

2014

Revisiting Reflection: Utilizing Third Spaces in Teacher Education

Ryan Flessner

Butler University, rflessne@butler.edu

Follow this and additional works at: http://digitalcommons.butler.edu/coe_papers

 Part of the [Educational Methods Commons](#), [Scholarship of Teaching and Learning Commons](#), and the [Teacher Education and Professional Development Commons](#)

Recommended Citation

Flessner, Ryan, "Revisiting Reflection: Utilizing Third Spaces in Teacher Education" (2014). *Scholarship and Professional Work – Education*. 37.

http://digitalcommons.butler.edu/coe_papers/37

This Article is brought to you for free and open access by the College of Education at Digital Commons @ Butler University. It has been accepted for inclusion in Scholarship and Professional Work – Education by an authorized administrator of Digital Commons @ Butler University. For more information, please contact omacisaa@butler.edu.

Revisiting Reflection: Utilizing Third Spaces in Teacher Education

Ryan Flessner

Abstract

Much has been written about the importance of reflective practice. What is missing is reflective work on the part of teacher educators to address the mismatch between university-based methods courses and the realities of classroom life. With examples from a third grade mathematics classroom as well as a university-based mathematics methods course, this article explores ways educators can employ third space theory as a way to engage in purposeful reflection into their teaching practices.

Keywords: practitioner inquiry, reflection, third space theory

For years, teacher educators have promoted reflection as an integral component of the preparation of future teachers. The educational research community has spent decades defining reflection (e.g., Griffiths & Tann, 1992; Johns, 2005), advocating for its use (e.g., Connelly & Clandinin, 1988; Loughran, 2006; Zeichner & Liston, 1996), and documenting its implementation (e.g., Korthagen & Verkuyl, 2007; Tremmel, 1993; Valli, 1992). Ideas developed in this area include the notions that reflection offers educational professionals a way to interact and communicate their knowledge and ideas (Hatch, 2006), that embedding reflective practice in teacher education programs proves more difficult than most of us would anticipate (Zeichner, 1994), and that reflective practice is essential if we are to address inequities and issues of marginalization and oppression within our schools (Bursztyn, 2004). With all of the attention paid to reflective practice, one glaring issue still remains: how teacher educators reflect on their own instruction within university-based methods courses to address the complexity of implementation within real public school classrooms.

This article examines use of a reflective third space (Bhabha, 1990, 1994; Soja, 1996) to investigate my own practice as I navigated two worlds as the lead instructor in both a third grade mathematics classroom and a university-based mathematics methods course to address the gap between university courses and actual classroom practice—the oft-noted divide between research and practice (Elliott, 1991; Honan, 2007; Van Looy & Goegebeur, 2007). In so doing, I address the question: How can teacher educators utilize reflective third spaces to address the research/practice divide?

Building on the work of scholars in the area of self-study (e.g., Loughran, Hamilton, LaBoskey, & Russell, 2004; Russell & Korthagen, 1995), this article provides a theoretical lens for rethinking teaching and teacher education. Through the use of third space theory, an opportunity arises for those who work with future teachers to re-envision the ways in which teacher education courses are constructed and connected to actual classroom practice.

Third Space Theory and Its Relevance to Teacher Education

Regrettably, universities and public schools are often framed as oppositional to one another. Many have written about the gap between research and practice (e.g., Ebby, 2000; Loughran, 2007; National Council of Teachers of Mathematics Research Committee, 2006), and others have noted differences between the cultural orientations of university faculty and public school teachers (Labaree, 2004; Neumann, Pallas, & Peterson, 1999). This "gap" presents a challenge for educational research to address the inconsistencies between our universities and our public schools. The lens of third space theory is one way to engage teacher educators in reflective practice to re-imagine the ways in which courses are structured, pedagogies are employed, and actions are taken to address the gap noted above. Specifically, two things can be drawn from third space theory: the recognition of binaries and the creation of new spaces for reflection and renewal (hybridity).

First, third space theorists ask us to reconsider binary relationships. Binaries are sets of terms typically situated in opposition to one another. For example, Soja (1996) listed binaries such as large/small, subject/object, and open/closed. Rather than bridging two extremes or compromising between opposing camps, third space theory redefines, recreates, and/or replaces a binary

relationship to re-imagine a new space in which innovative ideas can emerge. It is the research/practice binary that is challenged through this study.

Building on the concept of binary relationships, Soja (1996) noted that when considering a third space, "the original binary choice is not dismissed entirely but is subjected to a creative process of *restructuring* that draws selectively and strategically from the two opposing categories to open new alternatives" (p. 5). This idea presents a second lesson for the field of educational research. Hybridity presents an alternative to the two terms locked within the binary. That alternative allows one to exist between the two "originary subjectivities" to create a new term, a new space, a new moment out of "multiple beliefs and split subjects" (Bhabha, 1990, p. 79). In this study, hybridity was achieved as I took on the role of lead teacher in both an elementary classroom and a university mathematics methods course.

In addition to these classic elements of third space theory (binaries and hybridity), I have argued elsewhere (Flessner, 2011) that the utility of third space theory in teacher education is to address binaries by constructing reflective third spaces in an effort to return to the original spaces—the elementary classroom and the university methods course—to make change. Here, I differ from others who have argued for the construction of third spaces. Rather than envisioning a third space as the end in itself, I propose that reflective third spaces are simply the means that lead to an end that is purposeful change in the first and second spaces. This study documents the process of creating a reflective third space as well as the actions I took by returning to the elementary classroom and the university methods class in an effort to address the research/practice divide.

