six of the thirty preservice teachers wrote that children in poverty are either Black or Hispanic, have poor physical and/or emotional health, and act out in the classroom. One such preservice teacher wrote, “When I picture an impoverished child, I see a child from a black family.” Another preservice teacher who thought a majority of students from poverty belonged to minority groups qualified the answer by writing, “Race doesn’t matter. I mean I’m sure that there are more minorities in poverty, but there are white people too.” The general consensus among the preservice teachers’ responses was that children from poverty are easy to identify by both appearance (old clothes, malnourished, and unclean) and lack of resources (no money for classroom supplies, lunch, and field trips).

According to the U.S. Census Bureau (2008) the number of Whites in poverty (roughly 17 million) is larger than any other racial group, including Blacks (roughly 9.4 million) and Hispanics (roughly 11 million). It is important to note, however, that the percentage of Whites in poverty is lower than other racial groups. As previously stated, approximately 10.6% of the White population is considered living below the poverty level, while 33.9% of the Black and 30.6% of the Hispanic population are living below the poverty level. Poverty is distributed disproportionately across racial groups; however, the preservice teachers’ comments reflect the misconception that most poor are people of color. In reality, most poor are White, but people of color are disproportionately poor.

In addition to minority status, 25 of the 30 preservice teachers responded that poverty impacts children’s physical and emotional health negatively. With regard to physical health, the preservice teachers cited poor nutrition as a specific problem, and used adjectives such as: malnourished, hungry, overweight, underweight, skinny, and thin to describe students in poverty. One preservice teacher provided a more detailed response by writing, “Some are overweight because of unhealthy diets while others are underweight because of insufficient calorie intake.” These 25 preservice teachers also wrote of the emotional and social effects poverty can have on children. Their responses included issues related to children’s emotional health including depression, anxiety, stress, and loneliness. One preservice teacher wrote, “Children who grow up in poverty sometimes have self-esteem issues due to the overwhelming amount of
stress that is placed upon those who live in poverty.” Finally, preservice teachers believed that poverty affected children’s behavior, causing aggression, shyness, or hyperactivity. The preservice teachers largely attributed these behaviors to their belief that children in poverty do not receive enough attention at home and therefore seek it at school. For example, one preservice teacher wrote, “children in poverty might not be getting any love at home and so they might act out in class for attention.”

The preservice teachers were correct in writing that children living in poverty are more likely to suffer from malnutrition than children in higher SES groups, though this is not through a lack of love or attention at home. Children living in poverty are also more likely to face a lengthy list of health problems due to lack of available and affordable medical resources (Fox & Cole, 2004; Lichter & Crowley, 2002). Their parents, however, often take extreme measures to get their kids medical care and other services. It is the assumptions that parents from poverty do not care that we must address and challenge as educators (Compton-Lilly, 2004).

**Question 4: How Does Poverty Impact Achievement?**

The majority of preservice teachers believed that poverty was a detriment to student achievement, describing how limited access to computers, lack of school supplies, increased responsibilities at home, limited time to complete homework, infrequent adult help, and a general lack of encouragement and expectations make it difficult for these children to succeed in school. One preservice teacher explained the impact of poverty on student achievement by stating, “poverty impacts achievement because students may not have access to materials that promote their success as a student. There may not be encouragement from home to do well. Parents may be uneducated and uninvolved, thus providing a lesser emphasis on education.” Twenty-nine of the preservice teachers alluded in some way that parents and caregivers of children living in poverty were part of the problem—a common conception among new preservice teachers (DeCastro-Ambrosetti & Cho, 2005; Swartz, 2003).

Absent from the preservice teachers’ responses was the idea that many parents of children in poverty do value education and want their children to succeed. Low socioeconomic status does not equal lower levels of encouragement and expectations by parents (Ceja, 2004). For example, in a study on low socioeconomic successful Mexican students, the students credit their parents as being an important factor in offering encouragement and motivation in their educational studies (Alva, 1995). Poverty, however, does place significant demands on parents, and these demands must be attended to for the family to survive. For example, many parents in poverty are hardworking and trying desperately to make ends meet with the jobs that are available to them. Unfortunately, these jobs are often seasonal, part-time, and pay minimum wage, which will not end the family’s financial worries. The result is that parents are caught in an unending and delicate budget-balancing act. Furthermore, it should be made clear to preservice teachers throughout their program that students who come from poverty are not necessarily struggling academically in school.

Out of 30 preservice teachers only one mentioned the context of schools and how they impact students’ achievement. This preservice teacher wrote, “Those families who live in poverty, don’t always live in the best neighborhoods. This means that the children will not be going to a great school. The school isn’t going to have the best teachers or the best educational equipment.” A handful of the preservice teachers also wrote that children who come from poverty are likely to be categorized, stereotyped, and subjected to limitations and low expectations. It is unclear, however, whether these preservice teachers were referring to teachers, schools, or society as a whole.

Districts with high levels of poverty often have school facilities that are overcrowded, poorly
maintained, without current materials, and staffed by teachers who are under-qualified (Wald & Losen, 2007). However, there are also schools with high levels of poverty that experience high rates of student achievement through developing strong school leadership, collaboration, instructional approach, confidence and trust, and the school district dynamics. (Orr, Berg, Shore, & Meier, 2008). It is perhaps not surprising that so few of the preservice teachers realized the connection between poverty and school quality. After all, the preservice teachers we surveyed were new to education and were enrolled in an introductory class on diversity. It seems, however, that this is an important gap in preservice teachers’ knowledge and understanding of poverty that needs to be addressed in teacher education programs.

