2010

Action Research: Can It Be a Means for Helping Teacher Candidates Learn about Student Diversity?

Alisa Bates
Willamette University, abates@cu-portland.edu

Laura S. Pardo
Hope College, pardo@hope.edu

Follow this and additional works at: https://digitalcommons.nl.edu/ie

Action Research

Can It Be a Means for Helping Teacher Candidates Learn About Student Diversity?

Alisa Bates
Willamette University, Salem, OR, USA

Laura S. Pardo
Hope College, Holland, MI, USA

Teachers must have professional strategies that allow them to consider what students need in order to be academically successful, and then respond to those needs through instructional and management changes in the classroom. This is not a simple process for any teacher; for a novice teacher, this is a particularly complex challenge as they are still learning to teach while engaged in actual teaching (Darling-Hammond & Bransford, 2005; Wildman, Niles, & Magliaro, 1989). To that end, our work in the preparation of teachers led us to look for strategies that could support novices' attempts to meet students' diverse needs. This paper describes the use of action research as one such strategy in a teacher preparation program focused on preparing teachers for diverse student populations. It was our hope that through engaging in the process of action research, teacher candidates would learn how to recognize, accommodate, and utilize the unique diversity evident in their classrooms.

> *It was our hope that through engaging in the process of action research, teacher candidates would learn how to recognize, accommodate, and utilize the unique diversity evident in their classrooms.*

Supporting Teacher Candidate Development Through Action Research

Educational researchers have been studying teachers, instruction, and learning for decades. It has only been in the last thirty years or so, however, that classroom teachers have begun to study themselves, their own teaching and students, and their students' learning (Bradley-Levine & Smith, 2009; Cochran-Smith & Lytle, 1993, 1999, 2009; Kern & Levin, 2009; Wells, 1992).

This process is often used as a component of teacher education programs to encourage activism and critical thought on the part of novice teachers as teacher educators seek strategies to bridge the theory and practice divide commonly seen in preparation programs (Bullough & Gitlin, 2001; Everett, Luera, & Otto, 2007; Sugishita, 2003; Zeni, 2001). Action research, sometimes called practitioner research or inquiry, refers to research done in classrooms by actual teachers. Henderson, Meier and Perry (2008) assert that because children and families are commonly the focus of teacher research, it is a process viewed as "participatory, inclusive of differences, and democratic in nature" (p. 1).

Action research, by its name, implies that teachers are active and purposeful as they engage in a systematic inquiry into the events of their classroom (Cochran-Smith & Lytle, 1993, 1999, 2009; Phillips & Carr, 2006). Thus, we attempted to support our teacher candidates in viewing inquiry as a habit of mind that is present whenever teachers engage in asking questions about what they see and experience in schools. This further pushed our instruction that inquiry as a habit of mind is something good teachers develop, and that to conduct action research, teachers critically observe and think about what is working and what is not working in their classrooms (Hubbard & Power, 2003; Phillips & Carr, 2006). They identify an area to research, generate questions to guide the research, develop a plan for implementing some intervention, and then collect data to determine if the intervention was successful (Bradley-Levine & Smith, 2009; Hubbard & Power, 2003; Pardo, 1996; Phillips & Carr, 2006). We consider the inquiry process of action research a habit of mind that can support beginning teachers as they develop effective pedagogy and think about student learning. For the project described in this article, we asked student teachers to engage in action research designed to meet the diverse needs of their students as one way of helping them to respond to the range of complex teaching environments they may face in the classroom.

Teacher Education's Response to the Diversity of Students and Teachers

In today's society, classrooms and schools are becoming increasingly diverse places. Thirty-nine percent of the student population was of minority status in 2000 with a movement towards greater percentages of minority students in the coming years (Hodgkinson, 2002). However, teachers continue to be predominantly White and middle-class individuals who differ from their students in multiple ways (Villegas & Lucas, 2002). With diversity in ethnicity, language, socioeconomic status, culture, and race, teachers work in incredibly unique settings that require attention to the nuances of student learning.

The distinctions in diversity between students and teachers are often seen as problems rather than as strengths in the classroom (Taylor & Sobel, 2001). Teacher educators may find it difficult to support teacher candidates in learning more about and becoming responsive to issues of classroom diversity because of the strength of their beliefs as they enter teacher education programs (Feiman-Nemser, 2000; Wideen, Mayer-Smith, & Moon, 1998). Because the future

classrooms of today's newest teachers, for the most part, do not reflect the classrooms that teacher candidates grew up in, they need additional support in developing culturally responsive teaching practices (Liang & Zhang, 2009; Villegas & Lucas, 2002).

