

Inside Out and Outside In: Rethinking Spelling in Inclusive Elementary Classrooms

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A serendipitous moment, a passing conversation, led to this study. A university professor expressed concern that his second-grade son was “bored” with his weekly spelling lists, homework, and tests. A colleague of his, a former elementary teacher with 30 years experience and currently teaching field-based methods courses in this child’s school, listened carefully. This colleague had a student teacher in this particular classroom and saw this conversation as an opportunity to initiate changes in the spelling program, as a mutually beneficial effort for the second-grade and university students. Her hope was for her teacher education students to observe and take part in the best possible instructional practices. Further, this partnership could help to engage all the second-grade teachers in professional learning that would satisfy both concerns. This colleague was in an advantageous position to offer limited funding for time and resources as well as university students to do clerical tasks. Thus began a nine-month study of how three teachers designed and implemented new instructional practices, moving from a traditional to a student-centered, differentiated spelling program. This analysis also explored how the learning and the process of improving instructional practice influenced or did not influence the teachers’ paradigms of teaching and learning.

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Objective

The purpose of the research was to explore why teachers decide to alter their teaching, the process of designing the alterations, and what changes actually occur. Much has been written about the conditions needed to support teachers making changes, but this study was designed to consider how teachers make instructional adjustments in the naturalistic setting of today's K-12 schools where the resources and necessary conditions for lasting, substantive reform are often lacking (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Fullan, 2001; Gabriel, Day, & Allington, 2011; Guskey, 2002; Guskey & Huberman, 1995; Richardson, 1990). Whereas changes in teachers' practice typically are initiated by building or district leaders and implemented through formal professional development structures, this study examined how a school-university partnership served to alter the practices and beliefs of three teachers over nine months.

This study centered on the following research questions:

1. Where did this change originate?
2. How did teachers define "new" instructional practices, i.e., what would be different?
3. What looked different in practice from previous practice?
4. Did teachers' paradigms of teaching and learning evolve, and if so, in what way?

Theoretical Framework

Despite ample literature on building-wide or district-wide professional development initiatives, less has been written on the role of school-university partnerships in influencing the practices of cooperating teachers. University-school partnerships are generally valued for creating opportunities for teacher candidates to observe, learn about, and practice teaching. Often these partnerships symbiotically benefit the university teacher education programs and the schools and classrooms in which the candidates are placed (Fairbanks, Freedman, & Kahn, 2000; Giebelhaus & Bowman, 2002). The study of school-university collaborative partnerships is embedded in interorganization theory, which provides a "lens" with which to examine how participants act voluntarily toward goals that cannot be attained individually (Huxham, 1996; Van de Ven, Emmett, & Koenig, 1980).

In school-university partnerships, movement toward new practices and beliefs is often initiated by the university faculty member. Ravid

and Handler (2001) suggested there are four general school-university collaboration models, each determined by how and why the partnership is initiated, the factors related to its continuation, the roles and expectations of the collaborators, and the success of the collaboration. The extent to which the partnership focuses on the teacher candidates versus the classroom teachers varies widely. Though the elementary school and university described in this study have had a collaborative partnership for more than 10 years, the focus of that partnership has been on the development of future teachers. The case that we address in this article, however, centers on collaboration between a university professor (including her students) and three second grade teachers, which was clearly intended to improve the teaching practices of the teachers. This partnership could be categorized as a Consultation Model because the university professor applied her expertise and resources to help the teachers improve their knowledge and skills (Ravid & Handler, 2001). Yet, despite the apparent power differential with the professor role as change agent who tells teachers what they should be doing, consultation partnerships, like the one in this study, are often complex and allocate power in nonlinear ways.

Sociocultural theory helps explain how teacher change is often a product of complex and contextualized social interactions between teachers (Goos, 2008). To further our understanding of how and why the teachers in this case study were interested in making improvements in their spelling programs, it is helpful to use a situative perspective. Unlike constructivist perspectives, which view knowledge and skills as commodities that can be acquired, situative theories emphasize the importance of interactions with others in communities of practice. Interactions with others and resources are most important since shifts in teacher behavior are socially organized (Brodie, 2005; Sfard, 1998).

Any improvement in teaching practices requisitely involves teachers modifying their beliefs or actions. Literature on teacher change dates back decades and nearly all of it is rooted in the notion that change is hard and teachers tend to be conservative and resist complex reforms (Richardson, 1990; Zimmerman, 2006). Most of the literature falls into one of two areas: research on school-wide professional development and research on learning to teach through teacher education. In both cases, the changes are externally mandated and the teacher is merely "a pawn in the system with little power to make autonomous decisions" (Richardson, 1990, p. 12). Professional Development is typically based on staff development models which focus on outside expertise and school-wide training that is deliberate and purposeful. Borko (2004) asserted, "[T]he professional development currently available to teachers is woefully inadequate" (p. 3).

Recently, there has been an increase in schools using learning community models to improve teaching (DuFour, 2004; Eaker, DuFour & DuFour, 2002). Though learning community models empower teachers to plan and develop much of their own learning, the models tend to be quite structured, rule-bound, and orchestrated by administrators. In contrast, growth and learning opportunities are often spontaneous or serendipitous (Fullan, 2001). Learning communities often exist informally. The teachers in this study were not part of a formal learning community, nor did the university professor consultant actively pursue helping the teachers due to external mandates. Essentially, the change process just happened.

