University of South Florida

DIGITAL COMMONS @ UNIVERSITY OF SOUTH FLORIDA

Digital Commons @ University of South Florida

College of Education Publications

College of Education

January 2007

Education Policy Analysis Archives 15/01

Arizona State University

University of South Florida

Follow this and additional works at: https://digitalcommons.usf.edu/coedu_pub



Part of the Education Commons

Scholar Commons Citation

Arizona State University and University of South Florida, "Education Policy Analysis Archives 15/01" (2007). College of Education Publications. 621.

https://digitalcommons.usf.edu/coedu_pub/621

This Article is brought to you for free and open access by the College of Education at Digital Commons @ University of South Florida. It has been accepted for inclusion in College of Education Publications by an authorized administrator of Digital Commons @ University of South Florida. For more information, please contact digitalcommons@usf.edu.

EDUCATION POLICY ANALYSIS ARCHIVES

A peer-reviewed scholarly journal Editor: Sherman Dorn College of Education University of South Florida

Volume 15 Number 1

January 22, 2007

ISSN 1068-2341

Hugging the Middle Teaching in an Era of Testing and Accountability, 1980–2005

Larry Cuban Stanford University

Citation: Cuban, L. (2007). Hugging the middle: Teaching in an era of testing and accountability. *Education Policy Analysis Archives*, 15(1). Retrieved [date] from http://epaa.asu.edu/epaa/v15n1/.

Abstract

instruction; student-centered instruction.

In the last quarter-century and especially the last decade, testing and accountability have come to dominate education policy at the state and national levels. The common concern about the effects of such testing is that it reshapes teaching in the classroom. But such claims do not look at the evidence of deeper classroom structures (the mix of teacher-centered and student-centered practices) in historical context. This article extends historical research in *How Teachers Taught* (Cuban, 1993) to the present in three metropolitan school districts. While testing and accountability have become more obvious concerns of teachers, the hybridized classroom environment documented in *How Teachers Taught* have become more pervasive. This article documents this continuing ubiquity and addresses the apparent inconsistency between evidence of a hybridized classroom environment and the unintended consequences of testing and accountability. Keywords: No Child Left Behind; classroom environment; teacher-centered

Readers are free to copy, display, and distribute this article, as long as the work is attributed to the author(s) and **Education Policy Analysis Archives**, it is distributed for non-commercial purposes only, and no alteration or transformation is made in the work. More details of this Creative Commons license are available at http://creativecommons.org/licenses/by-nc-nd/2.5/. All other uses must be approved by the author(s) or **EPAA**. **EPAA** is published jointly by the Mary Lou Fulton College of Education at Arizona State University and the College of Education at the University of South Florida. Articles are indexed by H.W. Wilson & Co. Please contribute commentary at http://epaa.info/wordpress/ and send errata notes to Sherman Dorn (epaa-editor@shermandorn.com).

Abrazando el Centro: Enseñando en una era de Exámenes y de Responsabilidad Educativa, 1980-2005

Resumen

En el cuarto-siglo pasado y especialmente durante la década pasada, las exámenes y la noción de responsabilidad educative (accountability) han dominado las políticas educativas en los estados y a nivel nacional. Una preocupación frecuente es acerca de los efectos de los exámenes sobre la reestructuración de la enseñanza. Pero tales preocupaciones suelen no considerar la evidencia acerca de las estructuras profundas existentes en las aulas (la mezcla de prácticas centradas en los profesores y centradas en los estudiantes) en sus contextos históricos. Este artículo amplía la investigación histórica presentada en How Teachers Taught (Cuban, 1993 Como Enseñaban los Profesores) a la actualidad presente en tres distritos escolares metropolitanas. Mientras que los exámenes y la noción de responsabilidad educativa son las preocupaciones más obvias de los docentes, el ambiente híbrido de las salas de clase documentado en How Teachers Taught se ha hecho más intenso. Este artículo documenta esta linea de continuidad y discute la aparente inconsistencia entre la evidencia de un ambiente híbrido en las aulas y las consecuencias no-intencionales de los exámenes y la noción de responsabilidad educativa.

Palabras clave: Sin dejar un solo niño/a rezagado; contexto escolar; enseñanza centrada en los docentes; enseñanza centrada en los alumnos.

For nearly a half-century, critics have scolded dithering boards of education for low-performing public schools, condemned school bureaucracies and unions for blocking reform, but stuttered when it came to teachers. In carping at teachers, critics have been caught in a bind. They see too many teachers thwarting necessary changes. Yet critics know that these very same teachers—nearly four million strong—are gatekeepers to learning in schools and crucial to the growth of nearly fifty million young children and youth. No technology has yet convinced faultfinders, parents, or policymakers that machines can replace teachers. As important as improving boards of education, streamlining bureaucracies, and getting unions to be reform-minded are in making good schools, student learning still depends on what teachers do in classrooms. Inevitably, then, if critics see teachers as the problem these decision-makers also know that teachers are also the solution.

The paradox of distrusting teachers and then turning around and expecting them to solve the problems of low-performing students has often frustrated critics and reformers. The paradox, however, says little about what teachers do in classrooms once they close their doors. How teachers actually have taught has largely remained a mystery even though nearly all Americans have sat across from teachers' desks. Yes, stories, jokes, paintings, memoirs, interviews, and even television sit-coms have tried to capture both inspiring and ridiculous teachers and in doing so have given tantalizing but atypical glimpses of what occurs during lessons.

Finding out what typically happens in classrooms is important since in today's policy arena, local school boards, state legislators, and U.S. presidents say again and again that without good teaching, students will not learn vital content and skills. Furthermore, policymakers believe that improved reading, math, and science content and skills are the keys not only to reducing the student achievement gap between white and low-income minority students, one that has existed for decades, but also to future economic success.

Thus, parents and policymakers want teachers who have the subject-matter and instructional expertise to boost the academic achievement of low-performing students and make the difference between students' dropping out of high school and getting trapped in low-wage jobs, on the one hand, and entering college and eventually snaring a high-paying job, on the other hand. For those committed to improving schools, then, how teachers teach—their classroom pedagogy—is a powerful tool in getting students to learn and succeed

How Have Teachers Taught?

To answer the question, I present the big picture of pedagogy. From the very beginning of tax-supported public schools in the U.S., two traditions of teaching have shaped classroom instruction: teacher-centered and student-centered (Jackson, 1986; Katz, 1968). The teacher-centered tradition of instruction refers to teachers controlling what is taught, when, and under what conditions. Teachers transmit knowledge, skills, and values to students. Were readers to sit for a few minutes in such a classroom, they would note that the furniture is usually arranged in rows of desks or chairs facing the front chalkboard. In such a classroom, teachers talk far more than students, the entire class is most often taught as one group with occasional small groups and independent work, and students regularly use texts to guide their daily work. Scholars have traced back the origins of this pedagogical tradition to the ancient Greeks and religious schools centuries ago and have called it by various names: "subject-centered," "mimetic," "teaching as transmission," and "direct instruction" (Katz, 1968; Jackson, 1986; Chall, 2000).