One strategy to address these challenges was to give teacher candidates the tools necessary to learn to work with diversity in the classroom. Little research has explored the actual experiences and beliefs of teacher candidates as they learn to work with diversity in the classroom during teacher education field placements (Grant & Zozakiewicz, 1995; Howrey & Whelan-Kim, 2008; Liang & Zhang, 2009). Thus, there is little attention to the types of support that teacher candidates need to help them make sense of their experiences and become responsive to student learning needs. Action research has the potential to be one such tool for teacher candidates as they deal with the reality of today's classrooms and learn valuable lessons about meeting student needs.

We felt that using action research as the grounding force in this assignment might encourage students to pay greater attention to the diversity evident in their classrooms.

The Context of Our Work

We had two goals as researchers and instructors while engaging in this work. The first was to help our teacher candidates understand action research as a habit of mind that supports the development of the teacher as a thoughtful professional. Secondly, we wanted our teacher candidates to use action research as a tool that would help them explore and respond to the diverse student learning needs present in the classroom. Our university struggled with helping teacher candidates recognize, appreciate, and utilize diversity in the elementary classrooms in which they worked. We speculated that part of this was because most of our teacher candidates were Caucasian, monolingual English speakers, and from the middle class. Therefore, they had little in common with some of the diverse students with which they worked. We felt that using action research as the grounding force in this assignment might encourage students to pay greater attention to the diversity evident in their classrooms.

The student teachers we worked with were enrolled in one section of a year-long master's level course during the field-based internship year of an elementary teacher education program. This course focused on inquiry and reflection for teachers and included additional instructional attention centered on advanced literacy and social studies methods. Combining the course content was a pilot attempt by the two instructors to bridge these two methods classes and integrate these with instruction in the professional processes and strategies of teaching. Teacher candidates were present in university classes during one day in the fall semester and were in the field the other four days. During the spring semester, the course was front- and back-loaded with time off in the middle to be in the schools full-time for eight weeks.

The Action Research Project Assignment

The teacher candidates engaged in a yearlong process of learning about and conducting action research in their field placement classrooms. During the fall semester, we supported teacher candidates in reading about and building conceptual knowledge of action research as a habit of mind necessary to support teacher professional growth and practice. We particularly wanted teacher candidates to understand that action research is a process, and that this process could help them work with the challenges that they were having in the classroom in a proactive and student-responsive way. During class in the fall, we established school-based groups and provided time for teacher candidates to meet in them regularly to establish an avenue for conversation and reflection as each teacher candidate grappled with the challenges of field-based work with action research. Throughout the year, teacher candidates met in these groups–both in class and in the schools–and they supported each other in the development and enactment of their individual projects.

Additionally, we asked each teacher candidate to maintain a teacher's notebook. This is the place where we encouraged them to develop an understanding of their work in the process of engaging in action research, highlighting their observations in the field about students and learning, and tracing the trajectory of their ideas about the project across the year. Early in the fall semester, this notebook directly supported their required observations of the classroom to discern patterns and ideas that they were interested in addressing through action research. Later in the year, the notebook was a place for them to make observations about the ongoing evolution of their project as well as keeping important data for their projects.

Based on their observations and personal experiences during the fall semester, teacher candidates were asked to identify areas of interest to them and develop a plan for addressing those interests through the action research project, which was to be conducted during the spring semester. Teacher candidates were asked to find and read research on the topic(s) to determine what was already known about that issue and to find ideas for how to develop their plan of action. Using this foundation, teacher candidates developed a research question. At the end of the fall semester teacher candidates were asked to write a paper that detailed their understanding of the process of action research thus far, and to alert us to any challenges they felt they would face during the implementation phase in the spring semester. At the beginning of the spring semester, teacher candidates revised their research question based on further time in the classroom and developed a proposal for implementing their action research project in the schools. During the lead teaching period in the spring semester, teacher candidates collected data for the project. At the end of the semester, teacher candidates returned to campus for class and continued to work on data analysis and to prepare presentations for their peers to share the outcomes of their action research project. Finally, at the end of the spring semester, we asked teacher candidates to reflect on the action research process by writing a final paper addressing their experiences with action research.

Methodology

We designed our own action research project to examine how well we were able to implement the Action Research Project with our teacher candidates and how well our students were able to engage in action research as a habit of mind. We strove to answer the questions: Were students able to articulate the inquiry process? Were they able to make connections between their inquiry project and student learning (especially in terms of diversity)? What have we learned about helping pre-service teachers with action research and how would we revise this project for future classes?