In order to understand why and how the change “just happened,” it is important to examine the motivations and conditions that contribute to teacher learning. Hershey, Blanchard, and Johnson (2001) suggested that readiness to adapt instructional practices is a combination of ability—demonstrated by knowledge, skill, and experience, and willingness—demonstrated by confidence, commitment, and motivation. Though teachers are often willing and able to change, they tend to favor modifications in routines and lesson delivery but resist more complex reforms (Duffy & Roehler, 1986; Richardson, 1990). In their seminal study, Doyle and Ponder (1977) concluded that teachers adopt new practices based on three criteria: practicality, situation, and cost (including time). Teachers tend to favor new practices that are congruent with their existing philosophy and give them practical actionable ideas that they can implement quickly and easily (Fullan, 2001). Teachers often discuss ideas and practices with each other, but these interactions usually focus on procedural matters, not critical examinations of their teaching. Furthermore, changes that require a significant time investment are limited because teachers typically have limited time for collaboration with colleagues (Borko, 2004; McLaughlin & Talbert, 2001; Wilson & Berne, 1999).

The teachers in this case study were motivated to change but lacked some of the practical components needed to reconsider their practice. Teachers often make subtle procedural shifts from informal interactions with colleagues, yet at times they need guidance and support from a source outside the informal learning community (Richardson, 1990; Guskey, 2002). Consultative partnerships between university professors and classroom teachers can bolster teachers’ confidence to take risks and teachers who are willing to experiment in their teaching are more likely to increase their effectiveness and their students’ learning (Ravid & Handler, 2001; Sparks, 1988). Ultimately, teacher growth should enhance student learning.

Methods

A case analysis design was chosen as the best suited method toward examination of the profundity and complexity of this partnership. In case study research of change efforts, researchers seek to understand a situation through interpretation (Stake, 1995). The complexity of a single case requires breadth and depth of understanding through multiple data sources (Merriam, 1998). Employing multiple sources of evidence helps to support construct validity in case study research (Yin, 2009). In order to avoid misrepresentation of reality, investigator subjectivity can be minimized by referencing as much empirical evidence as possible, as well as by asking participants to review report drafts.

The study took place in a rural school district in the upper Midwest serving about 2,500 K-12 students. The specific school serves 381 students in grades K-4 and follows an inclusive model whereby students needing special instruction (i.e., special education, intervention, or Title I services) are included in the general education classrooms to the greatest extent possible. The student population is largely Caucasian with a range of socio-economic levels and 33% of students qualifying for free or reduced lunch. The three teachers participating in the study are Caucasian, two female and one male. Ms. Carlson was clearly considered the informal team leader due to her 30 years of teaching second grade and her role in developing the original spelling program for second grade around 20 years ago. Mr. Gaines, in his 40s and having come to teaching later in life, taught kindergarten for four years, with this being his first year teaching second grade. Ms. Ubright taught music part-time to K-4 students for one year before joining the second grade team at the beginning of this study. Mr. Wilson has been the principal at the school for 17 years. The university professor, Ms. Smith, who led this collaboration with the teachers in changing their spelling programs was formerly a colleague in the school as the Title I teacher as well as being an award-winning second grade teacher in the district.

The context of the study is unique in that the university and the school district have had a quasi-PDS (professional development school) relationship for nearly 20 years. The authors are both well-known by all participants. Derek was a successful middle school teacher in the district for 10 years and teaches a methods course that partners with the same school for placement of teacher candidates. Suzanne was a K-12 teacher for 17 years before moving to teacher education and was instrumental in developing the original partnerships with this district. She has taught field-based methods courses and/or supervised student teachers in all of the elementary schools for 20 years. Both authors in-

clude K-12 teachers in their scholarship and frequently secure funding from the university to include teachers in collaborative presentations of research at state and national conferences. The partnerships among the university and the school faculty are always approached as mutual learning opportunities and consistently contribute to the improvement of instruction for all.

In order to understand as much about the context, process, and impacts surrounding this case and to maximize objectivity, we collected data from multiple sources, including interviews, formal and informal classroom observations, documents, questionnaires, and email exchanges. This range of data helped to increase validity through triangulation (Stake, 1995; Yin, 2009).

We collected data across nine months from our initial conversation at the university to the end of the second semester of the classroom practices. Our data collection began with informal conversations with the two university professors who first called attention to the need for improvement in spelling instruction. One professor was a parent of a second grade student, and the other, Ms. Smith, had an established field-based program at the school and served as the expert consultant for the spelling program change. These informal conversations continued across the nine months of the study and provided rich longitudinal perspectives of the process.

Early on in the study, we interviewed each of the three second grade teachers, a student teacher and the principal separately. During the second semester of the study we conducted several observations of the teachers during spelling lessons, both formally and informally, each of which included discussion and questions after the lesson. During the second semester, we also sent questionnaires to the teachers via email. Numerous documents and artifacts added richness to our understanding of the change process. We collected and analyzed curriculum materials, student work, written explanations distributed to parents and administrators, and materials developed to present the changes to colleagues.

Our analysis of the data, following recommended procedure for case study research, was concurrent and iterative, rather than linear and subsequent to our data collection (Stake, 1999; Yin, 2009). Throughout the study, particularly after each collection of new data, each of us kept reflective notes, which we shared with each other through email and conversation. We challenged ourselves and each other to find rival explanations. At times our areas of disagreement or uncertainty prompted us to pursue new data. Because ours was a single-case design, we attempted to remain descriptive. However, the expertise we brought to the study combined with the breadth and depth of our data allowed us

to construct explanations of the causal and consequential components of the case (Yin, 2009).

Findings

Where Did This Change Originate?