The student-centered tradition of instruction refers to classrooms where students exercise a substantial degree of responsibility for what is taught and how it is learned. Teachers see children and youth as more than brains; they bring to school an array of physical, psychological, emotional, and intellectual needs plus experiences that require both nurturing and prodding. Were readers to sit for a while in such a classroom they would see that the furniture is arranged and rearranged frequently to permit students to work together in large and small groups or independently. Student talk is at least equal to, if not greater than, teacher talk. Varied materials (e.g., science and art centers, math manipulatives, etc.) are spread around the room for small groups and individual students to use. Guided by teachers, students learn content and skills through different tasks such as going to activity centers in the room, joining a team to produce a project, and conducting independent work. Scholars have tracked this tradition to its historical roots in ancient Greece and labeled it over the centuries as "child-centered," "progressive," "teaching as facilitating," "transformative," and "constructivist" (Katz, 1968; Jackson, 1986; Chall, 2000).

Skirmishes between Advocates of Teacher-Centered and Student-Centered Approaches

In each case, champions of each tradition believe that all students regardless of background grasp subject matter, acquire skills, cultivate attitudes, and develop behaviors best through its

¹ These teaching traditions are not dichotomous; hybrids of the two have always existed. I do not endorse either tradition as being better than the other or more worthy of implementation. My experience and research have made clear to me that neither tradition, however, defined, is the best form of teaching for all students. I do believe that hybrids of the two pedagogies, meaning multiple approaches in a teacher's repertoire adapted to differences in setting, who the students are, subject matter, and other conditions, have the best chance of getting the most students to learn.

practices. Yet the accumulated evidence of actual classroom practices producing particular student outcomes to support advocates of each tradition has been mixed or unconvincing. Therefore, no preponderance of evidence is yet available to demonstrate the inherent superiority of either pedagogy in teaching the young.²

Lacking substantial evidence, ideology and faith drive proponents of each tradition. Fierce rhetorical struggles erupt over which ways of teaching and learning are best for all or some students—often mirroring larger conservative vs. liberal (or orthodox vs. progressive) ideological battles over religion in schools, interracial marriage, child-rearing practices, and television programming. These so-called "culture wars" boiled over in newspapers, books, educational conferences, and scholarly journals before and after World War I and during the Civil Rights movement in the 1960s (e.g., Zimmerman, 2002). Since the 1970s, occasional outbreaks of these media-amplified fistfights— have spilled over from state legislatures and the Oval Office into newspapers, journals, and books with arguments on how best to teach reading, math, science, and history. Again, These battles again reflect the ideological divide between political conservatives and progressives over diverse issues such as abortion, school prayer, the right to die, and teaching about evolution (Hunter, 1991; Lakoff, 1996; Fiorina, 2004; Dionne, 2005).

To cite a recent example, in 2003, New York City Chancellor of schools Joel Klein mandated "Balanced Literacy"—a progressive whole language approach—as the preferred way of teaching children to read in nearly 750 elementary schools rather than a largely phonics-based approach. Advocates of teaching children to learn the rules of decoding words on paper, waving research studies that proved their way worked better than "balanced literacy," engaged the enemy in the latest skirmish over which pedagogy is best (Kolker, 2006). And in the latest battle in the "math wars" between progressives and conservatives, the National Council of Teachers of Mathematics (NCTM) issued a report in 2006 urging that math teaching in elementary and middle school concentrate on knowing multiplication tables, how to do division and manage decimals. Their earlier report in 1989 called for engaging students in learning concepts thoroughly and applying them to real world situations rather than memorizing multiplication tables and rules for long division and other familiar ways of grasping mathematics (Hartocollis, 2000; Garelick, 2005). As one former federal education official said:

This is definitely a back-to-basics victory. Emphasizing the building blocks children have always learned ... and moving away from the constructivist approach some educators prefer, in which children learn what they want to learn when they're ready to learn it (quoted in Lewin, 2006, p. A18).

These historic traditions of teaching practices, then, are alive and well. Yet in each instance the sharp divide between progressive and traditional ways of teaching blurs in practice because curriculum and pedagogy are entwined in an enduring marriage. For instance, in the past quarter-century, state curriculum standards in math include both traditional and progressive language to describe teaching. Current textbooks in math (e.g., University of Chicago School Mathematics Project, 2003) tilt toward constructivism but do blend traditional practices (e.g., whole class drill on math facts) with progressive ones (e.g., students working in small groups, writing in journals).³

² Determining that a mode of teaching causes student performance on tests to rise or fall has been claimed for decades but has yet to be proved because of the many variables that influence achievement (as measured by standardized tests) such as family background, teacher experience, peers, school safety and order, and dozens of other factors.

³ For recent writers who continue to use the language of progressives/conservatives or variations thereof, see Chall (2000), Hirsch (1996), Meier (2000), Nehring (2006), Spencer (2001), and Zoch (2004).

Historical Evidence

The polarizing ideologies remain alive and well and occasionally spark debates among parents and educators but the closer one comes to classroom practices, the distinctions become much less clear. The obvious question arises again: how have teachers taught over the past century? In *How Teachers Taught*, a study of these two teaching traditions in urban and rural schools between 1890 and 1980, I collected data from over 8,000 classrooms on common observable features within teaching in urban and rural districts that could distinguish between the two pedagogical traditions. I examined how teachers organized space in classrooms, grouped students, and the activities they structured for their students. I found several classroom patterns (Cuban, 1993)

Between the 1890s and the 1980s, the social organization of the classroom became increasingly informal. In the early 20th century, dress-clad women and tie-wearing men facing rows of 50 or more bolted down desks controlled every move of students. They gave or withheld permission for students to leave their seat. They required students, even little ones, to stand when reciting from the textbook or answering a question. Teachers often scowled, reprimanded, and paddled students for misbehaving.

Over the decades, however, classroom organization and teacher behavior slowly changed. By the 1980s, few classrooms contained rows of immovable desks. Classrooms were now filled with tables and movable desks, particularly in the early grades, so students faced one another and walls festooned with colorful posters and student work. Jean-wearing teachers drinking coffee smiled often at their classes and students went to a pencil sharpener or elsewhere in the room without asking for the teacher's permission. The dread and repression of the early 20th century classroom marked often by the swish of a paddle and a teacher's sneer slowly gave way, decade by decade, to classrooms where teachers were kinder, more informal in language and dress, and had a light touch in controlling unacceptable behavior.

By the early 1980s, most elementary and a lesser number of secondary teachers had blended certain student-centered and teacher-centered classroom practices into hybrids of teacher-centered progressivism. With the social organization of the classroom becoming increasingly informal, particularly in the primary grades reflecting new knowledge of child development, most teaching practices evolved into a blending of the two traditions.

Consider grouping. For decades, teachers taught 40 to 70 or more students as one group. Over time as class size fell, the student-centered practice of dividing the whole group into smaller ones slowly took hold among most elementary school teachers so that the teacher could work with a few students at a time on reading while the rest worked by themselves in groups or independently. However, small group work had a harder time taking hold among secondary school teachers though variations in grouping occurred among academic subjects (Grossman & Stodolosky, 1995; Stodolosky & Grossman, 1995).⁴

A similar pattern occurred with assigning groups different tasks. "Activity (or learning) centers" where pairs of students or individual children would spend a half-hour or more reading a book, playing math games, drawing or painting, listening to records or, later, tapes slowly took hold

⁴ Also consider how students commonly work in pairs and small groups to dissect small animals in biology and in chemistry labs do the same when they use Bunsen burners, flasks, and chemicals to see reactions occur. These science labs differ in organization, grouping, and activities from most English, foreign language, social studies, and math classes.

in kindergarten and the primary grades, spreading later to the upper elementary grades. Learning centers, however, seldom appeared in secondary schools.