To help us answer our first two questions, we collected and examined teacher candidates' work artifacts (two papers, action research proposal, and presentation), lesson plans, class documents (syllabus, assignment sheets, and handouts), field notes, teacher candidate surveys, and informal communication (email correspondence, and conversations with teacher candidates before and after class and in the field). Because we hoped that action research would become a habit of mind and of practice for the teacher candidates as well as help them to learn something specific for improvement of their teaching during the internship year, both the process of doing the project and the outcomes of their work on the specific project they attempted mattered to us. Further, we examined the work of three students closely as we developed case studies that traced their entire year and the evolution of their action research projects in response to the elements of classroom diversity they deemed most critical in their individual field placement classrooms. We addressed our final question by conducting reflective and reflexive conversations with each other across the year of the class, and in hindsight following the analysis of our students' data.
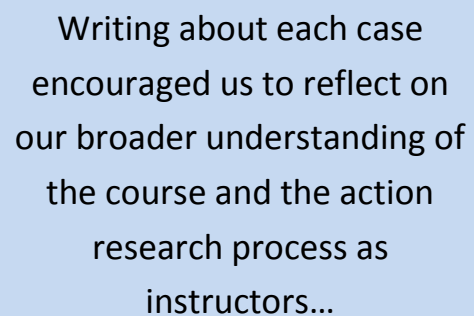
We analyzed the student data in two ways, using a grounded theory approach to our work that allowed us to reflect on and build our understanding by constantly revisiting our impressions as we worked with each element of the data set (Glaser & Strauss, 1967). First, we read through all the data (i.e., papers, proposals, and PowerPoint presentations) and looked for evidence of what our students had learned from doing action research. In particular, we wanted to see if they were able to articulate the inquiry process. We created a matrix for this part of the analysis, with the steps of the inquiry process as we had explained it to students listed on the top of the matrix, and the students' names listed down the side of the matrix. As we read through the students' work products, we indicated which parts of the inquiry process were articulated by which students. This allowed us not only to see which students were able to describe the entire inquiry process, but also, as we looked across each inquiry element, which ones were mentioned most and least often. This data also informed our final question about how we would refocus the assignment for future classes as well as helped us to continue to refine the weekly activities we were planning and implementing for this group of students.

At the end of the semester, we engaged in analysis where we looked through the data to see if students' final projects and presentation materials had indeed focused on student learning in general. We also reviewed each project with a focus on the specific particular student needs each had identified for his or her action research project. Because we had a broad definition of diversity (race, language, socio-economic status, social, behavioral, and cultural differences), we wanted to see the range of differences that our students chose to study. Our rich, narrative case studies (Yin, 1994) then built off this model to help us develop an understanding of the effectiveness of this approach. We selected three students' experiences with the action research project in the classroom as examples of the findings of our work and developed case studies to depict what was learned by each student from this research project. Writing about each case encouraged us to reflect on our broader understanding of the course and the action research process as instructors, and allowed us to continually check our assertions against each other as each case raised nuanced elements of the findings to the foreground. The three cases of Amanda, Lynda, and Michael are described below.

Findings

Three themes emerged from the analysis of the entire class's data set, as well as our close examination of the three focal students. First, teacher candidates were able to articulate the steps in the action research process and were able to describe how to use it in the elementary classroom. At the end of the semester, students wrote final papers depicting their journey of learning to be action researchers. Most students found the process to be helpful and planned to use action research in their future classrooms. Most teacher candidates reflected on how they were able to understand more fully their teaching practices by engaging in action research.

Second, teacher candidates' action research projects focused on meeting the needs of all the students in their respective classrooms as opposed to identifying a particular need based on an aspect of diversity and focusing narrowly on that topic. Teacher candidates used this class assignment to inform their teaching practices in particular classroom situations which they found challenging to address. Each teacher candidate recognized the potential to use action research as a means of exploring how to improve his or her teaching practice based on the particular needs of his or her students, but focused more globally on classroom issues than was expected (i.e., managing difficult students, motivating shy students).

> Writing about each case encouraged us to reflect on our broader understanding of the course and the action research process as instructors...

Finally, teacher candidates' abilities to articulate their understanding of the direct connection between using action research as a way to meet the diverse needs of their pupils was not evident. Even though many of the students used their projects in exactly this way, they were not able to connect action research to meeting the needs of diverse students. We had hoped that teacher candidates would think about diversity in broad terms including race, language, ethnicity, socioeconomic status, and culture. However, in surveying the class at the end of the semester, only three teacher candidates said that the inquiry process helped them learn more about their students' diverse learning needs.