Although reform often follows unplanned, wandering pathways, ability and willingness to change are essential for efforts to begin (Hershey, Blanchard, & Johnson, 2001). In this study, each of the three teachers approached the shifts in his/her spelling program with mixed feelings and hesitation. All three had concerns with the conventional approach, which had been followed by district teachers for the previous 20 years. Despite many reforms over the last 20 years in language arts instruction, spelling is often neglected and remains as a fairly traditionally taught subject even in more progressive classrooms (Alderman & Green, 2011). Traditionally, the teachers began spelling study with a 20-30 minute lesson on Mondays to introduce a specific phonics rule along with the week's ten corresponding words. In addition, each week's list included two challenge words which did not follow the phonics rule (referred to as "red words"). For homework, students wrote the new words three times on Monday night; Tuesday night they used each word in a sentence. The teachers administered a pretest on either Wednesday or Thursday followed by a final test on Friday. The final test consisted of writing the 10 words in isolation as well as completing dictated sentences in which several of the words were incorporated. Lastly, the students would participate in a listening comprehension exercise over a short story read aloud and followed by multiple-choice, literal level questions. Even though none of the teachers was enamored with the traditional program, deciding to change proved complex. All three teachers lacked the ability (knowledge, skill, and experience) and the willingness (confidence, commitment, and motivation) to enthusiastically embrace the new spelling program (Hershey, Blanchard, & Johnson, 2001).

The impetus for learning a new approach came from Ms. Smith, the university professor and consultative partner (Ravid & Handler, 2001), who provided the promise of guidance in how the new program worked, management tips, and clerical support. Ms. Smith's support resulted in willingness and confidence to take the risk and try something new. Ms. Smith defined her role as a "teacher educator" based on her perceived success in teaching an individualized spelling program as a second grade teacher a decade earlier. All three teachers stated that they would probably not have made changes in their spelling instruction at this time were it not for Ms. Smith's input. This reluctance is not unusual as teachers

often need outside guidance and support when facing complex reforms to practice (Guskey, 2002).

The socially organized nature of changes in teachers' practice also held true in this study (Brodie, 2005; Sfard, 1998). The veteran teacher felt allegiance to the traditional program she had used successfully for 20 years. The two newer teachers deferred to her as more experienced and knowledgeable. In addition, neither of the newer teachers had any background in the foundational phonics skills of the spelling program. Ms. Carlson, the veteran teacher, stated she literally "went home and shed some tears" at the thought of moving to the "new" spelling program. Ms. Ubright, one of the newer teachers, expressed feeling overwhelmed and saw the new program as "one more thing to learn." Clearly, without the input and support from "outside," i.e., the university partner acting as a change agent, and the readiness of the whole team to make the changes together, none of the teachers felt they would have tackled the new spelling program at this time (Brodie, 2005; Guskey, 2002; Sfard, 1998). Thus, the power of collaboration inside and outside the school was demonstrated as all three were willing to learn and implement a new instructional approach working together and with the support of Ms. Smith.

How Did the Teachers Define the New Program?

Commonly, teachers define changes to align with existing philosophies and seek shifts that are practical, quick, and easy to implement (Fullan, 2001). The shifts in the new program were defined as: (1) differentiating instruction for a variety needs while continuing to teach the prescribed phonics skills; (2) having students collect and choose their individual spelling words based on the weekly phonics skill; (3) providing a "menu" of homework options; and (4) having student partner teams conduct the Friday tests. As the teachers needed time, however, for their own learning and time to inform parents, administrators, and colleagues about the new program, they began by simply offering more options for spelling homework each week.

Marshalling Support

In October a letter was sent to the students' families explaining the homework choice menus in spelling for Monday and Tuesday evenings. Homework menus were provided by Ms. Smith and her university students. Based on this single shift in practice, all three teachers felt energized by the "new" program and recognized more excitement among students about spelling. However, some parents expressed concerns about the new homework menus because the choices required more time in the evenings to help their children with spelling. In fact some parents

continued to have their children do the traditional spelling assignments in place of adopting the new homework menu. The teachers agreed that their initial letter was not successful in sufficiently informing parents about the changes, so they decided to explain the new program in person to each parent at conferences in November, followed by the expectation of full compliance with the program in January.

Ms. Smith and the literacy coach composed a written explanation and rationale for the new program and submitted it to the principal who took it to the district administrator. Mr. Wilson, the principal, explained that if only one teacher were using a new “delivery method” of instruction, he would not inform the district-level administrator. However, when a whole grade level in his building tried a new instructional approach, administrators and building colleagues needed to be informed to avoid future problems. Mr. Wilson did not expect the new program to make significant growth in spelling achievement, but believed the program would “succeed” because the new practices were defined by teachers who were motivated to change. He said that as long as teachers were teaching the grade level “spelling strategies,” i.e., phonics skills expected by the district, decisions on how to teach those strategies were up to the individuals. Incongruously, however, he did in fact inform the assistant superintendent about this new teaching method which was not a change in curriculum.

Planning for the New Program

During planning meetings, a number of logistical issues surfaced. For example, the teachers wrestled with how to condense the district-provided lists of skills to fit the time frame of the new program. Ms. Smith offered to make the changes practical and less costly in teacher time by finalizing the list for the teachers (Doyle & Ponder, 1977). Teachers discussed mostly procedural issues such as how to give review tests rather than more substantive issues such as assessing spelling skills in student writing (Borko, 2004; McLaughlin & Talbert, 2001; Wilson & Berne, 1999). When considering new instructional approaches, it is not unusual for teachers to focus on how to avoid major disruptions to classroom routines to avoid chaos for themselves and their students.