The use of student-projects as activities lasting a few weeks that tie together reading, math, science, and art—think of a 4th grade class divided into groups or working individually on Native American life—became a standard part of elementary school curriculum and teachers' repertoires. In secondary schools, projects appeared in vocational subjects and periodically in science, English, and social studies classes.

Between the 1920s and 1980s, then, teachers combined two pedagogical traditions in their classrooms in imaginative ways to create hybrids of teacher-centered progressivism. In elementary schools, particularly in primary classrooms, richer and diverse melds of the two traditions appeared with far fewer instances surfacing in middle and upper grades. In high schools—allowing for some variation among academic subjects—teacher-centered pedagogy attained it purest forms.⁵

While the social organization of classroom moved from formal to informal and hybrids of teacher-centered progressivism multiplied, teacher-centered pedagogy still dominated classroom life. As Philip Jackson (1968) noted in his study of suburban teachers in the early 1960s, teacher smiles and friendly looks have, indeed, replaced "the scowls and frowns of teachers past" and "today's teachers may exercise their authority more casually than their predecessors" yet "the desire for informality was never sufficiently strong to interfere with institutional definitions of responsibility, authority, and tradition" (p. 29). In short, amid the evolving classroom informality, the growth of hybrids, and teachers' light touch in managing student behavior, deep continuities in teachers' exerting their authority persisted.

In light of my findings for classroom instruction between 1890 and 1980, the two teaching traditions seldom appeared in classrooms as unvarnished types. In schools across the nation where great diversity in children, parental wishes, academic subjects, and teachers were common—even amid "wars" fought in newspapers and conferences over the best way to teach—hybrids of subject-matter and practice flourished albeit more so among elementary than secondary school teachers. Thus, at the risk of overstating the point, the chorus of a 1973 song captures the place in which a typical teacher found herself:

Clowns to the left of me, jokers to the right, here I am

Stuck in the middle with you (quoted in Fiorina, 2004, p. 104).

Seeing teachers as carriers of these two traditions mirrors the evidence I collected of many teachers who combined elements of each teaching tradition over the past century. Teacher behavior has been in the middle of a continuum rather then clustered at its polar extremes—as it were, hugging the middle.

⁵ In a study of socialization in 64 classrooms in four elementary schools, grades two and five in the late 1990s, Brint, Contreras, and Matthews (2001) found a blending of traditional and modern values in these classrooms. "The routine practices of classrooms similarly show a blending of the old and new" (p. 173).

⁶ From Stealer's Wheel, "Stuck in the Middle with You." Fiorina (2004) used these lyrics to characterize American public opinion during the "culture wars" of the 1990s.

How Are Teachers Teaching?

Standards-Based Reform, Testing and Accountability, 1980s–2005

Since the early 1980s, state- and federally-driven reforms aimed at improving student academic achievement have sprinted through U.S. schools. Prompted by low scores of U.S. students on international tests, powerful coalitions of business and civic elites, fearful of losing economic traction in global commerce with too many entry-level employees mismatched to the demands of an ever-changing knowledge-based labor market, pressed state and federal officials to draft schools into preparing the next generation of engineers, scientists, and workers. State after state stiffened graduation requirements and set curricular standards with accompanying tests (Cuban, 2005).

By the late 1990s, however, a swelling movement mobilized by business-minded coalitions seeking a nimble college-educated workforce for early 21st century labor markets lobbied states vigorously to require demanding curricula, more testing, and accountability. U.S. presidents and state legislators endorsed these educational policies. With the election of former Texas governor George W. Bush as President in 2000, both Democrats and Republicans fashioned the No Child Left Behind law (NCLB), wrapping these state efforts into national policy (Cuban, 2005).

According to surveys of teachers and reports from researchers, policymakers, and journalists, the standards-based, testing, and accountability movement has strongly influenced classroom content and practices in the 1990s and especially since NCLB became law in 2002. Teachers reported spending more classroom time preparing students for state tests and less time on those subjects not on tests. Journalists uncovered that middle and high school students who scored poorly on tests have to double up on reading and math periods and can no longer take other academic subjects. Prodded by federal officials, districts' use of phonics spread in primary grade classrooms. According to observers, teacher lecturing and explaining, assigning more homework from textbooks had become pervasive (Pedulla, 2003; Dillon, 2006).

These portrayals of classroom teaching track the on-rushing freight train of standards-based testing and accountability erasing student-centered approaches. Do these reports of teaching mirror what has occurred in classrooms?

A Follow-Up Study of How Teachers Taught

Beginning in 2004, I have extended the data base I had accumulated for classroom practices between the 1890s to the 1980s to the present day in three districts: Denver (CO), Arlington (VA), and Oakland (CA).⁷ The key question was whether earlier patterns in classroom practice extended into the early 21st century, a time when stories and surveys repeated again and again the claim that state and federal policies were shaping both content and classroom practice. *Have teachers in these districts organized their classrooms, grouped students, and taught lessons in response to the policy demands of standards-based reform, increased testing, and accountability measures?* In answering the question, the research has used the design, the framework of two pedagogical (traditions-cumhybrids), and the methods from *How Teachers Taught* (Cuban, 1993).

⁷ This work was made possible by a small grant from the Spencer Foundation.

Methods

This article uses comparative case studies to examine pedagogical patterns in these three districts between 1993 and 2005. Getting data about classrooms in the past quarter-century requires care with several issues. Recapturing lessons that were once taught last year or a decade ago means that historians must cope with fragmentary data since records of classroom lessons or observations are rarely available to researchers. Moreover, interviewing or surveying teachers how they taught last week or ten years ago often yields unreliable results. For example, surveys of teachers, the most common and least expensive way of ascertaining classroom practices, remain imprecise and tend to reflect what teachers believe they did, not what occurred when independent observers sat in their rooms (Hook & Rosenshine, 1979; Mayer, 1999; Viadero, 2005; Tibballs, 1996).

Multiple-Source Data Collection

Using the strategy pursued in *How Teachers Taught*, I collected multiple sources within a district drawn directly from teachers, students, principals, administrators, journalists, parents, and others, including researchers, who were either in or entered classrooms and recorded what they saw. In addition, I briefly observed classrooms in each district. Finally, I used teacher and journalist photos of classrooms and ones taken by students for annual yearbooks. In short, I gathered opportunistic samples of classrooms in districts. From these reports, "snapshots" of three districts' classrooms chronicle particular observable features of classrooms: how teachers physically organized space in the classroom, how they grouped students for instructional tasks, and the activities in which students and teachers were engaged. These three features are ubiquitous, closely connected, and point to either teacher-centered or student-centered traditions or hybrids of both.

Observable Features of Classrooms

Organization of classroom space. Typically, elementary school classrooms are 900 square feet (700–800 square feet for an average secondary school room). Except in uncommon cases where district regulations require teachers to organize classrooms in uniform ways (e.g., for certain reading programs, team teaching arrangements), teachers arrange classroom furniture within the allotted space to express their beliefs in how best to teach, maintain order, and get students to learn. As one teacher put it: "A teacher's room tells us something about who he is, and a great deal about what he is doing" (Kohl, cited in Cutler, 1989, p. 36; Weinstein 1991; Hutchinson, 2004).

