

THE CHANGING ROLES OF TEACHERS: SERVING THE PUBLIC INTEREST?

by

Daria Buese and Linda Valli

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Abstract

Teacher roles in a high-stakes accountability climate are examined in this paper. Through interviews with teachers and principals between 2002 and 2005, and case studies of three schools in 2004-2005, we established that teachers' roles changed in response to policies aimed at improving student achievement. Teachers' roles increased in number as they were asked to do more things, intensified as policy-driven directives increased responsibility for work done in the classroom, and expanded in scope as teachers were held responsible for more collaboration outside of the classroom. Through examining how teachers responded to one pervasive instructional directive, "differentiated instruction," we illustrated the complexity of interactions between different roles and indicated areas in which the teachers experienced the most pressure to change. Our findings suggest that numerous, rapid-fire, and simultaneous policy directives promote an environment in which teachers are asked to relate to their students differently than they were traditionally accustomed to and enact pedagogies that are often at odds with their vision of best practices.

The Changing Roles of Teachers: Serving The Public Interest?

That teachers assume a number of roles in their work in schools and with students is hardly news. Teachers have always adapted both their classroom instruction and out of classroom practices in response to changing educational trends and governmental demands. We have seen an increase and change in teachers' roles over the nearly two decades of educational reform that led to the high-stakes accountability climate teachers now experience since the ratification of the Elementary and Secondary Education Act of 2001 or No Child Left Behind (NCLB, 2001). In this paper we discuss how teachers' roles have changed as high-stakes accountability has become an increasingly pervasive factor in their daily work. Our research reveals that teachers' roles have increased, intensified, and expanded in response to federal, state, and local policies aimed at raising student achievement. We describe the differences between these three kinds of role changes and illustrate them within the policy context in which the 4th and 5th grade classroom teachers in our study conducted their work from 2002 to 2005. Specifically, we focus on one directive that permeated teachers' work, "differentiated instruction," and follow the change in their roles as they responded to it through special programs and within classroom strategies. We make the claim that rapid-fire policy directives promote an environment in which teachers are asked to relate to their students differently than they are traditionally accustomed to and enact pedagogies that are often at odds with their vision of best practices.

Review of the Literature

Theoretically, this paper is situated within the diffuse body of literature on teacher roles, teachers' work, and teacher change. This area of scholarship is rooted in the early sociology of education literature, exemplified by Waller's (1932) *The Sociology of Teaching* in which the

author delineates the role of the teacher as institutional leader and poses the provocative question, “What does teaching do to teachers?” (p. 375). Since then, scholars have examined teachers’ roles through a variety of lenses. Some have been interested in the historical development and persistence of a culture of isolation (Feiman-Nemser & Floden, 1986; Little, 1999; Rosenholtz, 1991; Sarason, 1971), in which teachers work in “egg crate schools” that promote “teacher separation rather than teacher interdependence” (Lortie, 1975, p. 14). Others have examined the bureaucratizing or professionalizing influences on teachers’ roles (Darling-Hammond, 1999; Wise, 1979); the separation of conception and execution in teaching tasks (Gitlin, 1983); and, more recently, the influence of external mandates and reform-efforts on teachers’ roles and practices (Bailey, 2000; Cohen & Hill, 2000; O’Day, 2002; Spillane, 1999; Wilson, 2003).

Many of these analyses create a picture of teachers’ roles and everyday work as remarkably stable, resistant to change forces (Cohen, 1988; Cuban, 1993). The image of teachers’ work that emerges from these studies is of simple, routine tasks: “Teachers and students spend most of their time with lectures, recitations, and worksheets. Intellectual demands generally are modest, and a great deal of the work is dull” (Cohen & Spillane, 1992, p. 37). Teachers, themselves, have described teaching “as a routine task with low task variety and low task uncertainty” (Rowan, 1999, p. 43). When change occurs in teachers’ work, it is often limited to a small number of teachers (Elmore, 1996), tinkering with inconsequential components of teaching (Tyack & Cuban, 1995), or adapting a program of radical change to fit into established teaching patterns (Cohen, 1990).

Other studies, however, suggest that teachers’ work changes all the time and that, in the face of strong mandates, teachers are relatively powerless to resist change forces. Richardson

(2001), for instance, describes how teacher change occurs naturally and spontaneously through “discussions with other teachers, an evaluation by an administrator, a workshop, experience with an often-tried activity that no longer works, an article in a practitioner or research journal, a new grade level or population of students, etc.” (p. 908). Studies on external change forces have found evidence of the de-skilling (Apple, 1982), intensification (Hargreaves, 1992), marginalization (Bailey, 2000), and expansion of teachers’ work (Bartlett, 2004). When teachers’ work becomes excessively regulated, a host of unintended and negative consequences can result, such as job dissatisfaction, reduced commitment, burnout, loss of self-esteem, and early departure (Calderhead, 2001).

What sense can be made of this literature? Should we conclude that “teachers’ work has remained surprisingly stable. . .[that] little has changed in the organizational structures, instructional practices, and authority structures of teachers’ work. . .[and that] teachers’ work today remains fairly similar to that of 100 years ago” (Kirtman, 2002, p. 2). Or, conversely, is Hargreaves (1995) right when he claims that “whatever else might be said about teaching, few would disagree that the nature and demands of the job have changed profoundly over the years. For better or worse, teaching is not what it was” (p. 117). The apparent contradictions within this literature are partially resolved by noting that what counts as change differs across studies. Invariably, stability wins out over change in research on external efforts to change teaching practice in highly-ambitious, reform-oriented ways. On the other hand, change wins out in research on external efforts to professionalize teaching by including teachers in administrative decision-making processes. Change seems to occur more easily on the margins of what is widely considered to be the core role of teachers: their instructional practice (Elmore, 1996).

But a problem underlying much of this literature is the assumption that changes in one facet of teachers' work have little spill-over into the other. That might be the case in schools that are insulated from accountability concerns and in which teachers' function in isolation from one another. By tracking change, or lack of it, in relation to only one factor, these studies lose their ecological validity, failing to capture teachers' everyday experience as they are literally bombarded with new requests. With only a few exceptions (see Hargreaves 1995), even the literature on the expansion or intensification of teachers' work underestimates the impact of change across teachers' responsibilities. While separating teachers' roles into core instructional practices and more peripheral administrative practices might be a useful heuristic device, it obscures the tight link between teachers' work inside and outside the classroom and seriously underestimates the amount of change teachers experience and enact. By tracing change in one core element of teaching practice—instructional differentiation—we show the incredible complexity of teachers' work, a far cry from the teacher who can close her door and block out external influences.