Interesting social and power structures emerged as the teachers planned with Ms. Smith for full implementation. It was evident that both Mr. Gaines and Ms. Ubright were deferring to Ms. Carlson’s knowledge and experience with the traditional program as they defined the new one. At one point Mr. Gaines stated to Ms. Carlson, “We’re leaning pretty heavily on what you think.” Again, given that Ms. Carlson had 30 years experience teaching second grade and both her teammates were new to

the grade level and somewhat new to teaching, it was not unusual for them to defer to her experience. This created an interesting dynamic in that Ms. Carlson felt strong allegiance to the traditional approach due to being one of the developers of it and her many years teaching it.

Mr. Wilson, the principal, was somewhat vague on his expectations for the new approach. He considered the weekly spelling tests to be adequate assessment. He did take it a step further, though, and stated that he would also expect to see improvement in spelling in students' written work, at least as much growth as he expected as a result of the traditional spelling program. Ms. Smith, the university professor, did not envision moving away from weekly tests as a goal. She stated that students enjoyed selecting words and giving each other tests and as a result, they felt pride in achieving high scores on their weekly tests. The teachers did not question the purposes of teaching spelling or a rationale for weekly spelling tests, despite an abundance of research critical of such traditional methods of spelling instruction and assessment (Perfetti, Rieben, & Fayol, 1997). When issues arose where consensus was lacking, Ms. Smith consistently suggested leaving the discussion for a later time and moving to the next item on her agenda. It was unclear at these moments why Ms. Smith halted discussions. It could have been a lack of time to complete their agenda as she had limited funds to provide substitute time. Or, she may have felt the teachers would eventually resolve these as they gained experience with the new program. The teachers did not object to letting issues drop without resolution, making it appear that Ms. Smith was the formal leader and they trusted her as the change agent (Ravid & Handler, 2001).

Both the veteran teachers, Ms. Carlson and Ms. Smith, designed most of the changes. Possibly because of their past experiences with traditional spelling instruction, sometimes the veteran teachers disregarded possibilities that could have been more innovative as they nudged the new practices to fit into the traditional district structures of "doing spelling" (Duffy & Roehler, 1986; Richardson, 1990). During the planning meetings, power relationships were unequal due to knowledge, experience, and role. Ms. Smith was the consultative agent who was introducing and championing the changes based on her past successes (Ravid & Handler, 2001). Ms. Smith offered time-saving clerical supports. Ms. Carlson, the informal team leader, defined the new practices based on her past successes; thus, they continued to follow the district-identified spelling skills and maintained many of the traditional program components such as weekly homework and tests. Mr. Gaines and Ms. Ubright were both willing to try the new approaches with support to avoid adding to their already full plates.

Not surprisingly, throughout the planning meetings attention remained on procedural and management issues (Borko, 2004; Guskey, 2002; McLaughlin & Talbert, 2001; Richardson, 1990; Wilson & Berne, 1999). When substantive questions surfaced, Ms. Smith offered answers rather than using the questions as opportunities for reflection about the possibilities of the new program. She calmed teachers' concerns about managing the new program, built up their confidence, and secured university funds to purchase a professional resource book for each teacher. Ms. Smith defined her role as providing answers and resources to guide the teachers in designing and implementing the new program as well as providing ideas for management procedures and giving clerical support. Ms. Smith's leadership might raise the question of equality in the partnership; however, the teachers were all appreciative of Ms. Smith's time, resources, and guidance in this new endeavor.

How Did the Changes Look Different in Practice from Previous Practice?

Two formal classroom observations were conducted in each teacher's room during the winter semester as well as informal visits across the semester. Each visit confirmed that the new program brought increased motivation and excitement about spelling. The teachers also spoke of an increase in time spent on spelling instruction such as time to check with individual students for accuracy and appropriateness of individual lists. Overall, the atmosphere in all the rooms was one of enthusiasm.

On Monday the teachers introduced the skill of the week with a phonics lesson including words that illustrated the rule. The students then became "word detectives" adding examples of words that followed the rule. Students looked at the word wall, classroom library books, textbooks, displays, student displayed writing, and names of objects in the room as they collected their lists of words in notebooks. Differing abilities and motivation were apparent as some students collected ten words while others filled two columns in their spiral-bound notebooks. After about twenty minutes of word collecting, each class came together and each student contributed a new word to the list from the mini-lesson. Students then copied eight words from the generated list for their individual lists. In addition, two common "red words" (i.e., words that are not phonetically correct) were assigned to everyone. Finally, students chose two additional words they wanted to learn for their individual lists. The lists were copied twice, once for a school folder and once for a homework folder, and checked by the teachers. The entire process from teaching the skill to completing the lists took approximately one hour.

In all classes, students administered individual tests to each other on

Fridays. Mr. Gaines followed Ms. Carlson's lead and had students write dictation sentences and take a multiple choice listening comprehension test. Ms. Ubright simply had the students take their spelling tests before moving on to other literacy activities.

What Actually Changed?