The most common arrangement of furniture in secondary school classrooms and upper-grade elementary ones is traditional rows of desks facing the chalkboard and teacher's desk. I call it "traditional" because for the entire 19th century and nearly half of the 20th century, bolted-down desks in rows—later replaced by movable tables and desks—dominated classroom organization. Such a traditional floor plan locates one side of the rectangular classroom as the "front" (usually where the teacher's desk and a chalkboard are located) signaling students that the teacher gives directions, makes assignments, leads discussions and determines the degree of student movement. In

⁸The vulnerability of self-reports among practitioners can be seen, for example, among medical personnel. In one study, medical official in a pediatric intensive care unit in Melbourne, Australia estimated that they hand-washed 73 percent of the time; observers found that they did 9 percent of the time (Tibballs, 1996).

this familiar floor plan, the silent message is that teacher-to-student interaction is more important than student-to-student interaction.

In most elementary and some middle school classrooms teachers have departed from traditional space arrangements. Since the 1960s teachers have grouped desks in clusters of 4 or 5, hollow square arrangements, or mixes of rows and clustered desks. There is no obvious "front" to the classroom. Such a floor plan expresses the teacher's willingness to promote student-to-student interaction and student movement within the room. Providing space for a rug and soft chairs where students can sprawl and sit with partitions for learning centers (reading, computers, math, science) signal students that learning not only occurs in the whole group listening to the teacher but happens in small groups and individually. These arrangements are most often seen in K-3 classrooms but appear in increasing frequency in upper elementary grades as well.

In effect, how teachers configure classroom space teaches students unobtrusively what kinds of interaction are both important and acceptable. Notably, the physical design of the classroom flows into teacher decisions about grouping.

Grouping of students. If the classroom floor plan has clustered desks where students face one another, a rug-covered area, and designated spots for certain tasks (or various mixes of these), then teachers have designed their space to encourage both small group work and independent activity while encouraging student movement (Perrone, 1972; Barth, 1972; Doyle, 1986; Slavin, 1995). In such classrooms, mostly in elementary school grades, multiple forms of grouping occur for different activities. Over the course of a six-hour day, teachers organize whole group instruction for particular tasks (e.g., morning opening activities with the teacher reading a story) small groups working on different activities (e.g., reading group with teacher while a math group is with an aide or in learning centers), and individual students at their desks (e.g., working on a project or completing a worksheet).

In those classrooms where rows of student desks face the front of the room dominated by a teacher's desk and chalkboards—mostly in high schools—teachers often use the whole group for lecture, demonstration, and discussion. Students also work individually at their desks working on assignments from their textbook, writing essays, and completing worksheets. Occasionally in previous decades but more often in the past ten years, middle and high school teachers will ask students to move their chairs into small groups for particular tasks. So a mix of grouping patterns exists in secondary schools across academic subjects while whole group instruction remains dominant. Of course, the kind of grouping that the teacher chooses depends upon the teacher-designed activity—tasks that over time accumulate into patterns that track the dominant teaching traditions.

Classroom activities. The basic unit of a teacher's work in a classroom is the activity designed for students. One important consideration is that the teacher is a whirlwind of decisions and tasks over the school day. Researchers have documented 500 to 800 discrete elementary school teacher acts a day (some teachers accumulating well over 1000). Teachers are constant decision-makers. To make sense of these acts, Table 1 describes four types of tasks that teachers specifically design for students: teacher-directed, student-directed, interactive, and miscellaneous (Shuell, 1996; Gallego & Cole, 2001; Gump, 1982).

Table 1
Typology of Teaching Tasks

Typology of Teaching Tusks	
Teacher-directed activities (mostly teacher talk with some student interaction)	Lecture; demonstration; going over daily schedule of activities including homework; opening activities (song, salute to flag, doing calendar for day and month; taking attendance, making announcements); teacher reading aloud to class; students reading aloud; students reading silently; review for test; checking student work; teacher calling students to board to solve problems; giving test; showing film; seatwork (individualized tasks, diverse tasks, common task).
Student-directed activities (mostly student talk with some teacher interaction)	Small-group work; pairs/trios of students; learning centers in elementary school including play-time; reports to rest of class; working on projects (individually chosen or teacher-assigned small groups); bench work doing problems in science labs; student-chosen tasks in computer labs or with computers in classroom; working in library on assignments individually or in small groups.
Interactive between teacher and students (substantial student and teacher talk	One-to-one question and answer between teacher and student; teacher-directed small group work (math/reading) with teacher interacting one group at a time; competitive games; simulations and role-playing; whole class discussion; recitation; sharing time in primary grades;
Activities not falling into above categories	Transitions from one activity to another; teacher giving permission to move around or leave room; handling disruptive students; recess; going to bathrooms; scheduled field trips; whole school assemblies, etc.

In thinking about the classification of teacher acts, researchers should acknowledge that most activities are teacher-directed simply because the classroom is a crowd that has to be managed by the teacher who, in Philip Jackson's apt summary, serves as a "combination traffic cop, judge, supply sergeant, and time keeper" because "some kinds of control are necessary if the school's goals are to be reached and social chaos averted" (Jackson, 1968, p. 13). Furthermore, except for parents and lawyers, the teacher is one of the few people in the work world who asks questions to which she knows the answers. Because of the imperative to maintain group order and the teacher's power to control talk in a classroom, most classroom activities are teacher-directed and of relatively short duration, usually between 10 to 20 minutes (Cazden, 1988; Doyle, 1986).

Second, certain activities are more evident in elementary school classrooms than secondary ones (e.g., sharing time, seatwork, learning centers) while other activities are more common in secondary school classrooms (e.g., bench work in science labs, discussions, lectures). Third, activities similar in structure (e.g., small group work, seatwork) will vary by subject matter. Math teachers, for

example, use seatwork and small groups differently than social studies teachers (Stodolsky, 1988). Finally, a few teacher-directed activities consume a substantial majority of classroom time, even accounting for differences in level of schooling, students, and varied subject matter. For example, researchers estimate that more than 30 separate activities occur in elementary classrooms with the majority of classroom time spent in seatwork and the rest in whole-class presentation, recitations, and transitions. Historically, students' tasks have a narrower range in secondary school classrooms than in elementary school classrooms (Fisher, et. al., 1978; Doyle, 1986; Shuell, 1996).

Using these three interconnected observable markers—with special emphasis on teacher-designed activities—I collected 1045 classroom reports from 71 schools in three districts between 1993 and 2005 and placed them along the continuum of historical teaching practices. Many reports showed teachers who tilted toward student-centered instruction in how they organized their classroom space, used different groupings, and carried out classroom activities; in other reports, teachers arranged classroom furniture, grouped students, and designed lessons that leaned decidedly toward teacher-centered instruction. But, as in the past, most teachers hugged the middle of the continuum, blending activities, grouping patterns, and furniture to create hybrids of the two traditions.

Caveats

While the comparative case study research design permits me to answer questions about certain observable classroom practices that emerged across districts and within districts, both design and methodology exclude much about classroom life. In looking at a classroom through a straw one can see some things but not others.

The design, for example, neither investigates teachers' beliefs about the subjects they teach nor students' depth of understanding of subject matter. Nor does the design document the informal bonds between teachers and students or the emotional and intellectual climate of classrooms. The design does not allow me to assess the taught curriculum over time, teacher effectiveness or what students actually learn.

Moreover, some sources are vulnerable to criticism, especially surveys of teachers and students. Such teacher self-reports contain well-documented shortcomings of respondents' selective memory, inflation of what is considered "good" teaching, and deflation of what is viewed as "poor" teaching. To offset these drawbacks, I collected journalist reports, classroom photos, supervisors' observations, researcher studies, and lesson plans, in addition to self-reports. This mélange of sources offers a brief glimpse—a "snapshot"—of teaching practice in particular schools and a district.