The Policy Context

The school district in which we conducted our study is a large suburban one bordering a major metropolitan area in a mid-Atlantic state. Since the study began in 2001, the federal government ratified the No Child Left Behind Act and, in compliance with the act's guidelines, the state revised its already high-stakes annual assessment and replaced it with one that more closely matched the provisions of NCLB. It also established proficiency standards, set AYP benchmarks, and developed a state curriculum that aligned with the content of the state test at each grade level. During these few years of considerable policy activity, the school district released a new mathematics curriculum in 2002 and a new reading curriculum in 2004 for the 4th

and 5th grades. Accompanying the release of these curricula was a surge of directives and mandates that raised expectations for teachers in the areas of professional development, instructional practices, collaboration, and monitoring student progress and achievement. The veritable deluge of directives that teachers were asked to attend to obliged them to rethink and restructure their roles as teachers.

Changes in Roles

We determined three interrelated but different ways the policy environment affected teachers' roles; they increased, intensified, and expanded. Roles simply *increased* in amount or number; plainly, teachers were progressively asked to do more things. Alternately, traditional roles *intensified*. Intensification refers to the condition in which “teachers are expected to respond to greater pressures and to comply with multiplying innovations under conditions that are at best stable and at worst deteriorating” (Hargreaves, 1992, p. 88). Apple and Jungck (1992) assert that intensification erodes the working conditions of teachers. “It forces people to rely on ‘experts’ to tell them what to do and to begin to mistrust the expertise they have developed over the years (p.25). Intensification results from the growth of “interventionist styles of management” where the act of teaching is dominated by external plans and requirements such as pre-specified lists of competencies and objectives, pre and post tests for determining student skill level, and an increase of record-keeping and evaluation. In our analysis, we define role intensification as increased responsibility for teaching that is dominated by policy-driven directives to be addressed in the classroom (e.g. ongoing assessments, data collection and management for individual students).

Lastly, teachers' roles *expanded*. Advocates of teacher professionalism as a component of school reform suggest that role expansion is based, in part, on the involvement of teachers' in

activities beyond the classroom. These activities include work around assessment, pedagogy, and curriculum development and often seek to coordinate the experience of students across the school (Lieberman & Miller, 1999). This expanded role is highly collaborative and related to the “collective pursuit of educational goals” (Little & Bartlett, 2002, p. 346). It brings teachers and other school personnel together during the school day and represents a noteworthy change in expectations on teachers and in their work environment. Bartlett (2004) found that if expanded roles are integrated into the regular structure of the school day, teachers are likely to remain more engaged and committed to their expanded roles. Conversely, teachers become exhausted and overwhelmed when role expansion is heaped onto an already full teaching situation. Hargreaves (2000) cautioned that role expansion creates a situation in which teachers have difficulty discerning where their commitments and responsibilities should end. Collaboration then assists teachers in marshalling resources, conserving their energy, and understanding requirements and demands, or it can be used as a way to promote the implementation of “dubious policy ends” resulting in the consumption of teachers’ energy and professional ideals. We define role expansion as the increased scope of teacher responsibility for work outside of the classroom that requires collaboration with other teachers, specialists, or other district personnel.

Had the numerous policy influences the teachers in our study experienced occurred over a longer period of time than we observed, these kinds of role changes may not have seemed significant. We believe that the pace with which teachers were expected to undertake new and adjust old roles compels the examination and critique of role change in response to policy expectations. Generally, teachers seek to accommodate curricular and instructional directives from governing agencies and administration (Spillane, Reiser, & Reimer, 2002), but we reason that the success of policy implementation or realization of policy intent can be waylaid if

teachers have insufficient time to learn new processes and strategies, make authentic responses, and reflect on those responses, even given adequate administrative support, resources, and professional development. We found that even when changing expectations had some positive effect on teachers' practices, the summative effect of too many policy demands coming too fast usually resulted in teacher confusion, discouragement, and superficial responses to administrative goals.

After a brief description of the study, we explain the method of our analysis. We then examine the three kinds of changes by giving in-depth illustrations of specific teacher roles as they increased, intensified, and/or expanded in the fast-paced policy environment of the district's schools.

Description of the Study and Data Sources

This inquiry into the changing roles and practices of teachers is part of a mixed methods, longitudinal study of 4th and 5th grade teachers of reading and mathematics.¹ Teachers invited to participate worked in schools with moderate to high levels of poverty (30 – 85% as measured by the percent of students in the school who qualify for free and reduced meals). Approximately 150 teachers from 30 schools participated over a four-year period (2001-05), allowing us to observe instruction throughout the school year and to conduct individual and focus group interviews. To understand the broader context and expectations for teachers, we also attended meetings and interviewed principals, staff developers, and school-based reading and math specialists. For this paper we focused on interviews conducted with teachers, content area specialists, staff developers, and principals from 2002-2005. The core grand-tour questions that guided our data

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collection and analysis were: How has your role changed in the past few years, and what has influenced those changes? Interviews were audio-taped, transcribed, and coded through the use of NVivo software. While we stayed close to data by using a grounded theory approach (Strauss & Corbin, 1994), the coding process was iterative, informed, and guided by our research interests (Erickson, 1986).

Analysis

We structured our analysis by identifying specific roles that teachers were expected to undertake. As we examined the data we attempted to name the roles that emerged from the informants' descriptions of teachers' work in relation to the expectations placed on them. We created, roughly, 23 distinct labels that identified the roles that teachers undertook, whether within the classroom or in activities outside the classroom that were directly related to instruction: accountability responder, assessor, content adaptor, cultural agent, curriculum developer, curriculum enactor, data manager, data analyst, differentiator, educational activist, ESOL teacher, full inclusion teacher, moral agent, organizational systems manager, planner, program enactor, psychologist, remediator, resource consumer, resource teacher, student placement coordinator, team member, and vertical articulator². The roles these labels name are not exhaustive; we were purposefully restrained in naming roles to guard against overly delineating roles, to keep the analysis manageable, and to avoid either overstating or trivializing the teachers' work. And although these roles may seem to be normal components of teachers' work, they often contained layer upon layer of hidden dimensions. The role of student placement coordinator, for example, was incredibly multifaceted and nuanced. It required the teacher to be a student behavioral and academic achievement assessor, a data collector and

² Vertical articulation is the process by which teachers study and come to understand what students are expected to learn and be able to do at grade levels below and above the grade level they teach. This understanding is vital to the effective implementation of the curricula according to school district personnel.

analyst, a instructional program expert, a collaborator with other teachers, specialists, and parents to determine student placement, a monitor of student progress within a placement, an independent tutor of students when placements were unavailable, and an advocate for students' academic and emotional well-being when placements were suspect by the teacher. Except for the tutoring and advocacy components of the role, directives, mandates, or school-specific agreements *required* teachers to assume those responsibilities and, in most cases, *document* the work they did within those roles. By creating labels that described the function of the work tasks, we were then able to formulate an organizational structure that enabled us to analyze how the roles inter-related in the context of the teachers' workplaces.