The teachers reported that when using the district-supplied lists in the traditional program, more than 70% of the students spelled all the words correctly on the first pre-test. When asked why they used those lists even though they were clearly too easy, one teacher summed up responses, "It's just the way it was always done at [this district]" (Ms. Carlson, personal communication, October 21, 2010). The main difference in the new program was that students were studying individual lists of words rather than the same list for everyone. The students were eager to choose their own words; however, the teachers reported that most of the students needed some guidance in selecting appropriately challenging words. The teachers concluded that slightly more than half of the students selected word lists that were too easy. So, one change was that teachers were asking students to choose more challenging words; they were differentiating instruction, a goal of the new program. In addition, there were procedural changes. The homework assignments varied as children chose from the weekly menus. Both the students and the teachers enjoyed the increased excitement about spelling, and achievement on spelling tests remained high. Introductory lessons were longer, allotting more time to teaching the phonics or spelling rules each week.

Many things appeared similar to the traditional program. For instance, teachers continued to teach the same weekly prescribed list of phonics rules to all students. Each week the individual lists also included two red (sight) words. Two of the teachers continued to give dictation sentences and listening comprehension questions on each test. Weekly homework was assigned on Monday and Tuesday evenings, although the menus provided choices. Assessment continued to consist of a spelling test over lists of words. So the new program was a mixed bag of change and constancy.

How Did Teachers' Paradigms of Teaching and Learning Change?

Our final research question concerning shifts in paradigms proved difficult to answer. Two themes emerged in regards to paradigm shifts: (1) improved spelling in student writing and (2) differentiation of instruction across the curriculum. Based on the limited reforms in spelling instruction, we might conclude the teachers' paradigms did not change,

but the complexity of teaching does not allow such a conclusion based on our data. Although casual observers could question the depth of reform in the new approaches, the teachers believed they made significant improvements in spelling instruction for students. All three teachers stated the new practices were successful, citing their students' increased engagement and enjoyment of spelling instruction as well as success rates comparable to those in the traditional program.

Despite their excitement about the program and assertions that "it was working great," none of the teachers cited the impact of the program on their students' writing, until we asked probing questions. They each made comments similar to this one by Ms. Ubright: "[T]his has dramatically increased the spelling in their personal writing" (personal communication, May 17, 2011); yet, none of the teachers produced evidence of improvement in students' writing, even when asked. Ms. Carlson stated, "In all honesty I am seeing improvement but as is often the case...those who are good spellers are better at carrying over to everyday writing" (personal communication, March 11, 2011). The teachers seemed comfortable about the impact of the program on their students' writing, the goal of any spelling program; however, they did not appear to feel any need to use improvement in spelling within student writing to assess the success of the program. Thus, the paradigm shift the teachers made in regards to spelling instruction appeared limited in nature rather than being a deep, defining change in their beliefs about teaching and learning.

As we considered the question of differentiation, our data was inconclusive. Recall that the teachers freely admitted the original spelling program was too easy for most of their students, yet prior to prompting from Professor Smith, none differentiated spelling instruction. When asked how the new spelling program influenced their teaching in other ways, the teachers defensively noted they have always differentiated their instruction in other subjects. Mr. Gaines wrote, "This has reinforced our belief in differentiated instruction" (personal communication, May 17, 2011). Because this study focused only on spelling instruction, we were unable to attest to the validity of this answer. However, based on informal data gathered from short observations and anecdotal information from teacher candidates working in these rooms, this statement appears accurate. For instance, the teachers used literacy stations during reading instruction; writing workshop for writing instruction; and other approaches to language arts instruction that enable students to work at different levels as they learn. Thus, the question arises as to why all three teachers were content to teach spelling in a way that they openly stated was not meeting the individual needs of their students. The an-

swer to our final question as to whether the three teachers' paradigms of teaching and learning changed as a result of the new spelling program remained unclear.

Discussion

The new spelling program of the second grade teachers as well as their beliefs about spelling would be categorized as transactional rather than transformational. Transactional changes are more superficial in nature and do not alter the stability of schools (Cuban, 1988; Hersey, Blanchard, & Johnson, 2001; Kezar, 2001). Transactional changes do not break frames or fundamental procedures in the school or classroom, although some individual changes are evident. The new practices in this study cannot, at this time, be considered transformational. Although the teachers altered their spelling instruction by differentiating the content and process for learning spelling, there is no evidence that they differentiated their practices in any other subjects (Tomlinson, 2004; Tomlinson, Brimijoin, & Narvaez, 2008). The new second grade spelling program did not alter the structure or culture of their classrooms as a whole and had no noticeable effect at the school-wide level. Transformational changes reflect pervasive reforms to the teachers' behaviors and beliefs across their entire teaching practice, yet our data does not reveal substantial changes beyond the spelling program. However, the teachers' new spelling instruction was evident and did have impacts on the teachers' sense of self-efficacy.

The changes the teachers made in spelling instruction appeared to increase student academic motivation. The use of a Friday spelling test continues to be a widespread practice today; yet, this practice is often frustrating and defeating for children who struggle with literacy in general and spelling in particular (Alderman & Green, 2011). In spelling, as in most subjects, academic motivation is strongly connected to success, and the new spelling program appeared more motivating for the students. Alderman and Green noted that students can be motivated by grades or by learning. The enthusiasm the students displayed in collecting words, learning their individually chosen lists, and succeeding on weekly tests indicate the new program motivated these students for learning rather than simply for grades. Ms. Smith and the teachers reported the students were talking about spelling rules and words all day long when reading and writing. The teachers and principal noted the report cards focused on learning the phonics skills and did not report percentages from spelling tests, so the focus was on learning to spell using the phonics skills.