In sum, third space theory offers two important ideas for research in the area of teacher education. First, by recognizing binaries, assumptions are analyzed and re-examined. Next, hybridity allows teacher educators the opportunity to rethink the original binary to create new spaces for reflection. Furthermore, I posit that, in the field of teacher education research, creating a reflective third space requires simultaneous existence in two different worlds: the world of the university and the world of the public school classroom. Through participation in both spaces, each is informed and influenced by the other, and a third space emerges—a space in which new ways of educating future teachers are imagined. I re-imagined my teaching—as an elementary mathematics teacher and as a university methods instructor—by utilizing a reflective third space to examine and change my teaching practices. By entering a reflective third space and then returning to take action in both the elementary classroom (the first space) and the university-based methods course (the second space), I documented specific changes to my work in each context while addressing the gap between ideas espoused within university-based methods courses and actual implementation within public school classrooms.

An Introduction to the First and Second Spaces

For the purposes of this study, I label the elementary classroom as the "first" space and the university methods course as the "second" space. These labels are somewhat arbitrary. As noted by Moje et al. (2004), the naming of the spaces as first and second is less important than how these spaces are constructed and reconstructed to form a third space. However, because of my beliefs about educational research, the silencing of practitioners in that research, and the general dismissal

of the knowledge of those working in public school settings, I believe something as simple as naming the space of the elementary classroom as "first" is a small step I can take in an effort to emphasize the importance of voices from the classroom.

The First Space: Edgewater Metropolitan School District and Sycamore Elementary

The Edgewater Metropolitan School District (EMSD) employs approximately 3,000 teachers to educate its 25,000 students. Located in a university town in the Midwestern region of the United States, the district reports a student population that is 72.7% white, 15.8% Black, 7.1% Asian, 3.7% Hispanic, and 0.7% American Indian. The first language of 82.12% of the students in the district is English. Other major languages include Spanish, Hmong, Chinese (Mandarin), Korean, Khmer, Tibetan, Lao, Arabic, French, Albanian, Russian, Japanese, Urdu, Vietnamese, Chinese (Yue, Cantonese), and Tagalog. A total of 14.5% of the student population qualifies for English as a Second Language/Bilingual Education. Seventeen percent of all students qualify for special education services, and 41% are labeled as "low income."

Nested within this district setting, one context for this study was a third grade math classroom in EMSD's summer school program. The district has created an extended learning program that it believes will assist students in continuing their educational growth throughout the summer months. In 2007, over 3,700 students enrolled in summer classes. The school at which I taught, Sycamore Elementary, drew children from the zones of six different elementary schools across the district. During my time at Sycamore, I instructed two third grade math classes on a daily basis for six weeks. Each class period was 120 minutes in length. Ten students were a part of my first period class, and 11 students were enrolled in my second period class.

The Second Space: Central University and the University Methods Course

Central University's (CU) School of Education prepares teachers for all levels of elementary and secondary instruction. During the fall semester of 2006, the School of Education enrolled nearly 2,000 undergraduate students. Literature in the field of teacher education notes that programs across the United States are populated mainly by white (García, 1999; McIntyre, 1997), monolingual (Gomez, 1996; Ladson-Billings, 2001), female students (McIntyre, 1997; Zeichner, 1996) from middle-class backgrounds (Cochran-Smith, 2004; Ladson-Billings, 2001) in rural or suburban areas (Zeichner, 1996). CU enrolls a student body not unlike a majority of teacher education programs within the United States. During the 2006–2007 academic year, 75.66% of the undergraduates in the School of Education were female. The university reported that 8.2% of those students were from "targeted minority" backgrounds.

A second context for this study was the course "Teaching Mathematics" at CU during the fall semester of 2007. Situated within the program context described above, the course is one of several methods courses that preservice elementary teachers within the elementary certification programs must complete prior to student teaching. I met with 25 students once a week for each of the 14 weeks during the semester. Each class session was three hours in length. Most weeks, the class was held on campus; however, on three occasions, the preservice teachers and I visited area schools to see the types of teaching we were reading about and discussing in the course.

Methodology

This study utilized a practitioner inquiry stance (Cochran-Smith & Donnell, 2006). More specifically, self-study methodology (Tidwell, Heston, & Fitzgerald, 2009) was employed. Developed in the 1990s as a methodological framework for teacher educators to model the types of reflective practice they were promoting in their courses (Korthagen, 1995), self-study grew, primarily, out of the qualitative movement in educational research (Ham & Kane, 2004). The self-study movement rejects modernist views and assumptions about knowledge, what is known, and who can know (Bullough & Pinnegar, 2001). Those who inquire into their own practice acknowledge that, "The teller of the story affects the story and the ways knowledge is understood" (Hamilton, 2001, p. 382). In conducting this study, I claim the subjective nature of the research (Heikkinen, Huttunen, & Syrjälä, 2007) while also answering the charge to build on the work of others (Zeichner, 2007). Using third space theory to shape my work, I apply ideas from outside the field of teacher education as an opportunity to apply a new lens to the study of teacher education pedagogy.

Methods of Data Collection

Multiple forms of data were collected throughout the study. These methods included a teacher journal, videotapes of classroom practice, interviews with preservice teachers, and other artifacts of classroom life.

Throughout the study, I reflected in a daily teacher journal (Anderson, Herr, & Nihlen, 2007; Hobson, 2001). Written immediately following each class (in the elementary school as well as in the university setting), journal entries allowed me to enter a reflective third space to document my thoughts, ideas, and actions in both the university space and the space of the elementary classroom.