We found that the 23 identified roles, as described by our informants, fit into five organizational categories: instructional, institutional, learning, relational, and collaborative. Roles were categorized as instructional when they appeared in the classroom in direct work with students. They were categorized as institutional if the role was one that the district was attempting to establish across schools in order to create a degree of uniformity of practice throughout the district. Roles in the learning category are those that require teacher learning in response to directives – learning that consumed significant teacher time and intellectual effort. Relational roles refer to those that require teacher interaction with students and other teachers in ways that cannot be standardized but are necessary for the nurturing of students and the smooth running of work in schools. Finally, collaborative roles are those that require teachers to work in groups with other teachers or district personnel. These collaborative roles were mandated by the district or school and were often quite orchestrated.

The utility of the categorization was to illustrate how the many roles we encountered overlapped. As seen on Table I, none was discrete. Furthermore, by looking at how the same

role, (e.g., curriculum enactor) manifested itself in several categories, we were better able to determine how such a role expanded and/or intensified over time, particularly as directives that resulted from accountability based policies increased, changed, or gained urgency. Note that most of the roles appear in every category. We based our categorization on our knowledge of administrative directives at the schools, our observations of teachers as they worked in classrooms and meetings, and from our conversations with our informants. It is likely that the scope of some of the roles was beyond the reach of our data gathering efforts.

Table I: Teacher Role Categories

INSTRUCTIONAL	INSTITUTIONAL	LEARNING	RELATIONAL	COLLABORATIVE
Accountability responder	Accountability responder	Accountability responder		Accountability responder
Assessor	Assessor	Assessor	Assessor	
Content adaptor		Content adaptor	Content adaptor	Content adaptor
Cultural agent			Cultural agent	
Curriculum developer	Curriculum developer	Curriculum developer		Curriculum developer
Curriculum enactor	Curriculum enactor	Curriculum enactor		Curriculum enactor
Data manager	Data manager	Data manager	Data manager	Data manager
Data analyst	Data analyst	Data analyst	Data analyst	Data analyst
Differentiator	Differentiator	Differentiator	Differentiator	Differentiator
Educational activist			Educational activist	
ESOL teacher	ESOL teacher	ESOL teacher	ESOL teacher	ESOL teacher
Full inclusion teacher	Full inclusion teacher	Full inclusion teacher	Full inclusion teacher	Full inclusion teacher
Moral agent	Moral agent	Moral agent	Moral agent	
Organizational systems manager	Organizational systems manager	Organizational systems manager		Organizational systems manager
Planner	Planner	Planner		Planner
Program enactor	Program enactor	Program enactor		Program enactor
	Psychologist		Psychologist	
Remediator			Remediator	
Resource consumer	Resource consumer	Resource consumer		
Resource teacher	Resource teacher	Resource teacher		Resource teacher
Student	Student placement coordinator		Student placement coordinator	Student

placement coordinator				placement coordinator
Team member	Team member	Team member	Team member	Team member
Vertical articulator	Vertical articulator	Vertical articulator		Vertical articulator

Level 1 – high role expectation

Level 2 – moderate role expectation

Level 3 – low/emerging role expectation

Shaded box – new role

Increasing Roles

The policy environment at each of our study’s schools was highly charged through the duration of our study. The district, being a large one, used a number of means to inform teachers of their role expectations. It held district-wide professional development sessions to teach teachers about best instructional practices. It employed a “teacher of teachers” model of information dissemination in which staff developers and math and reading specialists learned about instructional and curricular expectations, returned to their schools, and instructed teachers on them. The district also mandated the use of specific instructional programs, particularly ones directed at raising achievement in low performing students.

The district had goals stemming from the state’s AYP expectations to bring all students to grade level in addition to district goals of having students be prepared for passing state required tests for graduation and improved SAT scores. Principals and staff developers spoke about the district’s goal of “accelerating” student achievement. The means for promoting grade level performance and accelerating student achievement came from the implementation of very directive new reading and math curricula in three years time, the district-wide use of an organizational systems model for school improvement, the Baldrige Process, to be in place in all schools by 2005, and the promotion of a number of collaborative and individual practices aimed at identifying students who were not achieving at grade level and raising them to expected levels of achievement.

Given the number of mandates, directives, and the curricula changes, the roles teachers were asked to assume increased. Teachers could no longer work independently, rely on extant practices, or in some cases, act on their own beliefs about what high-quality teaching was. They were now expected to learn more instructional strategies, enact a greater variety of instructional programs, understand the curricular expectations of grade levels above and below their own teaching assignment, and interpret formal achievement data from a number of new assessments that were administered throughout the school year. Additionally, as teacher accountability increased, teachers were asked to document everything from the monitoring tools they used with their students to the work they did in their grade-level team meetings. Even the work time expectation for some teachers increased. All teachers at Title I schools that were the most severely impacted by high numbers of FARMS students were given the new role designation of “resource teacher.” As such they were expected to meet after school one day a week until 6:00 and one Saturday per month for instructional planning and student placement purposes.

Teachers in some of our schools also took on the new role of “full inclusion teacher.” The district was moving toward making all of its elementary schools full inclusion, in which all students, even those who had previously received mathematics or reading instruction solely in special education classes, would be fully included in the regular classroom. This was a major change in the teachers’ role, requiring significant adaptations in the way they conducted their classrooms. There would now be two or more teachers in the classroom, and the expectation of the district was that they plan and deliver instruction together.