Three types of actions need to be present for teachers to increase student academic motivation toward learning rather than grades: (1) meaningful, challenging, and varied tasks; (2) evaluation that stresses effort over ability and are non-competitive; and (3) students are part of decisions in their academic work (Ames, 1992). The new spelling program offered students many opportunities to make spelling meaningful through word collecting, choosing individual words, and selecting homework options. Students strived to learn words they chose, stressing effort over ability. Clearly, students participated in finding and selecting words for their individual word lists and in choosing homework options. The new spelling program meets the three criteria for increasing student academic motivation, and all three teachers reported their students were in fact more excited and interested in spelling.

The broader question of this study was whether the changes teachers made in spelling instruction led to paradigm shifts in the teachers' beliefs about teaching and learning. Changing paradigms of teaching and learning is both a problem of "promoting learning in adults" (Elmore & McLaughlin, 1988, p. 42) and of teachers feeling they have the power to make the changes within their work contexts (Freedman, Jackson, & Boles, 1983; Reeves, 2009; Sarason, 1990; Standerford, 1992). In this study the teachers were working against multiple factors that limited their interest and abilities to make changes. First, because two of the three teachers were new to second grade and had limited background in the foundational phonics skills, the veteran teacher remained the team leader even though initially she was the least interested in trying the new program. The two less-experienced teachers wanted to get comfortable with the second grade curriculum and procedures before taking on substantive alterations to grade-level-wide practices. As the "new" teachers to second grade, they relied on the veteran teacher throughout the school year and across all subjects. Accordingly, they portrayed a reverence for her experience and tended to avoid suggestions that contradicted her time-honored practices. Additionally, the building administrator reported teachers were free to teach in any way they desired as long as they taught the approved curriculum. However, in actuality, when this change began, Mr. Wilson took a written rationale and explanation to the district administrator before teachers proceeded. Mr. Wilson also noted it was important for the three teachers to inform their colleagues about the new practices to avoid future problems. When asked the nature of "future problems," Mr. Wilson gave the example of third grade teachers finding increased behavior problems when these students returned to traditional spelling instruction and became bored. So although the reported district policy purports that teachers are free

to make independent decisions about appropriate pedagogy, the enacted policy appeared to be more restrictive. Mr. Gaines stated he felt comfortable making decisions about his instructional practices when he was the only kindergarten teacher; whereas, he was unwilling to make such decisions without the whole team agreeing and making the changes in second grade. Mr. Wilson scheduled weekly common planning time at grade levels so teachers could inform each other and plan together. Changing pedagogical practices, although touted as left to individual teachers, was more complex within this context than was officially recognized.

The factor that tipped the scales toward actualizing these changes was the outside support of Professor Smith. Ms. Smith was committed to providing innovative ideas for the teachers in this building and hoped to hold a summer professional development day for all teachers in the building to demonstrate ways to meet students' needs while managing time effectively. Ms. Smith's leadership and expertise were easily accepted as she had been an award-winning teacher in this district for many years prior to moving to the university position. Her support and guidance for the new spelling program were instrumental in the success of the program .

The depth of change in these classrooms remained unclear to the researchers. Clearly, the three teachers felt hopeful, and the students were doing as well as, and possibly better than, they did previously. However, none of the teachers, Ms. Smith, nor Mr. Wilson discussed or defined expected improvements in student achievement in advance. The success of the new program was measured by increased excitement about spelling and increased recognition of the phonics rules in students' reading and writing. The new practices appeared largely procedural rather than substantive as the teachers continued to follow the same set of phonics skills, assign homework, and test over lists of words. The Common Core State Standards for spelling state that second grade students should be able to "generalize learned spelling patterns when writing words (e.g., cage badge; boy boil)" (Fountas & Pinnell, 2011, p. 28). This standard leaves teacher discretion on the pedagogy while maintaining focus on application of spelling rules in student writing. The teachers in this study did not focus, discuss, or monitor improvements in student spelling within independent writing during the year of the study. Based on our data, we concluded the change was largely one of procedure rather than a paradigm shift about teaching spelling or teaching in general.

The increase in teacher self-efficacy, however, appeared to be profound for these teachers. Teachers must have both the will and the capacity to improve their instruction (Kaasila & Lauriala, 2010; McLaughlin, 1987; Parise & Spillane, 2010). The capacity to change can be created through

trial and error as teachers implement innovations and learn as they go; the will to improve is related to both the autonomy teachers feel in their professional roles and the personal characteristics of teachers as individuals (Standerford, 1992). The ability to make professional decisions is the essence of teaching, and teachers who believe they can positively affect student learning will continue experimenting with new ways of teaching, asking questions, criticizing their own teaching, and building relationships with colleagues who support them in their efforts (Dembo & Gibson, 1985; Duffy 1982; Kaasila & Lauriala, 2010; Opfer, Pedder, & Lavicza, 2010; Zumwalt, 1988). As teachers succeed with innovations, they develop self-efficacy, see themselves as lifelong learners, and gain in confidence to take risks and reconceptualize their roles as teachers (Ashton, 1984; Elmore & McLaughlin, 1988; Runhaar, Sanders, & Yang, 2010; Zumwalt, 1988).

The teachers in this study grew in confidence as they implemented and experienced perceived successes with the new spelling program. Ms. Smith secured funding to support all three teachers going to the state reading conference to present their new program. Their session attracted nearly twice the expected number of educators, totaling 60 attendees. The interest in their session further encouraged the teachers, and they presented at the State conference again the following year. The enthusiasm of their students, of educators across the state, and of Ms. Smith supported the three teachers in gaining confidence about the changes they made. They also benefited from the opportunities to plan, learn, and reflect with each other in informal ways, e.g., daily hallway discussions on management and logistical challenges. Though teachers belong to many concentric learning communities, their interactions with colleagues across the hall shape their personal teaching identities and standards of practice (Graven, 2004). Enthusiasm can be contagious and have a “snowball effect,” and teachers feel supported and valued as professionals when they are able to participate in both individual and group decision making (Gabriel, Day, & Allington, 2011, p. 39). The three teachers’ enthusiasm and confidence grew as they received recognition from Ms. Smith and the larger professional community. This growth in confidence and self-efficacy can in itself be a paradigm shift for teachers as they see themselves as leaders with valuable knowledge to share. Such a shift in their own view of their roles as educators beyond their classrooms may lead to broader reforms in their classroom instruction over time.