**Question 5: How Should Teachers Respond to Children from Poverty?**

In general, the preservice teachers believed that teachers should respond to students who come from poverty by being motivating, encouraging, and helpful. Their responses centered on teacher attitudes and the need to possess emotional sensitivity. They wrote about teachers needing to provide students with extra help and approach students with sensitivity and understanding. One preservice teacher simply wrote, “Give them extra attention, love and help. Be there.” The sentiments expressed by the preservice teachers characterize a number of the qualities that effective teachers possess, however, their answers only address one aspect of how teachers should respond to students from poverty. Teacher education programs must therefore ensure that preservice teachers know the importance of addressing both the academic and emotional needs of all students.

Preservice teachers’ ability to address both academic and emotional needs of their students is important as today’s students fall into a varied assortment of ethnic and social classification. Teachers, therefore, need to have the requisite pedagogical skills (i.e. knowledge of the subject matter and good classroom management), while simultaneously accounting for the different cultures and experiences of their diverse students (Brantlinger, 2003; Darling-Hammond & Bransford, 2005). Although knowledge of subject matter and pedagogy are key ingredients to effective teaching, Irvine (2003) found that successful teachers of minority/poverty students also need to feel an attachment to their students and their students need to feel an attachment to them. Good teaching involves more than just attempting to reach a child academically, most children need to feel a connection to their teacher or instruction is simply not going to be effective (Strahan, 2003).

To form this connection with their students, teachers must be informed about children’s family and home life. Forming this connection is often complicated due to single parent households or families in which both parents work full time (Allington & Cunningham, 2007). In other words, there are parents who want to be involved in their children’s schooling, but providing economic support interferes with their participation. In addition, students who come from poverty might have parents who do not have an optimistic outlook on the school system, largely because the school system did not work for them (Tutwiler, 2007). Parents from lower SES backgrounds care about their children’s success, but may be frustrated with the educational system and hold low expectations for its ability to meet their children’s needs. In fact, it is interesting that only three of the preservice teachers included details about the students’ families, while the 27 other preservice teachers did not mention that education should consider students’ families.

After analyzing the data, we considered the key details the preservice teachers acknowledged and the ideas that seemed to be missing from their responses. We address both aspects in the following section. It is also important to note that due to small sample size, the results of this study cannot be generalized to all preservice teachers; however, the sample was representative of today’s preservice teacher
population—primarily White, middle-class women. Hence, we feel that this study’s results could hold implications for other teacher educators and preparation programs.

Discussion

From this study we learned that we need to better inform our preservice teachers about poverty and how it affects children. While their responses were often broad in nature, we feel that their knowledge will develop as they progress through their teacher education program, provided we create courses that address issues of poverty and diversity. The background knowledge these preservice teachers brought to the preparation program will likely provide teacher educators with an adequate foundation upon which to build more complex understandings. That is to say, much of what preservice teachers already know about poverty is accurate, we just need expand this knowledge. In our own courses we realized that we assumed preservice teachers’ knowledge was more in-depth than it actually was, and this assumption resulted in us quickly reviewing certain subject that needed to be discussed in more detail.

For example, preservice teachers wrote of families living in poverty having fewer financial supports, fewer resources, and greater health problems – all of which are accurate. What their responses seemed to lack is evidence of a strong knowledge base about the intricacies of poverty, especially how it relates to schooling. We view this as a critical topic that we should address in our coursework, as having a strong knowledge base about poverty and the realities of teaching in urban schools is necessary if the future teaching workforce is to be effective in helping all students succeed (Gehrke, 2005).

Other information that was absent from our students’ responses yielded additional insights for us. For example, no preservice teacher wrote of students from poverty in a positive way. All of the responses referred to student, family, and home deficits. Preservice teachers wrote numerous times that being from poverty set children up for academic failure, and when parents and families were mentioned they were viewed as an obstacle to children’s academic success. It is clear that within our courses we need to foster more positive perceptions of children and families who live in poverty and have begun doing this through field experiences, course readings and videos, and the examples used in course discussions.

It is unrealistic to think that in a few short semesters, preservice teachers will be transformed and will hold all of the knowledge and beliefs necessary to be effective teachers for children coming from poverty. In reality, a great deal of learning and development will occur once a prospective teacher exits the teacher education program. It is up to teacher educators, however, to start the learning process for preservice teachers as soon as they enter the preparation context. For us, an important first step was to attend to prospective teachers’ incoming knowledge. By assessing preservice teachers’ misconceptions or gaps in knowledge, we can begin to shape our courses to facilitate preservice teachers’ reflection on their own identities and hidden assumptions. For example, from our results we acknowledge that within our own courses we need to provide preservice teachers with (a) specific details about the realities of living in poverty, (b) opportunities to discuss and observe how poverty, teachers, and schools relate, and (c) examples of children and families from poverty who have strengths and positive attributes.

Limitations

The participant selection was limited to 30 students (primarily white females) enrolled in an undergraduate course that focused on diversity. Due to the limited sample size, we could only present the beliefs of a small sample of preservice teachers, so the findings cannot be generalized to all preservice teachers. In addition, increased diversity among participants would have allowed us to investigate similarities and differences in participants’ perceptions across gender, race, and ethnicity.
Conclusion

Preservice teachers draw on many realities regarding poverty, but their knowledge was often broad and lacked focus on the relationship between poverty and schools. The results from this study will allow us to address our students’ misconceptions while also strengthening their existing knowledge through modifying course readings and projects. As a result, we encourage other teacher educators to use this information in their courses, or better still, administer their own questionnaires. We see teacher educators as critical agents in encouraging prospective teachers to consider how poverty affects children, schooling, and society. As teacher educators we can help prepare our students for classrooms that are becoming increasingly diverse by helping confront their hidden assumptions, refine their knowledge and beliefs, and adopt more positive views of children from poverty and their families.

References