The impact of increasing teacher roles came through clearly in our conversations with staff developers. These were teachers who worked daily with the classroom teachers in their

schools to implement programs, curriculum, and help teachers respond to increasing instructional demands:

...the thing that compounds, that makes [high-quality teaching] a hundred million times more difficult is that we're trying to help teachers become more reflective and meet those [professional teaching] standards and at the same time we're introducing a thousand miles of new curriculum, of new *everything*, and I'm not surprised by the rate of teachers that leave the profession right now...Even with the support; all of us are supports for them, but we're not enough. How much change can you do at once? I think it's admirable that we're taking a lot of strides towards – we know that the single most effective factor in raising student achievement is a high-quality teacher in every classroom. But how much can a human being do? (SD-FG, 3-31-04)

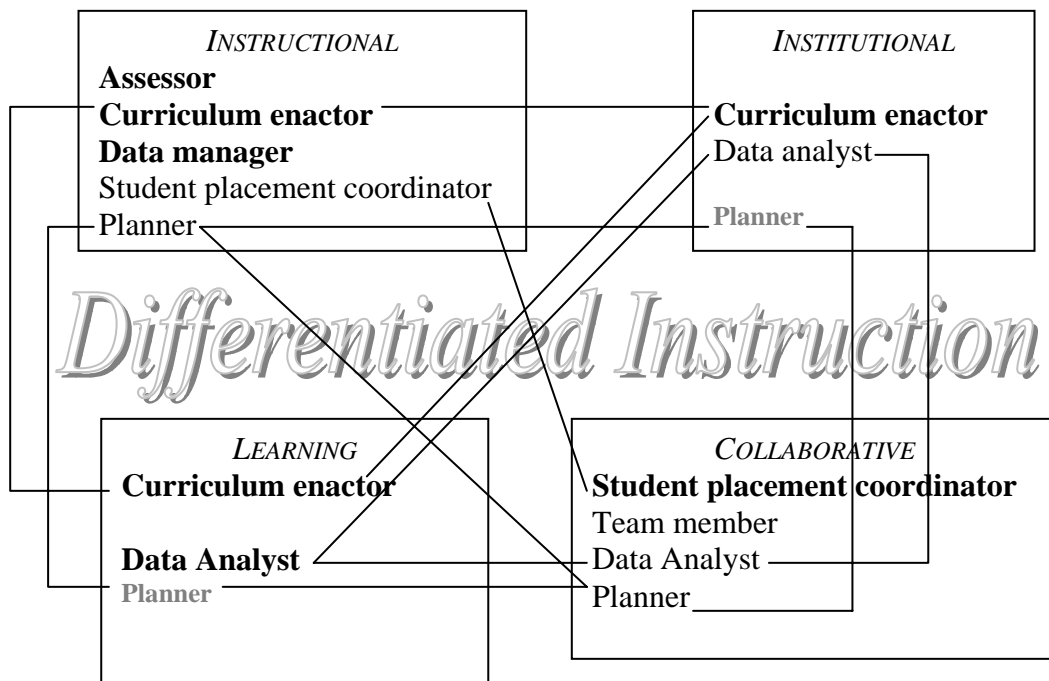
We were able to discern a distinction between role increase, role intensification, and role expansion in teachers' roles even though these roles were tightly interconnected. Merely stating that teachers' roles did only one or the other seemed inadequate to describe the changes we observed. So, having established that teachers' roles increased, in the following sections we demonstrate how their roles intensified and expanded by looking at one major directive – “differentiated instruction.” Over the course of the study this one directive was a major influence on how teachers worked in schools and as high-stakes accountability increased, so did their responses to the directive.

Role Intensification and Expansion for Differentiated Instruction

Table I categorized teachers' roles as instructional roles, institutional roles, learning roles, relational roles, and collaborative roles. As teachers' roles intensified and expanded, there was emphasis on one or another category depending on how the role appeared in response to a directive. For example, some roles became highly collaborative, such as planner, as teachers learned how to use highly-structured curricula, whereas some roles, such as organizational developer, were strongly institutional stemming more from a district mandate rather than an organic desire to operationalize organizational strategies. We chose to illustrate role expansion

and intensification through examining teachers' responses to differentiated instruction because of its pervasiveness. Not only was it evident in each of the five role categories, but it required teachers to enact a number of other roles such as assessor, curriculum enactor, student placement coordinator, planner, team member, data manager, and data analyst. In effect, the directive of differentiated instruction became a role in and of itself. We demonstrate this manifestation in Figure I where we reveal the interaction and overlap of the multiple roles required to address the directive. We show how the roles relate against the backdrop of the differentiation mandate, indicate the level of the role (as in Table I), and connect roles between categories to illustrate the complexity of this composite role.

Figure I: The Role of Teacher as Differentiator



The impetus of the directive

...[teachers] looked at specific students that might need more support in order to reach the goals and which, you know, ultimately the goal is not performance on [the state test]. It's certainly to be a strong reader and an academic performer but you know, [the state test] is that tool that determines whether or not a school makes AYP, their adequate yearly progress, or whether they go into some form of corrective action. (Curriculum Specialist, 2-12-04)

The state test of student achievement required significant increases in student scores between its first administration in 2003 and the last year of our study, 2005. The first year's scores were used to establish a baseline of student achievement, in 2004 schools were required by the state to increase the percent of students in the proficient category by 2.5% in reading and 2.7% in mathematics, and for 2005, proficiency ratings had to increase by 11.5% in reading and 9.5% in mathematics. Although "being a strong reader and academic performer" was the ideal goal for student achievement, clearly, the goal of attaining AYP was foremost in the minds of most district personnel. "Differentiated instruction" became a primary means for getting to AYP targets. Although differentiating instruction to meet the needs of students had long been a concern for teachers it took on new meaning as AYP goals increased. The roles that teachers had to assume in response to AYP became more and more institutionalized, that is, the district attempted to orchestrate the work of teachers on a level beyond what most had ever experienced.

Individual schools had some discretion on how they approached the directive of differentiating instruction and the district provided them with a number of models and resources to work with. We examine two major means through which the schools addressed differentiation: special programs and within classroom strategies.

Differentiation using special programs

Given the large population of ESOL and special education students in most of the schools we studied, one way instruction was differentiated was through pull-out and plug-in³ programs in mathematics and, more often, in reading. The district also required a “reading intervention” program for any students who were not achieving at grade level at all Title I schools, and the program was “strongly suggested” for schools that were in danger of not meeting AYP targets. The mandated reading block was already 90 minutes long, but for those students requiring intervention, as much as an additional hour of reading was required. The teachers’ role of student placement coordinator expanded as the number of student placement options increased. For example, the reading intervention program used specific instructional programs – teachers had to become familiar with the goals of programs they were not personally using. They were also expected to review an increasing variety of test data to determine their students’ grade-level status and determine student placement in both math and reading intervention programs. Here we saw an intensification of teachers’ roles as data managers and data analysts.

In all of the districts’ schools, a number of formal tests were administered to students to monitor their reading achievement at grade level and diagnose reading weaknesses. Some of these diagnostic tests intensified teachers’ roles as data managers because the teachers themselves administered the tests to individual students, each test taking up to 20 minutes. A battery of new tests, the Measures of Academic Progress in Reading (MAP-R) and the Stanford Diagnostic Reading Test #4 (SDRT), were also added for diagnostic purposes or to assess grade level achievement. One principal told us that the SDRT appeared on the scene at the eleventh hour before the start of the school year in 2004:

³ Plug-in programs used academic support teachers, resource teachers, ESOL teachers, or paraeducators to work with students identified for extra support within the classroom.