Videotapes of daily instruction in the elementary classroom captured further evidence of my teaching. By reviewing the videotapes, I analyzed the ways in which I utilized, revised, and constructed theory in practice. Through videotape analysis (Erickson, 2006), I identified examples of the possibilities and problems inherent in an elementary mathematics classroom for use in the university course. Several videos, along with my associated journal entries and notes from two critical colleagues—a practicing teacher and a fellow methods instructor—were made available to students at the university through a Web site associated with the methods course.

Semi-structured interviews (Brenner, 2006; Lankshear & Knobel, 2004) were conducted after the completion of the university semester. Six volunteer preservice teachers were asked to reflect upon pedagogies used throughout the semester. In addition, I asked them to verify or refute the themes that were identified during the first round of data analysis.

Artifact collection (Lankshear & Knobel, 2004) supplemented the data listed above. Lesson plans, examples of student work, photographs of the classroom environment, and chart paper from class discussions also helped record the events that occurred in both the elementary classroom and the university-based methods course.

Data Analysis

As one form of practitioner research, self-study is a messy process (Cook, 1998; Zeichner, 1999). Rather than following a linear trajectory, self-study is dynamic. Experts have described this process as an action research cycle (Caro-Bruce, 2000), an action research spiral (Kemmis & McTaggart, 1987), an action-reflection cycle (McNiff & Whitehead, 2006), an action research recursive spiral (Pine, 2009), and—because this research specifically attends to reflective third spaces—the developmental spiral of critical reflection (Horwitz, 2009). Each of these models captures the recursive nature of the analytical process. Following Argyris and Schön (1991), Anderson, Herr, and Nihlen (2007) noted a “double burden” of action and research inherent in practitioner research models, stating, “[This double burden] sets up a conflict between the rigor and the relevance of the research—a conflict that has been viewed as both an advantage and a disadvantage by different commentators” (p. 20). Given this critique, and the fact that practitioner research demands the constant revision of practice based on research findings, a deliberate, ongoing analysis of the data was necessary.

Prior to formal analysis of the data, all videotapes were given coded labels (Marshall & Rossman, 1999) based on the date and class period of the event. Additionally, each paper document collected was photocopied and labeled. The original pieces of data were filed by date. I also kept a file for each student. Photocopies of original data sources were placed in students’ individual files. Group artifacts, photocopies of unclaimed artifacts (i.e., student work without a name), and artifacts marked “anonymous” were filed separately by date. I then used the process of analytic induction (Becker, 1998; Lee & Fielding, 2004) to guide my analysis of the data collected. To do so, I attended to Marshall and Rossman’s (1999) six phases of analytic procedures: “(a) organizing the data; (b) generating categories, themes, and patterns; (c) coding the data; (d) testing the emerging understandings; (e) searching for alternative explanations; and (f) writing the report” (p. 152).

Following these tenets of analytic induction, careful consideration of each piece of data led to the identification of themes. Additionally, I paid attention to evidence that might contradict or refute the themes that were identified. Furthermore, analytical memos (Glaser & Strauss, 1967; Lee & Fielding, 2004) were kept throughout the analysis phase. These memos were used to adjust, revise, or contest designated themes and were later used in constructing the ideas that follow.

The Third Space

I define a third space as a place of reflection, renewal, and change in which two supposedly oppositional worlds are re-imagined to identify tensions, conflicts, exaggerations of distance, commonalities across domains, sources of insight, and inspiration for action. In this case, the two “supposedly oppositional worlds” are the worlds of the university methods course and the elementary classroom. My task was to develop a “place of reflection, renewal, and change” in which I could design specific actions to address the gap often noted between the university and public school classroom contexts. In doing so, I utilized a third space in an effort to re-imagine the ways in which pedagogies in my university course could build on the strengths of both the first and second spaces.

Being Reflective

In my reflections, I examined my teaching, my students' learning, and my next steps as a practitioner; however, I delved into new territory I had not previously explored. To develop a third space, I needed to continue reflecting on my practice, but I also began to reflect on the ways that my teaching was impacted because of my existence in, and between, both worlds. In reflecting on my practice, I needed to use what I had learned in the university setting to address problems of practice in the elementary classroom, but I also had to deal with the issue of educating preservice teachers to identify, analyze, and understand these same problems of practice. These added layers of reflection allowed me to enter a third space ``to identify tensions, conflicts, exaggerations of distance, commonalities across domains, sources of insight, and inspiration for action."

Relating Research and Practice

As an instructor of elementary mathematics methods, I talk frequently with preservice teachers about teaching with understanding (Carpenter & Lehrer, 1999; Hiebert & Carpenter, 1992). In doing so, I encourage future teachers to think about the ways they can pose problems that will cause children to use what they already understand to construct new knowledge. In the methods course, we often discuss the differences between teaching (providing the space, time, and tools for students to learn through the problems we pose) and telling (naming concepts or symbols, giving explicit instructions about how something is to be done, etc.).

