

Education Policy Analysis Archives

Volume 11 Number 12

March 27, 2003

ISSN 1068-2341

A peer-reviewed scholarly journal

Editor: Gene V Glass

College of Education

Arizona State University

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Teacher learning in context: The special case of rural high school teachers

Jay Paredes Scribner
University of Missouri-Columbia

Citation: Scribner, J. P. (March 28, 2003). Teacher learning in context: The special case of rural high school teachers, *Education Policy Analysis Archives*, 11(12). Retrieved [date] from <http://epaa.asu.edu/epaa/v11n12/>.

Abstract

Falling under the umbrella of teacher quality, professional development is an important policy issue in US public education. Understanding teacher learning and its relationship to teacher work is critical if efforts to improve teacher quality are to be successful. This article examines one overlooked context in the discourse about teacher learning and work—rural high schools. The study focuses on 20 teachers across 3 case study schools and conceptualizes the relationship between teacher learning and work according to three contexts: the core, intermediate and peripheral contexts. These contexts are explored and important features

discussed.

A growing consensus exists among scholars, policymakers, and education leaders that sound organization and implementation of professional development enhances teacher quality and, as a result, student learning. For instance, it has been argued that professional development resources should focus on (1) closing the gap between teachers' knowledge and student performance goals (Hawley & Valli, 1999; Sykes, 1999), (2) strengthening teachers' understanding of the connections between content and students' thinking and learning (Thompson & Zeuli, 1999), and (3) creating a tighter organizational fit between teacher learning activities and teacher work (Little, 1999). In spite of this growing consensus, traditional approaches to professional development persist in most schools. This study continues a line of research (Scribner, 1999) that aims to more deeply understand the reasons behind this persistence. Specifically, the study explores the relationship between teacher work context and teacher learning in rural high schools. In so doing, the study describes from the perspectives of teachers a broad view of work context that spans across the institution of education, with each contextual level influencing teacher learning in different ways.

In short, rural schools provide an important context for study for several reasons. Foremost, rural schools have been historically under studied. But also, exploring teacher learning in rural contexts provides a platform from which to question assumptions inherent in prevailing conceptions of effective professional development policy and practice, most of which emanate from research that focuses on urban and suburban teachers and students. The following research questions were addressed:

- What are the predominant features of work context according to these teachers?
- How does the work context of rural high school teachers influence how they learn?

In the discussion section I explore the relationships among the themes developed and draw implications for policy, practice, and future research.

Conceptualizing Teachers' Work Context

Describing the nature of teacher work has been the focus of more than a few researchers (Eraut, 1994; Hargreaves & Goodson, 1996; Huberman, 1993; Jackson, 1986; Johnson, 1990; McLaughlin, 1993; Scribner, 1999; Talbert & McLaughlin, 1996). While the purpose of this study was to further develop a grounded theory to explain the relationship between work context and teacher learning, it is useful to examine how others have conceptualized teacher work. Johnson (1990) conceptualized teacher work as being comprised of multiple dimensions including, political, economic, physical, organizational, psychological, cultural, and sociological. As such, Johnson's "constellation of workplace variables" described the workplace as a place where structure of formal authority, organizational policies and procedures, and informal norms that shape behaviors, beliefs, and actions converge. To further complicate matters, the manner with which these variables converge in any given school or district varies across organizations. What is fairly constant, Johnson argues, is the *presence*—in some form—of these variables.

Two general perspectives of the relationship between teachers and their work context

obtained in the literature. One view took a deterministic slant—that teachers are almost fully constrained by their work context. For example, Hatton (Hatton, 1987) argued that “situational constraints” inherent in teachers’ workplaces exist in the present and past to shape teachers’ dispositions, behaviors, and actions taken in the here-and-now. One such constraint, resources, can support a status quo approach to practice in cases where the resources to support innovative ideas do not exist. A more subtle constraint, hidden pedagogies (Denscombe, 1980, 1982; Hatton, 1987), reflects the cultural and historical dimensions of school contexts that contribute “significantly to the formation of culturally based attitudes, preference, and dispositions which have their own momentum” (Hatton, 1987).

Others, however, argued that while organizational constraints might influence the nature of teacher work, teachers maintain a certain freedom to act autonomously within the constraints, or presumably to expand the limits of those constraints (Grant & Sleeter, 1987). Grant and Sleeter argued that “teachers *do* have room to act, and they do not all act in the same way, in spite of similarities in their present and prior experiences” (p. 62). In other words, the fact that teachers working in similar work environments with identical constraints can act in different ways challenges the hegemonic view of teacher work context and its relationship to teacher action. Ultimately, rather than posing an opposite view of the deterministic perspective of teacher work, Grant and Sleeter pose a middle ground argument. That is, teacher action is “neither totally free nor totally determined” (p. 62). Instead, their autonomy lies in a gray area in which “actors draw on practical knowledge to guide their actions, often without acknowledging many of the taken-for-granted conditions that give rise to this practical knowledge, or the unintended consequences of their actions which tend to reproduce those conditions” (p. 62). This middle ground approach supports findings by Scribner (Scribner, 1999) that teachers experience their professional learning broadly, but that work context can shape the possibilities of teacher learning in subtle and not-so-subtle ways (Eraut, 1994; Jackson, 1968, 1986).

Two of the most immediate contextual factors facing teachers within schools are students and teachers’ subject matter. Most would agree with McLaughlin (1993) that students are the most prominent feature of the school as workplace. She argued that students help to define the context of teacher work through their diversity, their individual and cohort personalities, their and their families’ commitment to school, issues related to school safety, and so on. McLaughlin also found that teachers responded to students in one of three ways: 1) maintaining traditional standards; 2) lowering expectations for coverage and achievement; or 3) adapting practices and pedagogy. While teachers’ perceptions of their students influenced how teachers approached their work, a school’s mission, organizational structure, formal policies and “patterns of communication” (p. 89) also shaped teachers’ objectives toward teaching. However, in high schools the contextual factor of most significance in determining the nature of professional community was the department (McLaughlin, 1993; Talbert & McLaughlin, 1996) where teacher work processes shaped how they perceived their students’ abilities, their subject matter, and their relations with other teachers.