We didn't find out until a few weeks before school that we were going to have to give the Stanford Diagnostic Reading Test #4 to...selective students at 3rd, 4th and 5th grade. Now, the selected students we're giving it to are most probably the same selected students that we're giving the [reading interventions] to. So, those poor babies are going to be tested out. (BF-Principal, 9-28-04)

Under the category of “learner” we see role expansion for teachers as they were expected to become data analysts. The teachers underwent professional development sessions, often during time when students were in school, to learn to read the complicated statistical test reports on their students. A staff developer sympathized with the teachers at her school over this role expansion. In her statement below, we see that the MAP-R and SDRT did not exhaust the repertoire of assessments teachers were expected to assimilate into their work. There was more to come in the form of keeping running records for each student on palm pilots – meaning more professional development for teacher learning and greater role intensification as data managers:

We also have something new down the road, a new initiative, you know, that deals with the [palm pilots], you know, putting all this data on – and the whole, the SDRT and the MAP-R, you know, you're talking about the data piece of it that we've had to have trainings on how to read the data. What does it represent? What does it mean? Now, hopefully it will get easier but it's still very confusing and which means a lot more time that has to be spent looking at these test results. (BF-SD, 5-17-05)

As students were identified for special programs, other roles under the instructional, learning, and collaborative categories intensified or expanded. Even though students were taught by a number of different people, the classroom teacher was still the one held most accountable for student achievement according to a district-wide grading and reporting policy that was implemented in 2003. The district also required that all students, ESOL and special education students alike, be taught using the new curricula. The role of curriculum enactor was intensified because in addition to learning new curricula, teachers had to orchestrate their instruction in a manner that would provide coherence for students who came in and out of their classrooms on a regular basis. Or, if the special program teachers were “plugged-in” to the classroom, enacting

the curriculum expanded under the collaborative category. Simply understanding how to use specialists as resources became a necessary component of enacting the curriculum. As one teacher described her thinking:

And the tiered instruction, you know, tiered instruction, the differentiation and I guess maybe complete utilization of your resource people.... So being able to talk, you know, how are you utilizing your resources? How am I utilizing ESOL services? How am I utilizing the resource teacher for my fourth graders? And the time that they're not in the room, yet, I'm still responsible for some of the instruction, so being able to time things, that you're timing things perfectly so that you end one thing in order to start another thing when other students are coming in the room after they've been gone. So it's all in the timing and the differentiating. (T Group B-5-03)

By the end of our study teachers indicated that they had learned a great deal about enacting the mathematics curriculum, and having been exposed to one year of the reading curriculum, they anticipated a similar learning curve for their enactment of it. However, the differentiation directive, particularly using special programs, continued to challenge teachers as their roles changed. In one of our last interviews of the study, a staff developer reflected on the status of the differentiation directive as it appeared in practice at her school:

Well, the hardest thing in both reading and math is the differentiation piece, is the grouping, and the pull-out that goes on in the classroom. The teachers are really, really good at taking the instruction, looking at indicators and objectives that need to be taught, and teaching that, but when you have children being pulled out for ESOL, children being pulled out for resource, children being pulled out for reading intervention and it's constant all day, trying to find the time to teach, it gets kind of hard. And I would say that would be their biggest concern this year. (BF-SD, 6-7-05)

Within classroom differentiation in mathematics

Differentiated instruction did not stop with special programs. Teachers were expected to differentiate instruction in mathematics and reading in their regular classroom. In this way, teachers' roles became more intensified, particularly in the learning category as curriculum enactors. When the mathematics curriculum was introduced in 2002, it was to be delivered on a schedule so that all students in the district would be studying the same content at the same time,

making school-to-school transitions more coherent for teachers as well as for students. Another new aspect of the curriculum was the arrangement of content in the five units of the 4th grade curriculum and six units of the 5th grade curriculum. This required experienced teachers to abandon long-held practices and beliefs about how to teach certain topics and bring students to mastery because the curriculum seemed disjointed to them (e.g., work with fractions was spread across three or four units). Further complicating the situation was the spiraling of concepts across grade levels. Ideally, if a student began the curriculum in kindergarten, he or she would have no knowledge or skill gaps at successive grade levels. For the 4th and 5th grade teachers, enacting the curriculum and differentiating instruction was especially difficult during the initial year of implementation because all grades received the curriculum concurrently – knowledge and skill gaps were the rule rather than the exception. A 4th grade teacher complained during that first year that her higher-achieving students had no problem with the curriculum, but because her classes were grouped heterogeneously, differentiation was nearly impossible given the range of abilities in her class and the fast pace of the curriculum:

I have kids who get 104 on my quizzes because they've got it and they're getting the bonus. So I can't slow down (for struggling students)...because they'll be bored stiff. I find it more – the pacing of the math makes differentiation difficult...the pacing of the math makes it so I can't do it anyway. (Hinton-BF-02)

In contrast, a few teachers delved into differentiation and came to believe that their efforts improved their teaching. This teacher's statement indicates the intensification of her planning role as she learned to differentiate her mathematics instruction. She saw the extra planning she was required to do as a benefit to both herself and her students, but her statement also indicates that her learning took a great deal of individual motivation and effort:

I have found that we differentiate in math and differentiate to the point where I have three math groups within a heterogeneous classroom....I am forced to have to plan for the three different groups and the kids seem to – are able to learn, I think, better because

they're working with on their level as opposed to just being a, teaching math to the whole class....I feel that I've become a better teacher as a result of having to, forcing myself to kind of sit down and look at the three different levels of the kids in the classroom and kind of plan my lessons from that. (T Group B-5-03)

District-developed unit tests were created to monitor student progress with the new curriculum. Used as differentiation tools, these tests assisted in the regular regrouping of students within and between classrooms. In some schools, students were homogeneously grouped in classes across grade level teams, requiring that they switch teachers periodically during the year. As a result of this grouping technique, we see another version of the expanded teachers' role as student placement coordinator – teachers collaborated in their grade level teams to discuss individual student progress and determine their placement within the teams on a regular basis. In other schools, or when schools returned to scheduling heterogeneous classes because teachers realized a degeneration of student dialogue in homogeneously-grouped classes (particularly in lower achieving ones), the tests were used to regroup students within the classroom and serve as a guide for reteaching the curriculum.⁴