Carpenter, Fennema, Franke, Levi, and Empson (1999) describe teaching with understanding in the following way:

Because understanding is synonymous with seeing relationships, emphasizing relationships helps to develop understanding. No one can give knowledge to anyone else. Each individual must develop understanding by constructing relationships. This does not mean that a teacher can never tell children anything; sometimes the best way to construct a relationship is to have someone else point it out. However, even when children are told something, in order to understand they must be able to comprehend the relationship. (pp. 99–100)

In the elementary classroom, students were constantly documenting, discussing, analyzing, and revising the strategies they were using to solve mathematical problems. I was pleased with their willingness to share and discuss their ideas. At one point in the summer, however, I encountered a dilemma. I had posed the following problem:

There are 8 classrooms in our hallway. Each classroom has 6 windows. How many windows are there in total?

Speaking with Leslie, an intelligent but shy third grader, I realized that she was having difficulty documenting the complexity of her thinking. She was completely capable of solving the problem, discussing her thinking, and utilizing a basic strategy (direct modeling) to document her understanding. Leslie also talked through ``adding eight groups of six" but had not captured this thinking on paper. With discussion and assistance, Leslie documented her strategy.

After talking with Leslie, it became obvious that her thinking could also be captured in a ratio table, a strategy encouraged by the district's curriculum development team and one that I believed

may help Leslie see connections between repeated addition and multiplication. I debated whether telling was appropriate in this case. My journal entry from that afternoon describes my dilemma and my ultimate decision to show Leslie the ratio table notation:

The highlight of my day was working with Leslie. I noticed that she was struggling with the multiplication problem I had posed. When I sat down next to her, she had documented only one direct modeling strategy [see Figure 1]. She seemed puzzled, but hadn't given up. I asked her to talk to me about her thinking, and she eloquently described how she was thinking about the problem. It seemed to me that she was using a repeated addition strategy that used her knowledge of doubling, but she didn't know how to document her thinking. I simply drew on her language about adding six plus six, twelve plus twelve, etc. By asking her to write down everything she was saying, she ended up with documentation of her strategy [see Figure 2]. She seemed quite pleased, but I couldn't help but to think that this was a prime opportunity to push her further.

Figure 1. Leslie's direct modeling strategy.

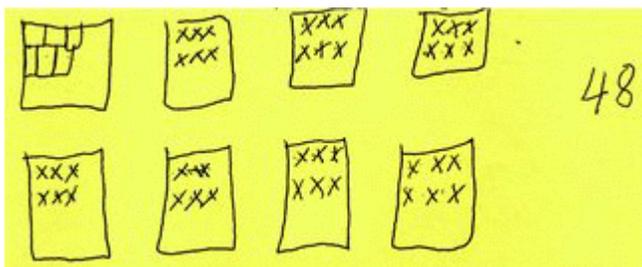
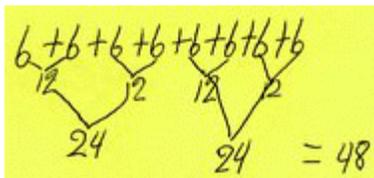


Figure 2. Leslie's repeated addition strategy.



As she continued to talk through her thinking, she mentioned that one room would have six windows. If she added six more windows she would have twelve windows and so on. To me, this seemed like a perfect opportunity to build on that language to show her the ratio table notation. I struggled to decide if I was teaching or telling. I decided that because she had used appropriate language, showing her a new notation scheme (telling) would simply give her another tool to represent her understandings. Luckily, once I introduced the idea, Leslie took off. She immediately completed a ratio table for the problem she was working on [see Figure 3], smiled, and asked if she could share the strategy during the discussion. (Teacher Journal, July 3, 2007)

Figure 3. Leslie's ratio table strategy.

classrooms	1	2	3	4	5	6	7	8
windows	6	12	18	24	30	36	42	48

Another portion of my teacher journal explores the way that this dilemma could influence my teaching at the university level:

What's so great about this episode is that it's something we talk about all the time in the methods course. The preservice teachers always ask me if they should ever tell students *anything*. While it seems obvious to me that some things *have* to be told (students will not magically create the symbol "+" to represent the addition of two numbers), the students at the university seem confused about when they should tell students information and when (and how) they should facilitate new knowledge.

I think my time with Leslie today is a prime example of a time when I felt it was appropriate to tell. I built on Leslie's understanding, related the notation to her other strategies, and let her decide if the strategy was useful to her. Luckily, it worked. It seems like this episode could be valuable in the methods course. (Teacher Journal, July 3, 2007)

This example shows one way that I documented my teaching and my students' learning. It also shows how I utilized theory in practice. I drew on information I had garnered at the university (i.e., teaching with understanding, when and how to "tell") to influence my teaching. Furthermore, I reflected on how this impacted my teaching in an elementary classroom as well as at the university. By entering a third space, I reflected upon my teaching in the elementary classroom (the first space), as well as re-imagined my pedagogy for the mathematics methods course at the university (the second space), in an effort to address the gap between universities and public school classrooms.

Modeling

In my role as an instructor at the university level, I find myself in an interesting position. I have definite beliefs about what should be happening in elementary classrooms—especially in the area of mathematics. Yet, I am still a learner. By returning to the elementary classroom, I continue to explore my own understandings of teaching and learning. In doing so, I've learned to tread lightly as I work with preservice teachers. I am open with the future teachers with whom I work. They know that I continue to study my own practice. To speak in absolutes would be contradictory to my philosophies of teaching and learning. Featherstone (2007) spoke eloquently about working with preservice teachers:

[W]e are trying to teach prospective teachers a questioning stance—we want them to understand that teaching is a journey and that they should be perpetually reflecting, trying to see new depths in their work. We want to teach them that problems are their friends—that working to teach in ways that help children to develop intellectual power, curiosity, and skill requires ongoing exploration and questioning. If we do not appear to be inquiring

ourselves, if instead we seem certain that we have found the right way to teach math, we squander an important opportunity to teach the values of openness and curiosity. For as we all know, teachers can be powerful models. (p. 71)

To convey this message, I model the types of teaching and reflecting in which the preservice teachers will engage in the future.