We first focus the discussion of our findings on the three case study students. The three focal students were chosen because they represented a range of personal experiences and their student teaching placements were varied. We wanted to illustrate a typical student in our class, and these students collectively represent the typical student.

Focus Teacher Candidate: Amanda

Amanda was a Caucasian teacher candidate in her early twenties during this course. She completed her internship in a third-grade classroom in an affluent suburban school. Her students came from a variety of racial and ethnic backgrounds, although the majority of her students were from European ancestry. Most of her students' parents had occupations as professionals and most students were from two-parent homes. Amanda's background mirrored that of her students as she grew up and attended a school much like the one in which she student taught.

In the fall, Amanda was concerned with how she would "motivate the quiet, passive students to participate and actively engage in their own learning." She described a critical incident that occurred after her principal observed her teaching a lesson. In the debriefing session after the lesson, Amanda's principal noted that she had called on all students but three during the entire 50-minute lesson. On reflection, this cued her to the fact that some of her quiet, yet academically talented, students were being ignored. As Amanda continued to think about, research, and observe in her classroom, she finally came to her research question, "How do differentiated assignments within guided reading groups motivate high ability, academically diverse students in a third-grade classroom?"

Amanda wanted to ensure that all students were engaged and challenged in their learning; therefore she focused her action research project on designing a strategy to incorporate appropriate participation by all students. Although it was three of her quieter students who pushed Amanda to consider how to include all students, she broadened her research question to include all of her students. In addition, she drew from her content knowledge of differentiation, one of our course topics, to provide specific and appropriate assignments for each subset of students in her classroom. During the spring semester, Amanda implemented a range of strategies during guided reading, varied to meet the social and academic needs of her students.

Amanda typifies the findings outlined above in that she focused her research project on meeting the needs of all students. Rather than just work with the shy students in her class, she designed differentiated activities for all students. In Amanda's final paper, she clearly articulated the action research process, showing that she was able to recite the steps and define action research in her own terms. Amanda focused her research on social and academic needs in her classroom, instead of drawing on other aspects of diversity, such as race, ethnicity, or language. Even though her class represented several races and ethnicities and she had students who were bilingual, she did not connect her action research project to the wider range of diverse characteristics of her students. Whether she knew how to make these connections, and chose not to, or whether she had some other reason for neglecting these connections, we found the data silent. We speculate that perhaps Amanda was enacting pedagogy that she thought would work well for the shy students (of which she was one), and she did not feel that this project was about diversity per se.

Amanda's final comments about her experiences with this project illuminate how she grew as a teacher during this year:

> Throughout the journey I've taken this year in questioning, researching, and implementing new ways of practice in my own classroom, I've learned that inquiry plays a huge role in what kind of teacher a person is. Because of the knowledge gained this year, I will be much more prepared for next year.
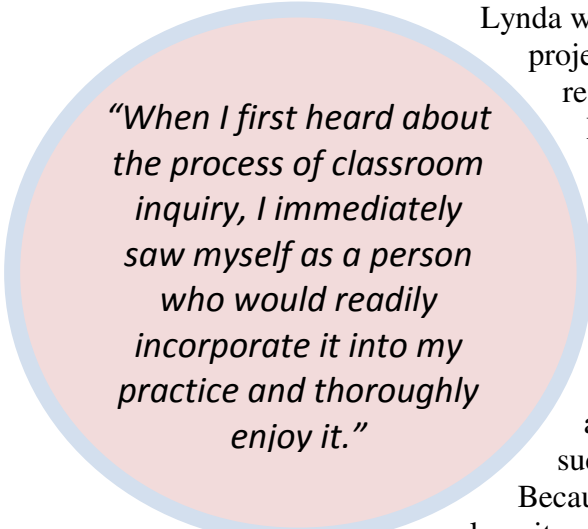
Focus Teacher Candidate: Lynda

Like Amanda, Lynda was a Caucasian teacher candidate in her early twenties who completed her internship in a third-grade classroom. However, Lynda's students were mostly from working class homes and the school district, while containing mostly Caucasian children, covered both suburban and rural areas. Some of Lynda's students were from single-parent homes. While Lynda's students were similar in racial and linguistic needs (all students were English native speakers), they were diverse in terms of their socioeconomic status, depending on where their families lived and worked within the community. Lynda's experiences as a student were in mostly professional communities and limited her exposure to students from a wide range of economic backgrounds. However, Lynda also had a number of experiences with diverse cultural contexts because her family spent a significant amount of time traveling in other countries during her childhood.