Ongoing informal assessment was the key to differentiation according to the information disseminated by math specialists and staff developers at the schools. The teachers' role as assessor intensified as they were directed to use ongoing "formative" assessments to determine student progress, preferably on a daily basis. One teacher described how she used "exit cards" to help her plan for the following day:

You know, over the, the last ten years of my teaching, that's one of the big differences, is the differentiation. You know, before, you didn't have four or five groups going in math, you know. You didn't give an exit card (formative assessment) at the end of every lesson to see who got it, who didn't, who needs reteaching. And that's a daily thing, now, to figure out where you're gonna go tomorrow, you know,...who's going on, who's staying

⁴ Because of the curriculum pacing, there was little time for reteaching concepts and skills during the regular mathematics block. Several schools added time during the school day, up to thirty minutes a day, for reteaching. This time was taken from specials (e.g., music, physical education) and in some cases from social studies or science.

here, who's going backwards, you know. Before, you taught a lesson to everybody, and, and hopefully, everybody got it. (FG-SA-6-2-04)

The teachers had little time to become comfortable with the mathematics curriculum or using differentiated instruction in mathematics before more was added to their work expectations. In the next section we will examine differentiation as teachers encountered it in the reading curriculum that was implemented only two years after the mathematics curriculum.

Within classroom differentiation in reading

The implementation of the reading curriculum in 2004 had a differentiation component built into it. Traditionally, 4th and 5th grade teachers did not conduct small guided-reading groups in reading classes as was common practice in the primary grades. The new reading curriculum mandated that teachers do this. Previously, teachers approached reading instruction after the 3rd grade from a philosophy of “reading to learn” rather than using text as “a vehicle to get to understanding a (reading) strategy, not so much for actually learning the information in the text” (CR-RS, 6/7/05). Guided-reading groups were viewed by the district as the best way to teach reading strategies to students of a wide range of ability. One principal told us about this reading instructional directive as introduced at a district principals’ meeting. In her statement she revealed the intensification of teacher learning required for many teachers to enact the curriculum in this way:

One of the pieces with the new training for the 4th and 5th grade was talking about guided reading groups....So that was going to be a huge, new learning for some classroom teachers. They've done whole group language arts instruction for several years and now they have to think about how they're going to group children in guided-reading groups. (I-BF-Principal_ 9-28-04)

Earlier, we described how differentiation was achieved in reading through the use of special programs and how teachers’ roles were impacted accordingly. Although many students received supplemental instruction in reading outside of the regular reading block, the teachers

still had their hands full with within classroom differentiation. Their roles as planners intensified as they spent more time choosing texts to match their students' skills to the reading strategies the curriculum was intended to develop. Their roles also expanded with the heightened expectation for teacher collaboration with regard to both instructional planning and as data managers and analysts. Teachers collected data, in addition to that already described, as though keeping an "on grade level vigil."

Meetings commonly referred to as "data meetings" were held in which teachers, principals, reading and math specialists, ESOL teachers, resource teachers, and staff developers met (again taking teachers away from the classroom) to discuss students who were receiving interventions or whose data indicated they were not achieving at grade level through regular classroom instruction. Data for these meetings was not limited to formal achievement data. The teachers kept data notebooks that documented the social, behavioral, and academic traits of struggling students. We observed professional development meetings where teachers were given packets of forms to document students' performance in each of those areas of development. These packets came complete with checklists of student behaviors and indicators of progress. Teachers also gave individual diagnostic reading assessments to all of their students during class time, again to monitor students' grade level ability. All of this data was presented by the classroom teacher at data meetings. They were asked to describe the strategies they used to support the students' learning and were then given instructional suggestions by the rest of the "data team." Teachers were of two minds about the data meetings. On the one hand, they thought the meetings were helpful in sharing information about students with difficult learning problems:

I kind of like the idea that these data meetings come up, because it kind of forces you to check those kids' progress and see exactly – sit down and talk, and it's a great way for

you to get together with all these other professionals that work with your children, and have advice, you know, different strategies that you can use to help them out. (HT-4th grade team, 6/8/05)

On the other hand, preparing for the meetings was time consuming and, in some schools, took the teachers away from interacting with the rest of the students in their classroom during instructional time:

It's a good thing for those five, six, or twelve children (discussed at data meetings). It negatively, in my opinion, impacts the children on grade level and above grade level, because you're taking teaching time away from them, because they're done (diagnostic reading assessments) one-on-one, individually, and they take a while to do. (HT-4th grade team, 6/8/05)

The teachers' voices in all of our study schools echoed the experience of role increase, expansion, and intensification as those we chose to highlight. The admirable goal of differentiating instruction in and of itself had an extraordinary impact on the work of teachers. Considering the impact of that one directive on teachers' roles, what might the outcomes of numerous concurrent directives be? We proceed in the next section to consider this.

Consequences of Too Many Policy Changes

Examining one instructional directive from the perspective of teacher roles illustrates a change occurring in teachers' work in a high-stakes accountability climate. Any single policy directive could be analyzed through the lenses of role increase, expansion, and intensification and a similar picture would emerge. When several significant directives impact teachers' work simultaneously, there is more than an additive effect on their responsibility. When a role expands in order to meet, for example, the collaborative mandate of one directive, and the same role intensifies in its instructional demands to meet the requirements of another, while new roles are added, we see an exponential gain in teachers' roles. When teachers' roles are affected to

this magnitude, we must ask what this does to the experience of schooling for both teachers and their students.

In our study, the impetus for the majority of directives that came along over the four years became inextricably linked to AYP, regardless of the value behind their original intent. Teachers roles changed as AYP expectations grew, particularly in schools where student populations had the greatest needs for academic growth. Teachers were swept up in a flow of curricular, instructional, assessment, and organizational mandates that consumed their thinking, their energy, and for some, even their love of teaching. Our analysis points to two very significant areas that were influenced by this high-stakes environment, one, teachers' pedagogies, the other, their relationships with their students.