“Something That Didn't Go Very Well”

Most of my examples of existing within a third space highlight moments during the summer when I discovered ways to take what I was learning back to the university methods class. Yet, there were also instances during the fall semester at the university when the third space provided opportunities to mark episodes of learning that I could take back to the elementary classroom. One such moment occurred after students had viewed one of the videos of my teaching in the elementary classroom. One of the students posted the following entry on the course Web site:

I love that you post videos of your teaching reform math. But, maybe you could share a video of something that didn't go very well? Maybe a student who struggles with thinking of different strategies, or a problem that's too hard, or one that just doesn't want to do it? ... I don't want to get the impression that reform math is easy and all students can think of ways to solve a problem. Cause, that's not an ideal classroom. (Anonymous Posting to Course Web site, September 26, 2007)

This entry gave me pause as I thought about my instruction in the methods course. The author of the comment was right: I was only showing classroom events in which students were successful. As I reflected, new ideas began to emerge. These ideas are captured in my teacher journal from the fall semester:

I just read the postings on the course Web site, and there was an interesting point made. One of the students noted that the video shows a lesson that went well and asked if I would post a lesson that didn't go so well. As I think about this, the student is absolutely right. I'm only posting things of which I'm proud. Similarly, we've only viewed tapes of other teachers and read articles that showcase teachers who are successful with reform mathematics. This is problematic. Reform math is extremely complex. Very experienced teachers often comment that they're still learning how to teach effectively in this way. I've tried to express that I, too, am still working on improving my practice. Yet, I may be sending contradictory messages by posting only successful lessons online.

By posting [a] lesson, I'll have another chance to think through my teaching, discuss the lesson with the preservice teachers, and think about what I can do in the future if the same problem arises. Plus, it gives me another chance to delve back into the third space. How am I using what I've learned in each space to improve my practice in both? (Teacher Journal, September 28, 2007)

After writing this entry, I posted a video of a lesson that was less than stellar. While I was slightly worried that I was opening myself up to negative critique, I felt that posting the video would encourage students to see me as another teacher working to improve his practice—as

opposed to an expert with all of the answers. After posting the video, I received a variety of responses from the students. Some were encouraging:

I'm really glad that you posted this video. I feel like what happened with your students is a very realistic thing. So many times you have posted videos [where] the kids really get it, but this video seemed more real to me. I appreciate watching you struggle, because I know that I struggled a lot this semester. It made me realize that you are learning from your teaching as well. (Beth, Posting to Course Web site, December 16, 2007)

Others were critical:

Wow! These students really seemed to fall apart! ... I [wonder] whether or not all of the students understood your vocabulary (Liz, Posting to Course Web site, December 4, 2007)

But, most importantly, students reflected on the video, deciding what they might do in a similar situation, and providing me thoughtful suggestions or questions that allowed me to rethink my own teaching in the elementary classroom:

I think that this lesson might have been more beneficial in a small group setting. Students seem to find it easier to draw connections and stay focused in a smaller group setting. (Angie, Posting to Course Web site, December 18, 2007)

Wouldn't it have been better to continue to give them problems that challenge the use of their strategies? That way hopefully some of the students would find some of those number patterns (Mary, Posting to Course Web site, December 7, 2007)

Later, I reflected on students' comments about the lesson *that didn't go very well*:

I just reviewed some of the students' reactions to Video #4. They have some really valid points and some interesting questions. Reading their comments, I'm learning a lot about my teaching. It's obvious that many of them appreciate the video as a learning tool in the methods course, so I'm glad I posted it. However, more importantly, their postings are helping me rethink my elementary classroom teaching.

Most importantly, I'm thinking about the concept of differentiation. We talk about this all the time in the methods course. While it's important for students to share their strategies in the classroom, to belabor one strategy could be detrimental to the learning of students who aren't quite ready for that strategy. That's exactly what I did in this lesson. I pushed students too far, too soon. Rather than teaching this as a whole class lesson, I should have used small groups. I'm not sure why I was so gung-ho about pushing this particular strategy. I should have known better. I should have known that things would fall apart. I should have celebrated the fact that almost everyone was using the strategy in the first place. I should have watched more closely to identify those students who were ready for a push. Instead, I confused and frustrated the entire class (and myself). Lessons learned (

It's interesting that I didn't think of the idea of differentiating this lesson in the moment; however, it's exciting that continued reflection in, and for, the methods course continues to challenge me to improve my practice at the elementary level! (Teacher Journal, December 15, 2007)

The reflective nature of the third space allowed me to realize simple—but profound—changes to my instruction in both the university context and the elementary classroom. I am still learning and growing as an educator. I hope that my students understand this and that they take with them the idea that teaching is a continually evolving profession.

Analysis of Episodes

The power of third space theory in education is the opportunity to *return* to the first and second spaces to implement changes devised within the reflective third space. At its core, this study addresses a common binary constructed within the field of educational research: the gap between what is espoused at the university and what is actually implemented in classroom practice. By positioning myself within, and reflecting on, these two spaces, it was possible to move beyond oversimplifying each space and to avoid positioning them as oppositional to one another.