Implications and Areas for Further Study

Our nation’s schools are passengers on a speeding train of educational reform as we move into the 21st Century. Much of the reform is

conceived and driven by politicians, policymakers, and business leaders while teachers' voices typically remain on the fringe of reform discussions. The lack of teachers' voices in reforms means that reform efforts are often designed by those unfamiliar with and far from the daily demands and challenges of teaching in today's inclusive classrooms. Our study uncovers some of the joys and challenges three teachers faced as they attempted to improve spelling instruction, a subject that is typically taught much the same as it was half a century ago (Alderman & Green, 2011). The teachers struggled with the complexities of changing practice such as finding personal and logistical resources to tackle the new practices; gaining support from administrators, colleagues, and parents; defining the change; and implementing new pedagogical and management techniques to make the new programs successful. Given these challenges, all three teachers and their university mentor felt they were successful as evidenced in student motivation and renewed interest and energy among the teachers for teaching spelling. Perhaps the most promising change was the growth in self-efficacy of the teachers as they took the risks required to make instructional changes and experienced success and recognition.

David K. Cohen has long written about teaching as an impossible profession of human improvement due to the structure of schools, lack of resources, and dependence on students' will to learn (Cohen, 2011). Much of educational reform has been touted as "tinkering toward utopia" or making simple changes while leaving substantive issues unchallenged (Tyack & Cuban, 1995). Cohen, Tyack, and Cuban (1995), as well as numerous others, have presented multiple historical reasons why changing teaching practice is slow, steady work (Elmore & McLaughlin, 1988). Following instructional reforms from inception to fruition provides insights into the myriad complexities teachers face in exercising professional decision-making and implementing innovations within the context of busy classrooms. Such research holds promise for finding ways to support teachers making substantive reform from the inside while receiving support from the outside.

Our study is limited to a small number of teachers in one particular school. Further research is needed to expand the findings of this study and to confirm or challenge our contention that teachers reforming their practice remains a minefield of challenges and a universe of possibilities. Additional research exploring how to make spaces within teachers' work lives for individual and collective learning and improvement of their practice is crucial for educational reform, particularly with regard to understanding how to transform teachers' increased sense of self-efficacy into substantive rather than procedural changes. To improve classroom

teaching and support shifts in teachers' paradigms commensurate with 21st Century needs for educating our youth, it is vital for future research to study educational reform from the inside and to include teachers' voices and experiences in reform discussions. Our study shows that these three teachers were sitting on a dynamite idea, but needed an outside spark to light the explosion and create the energy and willingness to change. To expand the changes made into transformative changes, it is clear that these teachers needed more time for collaboration in planning and reflecting as well as more support to manage the logistics of the reforms. Empowering teachers as the professionals they are meant to be and providing recognition for their efforts to improve can further teachers' self-efficacy, a powerful tool that educational reformers have yet to employ as a means of improving our schools. Our study supports the notion that powerful instructional reform does happen from the inside (teacher driven), but may need igniting from the outside with guidance, support, recognition, and above all, belief in teachers' willingness and abilities to improve.

References

- Alderman, G. L., & Green, S. K. (2011). Fostering lifelong spellers through meaningful experiences. *The Reading Teacher*, 64(8), 599-605.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3), 261-271.
- Ashton, P. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. *Journal of Teacher Education*, 35(5), 28-32.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Brodie, K. (2005, July). Using cognitive and situative perspectives to understand teacher interactions with learner errors. Paper presented at the Conference of the International Group for the Psychology of Mathematics Education, Melbourne, Australia.
- Cohen, D. K. (2011). *Teaching: Practice and its predicaments*. Cambridge, MA: Harvard University Press.
- Cuban, L. (1988). Constancy and change in schools. In P. Jackson (Ed.), *Contributing to educational change: Perspectives on research and practice* (pp. 85-106). Berkeley, CA: McCutcheon.
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). State of the profession: Study measures status of professional development. *Journal of Staff Development*, 30(2), 42-50.
- Dembo, M. H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *The Elementary School Journal*, 86(2), 173-184.
- Doyle, W., & Ponder, G. (1977). The ethic of practicality and teacher decision-making. *Interchange*, 8, 1-12.
- Duffy, G. G. (1982). Fighting off the alligators: What research in real classrooms