Apple and Jungck (1992) cautioned that when curriculum becomes increasingly controlled, standardized, systematized from a central level, and competencies are measured by standardized tests, the outcomes for teaching may not be what was envisioned. "Instead of professional teachers who care greatly about what they do and why they do it, we may have alienated executors of someone else's plans." (p. 24.) The implementation of two new curricula that were specific in their scope and sequence and directive in their enactment were, from general consensus, constraining for teachers, particularly in mathematics. Teachers struggled to replace their old pedagogies with new practices that enabled them to cover a dense curriculum on a schedule. However, many of the pedagogical changes they described, particularly during the first two years with the curriculum, were not ones that the school district endorsed. Because the curriculum moved at such fast pace and because the topics were organized in such an unfamiliar way, teachers felt as though they were racing through it. Several teachers referred to the deterioration of their pedagogies into a process they described as "hit or miss" and "drive-by

teaching.” Teachers told us that the rapid pace of the content delivery necessitated that they stop creating lessons that involved inquiry. A few teachers who responded that they appreciated the structure of the curriculum made rather dubious comments about the benefit of moving quickly such as it was good to move on when a student didn’t get a concept rather than “harping” on it. More than teaching the student disciplined learning, it seemed that the curriculum was disciplining the teachers: “it makes sure we’re disciplined enough to move on rather than wanting to make sure they learn it at 100% or 90%” (FG-T-MP-5-26-04).

We do not make the claim that the curriculum itself was at fault for these pedagogical changes, but we suggest that the role expansion and intensification we documented did not permit teachers the psychic or temporal space to reflect on the curriculum (in reading as well as mathematics) in ways that led to their own understanding of curricular structure or intents. Without time to reflect on their teaching or assess their enactment processes, was it really possible for them to enact curricula in thoughtful authentic ways that truly addressed the range of student abilities or learning styles? Rather than the “robotic” teaching that many teachers feared they were developing on account of the nature of the curricula, we submit that it is equally possible, if not more likely, that their roles were impacted so severely that their ability to enact the curriculum in ways that suited their classroom contexts was inhibited.

We focused on the directive of differentiated instruction for our analysis. Some scholars (Hargreaves, 2000; Bartlett, 2004; Apple & Jungck, 1992) state that school reformers believe that role expansion and intensification have the potential to elevate teachers’ sense of professionalism. Although some of our study’s teachers claimed that addressing the differentiation directive made them better teachers because it forced them to be more cognizant of their students’ learning styles and daily progress, they may have equated the role

intensification and expansion they experienced with the improvement of their teaching. Granted, some teachers speculated that their students seemed to be “getting it” through differentiating instruction and the daily monitoring of student work that it required, but we question the true benefit of ever changing student groupings and the ability of daily formative assessments to identify students’ learning gaps or difficulties. A staff developer, who had the occasion to observe teaching in classrooms across her school told us that the differentiation she observed was “differentiation going down.” Rarely, she admitted, did she see teachers focusing their attention on students who were not struggling. She wondered, with dismay, what teachers were doing to challenge students who were on grade level. Not surprisingly, teachers told us that they relied heavily on the higher achieving students in their classes to “teach,” not merely just help, the lower achieving ones. With up to five separate groups in one class, it was impossible for one teacher to give any one group, let alone any one student, significant attention. Additionally, differentiating instruction was described to us almost exclusively in terms of instructional materials, i.e., choosing worksheets that allowed students to practice skills at different levels. Teachers indeed seemed to become better managers of activities, resources, and data, but we saw little evidence that their pedagogies themselves improved as they assumed the many roles dedicated to instructional differentiation.

These findings naturally led us to consider the change that teachers experienced with regard to their relationships with their students as their roles changed. Despite the expanded collaborative roles that were required for student placement in special programs, most of our study’s teachers complained of the effect all of the movement had on their students and their relationships with them. We described the difficulty teachers had coordinating their enactment of the curriculum with pull-out teachers because of the regular coming and going of students in

and out of the classroom. Despite collaborative efforts, teachers told us that understanding what instruction their students were actually getting was difficult to keep track of. Considering the number and scope of collaborative roles the teachers tried to assume, there was not enough time to coordinate instruction or discuss student performance significantly on a day-to-day basis. Furthermore, teachers worried when students became confused about where they should be at any given time during the day. Consider, for example, the plight of the ESOL student who has yet to attain virtually any English language and the teachers' moral and instructional roles in trying to help him understand what was going on in *any* class when he was pulled out up to three times a day. One teacher became so frustrated at one point, both with the disruption of student movement to her lesson and out of concern for the students' well-being, that she refused to allow students to leave her classroom to go to their intervention. She, like other teachers, worried that they were not able to spend enough time with their students to get to know them, which was antithetical to their beliefs about the benefit of getting to know their students through working with them.

Getting to know students became a component of the teachers' role as data analyst. The teachers had plenty of data on their students from the many diagnostic and achievement tests we described. However, how well did the role of data analyst serve the student-teacher relationship? Very few teachers believed the information from the testing was worth the time and effort it took to administer the tests. Learning to interpret the data was a task that required a great deal of teacher learning, and professional development was spread thin enough to support the teachers' roles of curriculum enactors. Again, time was an issue. Teachers had so much data from so many tests that they didn't have enough time to use the information. Moreover, the constant testing impacted the teachers' relationship with their students in unexpected ways. One teacher

worried that it compromised her credibility with her students because after a point, would the students believe that she wasn't just "blowing smoke" about the importance of the test? She said, "It's hard to gear yourself up to take a test and tell the children it's important, if you're always giving them an important test." (BF-Keller, 6/16/05) Her colleague added that too many tests were demoralizing for students. She asked, "How much documentation do you need that the child can't read? I mean, they're reading three grade levels below. Okay, we know that. Do we have to keep slapping it in their face?" (BF-Grant, 6/16/05). All of the teachers we encountered considered themselves caring professionals. Getting to know students was important to them, so they had very mixed feelings about their expanded roles as data analysts. They were torn between accepting the district's stance that knowing the students' needs meant knowing their assessment data and their belief that the information they garnered through interacting with them was equally as valuable. The time taken away from instruction on account of testing was not, from the perspective of most of our study's teachers, worth the price of diminished relational roles with their students.

Conclusion

In this paper we examined teacher roles as they changed over the four years of our study on 4th and 5th grade teaching in mathematics and reading. We began by identifying the roles that teachers and other school personnel described to us in our interviews with them. We found that the number of roles they were asked to assume increased in number, expanded, and intensified as the policy climate in their school district became more high-stakes.

Our purpose for this analysis began as a means to determine if, in fact, teachers' roles did change significantly in a highly charged policy environment, contrary to views that teachers' work has historically remained quite stable. However, most examinations of teachers' roles have

not captured the “big picture” of reform efforts as they appear in the day-to-day work of teachers. By looking at teachers’ role change as a response to numerous, top-down mandates we found that not only did their roles change, but the magnitude with which they changed was far greater than we anticipated.