The recognition that the elementary classroom and the university methods course may inform and influence each other in positive and constructive ways is essential if teacher education is to move beyond idealism. The notion of hybridity allowed me to document the strengths each space had to offer, to examine the ways in which each space could be re-imagined, and to reflect upon the nexus between the two spaces. However, simply reflecting was not enough. The final piece to the puzzle was returning to classroom practice (at the university and/or within the elementary classroom) to enact change.

By examining the episode with Leslie, I reflected upon a problem in the elementary classroom while attending to the preparation of preservice teachers within the university methods course. In this way, the hybrid nature of the third space was used to simultaneously focus my attention on the first space of the elementary classroom and my work within a second space, the university context. The act of returning was documented as I took action within this episode. I offered Leslie a way to document the mathematical understandings she was already communicating verbally while also providing a concrete example of a tension discussed within the university methods course—the difference between teaching and telling.

A second reflective instance was documented to further explore third space theory as a lens for studying teacher education. By reading, reflecting upon, and responding to the entry of one of the preservice teachers, I addressed a problem in both the first and the second spaces. In the university methods course, I was only highlighting successful moments in reform mathematics classrooms. In essence, I was avoiding the messiness of practice. This messiness needed to be addressed in the university methods course and, more specifically, in my own teaching of elementary mathematics. The hybrid nature of the third space allowed me to draw on my knowledge of both the elementary classroom and the university context as I constructed a response to the preservice teacher's request for a lesson that "didn't go very well." In addition, the notion of returning played an essential role as I worked toward change. By offering a video

of a failed lesson of my own, I provided the preservice teachers the opportunity to use their knowledge of reform mathematics to reflect on what had happened during this failed lesson. By presenting the future teachers with an opportunity to critique my elementary teaching, I was reminded of ways I could continue to take action as an elementary teacher.

Conclusion

Gutiérrez, Baquedano-López, and Turner (1997) noted, "[T]he third space in learning environments refers to a place where two scripts or two normative patterns of interaction intersect, creating the potential for authentic interaction and learning to occur" (p. 372). My time within this third space taught me much about the teaching and learning of elementary children and, therefore, about what I need to do at the university level as I engage in the preparation of future classroom teachers. Furthermore, the third space allowed me to build on lessons learned within the university context as I reflected on my teaching within an elementary setting.

To truly address the gap between the ideas espoused within university-based teacher education programs and practice within public school classrooms, we must learn to value the wisdom of practice (Shulman, 2004). Educational research must attend to the voices of practitioners. Educators around the globe—those within public school classrooms as well as those working in university contexts—must put forth their practices, reflections, and theories for critique. In doing so, the voices of practitioners will have the potential to influence educational research, theory, and policy.

A global dialogue has already begun in the area of self-study, and third space theory presents one avenue to document this type of work. By positioning themselves within and between both the world of the university and the world of public school classrooms, teacher educators can produce knowledge previously absent from the international educational research community. This knowledge is sorely needed as we work to ensure that our understandings of real classrooms are in line with the messages we send to the preservice teachers with whom we work. Otherwise, we are doomed to repeat what has already proven difficult to overcome: a mismatch between teacher education programs and the realities of classroom life within our public schools. Third spaces allow teacher educators to expand upon previous notions of reflective practice and to implement the ideals we hope our university students will enact as they enter the profession of teaching.

Notes

1 The names of the school district, the elementary school, and the university have been changed to protect the identities of the participants in this study.

2 Demographic descriptors are those of the district.

3 Data retrieved from [http://www.\[edgewater\].k12.\[state\].us/QuickFacts.pdf](http://www.[edgewater].k12.[state].us/QuickFacts.pdf) and [http://www.\[edgewater\].k12.\[state\].us/topics/stats/2006/byincome.htm](http://www.[edgewater].k12.[state].us/topics/stats/2006/byincome.htm).

4 Information retrieved from [http://www.\[edgewater\].k12.\[state\].us/today/711.htm](http://www.[edgewater].k12.[state].us/today/711.htm).

5 Targeted minority students are those who are counted for diversity programs on campus and may not include all students from non-dominant backgrounds—especially those who choose not to

disclose their demographic information. Typically, targeted minority students include those labeled by the university as Black, Hispanic, Southeast Asian, or Native American/Alaskan Native.

6 See Lobato, Clarke, and Ellis (2005) for an interesting discussion of various conceptions of telling and how it might be used in the mathematics classroom.