In her third-grade classroom, Lynda focused on vocabulary instruction almost immediately upon entering her classroom in the fall, when during a social studies lesson, she realized that "the kids aren't getting anything out of the vocabulary in their reading." As Lynda continued to document how vocabulary was addressed in her classroom, she recalled the following critical incident:

> The students had been assigned a vocabulary sheet on the upcoming Presidential election. This page asked the students to read a sentence and then fill in the blank using the correct word. The students had a horrible time with this assignment. The students became so frustrated that we eventually stopped them and did the assignment together as a class.

This incident, and many more like it, convinced Lynda to research ways to help her students effectively acquire content-specific vocabulary.

Lynda was particularly concerned by the challenge her struggling readers faced as they encountered new terms in a difficult reading passage. By doing some broad research on how to support struggling readers, she encountered several articles that talked about having students draw and/or act out their vocabulary words. These strategies intrigued her and her research question eventually became, "How does the use of art in vocabulary instruction affect low-ability literacy students' vocabulary development?" Lynda's action research focus demonstrated her concern that her struggling readers be given the tools and support necessary to succeed on complex tasks. When the action research project was introduced in the fall, Lynda immediately gravitated to the assignment and felt passionate about acquiring inquiry as a habit of mind. Reflecting on this stance near the end of the year, Lynda said, "When I first heard about the process of classroom inquiry, I immediately saw myself as a person who would readily incorporate it into my practice and thoroughly enjoy it."

"When I first heard about the process of classroom inquiry, I immediately saw myself as a person who would readily incorporate it into my practice and thoroughly enjoy it."

Lynda was unusual in her early embrace of the action research project, and we see that she was able to articulate the action research process much earlier than other students in the class. Lynda's study design focused on the struggling reading students in her class; in this way she was not part of the finding that teacher candidates focused on meeting the needs of all students. Lynda felt that the higher and average ability students were able to figure out the vocabulary they encountered in reading, and they also possessed more background knowledge so there were fewer words that they didn't know. By targeting the lower ability group, Lynda felt her project was more likely to succeed in fostering valuable student learning growth. Because there was little racial or linguistic diversity in Lynda's class, it makes sense that she ignored these facets of diversity; however, Lynda failed to recognize or make a connection between the reading readiness and life experiences of her students and the range of socioeconomic factors affecting her students' lives outside of school.

Lynda, who began the process as the most enthusiastic in the class, commented at the end of the semester:

> Teaching elementary school students encompasses so many different avenues that it is hard to imagine ever ceasing to question and act upon my experiences in the classroom. The inquiry process can only strengthen my ability to instruct my students in the ways that they learn best.

Focus Teacher Candidate: Michael

Michael was a Caucasian male in his early twenties during this project. He completed his internship in a first-grade classroom in a high poverty urban school. Parkside Elementary was one of 30 elementary schools in a mid-sized Midwestern city and was a magnet school for the fine and performing arts, and was also labeled a failing school. Michael's students were diverse in terms of race (equal percentages of Caucasian students and students of color) and first language (some of his students spoke Spanish, others spoke Hmong).

Michael's inquiry interest grew out of the behavior problems that many of his first-grade students exhibited. He recounted a critical incident involving one particular student who lied repeatedly in the classroom. Michael's collaborating teacher, the student's mother, and Michael had tried many different things to get the student to tell the truth about his own behaviors. Michael agonized over the actions that they were collectively using to help this child and wondered, "Are we really making a difference with [this student]?"

Michael focused his action research project on finding successful ways to work with behavior problems; in particular he was interested in helping the student described in his critical incident. As Michael researched ways to work with this child, he began to broaden his view to all of the students in his classroom because he recognized the community-focused environment that he hoped to establish among his students would work more effectively if a consistent behavior plan was in place for all students. His eventual research question was, "How can a reward system be established which effectively reduces transition time, increases instructional time, and directly benefits individual students by establishing a set of expectations for the whole group?" Michael implemented a reward system with his whole class and in so doing found a way to work with all students in order to build a sense of community and a positive classroom climate.

Michael was indicative of the findings outlined above. He focused his research project on meeting the needs of all the students in his class (moving from a focus on one student to the whole class). His final paper clearly indicates that he understood the research process. Like his peers, he was not able to articulate the connection between action research as a process and as a way to meet the diverse needs of a classroom. Throughout his project Michael seemed aware of the diversity that existed in his students (in terms of race, first language, ethnicity, cognitive

abilities, and social skills). However, his research project focused only on the trait of social skills even though we had stressed we wanted students to think about the range of diversity evident in their classrooms.