We chose to examine the directive of differentiated instruction to illustrate the severity of role change. Differentiated instruction was only one major directive that the teachers in our study experienced over only a few short years. Through this examination we illustrated the complexity of interactions between different roles and indicated areas in which the teachers experienced the most pressure to change. Combine a number of directives that have similar complexity and urgency and consider what that does to the ability of teachers to improve instruction and create learning environments that are responsive to students’ intellectual and social growth as well as to bring students to standards of achievement in accordance with AYP targets. Had Waller written in 2006 rather than 1932, he might well have asked, not just “What does teaching do to teachers?” but also, “What does it do to their relationships with students?”

We submit that as school districts develop curricula and plans for raising student achievement, they should consider their impact on teachers’ roles. As admirable as the implementation of rigorous curriculum and elaborate designs for monitoring student achievement are, if they result in exponential growth of teacher roles, especially in a short period of time, the consequences may be quite different from the outcomes that were desired. The teachers we studied worked very hard to enact the curricula and address the directives in meaningful ways. However, the burden of taking on numerous interconnected and overlapping roles caused many to question “whether I’m a good teacher.” We ask whether it is in the public interest when that

query confounds rather than improves teachers' work or diminishes their desire to stay in the profession.

References

- Apple, M. (1982). *Education and power*. Boston & London: Routledge & Kegan Paul.
- Apple, M.W. & Jungck, S. (1992). You don't have to be a teacher to teach this unit: Teaching, technology and control in the classroom. In A. Hargreaves & M. Fullan (Eds.), *Understanding teacher development* (pp. 20-42). New York, NY: Teachers College Press.
- Bailey, B. (2000). The impact of mandated change on teachers. In N. Bascia & A. Hargreaves (Eds.), *The sharp edge of educational change: Teaching, leading, and the realities of reform* (pp. 112-128). London & New York: RoutledgeFalmer.
- Bartlett, L. (2004). Expanding teacher work roles: A resource for retention or a recipe for overwork? *Journal of Education Policy*, 19 (5), pp. 565-582.
- Calderhead, J. (2001). International experiences of teaching reform. In V. Richardson (Ed.), *Handbook of Research on Teaching*, 4th Edition (pp. 777-800). Washington, DC: AERA.
- Cohen, D. K. (1988). Teaching practice: Plus que ca change... In P. Jackson (Ed.), *Contributions to educational change: Perspectives on research and practice* (pp. 27-84). Berkeley: McCutcheon.
- Cohen, D. K. (1990). A revolution in one classroom: The case of Mrs. Oublier. *Educational Evaluation and Policy Analysis*, 12 (3), 311-330.
- Cohen, D. K., & Hill, H. (2000). Instructional policy and classroom performance: The mathematics reform in California. *Teachers College Record*, 102 (2), 294-343.
- Cohen, D. K., & Spillane, J. P. (1993). Policy and practice: The relations between governance and instruction. In L. Darling-Hammond (Ed.), *Review of Research in Education* (Vol. 18, pp. 3-49). Washington DC: American Educational Research Association.
- Connell, B. (1985). *Teachers' work*. Sydney, Australia: Allen & Unwin.
- Cuban, L. (1993). *How teachers taught: Constancy and change in American classrooms 1880-1990*, 2nd Ed. New York: Teachers College Press.
- Darling-Hammond, L. (1999). *The right to learn: A blueprint for creating schools that work*. San Francisco: Jossey-Bass.

- Elmore, R. F. (1996). Getting to scale with good educational policy. *Harvard Educational Review*, 66 (1), 1-26.
- Feiman-Nemser, S., & Floden, R. (1986). The cultures of teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 505-526). New York: Macmillan.
- Gitlin, A. (1983). School structure and teachers' work. In M. Apple & L. Weis, *Ideology and practice in schooling* (pp. 193-212). Philadelphia: Temple University Press.
- Hargreaves, A. (1992). Time and teachers' work: An analysis of the intensification thesis. *Teachers College Record*, 94 (1), pp. 87-108.
- Hargreaves, A. (1995). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. New York: Teachers College Press.
- Hargreaves, A. (2000). Four ages of professionalism and professional learning. *Teachers and Teaching: History and Practice* 6 (2), pp. 151-182.
- Kirtman, L. (2002, May 8). Policy and practice: Restructuring teachers' work. *Education Policy Analysis Archives*, 10 (25). Retrieved 12/15/2005 from <http://eppaa.asu.edu/eppa/v10n25/>.
- Lieberman, A. & Miller, L. (1999). *Teachers transforming their world and their work*. New York: Teachers College Press.
- Little, J. W. (1999). Organizing schools for teacher learning. In L. Darling-Hammond & G. Sykes, *Teaching as the learning profession: Handbook of policy and practice* (pp. 233-262). San Francisco: Jossey-Bass.
- Little, J.W. & Bartlett, L. (2002). Career and commitment in the context of comprehensive school reform. *Teachers and Teaching: Theory and Practice* 8 (3/4), 345-354.
- Lortie, D. (1975). *Schoolteacher: A Sociological Study*. Chicago: The University of Chicago Press.
- No Child Left Behind Act, (2001). Public Law 107-110.
- O'Day, J. (2002). Complexity, accountability, and school improvement. *Harvard Educational Review*, 72 (3), 293-329.
- Richardson, V. (2001b). Teacher change. In V. Richardson (Ed.), *Handbook of Research on Teaching*, 4th Edition (pp. 905-47). Washington, DC: AERA.
- Rosenholtz, S. (1991). *Teachers' workplace: The social organization of schools*. New York: Teachers College Press.

- Rowan, B. (1998). The task characteristics of teaching: Implications for the organizational design of schools. In R. Bernhardt, C. N. Hedley, G. Cattaro, & V. Svolopoulos (Eds.), *Curriculum leadership. Rethinking schools for the 21st Century* (pp. 37-54). Cresskill NJ: Hampton Press.
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of school reform*. Cambridge, MA: Harvard University Press.
- Sarason, S. (1971). *The culture of the school and the problem of change*. Boston: Allyn and Bacon, Inc.
- Spillane, J. P. (1999) External reform initiatives and teachers' efforts to reconstruct their practice: the mediating role of teachers' zones of enactment. *Journal of Curriculum Studies*, 31 (2), pp. 143-175.
- Spillane, J.P., Reiser, B. & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation. In M.I. Honig (Chair), *The new local education "agency": Reconceptualizing implementers' and policymakers' roles in implementation*. Symposium conducted at the meeting of the American Educational Research Association. New Orleans, LA.
- Waller, W. (1932). *The sociology of teaching*. New York: John Wiley & Sons.
- Wilson, S. (2003). *California dreaming: Reforming mathematics education*. New Haven: Yale University Press.
- Wise, A. (1979). *Legislated learning: The bureaucratization of the American classroom*. Berkeley: University of California Press.