Some readers, however, could rightly ask what conclusions one can draw about teaching from the observable features of classrooms: Will documenting furniture arrangements, grouping practices, and teaching activities capture the depth, texture, and character of a teacher's routine instruction for a researcher sufficiently to place that teacher confidently on the continuum of teaching traditions? It is a fair question that needs answering before any broad statements can be made about what happens in classrooms during a period of strong policy intervention by state and federal authorities.

Target Districts

The choice of districts was made to maximize comparisons, regional dispersion, and unique circumstances involving the history of reform in each district. Arlington and Denver were in my original study (Cuban, 1993), and as such I had comparative data prior to the 1990s. I chose Oakland, California, because *How Teachers Taught* did not include a West Coast district, and I had access to historical archives to capture lessons from the 1920s through the 1980s. Contacts in the district made it possible for me to visit many classrooms in 2004 and 2005. Between the mid-1960s and the present, Arlington, Denver, and Oakland experienced national surges of school reform and tailored those reforms to fit their particular settings. The decade of the mid-1960s to mid-1970s, for example, saw squabbles over desegregation disturb each of the three districts. Furthermore, district policymakers designed reforms to loosen the grip of traditional school and classroom practices by building open space schools, launching informal or open classrooms, and urging teachers to adopt student-centered classroom practices of small group work, learning centers, and project-based learning.

By the late-1970s across the nation, however, passion for desegregation, open space schools, and open classrooms had ebbed considerably. Parental and policymaker concerns in the three districts over students not learning basic skills, having little homework, and being unready for college produced a climate spotlighting literacy, subject-matter proficiency, and no-nonsense discipline. Spurring this return to traditional practices were business and civic leaders who worried about the U.S.'s global competitiveness because high school graduates were unprepared for college and entry-level jobs in an economy swiftly turning to information and communication technologies.

Within a decade, Virginia, Colorado, and California had mandated higher graduation requirements and new tests. With a growing national and bipartisan fervor for curriculum standards and accountability culminating in the No Child Left Behind Act, again each district accommodated to state and federal mandates.

Table 2
Demography of Three Districts, 1970–2004

	Arlington, V	irginia	Denver, Co.	lorado	Oakland, California		
Trait	1970	2004	1970	2004	1970	2004	
Schools	36	31	119	136	90	131	
Minority %	28	53	34	79	72	94	
Lunch	N/A	41	N/A	63	28	63	
program %							

Sources: Cuban (1993); Keyes v. School District (1973); McCorry (1978); Yee (1995); Oakland Unified School District (http://webportal.ousd.k12.ca.us/index.aspx); Arlington School District (http://www.arlington.k12.va.us); and documents in author's possession.

Arlington. Arlington is a mid-sized urban district across the Potomac River from Washington, D.C. blessed with a long-standing solid funding base for its schools and a string of long-tenured superintendents (only six between 1960–2007). Arlington had also avoided court intervention by desegregating its few all-black schools by the early 1970s permitting the district to respond wholeheartedly to state mandated standards and tests. By the early 1990s, however, Virginia business and civic elites—like their counterparts elsewhere—feared that the state was falling behind in producing sufficiently educated graduates to enter college and a swiftly changing job market. In 1995, the Virginia Board of Education approved new Standards of Learning (SOLs) in English,

history/social science, math, and science. In 1998, districts administered new tests to students matched to each of the SOLs.

State and district administrators used test scores to determine whether schools would be accredited, individual students would be promoted or held back in the lower grades, and would graduate high school. For the Standard Diploma, high school seniors in the class of 2004 for the first time had to pass six SOLs (or state-approved substitutes) and for the Advanced Studies Diploma, nine SOLs. Because Arlington and other districts began identifying academically struggling high school students in the 9th grade and provided individual help, less than one percent of Arlington 1100-plus seniors were barred from graduating in 2004. As the Virginia Board of Education President said, "I see this as our first look at what tomorrow's education may be like in Virginia and not just for seniors." Colorado political leaders also sought tomorrow's education now (Helderman, 2004).

Denver. Responding to state leadership in standards, testing, and accountability was not easy for Denver since the district had experienced 40 years of turbulence that had taken its toll on staff and community. Beginning in the mid-1960s, racial turmoil over desegregation fastened the district's attention upon low-performing largely black and Hispanic schools. A marker of Denver's difficulties over these four decades is that between 1967 and 2006, eleven superintendents served the school board. In Keyes v. School District No. 1, Denver (1973), the U.S. Supreme Court ruled that Denver had segregated its schools and ordered the district to desegregate black and Hispanic schools. The board of education plan included busing, establishing magnet schools, and other means of reducing race and ethnicity as a factor in students attending school. Not until 1996 was the desegregation order lifted at which time the entire district enrolled mostly Hispanic and black students (Taylor, 1990).

By the mid-1990s, Colorado leaders, like those elsewhere who were concerned about the links between education and the economy, had taken aggressive action to improve schooling. The governor and legislature had put into place new curriculum standards, tests, and accountability regulations. The Colorado Student Assessment Program (CSAP) tests Denver students every spring in reading and writing grades 3 through 10 while students take math tests in grades 5 through 10. Eighth graders take science tests. The state reports results in percentage of students who perform in four categories: unsatisfactory, partially proficient, proficient, or advanced. In Denver, familiar patterns emerged of largely poor minority schools doing badly on these tests—with occasional exceptions—and a yawning achievement gap between white and minority students. To Governor Owens, however, "Schools all across Colorado are improving because of the standards and accountability measures like the School Accountability Reports that tell parents about how well their school is educating their children" (Owens, 2005, ¶3). That boilerplate reasoning in the face of continuing low academic performance in largely poor minority schools also propelled the rhetoric of California policymakers.

Oakland. Once a national leader among states for its educational system, California had fallen upon fiscally hard times after the passage of Proposition 13 in 1978. Since then local school funds drawn from property taxes had shrunk. School services once taken for granted such as reading, art, music, and librarians in elementary schools and counselors in high school disappeared. Fees for athletics, busing, and field trips became common. Class size ballooned. Affluent districts established private foundations to help fund smaller classes and replace lost staff and services. The state steadily assumed a far higher proportion of funding local districts than previously but failed to reach pre-1978 levels. With increased funding came increased state authority for determining curriculum standards, class size, testing students, and accountability for results.

Few state-driven and business-inspired school reforms in the 1980s and 1990s unfolded in a straight line. In California where state authority over schools is split among the governor, legislature, elected state superintendent, and an appointed state board of education, reforms showered districts in these years. For example, an aggressive State Superintendent of Instruction pressed forward with new curriculum frameworks throughout the 1980s only to run up against a governor reluctant to support these initiatives. The legislature mandated new curriculum standards and tests in the early to mid-1990s only for the governor to repeal one set of tests that had been given for a few years. Then in 1999, another governor pushed through the legislature a new statewide accountability system called the Academic Performance Index (API) with test scores determining where each school ended up on the Index. Doing well on the Index meant rewards—cash for improving schools—and penalties—state intervention for low performing schools. (EdSource, 2001; Carlos & Kirst, 1997; Wilson, 2003).