Michael was also similar to his classmates as he reflected back on his experiences with action research. He wrote:

> Next year I will not have a [university] teacher expecting an inquiry project. However, I will look for researchable material that can be analyzed, summarized, and used to provide insight on my own teaching practices because I have seen the benefits of this procedure during the completion of this inquiry project.

The cases of these three focus students mirror the findings from the entire class. It should be evident that Michael, Lynda, and Amanda designed and implemented action research projects that focused on inquiry and improving their teaching and impacting student learning. The projects were also focused on meeting the diverse needs of their students–although this included social, academic, and behavioral needs, rather than those of race, culture, or socioeconomic status. It is also probable that students (including Amanda and Michael) focused more on global issues that they felt incorporated all the children in their classes because we encouraged an inclusive stand on teaching and learning in our more general discussions of literacy and social studies methods. Of the three cases here, Lynda designed and implemented an action research project that actually met our intent–working with a specific (i.e., diverse) group of students to improve learning. Being more specific about this distinction for the action research assignment could help students in the future.

It is evident that these projects helped the focal students, and most of their classmates, articulate the process of inquiry. Most were also able to recognize the benefits of action research for improving teaching practice. Recognizing the connection between action research and their teaching was an outcome we hoped they would take from the experience. Being able to connect the process to the outcome was an important step that can foster a return to action research in future teaching situations when one wants to improve a learning experience for students. However, it is important to note that we had presented the process many times in class, and had provided readings and handouts that reinforced this notion. It is possible that students were simply "doing school" when they reiterated in their final papers what they had heard us say in the class. A true test of whether they had internalized the inquiry process would have been to revisit this with them after their first year of teaching. Further research in this area might investigate this.

Since a main goal of this work was to help interns understand how to meet diverse student needs through action research, we found that additional explicit attention to issues of specific diverse needs would be necessary in the future. Even though Amanda, Lynda, and Michael's classrooms

reflected diversity in many areas, they focused their action research projects on learning styles, behavior and social problems, and academic abilities. We speculate that it is hard for pre-service teachers to focus on multiple and simultaneous goals. During student teaching, there can be conflicting expectations, and it is likely that students make choices about what to focus on that maximize the public view of their teaching as highly successful. Conducting an action research project while taking classes at the university, and preparing for student teaching every day may have been all they could handle, and the aspect of working specifically with a topic focused on diverse students was simply too much to incorporate into the process.

Using Action Research as a Promising Practice to Respond to Classroom Diversity

Based on our findings, we believe that action research holds promise as an effective pedagogical tool for preparing teacher candidates for diverse classrooms and students. Drawing from what we have learned, we make several recommendations for using action research as a tool for novice teachers to learn about and address the needs of their diverse students. These suggestions include ideas that focus on being explicit about how to design projects that focus on the needs of diverse students. Additionally, recommendations for the role and strategies of instructors include: 1) provide scaffolded support for developing projects, 2) include the use of case studies and instructional conversations, and 3) incorporate instructor modeling.

It is our hope that action research will allow teacher candidates to feel competent to address the complex issues of diverse student needs in their classrooms during their early years as novice teachers. Because our teacher candidates struggled to develop explicit understandings that they could verbalize about the connections between diverse student needs and action research, we feel that more needs to be done to provide support for particular needs (i.e., English language learners, issues of socioeconomic status) when using this project with other teacher candidates. Being explicit about how action research can serve as a source of information and activity to meet a particular challenge will help teacher candidates quickly access this tool in a moment of classroom stress. Providing examples of projects that do address diversity in the classroom would help make the instruction more meaningful for students.

Providing the scaffolded support that will allow them to better make this connection is a key part of what we believe must be done to improve the flexibility of action research as one tool in the teachers' kits. Responding to the complexities and subtleties of students' diverse learning needs is an advanced skill for most teachers. Anything that can be done during teacher preparation to support this development is likely to encourage teachers to be proactive and responsive to students. Meeting with student teachers in their school placements during the collection of data might be one way that faculty could scaffold for students. It is possible that faculty might see things in the classroom that novices would miss. Scaffolded support could also come from cooperating teachers and university supervisors. To bring these staff on board would require professional development and training.