Eraut (Eraut, 1994; Scribner, 1999; Talbert & McLaughlin, 1996) provided a framework useful for understanding how the contexts of teacher work might contribute to teacher learning. The classroom context—where teachers spend the bulk of their professional lives—“corresponds with more private contexts in which normal professional practice is

produced in a relatively routine manner without questioning assumptions on which it is based” (p. 26). Eraut saw a strong link between classroom contexts and teacher learning. He argued that, “teachers are in a ‘doing’ environment more than a ‘knowing’ environment” (p. 31), and therefore, tend to rely on procedural (how to) knowledge that often is acquired unreflectively. In other words, knowledge acquired is not atheoretical, but theories that guide practice remain implicit and serve to make life tolerable. In this regard, Denscombe (Denscombe, 1980) warned that when guided by implicit theories teachers are more susceptible to the displacement of one set of teaching goals for another—i.e., shifting focus to controlling the classroom at the expense of student learning. Thus, while important, knowledge that guides practice often remains tacit; and in the isolation of the “classroom, the only significant validator of knowledge are the teachers themselves....the validation is individual rather than collective” (Eraut, 1994, p. 32).

Clearly, the school also serves as an important context of teacher work. Professional learning in the school context focuses primarily on the business of the organization. For example, developing consensus and solidifying teachers’ understanding of the school’s mission and vision are central learning activities (McLaughlin, 1993). Learning the language of policy (Eraut, 1994) is an ever increasing focus of school learning also. The language of education reform, such as performance assessment, high stakes testing, and other accountability measures, often becomes the focus of teacher learning for at least a couple of reasons. First, teachers must make sense of reforms that are promulgated from “on high.” Second, teachers often sense the political dimensions of their work and realize the need to be able to communicate the purposes and potential impacts of the reforms to parents and other education stakeholders (Bredeson & Scribner, 2000). Thus, learning is sought to cope with external demands, not necessarily to expand the pedagogical repertoires or content expertise of teachers. As a result, it is at the school (and district) level that much professional development is associated with formal activities that are well suited for “getting people on board with the policy language” (p. 31).

Finally, teachers work in a more diffuse context, also. Eraut (1994) calls this the academic context, while others have described professional networks such as professional associations as places where teachers acquire knowledge (McLaughlin, 1993; Scribner, 1999). Contrasted with the procedural and tacit knowledge acquired in the classroom, the academic context is where teachers acquire propositional knowledge and where theories are made explicit. A specialized language characterizes knowledge acquired in the academic context, with a high value placed on understanding theories rooted in the disciplines (Eraut, 1994). Furthermore, in this context knowledge is typically assessed formally to measure its acquisition, although determining how it is ultimately used is less sure. While the knowledge acquired in the academic context is arguably detached from practice, Eraut argues that the knowledge and habits of mind acquired in the academic context are not irrelevant to teachers, “...the academic context has norms that support and expect learning to be a lifelong process, that new knowledge will be acquired by all members of the institution, and that new knowledge will be put to good use” (p. 30). Thus, the academic context is where theories are made explicit for critical analysis.

Teacher Learning: Best Practices

In spite of the attention paid to teacher professional development, organizational learning in schools, professional community, and so on, the act and impact of teacher learning remains difficult to observe and even more challenging to measure over the long term. Fullan's (Fullan, 1995) description of the potentials and limits of professional development continues to ring true. Specifically, one dilemma stands out. That is, as we continue to seek ways to foster school improvement we struggle with balancing the learning needs of organizations and the individual professionals within them (Scribner, Hager, & Madrone, in press). A second dilemma underscores the fact that meaningful change ultimately occurs locally. But still, the change agenda is largely determined external to the school, perhaps at the district level, but more likely at the state level. Finally, the focus of what professional development efforts should look like and focus on continues to be debated. For instance, scholars have argued convincingly that the purposes of professional development in any given school or district should be determined by the gap between student achievement goals and actual student performance (Thompson & Zeuli, 1999). However, actually identifying the teacher learning activities that might fill that gap is easier said than done. Defining professional development as a gap implies that teachers have not been achieving adequately themselves. While certainly the case for some teachers, not all teachers are failing. Secondly, research also suggests that teachers have multiple reasons for engaging in professional learning activities that they believe will assist them in becoming more effective with students, but to the external observer may appear to be unhinged from the core issue at hand—teaching and learning (Scribner, 1999).

With persistent challenges like these, the staying power of teacher professional learning as a policy concern suggests that the concept is important to the lives of students and teachers. Furthermore, in spite of the dilemmas discussed above, a consensus on professional learning practices has emerged that can serve as a useful guide. Consensus surrounding teacher learning today focuses on the importance of learning in context and acquiring knowledge that is relevant to one's professional context. Furthermore, it has been argued that the specific focus should be directly linked to student learning (Sykes, 1999). In addition, to make professional development meaningful in a reform environment, deeper coordination between schools and districts must occur to ensure its relevance. Sykes argued that the coordination between schools and districts should ensure that professional development is driven by the "teacher-student learning connection for the selection and design of teacher professional development" (p. 159). Further, teacher learning should focus on deepening teachers' knowledge of the specific content that students are expected to know. And finally, multiple sources of evidence (especially, the assessment of student work) should be integrated into teacher learning experiences.

Thompson and Zeuli (1999) argued that in the face of standards based reforms, professional development for teachers has failed. Interestingly, they argued that because of the nature of teachers and teaching, tinkering with the social and structural arrangements of teacher learning is insufficient. Indeed, policy makers must ensure that the professional development content and pedagogy are appropriate. In their view, "appropriate" professional development assists teachers with developing their own ideas and connections among the materials that students are to learn, understanding the various ways students experience a given content area, and learning how to foster student engagement with the material.