All of these state actions directly affected Oakland Unified School District. After nearly four decades of turmoil over desegregation, community involvement, the assassination of one superintendent, and continuing low academic performance of a largely minority school population, Oakland school leaders drew constant criticism from civic officials, parents, media, and state policymakers. In 2000, the district took the unusual step of mandating a literacy program called Open Court to be phased into all elementary schools within three years. In the same year, Oakland's mayor attempted to shift school governance from an elected school board to City Hall. The battle with the school board ended in a compromise with the mayor appointing three of the sevenmember board. Shortly afterwards, without warning, a serious fiscal breakdown occurred (Yee, 2004; Oakland Unified School District, 2001).

In 2003, the startling discovery of a \$100 million deficit led to the resignation of a popular superintendent, the legislature lending that amount to the district, and the State Superintendent of Instruction appointing an outside administrator to run the district with the elected school board becoming a mere advisory body. In 2006, the state-appointed administrator left to be replaced by another appointee. That superintendent was the 15th to lead Oakland since 1962 (Yee, 2004).

Expectations from Increased Accountability

Given this background in each of the three districts, one should be able to answer the central research question: Have teachers in these districts organized their classrooms, grouped students, and taught lessons in response to the policy demands of standards-based reform, increased testing, and accountability measures? To many teachers and researchers the answer would be an unequivocal yes. Classroom stories and teacher surveys report again and again that more lesson time is spent preparing students for high-stakes tests and the narrowing of the curriculum to what is on those tests. As one first-year teacher put it:

The test is the total goal. We spend time every day doing rote exercises. Forget ever doing hands-on ... science or math games, or creative writing.... We do one hour of sit and drill in each of the subjects of math, reading, and writing. We use a basal reader, math workbook pages, and rote writing prompts.... Every day for one hour the whole school does the exact same direct instruction lesson.... The children sit and get drilled over and over (Jones, Jones, & Hargrove, 2003, p. 37).

A national survey of curriculum changes revealed that in thousands of schools under threat of being closed for poor performance, administrators restrict students to taking only math and reading classes until their scores improve and then they can take elective subjects. Over 70

percent of nearly 15,000 districts in the nation have cut back time spent in social studies, science, art, music, and other subjects to create more time for reading and math (Dillon, 2006).

Such stories and scattered teacher reports describe classroom instruction, particularly in largely poor and minority schools, as more focused on meeting prescribed state standards and raising test scores. Journalists report that districts reduced recess time in elementary schools. Teachers say they use fewer student-centered activities (e.g., small group work, discussions, learning centers, and portfolios) because such work takes away precious classroom time from standards-based curriculum and test preparation (Herman, 2002; Pedulla, 2003; Hasiotis, 2006; Pressler, 2006; Viadero, 2006).

From these stories, one might expect that the reports collected in the three districts on classroom instruction would indicate mostly teacher-centered practices of rows of desks facing the teacher and much direct instruction to the entire class at once. Further, in light of these state policy changes, one would expect student-centered features in classrooms such as clustering tables and desks, small group work, and activities calling for much interaction among students and between teacher and students to be less frequent.

It is important to keep in mind that all of the above expectations linked to consequences of federal and state policies on standards, testing and accountability might (or might not) have altered classroom furniture arrangements, grouping practices, and teaching activities yet still failed to capture such changes in practice as increased time spent on test preparation and less time on subjects not covered by the tests that have been reported in a multitude of journalist stories, researcher studies, and surveys. That gap between changes in particular classroom features and what teachers report about their lessons is an important point taken up later.

Findings

Organization of Classroom Space

Regarding the organization of classroom space, the data include reports from nearly 500 elementary and secondary classrooms in the three districts. Teachers used traditional teacher-directed ways (rows of movable tables or desks facing the front of the classroom) or non-traditional ways (clusters of tables where students faced one another, horseshoe arrangement, etc.).

Table 3
Traditional Arrangement of Classroom Space in Three Districts, 1993–2005

School level	Arlington	Denver	Oakland
Elementary			_
N (All reports)	78	56	43
In rows	19	14	4
% in rows	24%	25%	9%
Secondary			
N (All reports)	51	128	118
In rows	16	69	78
% in rows	31%	54%	66%
All classrooms			
N (All reports)	129	184	161
In rows	35	83	82
% in rows	29%	45%	51%

While variation in space organization exists among the three districts, the overall historic pattern of elementary classrooms being arranged far more non-traditionally than secondary classrooms is evident in these three districts. The change is also important to note. In Arlington between 1975 and 1981, from 333 reports of elementary and secondary classroom on arrangement of desks, 47 percent of those classrooms were arranged in non-traditional patterns. In Denver between 1965 and 1993, from 95 reports of elementary and secondary classrooms, 42 percent were arrayed in non-traditional ways. For Oakland, from 170 secondary school classroom reports between 1965 and 1992 (mostly taken from photos in high school yearbooks), nearly 20 percent of the classrooms show desks and tables arranged non-traditionally. When comparing these classroom reports to those from earlier periods in each district, a decided trend toward increased student-centered space arrangements is apparent.

Grouping of Students

How teachers organize the space in their classrooms is linked to how they group for instruction. For that feature of instruction, I have slightly over 1000 classroom reports for both elementary and secondary classrooms in the three districts. Similar patterns across the three districts (except for one instance) turn up in classroom grouping. I divided the results by elementary and secondary classrooms.

Table 4
Elementary Classroom Reports on Grouping for Instruction, 1993–2005

	Arlington		Ι	Denver		akland
Grouping	N	$^{0}\!/_{\!0}$	N	$^{0}\!/_{\!0}$	N	0/0
Whole group						
Entire report	113	30%	21	32%	16	33%
Part of report	196	53%	30	45%	19	39%
Small group						
Entire report	24	6%	3	4%	4	8%
Part of report	134	36%	18	27%	10	20%
Individual work						
Entire report	14	3%	8	12%	8	16%
Part of report	146	39%	29	44%	16	33%
Teachers using mixed		59%		51%		43%
groupings						
Teachers using a single		41%		49%		57%
type of grouping						
Total reports	372		66		49	

Numbers in each column will not add to the total N because the grouping categories were not exclusive. For example, a teacher who used whole group, small group, and independent work in a lesson is counted once for whole group, once for small group, and once for individual work.

Table 5
Secondary Classroom Reports on Grouping for Instruction, 1993–2005

	Arlin	gton	Der	nver	Oak	land
Grouping	N	0/0	N	%	N	0/0
Whole group						
Entire report	87	41%	67	41%	71	44%
Part of report	82	39%	10	6%	31	19%
Small group						
Entire report	16	8%	27	16%	31	19%
Part of report	45	21%	5	3%	11	7%
Individual work						
Entire report	15	7%	59	36%	25	15%
Part of report	40	19%	11	7%	25	15%
Teachers using mixed		44%		7%		20%
groupings*						
Teachers using a single		56%		93%		80%
type of grouping*						
Total reports	210		165		161	

Numbers in each column will not add to the total N because the grouping categories were not exclusive. For example, a teacher who used whole group, small group, and independent work in a lesson is counted once for whole group, once for small group, and once for individual work.

^{*} In Denver and Oakland I collected far more yearbook photos than in Arlington. These snapshots showed only one form of grouping. The results, then, may over-report that grouping and be skewed against teachers who used mixed groupings within the same lesson.

These results for grouping again show variation among the three districts with the trend toward student-centered forms of grouping (small groups and independent work) noted in my earlier study being more evident in elementary than secondary classrooms. I am most confident in the Arlington data for both levels because of the many diverse sources but less confident for Oakland and Denver secondary classroom grouping practices because the primary source for Oakland and Denver comprised student yearbook photos. Such data offer glimpses of only one flash-like moment in a classroom rather than an entire lesson.