Another way to be explicit is to ask teacher candidates to examine and analyze cases of how practicing teachers use action research to meet the needs of diverse students. Engaging teacher candidates in instructional conversations about the cases will also help them recognize the particular aspects of diversity being addressed. Both text-based and hypermedia cases exist that might work for these purposes (Hubbard & Power, 2003; Rosaen, Degnan, VanStratt, & Zietlow, 2004; Rosaen, Johnson, Koehler, & Ruggerio, 2004). Using a variety of print and video cases offers the opportunity for teacher candidates to engage in reflection on teachers' responses to issues of multiple forms of classroom diversity (e.g., racial, linguistic, socioeconomic, etc). As instructors, our responsibility is to help them think about how the teacher in each case works with that type of diversity and responds to her students' learning needs in proactive and responsive ways. For our particular context, having these conversations in the first semester might help students to better focus their teacher's notebook entries as they explore their classroom-based curiosities. The use of cases allows for theoretical and practical discussion about the realities of the classroom, with instructor support to facilitate that conversation and reflection.

Finally, instructors in teacher education can model both responding to student diversity and using action research. Demonstrating for students how to use characteristics of the class needs by recognizing the unique diversity each teacher candidate brings and using these traits to plan and implement instruction exemplifies the practices we ask teacher candidates to use with their students. This would involve careful and purposeful conversations with our students so as not to offend or marginalize members of the class. Thinking aloud about one's own instructional decisions and helping teacher candidates to realize the intentionality of these decisions will allow them to move between student and teacher roles and will provide a first-hand example of how to connect pedagogical moves to the diversity students bring to the classroom. Further, teacher educators have the opportunity to model how action research can be one of those responses that meets the particular challenges of a setting. Engaging in this process with their own practice, teacher educators further the commitment to the action research as a part of reflective practice that all teachers engage in. Modeling this activity offers one more opportunity to actively engage students in conversations about the challenges of teaching and decision making. We believe the following statement, as expressed by Stremmel (2007), to encapsulate our beliefs about action research that need to be modeled for our teacher candidates:

> Teacher research is liberating and empowering inquiry that allows teachers and teacher educators to take their lives as teachers seriously, to generate knowledge and understanding that can improve teaching and create a more democratic and equitable learning community. Most important, teacher inquiry allows teachers to simultaneously study their teaching, their students, and themselves—the images they hold of children as learners and themselves as teachers—and as a result, it allows the possibility of transformation and renewal. (p. 8)

For our students, action research did help them develop inquiry as a habit of mind that allowed them to be responsive to students. Given this, we believe that action research should be a supported part of a teacher education program. When teacher candidates have extensive exposure and investment in a field-based classroom, such as during student teaching or an internship, supporting action

> *Action research provides a tool for teacher candidates to develop strategies that enable them to react thoughtfully.*

research projects can provide a focus on encouraging teachers to reflect on and respond to new situations in the classroom. Action research provides a tool for teacher candidates to develop strategies that enable them to react thoughtfully. Being able to do so provides excellent professional development for early career teachers to deal with many of the challenges of the early years of teaching. As Henderson, Meier, and Perry (2008) remind us, "Giving voice to an idea is taking ownership. Teacher research provides teachers a place to reflect and explain how their projects change them, their teaching, and their settings" (p. 3).

Alisa Bates is an assistant professor of teacher education at Willamette University in Oregon. Her research focuses on teacher inquiry as well as the supervision of student teachers.

Laura S. Pardo is an associate professor of education at Hope College in Holland, Michigan, where she teaches courses in literacy methods and principles of secondary education. Her research interests include mentoring beginning teachers, the induction period, and teacher preparation. She also studies the literacy methods used in mid-grade classrooms.

References

Auger, W., & Wideman, R. (2000). Using action research to open the door to life-long professional learning. *Education, 121*(1), 120-127.

Bullough, R. V., & Gitlin, A. D. (2001). *Becoming a student of teaching: Linking knowledge production and practice* (2nd ed.). New York: Routledge Falmer.

Bradley-Levine, J., Smith, J., & Carr, K. (2009). The role of action research in empowering teachers to change their practice. *Journal of Ethnographic and Qualitative Research, 3*, 152-161.

Chant, R. H., Heafner, T. L., & Bennett, K. R. (2004). Connecting personal theorizing and action research in pre-service teacher development. *Teacher Education Quarterly, 31*(3), 35-42.

Cochran-Smith, M. & Lytle, S. L. (1993). *Inside/Outside: Teacher research and knowledge*. New York: Teachers College Press.

Cochran-Smith, M. & Lytle, S. L. (1999). The teacher research movement: A decade later. *Educational Researcher*, *28*(7), 15-25.

Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research in the next generation*. New York: Teachers College Press.