How teachers experience their own learning has also become an important dimension of teacher professional development. Challenging the notion that teachers are merely tinkerers who favor improving around the margins of their expertise, some believe that transformative learning should be the goal of professional development. For instance, Thompson and Zeuli argued that to be meaningful teacher learning activities must provide cognitive dissonance-creating and dissonance-resolving opportunities related to teachers' classroom experiences. This reflexive approach to professional learning should be designed to develop "new conceptual knowledge (understanding), rather than, say, new habits of practice" (Thompson and Zeuli, p. 356). It is through new conceptual knowledge that new practices develop.

Methods

The present study employed qualitative methods and procedures of grounded theory in three rural public high schools in a midwestern state to further explain the relationship between teacher professional development and the context of teacher work at the high school level (Scribner, 1999). The study utilized a multiple case study design (Yin, 1994). Data collection and analysis occurred over two academic years and involved several stages. First, three rural high schools were identified and an initial investigation was made to ensure the schools were indeed rural in nature (e.g., small, dispersed school populations, seasonally-based community economies). Second, using purposive sampling techniques, in-depth interviews were conducted with 20 teachers across content areas (academic and career and technical education) and years of teaching experience. Teacher interviews focused on teachers' perceptions of their work environments, their learning strategies, and the connections between the two. School administrators were interviewed to develop an understanding of each school's organizational goals and philosophy toward teacher professional development. Interviews lasted from 45 minutes to 2 hours and were audio-taped and transcribed. In each school focus group interviews with previously interviewed teachers were conducted to further explore emergent themes that developed from the analysis of initial interviews and observations. Third, observations of teachers at work and in learning activities were also conducted. In each school three teachers were shadowed for one day each; these teachers were later interviewed to gain further insights. In addition, schools were each visited on other occasions to observe such activities as professional development days, faculty meetings, and extracurricular activities to gain a deeper understanding of teacher work. Finally, teachers were provided an opportunity to read a draft of the manuscript. Several teachers provided comments and insights to further hone categories.

Findings

As a result of a constant comparative analysis of the data, this section explores three contexts of teacher work: the core, intermediate, and peripheral contexts. Each context was described according to its dimensions, including how those dimensions facilitate or impede teacher learning. Most importantly, findings showed that teachers defined their work context more in terms of relationships (and the nature of those relationships) and less in terms of physical plant, resources, pace of work on so on. By examining these relationships in terms of dimensions occurring at different contextual levels the reader will see more clearly how context, broadly defined, influences teacher learning.

The Core Context

The “doing” environment of the classroom is represented here as the core context. Like an atom, the core context is difficult to change precisely due to the strength of relationships that define it. Teachers and their relationships between students and teachers’ subject areas comprise this triadic relationship. While the intensity of interaction among this triad may provide a rich source of continuously renewing knowledge, it also requires expeditious problem resolution. This need for decisive action makes the core context difficult to penetrate with knowledge from other contexts.

Students as context. Students did more to shape the context of teacher work than any other dimension. Teachers were keenly aware that students shaped their work contexts hourly, daily, by semester, and each year. The fluidity of the student dimension manifested itself in the ever-changing student body. Teachers were aware that on any given day, semester, or year, their students might come to school with different set of needs. A math teacher described how the changing needs of students influenced his learning and classroom practice:

You learn from year to year that you can't teach different students the same way. And you won't know that until you get involved with the problems, and what you have to be really flexible. In other words, you have a standard way of doing business, but you're going to see the look on their face, the big question mark come across, and if you see a lot of that, then you're probably going to have to back up and start over again and try a different approach.

However, the fluidity of students also created daily learning opportunities for teachers. According to teachers, students constantly, and in ways difficult to predict, questioned teachers regarding subject matter and other issues that expanded teacher understanding of the content. A novice English teacher described the phenomenon:

The reason I don't like to use tests, like say a Shakespeare unit we just did, every class is very different, and every class is going to have a very different discussion, and they're going to focus on different elements. They're going to be drawn to a certain character or they're more into analyzing the motivations instead of looking at the overall plot, so I don't like to treat every class the same.

This type of student question brought to light the different levels of subject matter knowledge needed to engage students and facilitate learning. As a first year teacher described having in-depth knowledge of the details of her subject matter were key to “running a smooth class,” and it was her students that acted as a catalyst for her learning by causing her to reassess and expand her own content knowledge of world history:

I was teaching students about Hannibal and his elephants back in ancient history, and one of my students goes, ‘well did they use camels in warfare?’ I really don't know. Let me see if I can't find that out, and I actually was able to find the information that, yes, the Assyrians used camels in warfare, and that told me that, yes, it's good to have the broad picture, but I need to know the details to make it more interesting and be able to answer some of the questions for the kids.

Another predominant teacher learning theme within the student dimension was learning how to control the classroom. Teachers who addressed this phenomenon described a negotiation process that, through trial and error, allowed teachers to control the classroom in order to achieve learning objectives by establishing a good rapport with students. A veteran English teacher was observed relying on this rapport to motivate an otherwise unmotivated section of students one particular day. She told them:

You tell me, what do you want to learn? Because, you know, you've got to be in here; I'm not cutting you loose any time soon, so what will make sense to you? This is an English class; you know you've got to do some kind of reading, some kind of writing; we've got to communicate with each other. We know this has to be done. What do you want to do? How do you want to apply it?

That afternoon she explained her approach toward her students:

That really helped because it gave them a little bit more ownership. Because I do find that a lot of the kids, especially the ones who are not college-bound, do not take ownership of their education. And they'll even say, 'I'm sorry I didn't get my homework done.' And I say, 'you don't need to apologize to me. I've already graduated from high school. This does not affect me. This is yours. You should own it; you're the one that you're messing up.'

Another English teacher described how she moved from direct instruction to a more collaborative learning environment in response to student reaction and behavior:

I've learned to deal with students most from experiences, I guess. When I first started, I was very traditional, direct instruction, whole group, follow the Madeline Hunter method. Then as I learned more about what it is to be a teacher and what I learned from my students and what they needed, then I began to refine methods and to relax a little bit....One thing I resent about teaching is that you have to spend so much time dampening little fires, especially if it's a whole-class instruction model or direct instruction with the whole class. So, hopefully, working with smaller literature groups, more group activities, you can engage the students better.