References

1. Anderson, G. L., Herr, K. G., & Nihlen, A. S. (Eds.). (2007). *Studying your own school: An educator's guide to practitioner action research* (2nd ed.). Thousand Oaks, CA: Corwin Press.
2. Argyris, C., & Schön, D. (1991). Participatory action research and action science compared: A commentary. In W. R. Whyte (Ed.), *Participatory action research* (pp. 85–96). Newbury Park, CA: Sage.
3. Becker, H. S. (1998). *Tricks of the trade: How to think about your research while you're doing it*. Chicago: University of Chicago Press. [CrossRef]
4. Bhabha, H. (1990). The other question: Difference, discrimination and the discourse of colonialism. In R. Ferguson, M. Gever, T. T. Minh-ha, & C. West (Eds.), *Out there: Marginalization and contemporary cultures* (pp. 71–87). New York: The New Museum of Contemporary Art.
5. Bhabha, H. (1994). *The location of culture*. London: Routledge.
6. Brenner, M. E. (2006). Interviewing in educational research. In J. L. Green, G. Camilli, & P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 357–370). Mahwah, NJ: Lawrence Erlbaum.
7. Bullough, R. V., Jr., & Pinnegar, S. (2001). Guidelines for quality in autobiographical forms of self-study research. *Educational Researcher*, 30(3), 13–21. doi: 10.3102/0013189x030003013 [CrossRef]
8. Bursztyn, A. (2004). Special education, urban schools, and the uncertain path to social justice. In J. L. Kincheloe, A. Bursztyn, & S. R. Steinberg (Eds.), *Teaching teachers: Building a quality school of urban education* (pp. 135–156). New York: Peter Lang.
9. Caro-Bruce, C. (2000). *Action research facilitator's handbook*. Oxford, OH: National Staff Development Council.
10. Carpenter, T. P., Fennema, E., Franke, M. L., Levi, L., & Empson, S. B. (1999). *Children's mathematics: Cognitively guided instruction*. Portsmouth, NH: Heinemann.
11. Carpenter, T. P., & Lehrer, R. (1999). Teaching and learning mathematics with understanding. In E. Fennema & T. A. Romberg (Eds.), *Mathematics classrooms that promote understanding* (pp. 19–32). Mahwah, NJ: Lawrence Erlbaum.
12. Cochran-Smith, M. (2004). *Walking the road: Race, diversity, and social justice in teacher education*. New York: Teachers College Press.

- 13.** Cochran-Smith, M., & Donnell, K. (2006). Practitioner inquiry: Blurring the boundaries of research and practice. In J. L. Green, G. Camilli, & P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 503–518). Mahwah, NJ: Lawrence Erlbaum.
- 14.** Connelly, F. M., & Clandinin, D. J. (1988). *Teachers as curriculum planners: Narratives of experience*. Toronto: OISE Press.
- 15.** Cook, T. (1998). The importance of mess in action research. *Educational Action Research*, 6(1), 93–110. doi: 10.1080/09650799800200047 [Taylor & Francis Online], [CSA]
- 16.** Ebby, C. B. (2000). Learning to teach mathematics differently: The interaction between coursework and fieldwork for preservice teachers. *Journal of Mathematics Teacher Education*, 3(1), 69–97. [CrossRef]
- 17.** Elliott, J. (1991). *Action research for educational change*. Bristol, PA: Open University Press.
- 18.** Erickson, F. (2006). Definition and analysis of data from videotape: Some research procedures and their rationales. In J. L. Green, G. Camilli, & P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 177–191). Mahwah, NJ: Lawrence Erlbaum.
- 19.** Featherstone, H. (2007). Preparing teachers of elementary mathematics: Evangelism or education? In D. Carroll, H. Featherstone, J. Featherstone, S. Feiman-Nemser, & D. Roosevelt (Eds.), *Transforming teacher education: Reflections from the field* (pp. 69–92). Cambridge, MA: Harvard Education Press.
- 20.** Flessner, R. (2011). Pushing the field of practitioner research: Utilizing ‘reflective third spaces’ to explore educational practice. In I. M. Saleh & M. S. Khine (Eds.), *Practitioner research in teacher education: Theory and best practices* (pp. 121–140). Frankfurt, Germany: Peter Lang.
- 21.** García, E. (1999). *Student cultural diversity: Understanding and meeting the challenge*. Boston: Houghton Mifflin.
- 22.** Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine.
- 23.** Gomez, M. L. (1996). Prospective teachers’ perspectives on teaching “other people’s children.” In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education* (pp. 109–132). New York: Teachers College Press.
- 24.** Griffiths, M., & Tann, S. (1992). Using reflective practice to link personal and public theories. *Journal of Education for Teaching*, 18(1), 69–84. doi: 10.1080/0260747920180107 [Taylor & Francis Online]

25. Guti rrez, K., Baquedano-L pez, P., & Turner, M. G. (1997). Putting language back into language arts: When the radical middle meets the third space. *Language Arts*, 74(5), 368–378. [CSA]
26. Ham, V., & Kane, R. (2004). Finding a way through the swamp: A case for self-study as research. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (Vol. 1, pp. 103–150). Dordrecht, the Netherlands: Lower Academic. [CrossRef]
27. Hamilton, M. L. (2001). Professional knowledge, teacher education and self-study. In J. Loughran, M. L. Hamilton, V. LaBoskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (pp. 375–419). Dordrecht, the Netherlands: Kluwer Press.
28. Hatch, T. (2006). *Into the classroom: Developing the scholarship of teaching and learning*. San Francisco: Jossey-Bass.
29. Heikkinen, H. L. T., Huttunen, R., & Syrj o, L. (2007). Action research as narrative: Five principles for validation. *Educational Action Research*, 15(1), 5–19. doi: 10.1080/09650790601150709 [Taylor & Francis Online]
30. Hiebert, J., & Carpenter, T. P. (1992). Learning and teaching with understanding. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 65–97). Reston, VA: National Council of Teachers of Mathematics.
31. Hobson, D. (2001). Action and reflection: Narrative and journaling in teacher research. In G. Burnaford, J. Fischer, & D. Hobson (Eds.), *Teachers doing research: The power of action through inquiry* (2nd ed.) (pp. 7–27). Mahwah, NJ: Lawrence Erlbaum Associates.
32. Honan, E. (2007). Teachers engaging in research as professional development. In T. Townsend & R. Bates (Eds.), *Handbook of teacher education: Globalization, standards and professionalism in times of change* (pp. 613–624). Dordrecht, the Netherlands: Springer. [CrossRef]
33. Horwitz, J. (2009). Critical reflection: Uncovering a developmental spiral. In K. Pithouse, C. Mitchell, Y. R. Moletsane (Eds.), *Making connections: Self-study and social action* (pp. 301–315). New York: Peter Lang.
34. Johns, C. (2005). Balancing the winds. *Reflective Practice*, 6(1), 67–84. doi: 10.1080/1462394042000326806 [Taylor & Francis Online]
35. Kemmis, S., & McTaggart, R. (1987). *The action research planner*. Geelong, Australia: Deakin University Press.
36. Korthagen, F. A. J. (1995). A reflection on five reflective accounts. *Teacher Education Quarterly*, 22(3), 99–105.
37. Korthagen, F., & Verkuyl, H. S. (2007). Do you encounter your students or yourself? The search for inspiration as an essential component of teacher education. In T. Russell & J.