Classroom Activities

If organizing space and grouping patterns revealing trends toward student-centered arrangements do not seem to fit the teacher reports and classroom anecdotes about what occurred in classrooms during the intense years (1990-present) of standards-based reform, testing, and accountability, then what patterns of teaching activities show up in over 1000 classroom reports in the three districts?

Table 6
Elementary Classroom Reports on Instructional Activities in Three Districts, 1993–2005

	Arlington		Denver		Oakland	
Grouping	N	%	N	0/0	N	0/0
Whole group						
Entire report	100	27%	38	58%	15	31%
Part of report	161	43%	18	27%	17	35%
Small group						
Entire report	18	5%	4	6%	6	12%
Part of report	107	29%	11	17%	4	8T
Individual work						
Entire report	69	18%	6	9%	11	22%
Part of report	137	37%	7	11%	16	33%
Teachers using a mix of		50%		27%		35%
activities						
Teachers using one type of		50%		73%		65%
instructional activity						
Total	375		66		49	

Numbers in each column will not add to the total N because the activity categories were not exclusive. For example, a teacher who used teacher-directed, student-directed, and independent work in a report is counted once for each activity.

Table 7
Secondary Reports on Instructional Activities in Three Districts, 1993–2005

	Arlington		Der	nver	Oakland	
Grouping	N	0/0	N	0/0	N	0/0
Whole group						
Entire report	44	20%	114	69%	80	49%
Part of report	97	45%	6	4%	33	20%
Small group						
Entire report	24	11%	35	21%	33	20%
Part of report	53	25%	5	3%	4	8%
Individual work						
Entire report	39	18%	10	6%	14	9%
Part of report	86	40%	4	2%	31	19%
Teachers using a mix of		49%		4%		22%
activities*						
Teachers using one type of		51%		96%		78%
instructional activity*						
Total	216		166		162	

Numbers in each column will not add to the total N because the activity categories were not exclusive. For example, a teacher who used teacher-directed, student-directed, and independent work in a report is counted once for each activity.

* In Denver and Oakland I collected far more yearbook photos than in Arlington. These snapshots showed only one form of instructional activity. The results, then, may over-report that activity and be skewed against teachers who used mixed activities within the same lesson. While such results could be viewed as strong evidence of teacher-directedness, the lack of other classroom data beyond photos leads me to raise this caveat. I am more confident of the results for classroom activities in Arlington where I drew from many different classroom sources.

In the three districts' elementary schools but apparently less so in two districts' secondary schools (see caveat noted in above tables for secondary classrooms), a similar increase in student-centered teaching activities occurred as compared to earlier periods in each district. When teachers use a mix of teaching activities—see above section on typology of activities—more interactive tasks occur in classrooms with student talk consuming a larger chunk of air-time in speaking more to the teacher, with one another, and working together on tasks. In such classrooms, opportunities for student independence increase also.

Summation

Two statements distil the evidence I have gathered from the three districts between 1993 and 2005:

The social organization of elementary and secondary school classrooms continued to be informal. The pattern I noted occurring between 1890 and the 1980s in other districts across the nation has become dominant by 2005 in these three districts' elementary classrooms and more prevalent in secondary ones than in earlier decades. Classrooms filled with tables and movable desks, particularly in the early grades, placed students in situations where they could easily converse and work in groups. Students' work, colorful posters, and ceiling mobiles brightened elementary school classrooms. Teachers smiled often at their classes, used casual language, and non-physical warnings to preempt unacceptable behavior. In the upper grades, for example, a firm warning embedded in a

teacher-told story about one of her students who used a cell phone in class was sufficient to remind students not to use them in class.

Pedagogical hybrids of teacher-centered progressivism flourished. Since first observed in the early 20th century, teachers exhibiting mixes of teacher- and student-centered practices in arranging space, grouping for instruction, and teaching activities had become widespread in three districts' elementary classrooms and more evident in secondary ones.

Recall that teacher surveys and stories from many teachers, administrators, and parents pointed to increased time being spent in meeting state curriculum standards and preparing for tests. From these reports, a reasonable person would have inferred that traditional teacher-directed arrangements in organizing space—rows of student desks, in grouping—whole group instruction, and in tasks for students—seat-work, textbook recitation, lectures and note-taking in secondary school classrooms would have thoroughly dominated classroom teaching in these districts. That is not what I found.

Since none of the linked classroom features I concentrate on deal with the content of actual lessons it is, of course, possible, even likely, that many teachers, in varying degrees depending upon the school they were in, did focus their activities on test preparation and pursued specific state standards—after all, those many teacher reports in interviews and surveys were not contrived.

Moreover, consider that state and district administrators aligned curriculum-based standards to textbooks and tests. In addition, increased pressure from federal and state officials on district officials to raise reading and math scores to show sufficient gains to meet NCLB requirements in concert with text-based lessons suggest that the survey and anecdotal evidence may well have reflected classroom practices. Yet even those test-prep lessons unfolded within distinctly informal settings where teachers used hybrids of teacher- and student-centered practices.

On the whole, then, the evidence I collected from reports on how teachers organized space, grouped for instruction, and the activities they designed for their students suggest that classroom informality and teacher-centered progressive hybrids I had noted throughout the 20th century in other districts have not lessened under district and state mandates but had even become more pervasive in these three districts by 2005.

Making Sense of Conflicting Evidence

I understand that some readers may remain unpersuaded by the evidence I and a few other researchers (Grant, 2003; Coburn, 2004; Jacob, Stone, & Roderick, 2004; Joseph, 2005) have found in varied districts that informal practices and mixes of teaching approaches have, indeed, persisted and not shrunk even under pressures from state and federal standards-based curriculum, tests, and accountability measures. While these findings challenge the evidence reported by teachers and others about policy effects on teaching over the past few decades, I stop short of saying that the three classroom features I documented capture the complexities of teaching practice in these years. I do so because caution about over-generalizing from my data also dictates that I not ignore opposite evidence but make sense of their apparent contradiction.

One explanation is that teachers, particularly in urban districts, have responded to administrator pressures to meet curriculum standards, testing, and accountability in their choice of content for their daily lessons and that the classroom indicators I used missed these responses. The constant refrain from teachers in surveys and myriad stories about more class time for test preparation of students and less time for non-test academic content, amply supported by principals' comments, journalist visits to schools, and researchers' studies, suggest strongly that the taught curriculum—the content and skills teachers choose to put in daily lessons—has, indeed narrowed.

Furthermore, my classroom observations in many urban districts and listening to many elementary and secondary teachers in the past five years persuade me that teacher decisions about textbooks, worksheets, discussions, projects, field trips, and dozens of other activities has accommodated to state tests and accountability regulations. Thus, I cannot dismiss such evidence as either too subjective or anecdotal, especially when it challenges my findings.

If I cannot dismiss the evidence, then how can I explain the obvious expansion of student-centered practices in classrooms at a time when teacher-directed test preparation and a narrowing of lesson content to meet curricular requirements also expanded? What is possible is that **both** the patterns in observable features of teaching I found in three districts and teacher-reported curricular accommodations in content and lessons have occurred in classrooms.