Subject matter as context. Stein and D'Amico (Stein & D'Amico, 2000) argued that the degree to which a subject area is perceived as a well defined discipline (e.g., mathematics) or a more loosely defined set of knowledge and concepts (e.g., social studies or language arts) influences how teachers understand and approach their subject matter. These data suggested that these differences might also influence how teachers approach their learning. Teachers in the core academic areas tended to have broader notions of professional learning than their career and technical education colleagues. For example, teachers in the arts and career and technical education areas described learning that focused on developing their own technical skills. Little if any discussion revolved around learning issues of pedagogical theory and skill, education reform, or content area knowledge. The focus of these teachers was squarely on developing concrete, "real world" skills to pass on to their students.

Interestingly, academic teachers also voiced concern that relevant learning be concrete and applicable immediately in the classroom. However, when probed further academic teachers described a process in which they banked knowledge gained. That is, while they expressed a desire to focus their learning on practical and immediately relevant knowledge, they actually sought a wide array of knowledge that often was used over a much longer time frame. While it may not be surprising that teachers associate knowledge use with need, teachers were surprised to admit that they used a wide array of knowledge (including e.g., propositional and procedural) to inform their practice. An English teacher explained how in reality learning and the use of knowledge acquired are not linear processes:

I've been to a lot of different conferences and have met different speakers and gurus in the field. I have a lot of books I've collected from those things and other places that at the time I didn't have a chance to read. But a lot of times, I'm finding I still pull them down, and they are still current and useful as far as how to teach writing.

Like their career and technical colleagues, several academic teachers described the importance of learning the skills associated with their subject area. They believed that their effectiveness with students relied at least partly on their ability to “practice what they preached.” One English teacher described the importance of developing her own skills related to the craft she was teaching to students:

Participant: I do a lot of free writing. A lot of times there'll be some kind of nugget that comes out of it. The writing group that I started this year helped a lot because a lot of times, we'd just sit around and write. Then we'd read it and talk about it a little bit. And I used to be in a couple of all-teacher writing groups. We just started talking about how important it is for us to start a writing, reading, or art group where we all get together.

Interviewer: Among the teachers?

Participant: Yes.

Interviewer: Why was that important for you professionally?

Participant: I think I was hassling [my colleagues] about the lit magazine, actually. I kept saying, kids really want to see that we can do what we say we can or what we teach. It's really awful to be a writing teacher and never share your writing or an art teacher and never share your art.

On the other hand, some teachers focused their learning more narrowly on their discipline. For example, a math teacher described how his professional learning was focused squarely on developing a deeper understanding of content knowledge. He believed that the topic of math kept him from having to deal with or, for that matter know about, some of the social issues facing students. For example, when probed about how he had learned to work with a growing number of students who were not white, he responded:

[Math teachers] don't have that problem [teaching and discussing issues of

diversity], whereas I've talked to other teachers from other areas, and that's really a challenge for them. And there again, teaching math, you know, that's the reason I stick with math; I don't want to get involved with other issues. I found out if I can avoid that, I have fewer conflicts with students disagreeing or whatever. If we can all talk about algebra, there's not much to argue about. It's pretty cut and dry.

These examples shed light on the ways students and subject matter together define the core context of teacher work. The triadic relationship is complex. The teacher-student relationship can shape teacher learning of subject matter, and the teacher-subject matter relationship can shape teachers approach to students. The fluidity and unpredictability of teacher work in the core context can make *a priori* attempts at teacher learning seem quixotic. Teacher learning in the core context was experiential, usually non-reflective, and lonely with few signs of encroachment from the intermediate and peripheral contexts. It is no wonder that teachers described learning from experience as the most important source of learning. As a result, the learning spurred by students occurred through experience, i.e. trial and error. Furthermore, the focus of the trial and error learning ranged from learning to control students, to deepening and broadening one's content knowledge, to learning about student experiences outside of school and how those experiences influence the classroom.

The Intermediate Context

The intermediate context focused on the dimensions of teacher work that existed within the school, but beyond the core context. The small faculties in these isolated schools shed light on a high school context different than those already reported in the literature. In particular, three dimensions of school context emerged as most salient in the case study schools: strain of multiple roles, faculty relations, and principal leadership.

Strain of multiple roles. While teachers predictably discussed the problems posed by lack of time and other resources, especially as they pertained to teacher learning, these issues were exacerbated by the small size of these schools. In these rural schools teachers took on numerous curricular and extracurricular activities and often taught a wide array of subject area levels. This stretching of teacher responsibility shaped how teachers thought about their own learning. Across each school, teachers explained that they did not spend adequate time in meaningful discussion with their peers because of the “many hats” all teachers wore to meet the academic and social needs of students.

It was not uncommon for teachers in these small rural schools to be in departments that consisted of one to three teachers. One-person departments were quite common, while departments of more than three were rare. As a result many of the teachers interviewed and observed taught multiple “preps”—some teaching four or five different levels within a subject (and across subjects) each day. The daily grind caused by these multiple class preparations had a profound effect on how teachers approached their own learning. Faced with four or five class preparations teachers had to simultaneously cover a wide breadth of subject matter knowledge and varying levels of student needs. For example, during one set of observations an English teacher described how preparing and continuously honing multiple sessions had constrained her ability to deeply explore content knowledge. She described how she only marginally improved her classes and was reluctant to commit too much time to in-depth learning in one area for fear that

three or four other groups of students would suffer. Furthermore, because teachers were constantly preparing for a variety of classes they did not have time to discuss issues of practice with other teachers or collaborate on interdisciplinary units. The following exchange during a focus group reflects teachers' frustration:

Participant 1: We do need to do more. See, we tried last year. Remember, we tried to do the big unit. We were going to do it around the Olympics or something, and it's just we got so busy that it just didn't get done.