Loughran (Eds.), *Enacting a pedagogy of teacher education: Values, relationships and practices* (pp. 106–123). London: Routledge.

38. Labaree, D. (2004). *The trouble with ed schools*. New Haven, CT: Yale University Press.
39. Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass.
40. Lankshear, C., & Knobel, M. (2004). *A handbook for teacher research: From design to implementation*. New York: Open University Press.
41. Lee, R. M., & Fielding, N. G. (2004). Tools for qualitative data analysis. In M. Hardy & A. Bryman (Eds.), *Handbook of data analysis* (pp. 529–546). London: SAGE. [CrossRef]
42. Lobato, J., Clarke, D., & Ellis, A. B. (2005). Initiating and eliciting in teaching: A reformulation of telling. *Journal for Research in Mathematics Education*, 36(2), 137–157.
43. Loughran, J. (2006). *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. London: Routledge.
44. Loughran, J. (2007). Teachers as leaders: Building a knowledge base of practice through researching practice. In T. Townsend & R. Bates (Eds.), *Handbook of teacher education: Globalization, standards and professionalism in times of change* (pp. 585–596). Dordrecht, the Netherlands: Springer. [CrossRef]
45. Lougran, J. J., Hamilton, M. L., LaBoskey, V. K., & Russell, T. (Eds.). (2004). *International handbook of self-study of teaching and teacher education practices*. Dordrecht, the Netherlands: Kluwer. [CrossRef]
46. Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
47. McIntyre, A. (1997). *Making meaning of whiteness: Exploring racial identity with white teachers*. Albany, NY: State University of New York Press.
48. McNiff, J., & Whitehead, J. (2006). *All you need to know about action research*. London: Sage.
49. Moje, E. B., Ciechanowski, K. M., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly*, 39(1), 38–70. [CrossRef], [Web of Science ®]
50. National Council of Teachers of Mathematics Research Committee. (2006). The challenge of linking research and practice. *Journal for Research in Mathematics Education*, 37(2), 76–86. [Web of Science ®]
51. Neumann, A., Pallas, A., & Peterson, P. (1999). Preparing education practitioners to practice education research. In E. C. Lagemann & L. S. Shulman (Eds.), *Issues in education research: Problems and possibilities* (pp. 247–288). San Francisco: Jossey-Bass.

52. Pine, G. J. (2009). *Teacher action research: Building knowledge democracies*. Los Angeles: Sage.
53. Russell, T., & Korthagen, F. (Eds.). (1995). *Teachers who teach teachers: Reflections on teacher education*. London: Falmer Press.
54. Shulman, L. S. (2004). The wisdom of practice: Managing complexity in medicine and teaching. In S. M. Wilson (Ed.), *The wisdom of practice: Essays on teaching, learning, and learning to teach* (pp. 251–271). San Francisco: Jossey-Bass.
55. Soja, E. W. (1996). *Thirdspace: Journeys to Los Angeles and other real-and-imagined places*. Malden, MA: Blackwell.
56. Tidwell, D. L., Heston, M. L., & Fitzgerald, L. M. (Eds.). (2009). *Research methods for the self-study of practice*. Dordrecht, the Netherlands: Springer.
57. Tremmel, R. (1993). Zen and the art of reflective practice in teacher education. *Harvard Educational Review*, 63(4), 434–458. [Web of Science ®]
58. Valli, L. (Ed.). (1992). *Reflective teacher education: Cases and critiques*. Albany, NY: State University of New York Press.
59. Van Looy, L., & Goegebeur, W. (2007). Teachers and teacher trainees as classroom researchers: Beyond Utopia? *Educational Action Research*, 15(1), 107–126. doi: 10.1080/09650790601151384 [Taylor & Francis Online]
60. Zeichner, K. (1996). Educating teachers for cultural diversity. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education* (pp. 133–175). New York: Teachers College Press.
61. Zeichner, K. (2007). Accumulating knowledge across self-studies in teacher education. *Journal of Teacher Education*, 58(1), 36–46. doi: 10.1177/0022487106296219 [CrossRef], [Web of Science ®]
62. Zeichner, K. M. (1994). Research on teacher thinking and different views of reflective practice in teaching and teacher education. In I. Carlgren, G. Handal, & S. Vaage (Eds.). *Teachers' minds and actions: Research on teachers' thinking and practice* (pp. 9–27). London: Falmer Press.
63. Zeichner, K. M. (1999). Action research and the preparation of reflective practitioners during the professional practicum: Lessons learned. *International Journal of PEPE, Inc.*, 3(1), 1–26.
64. Zeichner, K. M., & Liston, D. P. (1996). *Reflective teaching: An introduction*. Mahwah, NJ: Lawrence Erlbaum.