- has to say about reading instruction. *Journal of Reading Behavior*, 14(4), 357-373.
- Duffy, G., & Roehler, L. (1986). Constraints on teacher change. *Journal of Teacher Education*, 35, 55-58.
- DuFour, R. (2004). What is a professional learning community? *Educational Leadership*, 61(8), 6-11.
- Eaker, R., DuFour, R., & DuFour, R. (2002) *Getting started: Reculturing schools to become professional learning communities*. Bloomington, IN: Solution Tree.
- Elmore, R. R., & McLaughlin, M. W. (1988). *Steady work: Policy, practice, and the reform of American education*. Santa Monica, CA: The Rand Corporation.
- Fairbanks, C. M., Freedman, D., & Kahn, C. (2000). The role of effective mentors in learning to teach. *Journal of Teacher Education*, 51(2), 102+
- Fountas, I. C., & Pinnell, G. S. (2011). *The common core standards for language and literacy and the continuum of literacy learning, grades preK-8: A guide to teaching*. Portsmouth, NH: Heinemann.
- Freedman, S., Jackson, J., & Boles, K. (1983). Teaching: An imperiled "profession." In L. S. Shulman & G. Sykes (Eds.), *Handbook of teaching and policy* (pp. 264). New York: Longman.
- Fullan, M. (2001). *The new meaning of educational change*. New York: Teachers College Press.
- Gabriel, R., Day, J. P., & Allington, R. (2011). Exemplary teacher voices on their own development. *Phi Delta Kappan*, 92(8), 37-41.
- Giebelhaus, C. R., & Bowman, C. L. (2002). Teaching mentors: Is it worth the effort? *The Journal of Educational Research*, 95, 246-254.
- Goos, M. (2008). Sociocultural perspectives on learning to teach mathematics. In B. Jaworski & T. Wood (Eds.), *International handbook of mathematics teacher education* (Vol. 4, pp. 75-91). Rotterdam, The Netherlands: Sense Publishers.
- Graven, M. (2004). Investigating mathematics teacher learning within an in-service community of practice: The centrality of confidence. *Educational Studies in Mathematics*, 57, 177-211.
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3), 381-391.
- Guskey, T. R., & Huberman, M. (Eds.). (1995). *Professional development in education: New paradigms and practices*. New York: Teachers College Press.
- Hershey, P., Blanchard, K. H., & Johnson, D. E. (2001). *Management of organizational behavior* (8th ed.). Upper Saddle River, NJ: Pearson.
- Huxham, C. (Ed.). (1996). *Creating collaborative advantage*. London, UK: Sage.
- Kaasila, R., & Lauriala, A. (2010). Towards a collaborative, interactionist model of teacher change. *Teaching and Teacher Education*, 26(4), 854-862.
- McLaughlin, M. W. (1987). Learning from experience: Lessons from policy implementation. *Educational Evaluation and Policy Analysis*, 9(2), 171-178.
- McLaughlin, M. W., & Talbert, J. E. (2001). *Professional communities and the work of high school teaching*. Chicago: University of Chicago Press.
- Merriam, S. B. (1998). *Qualitative research and case studies applications in education*. San Francisco: Jossey-Bass.

- Opfer, V. D., Pedder, D. G., & Lavicza, Z. (2010). The role of teachers' orientation to learning in professional development and change: A national study of teachers in England. *Teaching and Teacher Education, 1*, 1-11.
- Parise, L. M., & Spillane, J. P. (2010). Teacher learning and instructional change: How formal and on-the-job learning opportunities predict change in elementary school teachers' practice. *The Elementary School Journal, 110*(3), 323-346.
- Perfetti, C. A., Rieben, L., & Fayol, M. (Eds.). (1997). *Learning to spell: Research, theory, and practice across languages*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ravid, R., & Handler, M. G. (2001). Models of school-university collaboration. In R. Ravid & M. G. Handler (Eds.), *The many faces of school-university collaboration* (pp. 3-10). Englewood, CO: Teacher Ideas Press.
- Reeves, D. B. (2009). *Leading change in your school: How to conquer myths, build commitment, and get results*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Richardson, V. (1990). Significant and worthwhile change in teaching practice. *Educational Researcher, 19*(7), 10-18.
- Runhaar, P., Sanders, K., & Yang, H. (2010). Stimulating teachers' reflection and feedback asking: An interplay of self-efficacy, learning goal orientation, and transformational leadership. *Teaching and Teacher Education, 26*(5), 1154-1161.
- Sarason, S. (1990). *The predictable failure of educational reform*. San Francisco: Jossey-Bass.
- Sfard, A. (1998). On two metaphors for learning and the dangers of choosing just one. *Educational Researcher, 27*(2), 4-13.
- Sparks, G. M. (1988). Teachers' attitudes toward change and subsequent improvements in classroom teaching. *Journal of Educational Psychology, 80*(1), 111-117.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Standerford, N. S. (1992). Improving reading instruction through state policy: Two local stories. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.
- Tomlinson, C. A. (2004). *Fulfilling the promise of the differentiated classroom: Strategies and tools for responsive teaching*. Alexandria, CA: ASCD.
- Tomlinson, C. A., Brimijoin, K., & Narvaez, L. (2008). The differentiated school: Making revolutionary changes in teaching and learning. Alexandria, CA: Association of Supervision and Curriculum Development.
- Tyack, D. B., & Cuban, L. (1995). *Tinkering toward Utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.
- Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education, 24*, 173-209.
- Van de Ven, A. H., Emmett, D. C., & Koenig, R. (1980). Frameworks for interorganizational analysis. In A. R. Neghandi (Ed.), *Interorganizational theory* (pp. 19-38). Kent, OH: Kent State University Press.
- Yin, R. (2009). *Case study research: Design and methods*. Thousand Oaks, CA:

Sage.

Zimmerman, J. (2006). Why some teachers resist change and what principals can do about it. *NASSP Bulletin*, 90, 238-249.

Zumwalt, K. K. (1988). Are we improving or undermining teaching? In L. Tanner (Ed.), *Critical issues in curriculum (Eighty-seventh yearbook of the National Society for the Study of Education, Part I)* (pp. 148-174). Chicago: University of Chicago Press.