Participant 2: I think at the high school level, we need to collaborate more, team-teach more. That's something that this school, we haven't done. But we're all interested in doing that. The problem is that because we're limited with faculty, our planning times are different. After school, we have so many committee meetings, because in a small school district, one person could be in charge of ten committees because we just don't have as many people as larger school districts. We wanted to do some type of an end-of-the-school-year theme, and all teachers had to teach about that theme. Like, this year we wanted to do the Olympics, but we just didn't get to it.

Participant 3: Yeah, we've talked about wanting to do a thematic unit and having like the theme be ancient Greece or the Olympics or something. And then trying to incorporate all of the different subjects into that. We didn't get it done this year, but *we did a lot of talking about it*.

Faculty as work context. Not surprisingly, teachers described their faculty peers as important factors in shaping the character of their workplace. However, several issues in these rural schools stood out. First, while teachers sought out their colleagues to address questions of practice, these interactions were often spontaneous and unplanned and did not focus on deep examinations of teachers' behaviors and beliefs. Teacher interactions typically addressed mundane matters and with minimal impact on teacher practice. This is not to say that teachers were irresponsible or intransigent; it only suggests that learning aimed at supporting changes in practice did not typically occur via faculty interaction.

Contrary to the image of faculty cultures as deeply rooted constructs, teachers at each of the schools described cultures that were somewhat unpredictable. Teachers argued that the small faculty size and isolation of the schools led to a revolving-door phenomenon among faculty that could easily destabilize school cultures. For example, a faculty culture could become transformed over one summer with a few key faculty retirements. Several teachers described this as a benefit of working in a small rural school because it allowed the school to hire teachers with fresh ideas.

On the other hand, from the perspective of teachers who had decided to make a school their professional home, the flow of faculty in and out of the school created a challenging environment. In two of the schools, several teachers described how their departmental colleagues were all novices. The veteran teachers found that while discussions with their more novice peers were often engaging, they found themselves more often than not in mentoring roles. While they accepted this role and enjoyed mentoring new faculty, their learning was not of the same depth and reflection as might have occurred with teachers of their same experience level. As one teacher put it:

It's me and then two first-year teachers in the language arts department. So there isn't a whole lot of collaboration because they're so new that they're just working on getting through....Before we had two, more experienced teachers....We did more talking with each other and suggesting or asking, what kind of novels would you suggest for this?

Ironically, while the small size of these rural schools facilitated communication among all teachers, teachers still operated within limited spheres of interaction. In other words, even in schools with faculties of 18 teachers, teachers still worked primarily with a small number of colleagues. Within these spheres of interaction, teachers described norms that guided the course of relationships and often bounded the conversations. For example, most teachers' collegial relationships focused more on discussions around classroom logistics, curriculum, even content, and less on their successes or failures with particular students and their approaches to teaching. Where discussions among teachers were focused on teaching, they swirled around the surface and did not penetrate deeply into the core context. For example, teachers shared materials, provided interdisciplinary support (e.g., art and English), but rarely described in-depth sharing or challenging assumptions in each other's practice. One teacher's comments capture this hesitancy to pry too much into the practice of other teachers:

Our high school has very good working relationships. We're all on different committees or we're assigned activities together, and we all work pretty well together. As always, you'll have some teachers that you don't feel do their job correctly, but you don't want to say anything to anybody. They'll figure it out.

Teachers also described how the reluctance to engage or even challenge peers in substantive ways affected faculty relations in negative ways. For example, at one school several teachers mentioned the damage to faculty motivation that one incompetent teacher brought. That incompetence caused a ripple effect that was felt within the core context. As a result of one teacher's failures, another teacher's students in the same subject area were influenced each year. The teacher's focus was on remediation and not the teaching of the material she was meant to teach. Further, her motivation to learn more deeply the subject matter she was supposed to be covering was lacking. She said:

I had students in Spanish 4 when I first got here that could not even complete an entire sentence, could not respond to "como estas," for example. And so that was very frustrating for me because I came in and I knew how long she had been here. I knew she had her masters. She was making twice as much as me, and she didn't do anything while she was here for three years. So that is the kind of thing that I find frustrating. For me, that is one thing that will make or break whether I stay. I'm very self-motivated. I keep going. I really want my kids to learn, but if you constantly see people getting rewarded for not doing what they're supposed to be doing, it impinges on what you're trying to do.

However, while the competence level of co-workers was an important characteristic of work context, teachers did little on their own to confront faculty unable to meet the needs of students. Incompetence, while seen, was not discussed. "Intrusions" into the practices of peers were acceptable only when invited or through some formal channel,

such as a mentoring program.

The Principal as Context. This study showed that principals as part of the intermediate context can influence teacher work and learning in several ways. The principal's engagement in the classroom and focus on teachers' concerns enhanced teacher learning within the core and intermediate contexts. It was clear that the small size of these rural schools (and consequently the small number of faculty) increased the potential for principal-teacher interaction, and certainly provided opportunities for principals to support and foster teacher learning. Through their actions or inactions, principals influenced the students-as-context, teachers' perceptions of subject matter, and teachers' relationships with their colleagues.

While principal activism does not guarantee a positive influence on work context, in this study the one principal who took an active role did create learning opportunities for teachers. The principal's positive influence on school culture was compared to the previous principal who had become overly passive at the end of his career. Under the previous principal, the school culture had turned dysfunctional as teachers took an "us versus them" stance toward their students; and, according to teachers, students disregarded basic rules of conduct by fighting in hallways, disrespecting teachers, and coming and going at will during the school day. Juxtaposed against this scenario, the new principal was a "change agent" who immediately influenced school culture. First, this principal influenced student-as-context in ways that refocused teachers' perspectives of students in much more constructive ways.