Darling-Hammond, L., & Bransford, J. (Eds.) (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do.* San Francisco, CA: Jossey-Bass.

Everett, S. A., Luera, G. R., & Otto, C. A. (2008). Pre-service elementary teachers bridge the gap between research and practice. *International Journal of Science and Mathematics Education, 6*(1), 1-17.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, *103*(6), 1013-1055.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing Company.

Goatley, V., Highfield, K., Bentley, J., Pardo, L., Folkert, J., Scherer, P., ….Grattan, K. (1994). Empowering teachers to be researchers: A collaborative approach. *Teacher Researcher, 1(2)*, 128-144.

Grant, C. A., & Zozakiewicz, C. A. (1995). Student teachers, cooperating teachers, and supervisors: Interrupting the multicultural silences of student teaching. In J. M. Larkin & C. E. Sleeter (Eds.), *Developing multicultural teacher education curricula* (pp. 259-278). Albany, New York: State University of New York Press.

Henderson, B., Meier, D., & Perry, G. (2008). Teacher research in early childhood education. *Voices of Practitioners*. Retrieved on June 2, 2008 from http://journal.naeyc.org/btj/vp/

Hodgkinson, H. (2002). Demographics and teacher education. *Journal of Teacher Education*, *53*(2), 102-105.

Howrey, S. T., & Whelan-Kim, K. (2009). Building cultural responsiveness in rural, pre-service teachers using a multicultural children's literature project. *Journal of Early Childhood Teacher Education, 30*(2), 123-137.

Hubbard, R. S., & Power, B. M. (2003). *The art of classroom inquiry: A handbook for teacher-researchers* (2nd ed.). Portsmouth, NH: Heinemann.

Hubbard, R. S., & Power, B. M. (1999). *Living the Questions: A Guide for Teacher Researchers*. Portland, Maine: Stenhouse Publishers.

Kern, A., & Levin, B. B. (2009). How national board certified teachers are learning, doing, and sharing action research online! *Delta Kappa Gamma Bulletin, 76*(1), 20-23.

Liang, X., & Zhang, G. (2009). Indicators to evaluate pre-service teachers' cultural competence. *Evaluation & Research in Education, 22*(1), 17-31.

Pardo, L. S. (1996). Becoming a reflective teacher: One teacher's journey on the road to reflective teaching. *Michigan Reading Journal*, *29*(4), 28-36.

Phillips, D., & Carr, K. (2006). *Becoming a teacher though action research.* New York: Routledge.

Rosaen, C., Degnan, C., VanStratt, T., & Zietlow, K. (2004). Designing a virtual K-12 classroom literacy tour: Learning together as teachers explore "best practice". In J. Brophy (Ed.), *Advances in research on teaching, volume 10: Using video in teacher education* (pp. 169-199). New York: Elsevier Science.

Rosaen, C., Johnson, M. K., Koehler, M., & Ruggerio, C. (2004, March).   *Exploring IVAN: Interactive video access neighborhood*. Poster session presented at the International Conference of the Society for Information   Technology and Teacher Education, Atlanta.

Sparks, W. G., & Butt, K. L. (2000). Student teaching action plans: A context for expanded inquiry in multicultural education. *The Physical Educator, 57*(3), 114-123.

Stremmel, A. J. (2007). The value of teacher research: Nurturing professional and personal growth through inquiry. *Voices of Practitioners*. Retrieved on June 2, 2008 from: http://journal.naeyc.org/btj/vp/

Sugishita, J. (2003). Classroom inquiry in pre-service teacher training: The experiences of six teacher interns. *Action Teacher Education, 25*(2), 1-8.

Taylor, S. V., & Sobel, D. M. (2001). Addressing the discontinuity of students' and teachers' diversity: A preliminary study of pre-service teachers' beliefs and perceived skills. *Teaching and Teacher Education, 17*, 487-503.

Villegas, A. M., & Lucas, T. (2002). *Educating culturally responsive teachers: A coherent approach*. Albany, NY: State University of New York Press.

Wells, G., & Chang-Wells, G. L. (1992). *Constructing knowledge together: Classrooms as centers of inquiry and literacy*. Portsmouth, NH: Heinemann.

Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research*, *68*(2), 130-178.

Wildman, T., Niles, J. A., & Magliaro, S. G. (1989). Teaching and learning to teach: The two roles of beginning teachers. *Elementary School Journal*, *89*(4), 471-493.

Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed). Thousand Oaks, CA: Sage Publications.

Zeni, J. (2001). *Ethical issues in practitioner research*. New York: Teachers College Press.