The new principal began to institute policies that required students to be responsible and accountable for their actions. By gaining control and reorienting the student culture, teachers' described a shift in their mindsets that had been teacher-centered to more student-centered approaches to teaching. Furthermore, teachers began to feel empowered in the school. As one teacher said, "Finally, we're running the school with input from the students." Teachers attributed this positive change to the principal. One teacher explained:

He's got me seeing the possibilities for each student, even for some of them that are squirreling around. Why would a kid who's squirreling around that morning in first hour class—why did they come in at the end of the day? Well, it's because they know they can, and it's a safe place. So you can grab him and say, you know, you're being a real dork. Why don't you get to work. And he'll go with that; he can accept that. So I guess [the principal's] whole message...he's not real hung up on how much English did you teach today in 10 minutes?...It's more of how did you get into their heads?...I appreciate the fact that he has said that to us, that our curriculum or our subject matter is how we get into these kids' heads.

Second, compared to his predecessor, this principal blurred the boundaries between the roles of teachers and of the principal. Teachers described the rejuvenating effect of a principal who would spontaneously teach side by side with teachers. One teacher described it this way, "He'll just walk in the room and he and I just have this way we can just play off each other, which is very exciting because we did a little team teaching." In a later interview, she added:

I did this survey with these kids...it was mid-year which I was really seeing

some attitudes and hearing about some behaviors and stuff that were really disturbing to me...I was very pleased with what I found; they just want to be thought of as very good, and they want to do what is right, but their actions don't show that. I took the results to [the principal]...and boy that just got his brain working. We ended up team teaching our seniors for three days together.

Initially a shock, teachers soon began to welcome the principal into their classrooms as a colleague. These interactions and the principal's breadth of subject matter (especially math and science) and pedagogical knowledge created avenues for the principal to motivate and empower teachers to learn about their own subject matter. Teachers argued that the expectation of unexpected classroom visits had a positive effect on teachers because they had grown complacent and teacher-centered under the previous principal.

Finally, the principal played a critical role in shaping the ways teachers interacted with each other. Through his actions in the classrooms and efforts to act as a conduit between teachers, the principal was able to begin to develop a foundation upon which faculty could build their own relationships. For example, one teacher described the value of an off-campus retreat during summer break that the principal sponsored to help the staff get to know each other and "how they clicked." Also, as a result of his constant presence in classrooms, the principal was able to help teachers see connections and possibilities among them that were previously overlooked. Through means such as these the principal communicated to the faculty his belief in the importance of investing in and developing strong professional relations among the staff. He also modeled that fact by engaging groups of teachers in informal conversations focused on student issues, content, and pedagogy. In short, this principal exhibited what Stein and D'Amico (2000) identified as an aptitude for subject matter leadership. He was an excellent teacher and could translate his skills and knowledge base about teaching for teachers in any subject area. For example, compared to the other high schools studied, teachers at this school were more involved in learning with each other, the norms of secrecy were breaking down as the principal made his presence known in each classroom. Beyond presence, however, the manner in which the principal spontaneously engaged himself into the flow of the classroom helped shaped teachers' perspectives of themselves as learners. Put differently, the principal acted as "principal colleague" for teachers, many of whom had no (or few) other colleagues in their subject areas.

On the other hand, in the other two schools teachers perceived the principals as less activist. A principal's perceived inaction vis a vis teachers' work context is neither good nor bad, necessarily. However, in two of the case study schools principals' inaction with regard to developing contexts that supported vigorous teacher learning climates may have reinforced traditional approaches to teacher learning. For example, in the case regarding an incompetent teacher, the principal's and district's lack of disciplinary action lowered staff morale, and increased the need of another teacher who taught the upper level sections of that subject to remediate students. Unfortunately this situation lowered her enthusiasm for pursuing her own learning. In the third school, the principal played a minimal role in facilitating teacher learning by limiting his activities to authorizing travel and reimbursing participation in formal professional development activities. In this case the principal and teachers tended to see the principal's role as traditional—e.g., professional development through formal evaluation.

Peripheral Context: The District and State Contexts

It was apparent that districts and the state policy milieu also formed facets of teachers work context. Both the districts within which teachers worked and the policy milieu—that is, state policy initiatives that were designed and able to influence teacher work—formed part of teachers’ learning contexts, but not necessarily with the immediacy of the core and intermediate contexts.

The district-as-context influenced teacher learning in two ways. First, teachers across schools believed that district leadership was responsible for setting the agenda for formal professional development. In describing the districts’ role in professional development, the tension teachers felt between meeting individual teacher needs and organizational needs was palpable. A second factor influencing teacher learning at the district level were professional development committees (PDCs) that consisted solely of teachers. State law required that each district fund professional development to at least one percent of the basic district funding formula and that each district establish a professional development committee responsible for allocating those funds.

Teachers at each of the districts experienced similar patterns regarding the organization of their learning. Teachers identified several problems. In each case, districts had allotted approximately 5 professional days throughout the school year. In order to stretch resources and achieve economies of scale, the districts often held district-wide professional development events. While some teachers benefited from the workshops and speakers, most teachers interviewed found the events to be ineffective. For example, because most teachers in the district represented primary and middle school grades, teachers in this study often found the activities to be irrelevant to their needs. These teachers believed that by casting a wide net to accommodate all teachers, learning became superficial. Generally, teachers were frustrated by the waste of time spent at district professional development activities. A language arts teacher’s comments capture this tension:

I dread the PDC days, and I've been saying that since last year. I get in trouble with elementary teachers. I don't think they're crazy about me. But I don't know why we all meet as a group. I do think we're in this together, and I think every now and then we do need to meet as a group and say, what are you teaching, what are we doing, where can we go from there?

One of the high school’s PDC representatives described the tension this way:

The high school people are outnumbered since we have three elementaries. The reading workshop's kind of good, because like I said the elementary people felt it was useful mostly, and they are 3/4 of our population of teachers, and our high school people were sitting there kind of like....And if we had turned that around and had something that was more specific for high school that didn't apply to the elementaries, they would have been equally rude or disgruntled. So it is difficult to come up with something that works for the whole district.

By and large, however, teachers approved of districts’ PDCs. PDCs were valued by teachers in a few ways. For example, teachers believed that the districts’ professional

development committees (PDC) provided the freedom for teachers to pursue their own learning goals even if those goals were not completely aligned with district goals for teacher learning. Teachers explained that their interests in attending regional, state, or local conferences were usually supported by the PDC if their requests were within the committee's budgetary constraints. Furthermore, the types of teacher learning activities funded by the PDCs offered teachers the opportunity to "benchmark" their own practices against their peers' across the state and nationally. Benchmarking practice was a theme among teachers across schools that highlighted the important role of oft-maligned large-scale conferences. The venues for learning served as a way to overcome the isolation of professional practice in these small rural schools.

From teachers' perspectives, the predominant state-level feature influencing teacher work was the state's program for performance assessment. The purpose of the assessment program was to increase student achievement levels by increasing the levels of school and district accountability. While the intended effects on schools and teachers were to change multiple aspects of professional practice (e.g., pedagogy, content knowledge, and assessment practices), interview data suggested that the density of the core contexts often deflected these intentions. Furthermore, the program's influence was limited by its focus on teachers of the core academic subjects. As a result, it was not surprising that core subject teachers discussed the assessment program and its influence on them more than teachers of career and technical subject areas. However, teachers' descriptions of how their practices had changed as a result of the program were telling because the changes do not penetrate deeply into multiple aspects of the core context. As interview data repeatedly showed, teachers reacted to the new performance assessment primarily by changing the way they assessed students in some cases. A language arts teacher described a typical response to the state's assessment program:

[The assessment program] is about critical thinking and comprehension....It's altered the way that I approach mostly my testing. I try to [reflect the assessment program] in my test questions even though my grade levels do not take it in communication arts. I've tried to support that. We've had training. We've had an [assessment program] leader here, and we will next year also.

This tweaking on the margins of teacher practice did not appear to influence teachers' thinking of their subject area, content knowledge, or student needs for leading productive lives in the future. Instead, with observations of fairly traditional teacher directed learning environments, most teachers articulated a presumption of compliance with the policy intent of the program. That is, teachers believed that they already taught critical thinking skills and changed their approaches to their students in preparing them for taking the high stakes tests. For instance, an English teacher stated:

I'm fresh out of college, so I know what skills they need to go in there. So I look at real life, what are they going to need, and teach to that, and thankfully that's what's on the [State Assessment Program (SAP)]. We do the whole writing process, the revising, webbing, graphic organizers, and those are very important on the SAP....If a teacher is truly doing his or her job, then they are naturally teaching to the test. What I don't do is, I'm not going to review for five weeks and think, "I've covered what's on there."

In part, the muted impact of the policy milieu on the classroom context may stem from teachers beliefs that their students needs are much broader than academic. Teachers

argued that the assessment program was too distant from the classroom context, and they believed that district and school policies were better situated to keep the students' best interests in mind. As one teacher stated:

I would rather see student achievement done on a portfolio-type basis, working out of the school district, not so much a test to see where we stack up against other [districts]. I would rather see more local accountability. More local processing. I feel a school district knows its children the best, better than the state can know them...And I really feel it needs to be done more on a tracking of growth through a portfolio, maybe that they begin in seventh grade and keep going up through twelfth grade and look at that as an evaluative instrument rather than a test they take two or three mornings.

Discussion

This study contributes to the literature by taking the concept of teacher work context—a concept that has become synonymous with structural and organizational dimensions of schools—and recasting it in terms of sets of relationships. Furthermore, by examining these relationship sets within the context of rural high school teachers, several assumptions about teacher learning became apparent. For example, from teachers' perspectives the gap between teacher and student knowledge is fluid and not confined to student academic performance. Also, while the virtues of small schools and small professional communities are extolled in the literature, the smallness and isolation of the rural context created significant challenges to teacher learning and elicited specific teacher learning responses. Finally, current discussions of teacher learning tend to lightly address, if at all, the critical role of the principal and other educational leaders in supporting teacher learning, especially in rural schools where subject matter colleagues are limited in number.

This article showed how the multiple contexts of teacher work and their relationship to teacher learning are complex and interwoven. To state the obvious, each school context is unique. For instance, in these rural high schools the department was not the context of most import as suggest in other studies (e.g. McLaughlin, 1993). Most teacher did not have departments, per se. The context of most import for them was the classroom, or at times, their professional community external to the school and district. Furthermore, this study shows the complex relationship between student-teacher and teacher-principal relationships in shaping teachers individual and collective beliefs about their students.

Conceptualizing teacher work context as beginning with a dense core and emanating outward to levels of context provides an important image that is less prone to over-simplifying how teachers do and should learn on the job. More than any other factor, the “hot action” and “here-and-now” urgency of the classroom life (Eraut, 1994; Jackson, 1968) stemmed from the complex and daily interactions of students. These interactions, marked by the fluidity and unpredictability of student needs, attitudes, and behaviors, are what give the core context its density. And it is this density that causes efforts to support teacher learning from the intermediate and peripheral contexts to be met with resistance. Teachers' subject matter served as the conduit through which most teacher-student interactions took place. In this study, teachers of subjects with well-defined knowledge bases such as math and science also tended to define the triadic relationship of the core context narrowly. Their efforts were focused primarily on

transferring the conceptual knowledge. Other teachers—e.g., language and social studies teachers—used the content of their subject area to broadly address student needs. For example, these teachers would use the content to explore ethical dilemmas in students' lives as well as to convey the specific content.

The intensity of teacher-student interaction and the way teachers perceived of their subject matter created an environment in which teachers believed that only the most practical and immediately applicable knowledge/skill would suffice to inform their practice. Thus, because of the intensity of interaction between teachers, students, and content, learning that was valued most was acquired experientially.

The intermediate context played an important role in shaping the broader context of teachers' everyday lives. The principal was uniquely situated to influence important relationships within the core and intermediate levels. For example, the principal could influence the core context by influencing student culture, shaping how teachers perceived students, shaping how teachers approached their own content, and influencing the nature of teacher relations. The principal also was uniquely situated to reshape the norms of professional practice as that practice related to students, subject matter and school culture, and in so doing influence the content and nature of teacher conversations about their work and students.

In spite of knowing what strong learning communities look like, however, traditional approaches to teacher learning persist. Contributing to this persistence were teacher attitudes and norms that hold back professional critique and shy away from opportunities to “deprivatize” practice (Louis, Kruse, & Marks, 1996). However, the blame cannot be solely placed on teachers. The important roles of principals were clear in this study. For example, the principal who broke down the metaphorical walls that isolated teachers was beginning to see more collaboration and learning among teachers. In schools where the principals took on passive leadership roles, teachers continued to work in (and worked to maintain) isolation. Furthermore, teachers emphasized how resources strain limited the possibilities of periodic interaction among peers.

In short, the potential of intermediate level factors for influencing the core context was significant. The potential was found in the possibilities of school leaders and teachers' peers in shaping how teachers perceived of their students, how they taught their students, and the way they approached their subject matter in terms of their students. Furthermore, in small and isolated high schools such as these where collegiality within departments was often a moot issue, the role of the principal as “principal colleague” and facilitator of teacher collegiality was critical to the health of professional learning.

The peripheral context of teacher work did not factor into teachers' work lives on a daily basis. Nonetheless, the study uncovered several findings that cast new light on teacher learning in rural schools. Most surprising was that in districts where central offices were often located on the same campus as the high school, teachers perceived of the superintendent and district as peripheral to their learning. Without a doubt, district policies surrounding professional development influenced teacher work context. Unfortunately, district sponsored professional development programs were of little relevance to high school teachers. On the other hand, teachers found that state legislated district support for individual learning was more useful. Thus, district professional development committees acted as vehicles for teachers to broaden their professional networks by attending regional and state conferences. This fact underscored a difference

between these rural teachers and urban and suburban teachers (Scribner, 1999; Talbert & McLaughlin, 1996). That is, teachers in these rural high schools relied to a greater extent on professional community beyond the school walls. Because departments in these schools were small, opportunities for fruitful collegial relations were often found elsewhere.

Statewide performance assessment was the major state policy initiative that influenced many teachers in this study. However, by definition, only teachers in the core academic subjects were influenced by the program. In some cases this policy influenced the core context of teacher work. However, the effect was marginal in that teachers described minor changes to their practice—i.e., changing the way they assess students. Many of the teachers interviewed were not in subjects that were assessed and, obviously, they were not influenced by the policy.

Thinking about the relationship between teacher learning and work context in terms of three concentric contexts brings into focus several important implications for teacher learning. Teacher learning within the core context is inevitable. The question remains, though, how will that learning occur and what will it focus on? Left alone, teachers have no choice but to learn reactively, guided only by their own experience and the immediate needs of students. Somewhat paradoxically, professional development for principals, superintendents and other educational leaders may have important implications for teacher learning. While professional learning opportunities for teachers abound, opportunities for principals and superintendents occur with less frequency. Professional development for educational leaders must place more emphasis on their roles in shaping the learning cultures of schools and more specifically subject matter leadership (Stein & D'Amico, 2000). Furthermore, opportunities for teacher professional development must consider the situations of rural teachers. For teachers in this study, statewide professional conferences were places for establishing and maintaining professional community. And finally, the development of virtual professional development opportunities may be effective strategies for bringing teachers of similar subject matters into professional conversations.

In summary, this study demonstrated how the density of the core context was defined by intense relationships among students, teachers, and content. For these relationships to be nurtured and shaped in ways that improve teacher practice and student learning they must be (1) acknowledged in the broader education context, (2) understood as a strength in the teaching and learning process, and (3) addressed in a concerted way across all three contexts. If teachers are left to “figure things out” on their own in isolation, most of them will be forced to learn solely through experience and in unreflective ways. The role of the intermediate and peripheral contexts in teacher learning must be to provide the time, space, and support for practical and conceptual learning that teachers believe (or come to believe) is meaningful within their more immediate work context—the relationship between teacher, student and subject matter.

Acknowledgement

This article was supported entirely through the National Academy of Education/Spencer Foundation Post-doctoral Fellowship Program. An earlier draft was presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA, April 1-5, 2002.

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About the Author

Jay Parades Scribner

University of Missouri-Columbia

Email: scribnerj@missouri.edu

Jay Paredes Scribner is an Assistant Professor in the Department of Educational Leadership and Policy Analysis at the University of Missouri-Columbia. His research focuses on professional learning in K-12 contexts. Specifically, his research has focused on the relationship between teacher learning and teacher work and the political dimensions of professional communities in schools. He has also conducted research on professional learning in principal preparation programs. His other professional experiences include teaching in the Peace Corps, program evaluation and policy analysis with the US General Accounting Office, and evaluation consulting in the K-12 and higher education arenas.

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Humberto Muñoz García (México)

Universidad Nacional Autónoma de
México
humberto@servidor.unam.mx

Daniel

Schugurensky (Argentina-Canadá)

OISE/UT, Canada
dschugurensky@oise.utoronto.ca

Jurjo Torres Santomé (Spain)

Universidad de A Coruña
jurjo@udc.es

J. Félix Angulo Rasco (Spain)

Universidad de Cádiz
felix.angulo@uca.es

Alejandro Canales (México)

Universidad Nacional Autónoma de
México
canalesa@servidor.unam.mx

José Contreras Domingo

Universitat de Barcelona
Jose.Contreras@doe.d5.ub.es

Josué González (U.S.A.)

Arizona State University
josue@asu.edu

María Beatriz Luce (Brazil)

Universidad Federal de Rio Grande do
Sul-UFRGS
lucemb@orion.ufrgs.br

Marcela Mollis (Argentina)

Universidad de Buenos Aires
mmollis@filo.uba.ar

Angel Ignacio Pérez Gómez (Spain)

Universidad de Málaga
aiperez@uma.es

Simon Schwartzman (Brazil)

American Institutes for Resesarch–Brazil
(AIRBrasil)
simon@sman.com.br

Carlos Alberto Torres (U.S.A.)

University of California, Los Angeles
torres@gseisucla.edu