The patterns I found in these three districts are evidence of the institutionalization of certain teacher-centered progressive practices begun decades earlier. Students working in small groups sitting at tables rather than in rows of desks, doing independent work in elementary school centers or in secondary school projects under the watchful eye of a teacher, and engaging in spirited discussions with a teacher are examples of practices that began over a century ago as progressive innovations and over time became routinized as "best practices" in "good" teaching without undercutting the teacher's authority to determine the classroom curriculum, pedagogy, and order (Tyack and Cuban, 1995).

Similar to the process of institutionalizing technological innovations in teaching over time such as the blackboard, the overhead projector, videocassettes, and the computer, this slow-motion incorporation of particular methods into teachers' repertoires as evidence of "good" teaching speak to the practical ways that teachers in every generation have blended old and new practices to make their daily routines compatible with their beliefs about children and learning without diluting their authority (Cuban, 1986).

What has fueled this process of institutionalizing student-centered features I documented in classrooms is the pervasiveness of constructivist (or latter-day progressive) ideas and language over the past quarter-century in curriculum standards (see above), colleges of education and textbooks. A few examples make this evident.

A 1997 survey of 900 randomly selected professors at schools of education who prepare teachers and administrators for schools found that 86% believe that it is more important for students to figure out the process of finding the right answer rather than knowing the right answer; that 82% believe that students should be active learners; 78% want less emphasis on multiple-choice exams; 64% believe that schools should drop honor rolls and other forms of competition; and that 60% want less emphasis on memorization in classrooms (Public Agenda, 1997). These beliefs, drawing heavily from progressive rhetoric and ideas about teaching and learning, dominate the thinking of 40,000 faculty spread among 1,300-plus institutions awarding degrees and licenses to teachers, administrators, and other educators (Labaree, 2004).

Finally, progressive ideas and language have penetrated not only curriculum standards but also textbooks in their teacher manuals. Consider Open Court texts mandated for all Oakland elementary schools, where I observed their use in two schools at two elementary schools in 2005. Heavily scripted toward teacher-directed phonics instruction to the whole group, the teachers manual recommends that teachers arrange the classroom furniture into a square where students face one another and organize reading, math, and writing workshop centers for small groups to follow up on earlier instruction—all indicators of student-centeredness.

Pervasive presence of progressive ideas and language among professors and textbook plus the features that I documented in classrooms may suggest to some readers that student-centered teaching practices have become widespread as some critics have claimed (Ravitch 2000; Hirsch, 1996). But other evidence from teacher surveys, direct observations, and research studies point out

the spread of teacher-centered activities responding to district, state, and federal pressures to meet curricular standards and raise test scores.

More to the point is that particular indicators of progressive pedagogy have given a student-centered patina to most classrooms where teachers focused on meeting state curriculum standards and preparing students for tests. Just as a teacher in jeans chats with her high school students conveying to an onlooker a relaxed, friendly presence in the classroom, the mood shifts with a clap of the teachers' hands and directions for students to take out their homework assignment and textbook to begin the day's lesson. Echoes of John Dewey's comment on an earlier generation of progressive education in 1952 reverberate today: "There is a great deal of talk about education being a cooperative enterprise in which students and teachers participate democratically, but there is far more talk about it than the doing of it" (Dworkin, 1959, pp. 129–130).

The phrase *teacher-centered progressivism* points to the hybrid classroom practices and particular student-centered features that have been incorporated into most teachers' repertoires over the decades as they adapted their practices to regulatory policies. Thus, what initially appeared as conflicting data drawn from evidence I collected in three urban districts and teacher reports across the nation of accountability, standards, and testing policies reshaping the content of their lessons turns out to be another instance over the past century of teacher adaptiveness in melding progressive classroom practices to fit current policies that sustain teacher-centeredness.

References

- Barth, R. (1972). Open education and the American school. New York: Agathon.
- Brint, S., Contreras, M., & Matthews, M. (2001). Socialization messages in primary schools: An organizational analysis. *Sociology of Education*, 74, 157–180.
- Carlos, L. & Kirst, M. (1997). California curriculum policy in the 1990s: We don't have to lead to be in front. San Francisco: Wested.
- Cazden, C. (1988). Classroom discourse: The language of teaching and learning. Portsmouth, NH: Heinemann.
- Chall, J. (2000). The academic achievement challenge. New York: Guilford Press.
- Coburn, C. (2004). Beyond decoupling: Rethinking the relationship between the institutional environment and the classroom. *Sociology of Education*, 77, 211–244.
- Cuban, L. (1986). Teachers and machines. New York: Teachers College Press.
- Cuban, L. (1993). How teachers taught. New York: Teachers College Press.
- Cuban, L. (2005). The blackboard and the bottom line: Why schools can't be businesses. Harvard University Press.
- Cutler, W. (1989). The cathedral of culture: The schoolhouse in American educational thought and practice since 1820. *History of Education Quarterly*, 29(1), 1–40.
- Dillon, S. (2006, March 26). Schools cut back subjects to push reading and math. *New York Times*. Retrieved January 18, 2007, from http://www.nytimes.com/2006/03/26/education/26child.html?ex=1301029200&en=0c 91b5bd32dabe2a&ei=5088&partner=rssnyt&emc=rss.
- Dionne, E.J. Jr. (2006, January/February). Why the culture war is the wrong war? *The Atlantic Monthly*, pp. 130–135.
- Doyle, W. (1986). Classroom organization and management. In M. Wittrock (Ed.) *Handbook of research on teaching* (3rd ed., pp. 392–431). New York: Macmillan.
- Dworkin, M. (1959). Dewey on education: Selections. New York: Teachers College Press.
- EdSource. (2001, January). *Aligning California's education reforms*. Mountain View, CA: Author. Retrieved January 18, 2007, from http://www.edsource.org/pdf/align0101.pdf.
- University of Chicago School Mathematics Project. (2003). *Everyday Math.* Retrieved December 15, 2006, from http://everydaymath.uchicago.edu/index.shtml.

- Fisher, C., Filby, N., Marliave, R., Cahen, L., Dishaw, M., Moore, J., & Berliner, D. (1978). Teaching behaviors, academic learning time and student achievement. Final report of phase III-B Beginning Teacher Evaluation Study. San Francisco: Far West Laboratory of Educational Research and Development.
- Fiorina, M. (2004). Culture war? The myth of a polarized nation. New York: Longman.
- Gallego, M., & Cole, M. (2001). Classroom cultures and cultures in the classroom. In V. Richardson, (Ed.) *Handbook of research on teaching* (4th ed., pp. 951–997). Washington, D.C.: American Educational Research Association.
- Garelick, B. (2005). An a-maze-ing approach to math. *Education Next*, 5(2). Retrieved January 18, 2007, from http://www.hoover.org/publications/ednext/3220616.html.
- Owens, B. (2005, June 2). Veto message on S.B. 214 [press release]. Retrieved January 18, 2007, from http://www.colorado.gov/governor/press/june05/sb214.html.
- Grant, S.G. (2003). History lessons: Teaching, learning, and testing in U.S. high school classrooms. Mahwah, NJ: Lawrence Erlbaum Associates.
- Grossman, P., & Stodolsky, S. (1995). Content as context: The role of school subjects in secondary school teaching. *Educational Researcher*, 24(8), 5–11.
- Gump, P. (1982). School settings and their keeping. In D. Duke (Ed.) *Helping teachers manage classrooms* (pp. 98–114). Alexandria, VA: Association for Supervision and Curriculum Development.
- Hasiotis, D. (2006). All in a day's work. New York: Common Good.
- Hartocollis, A. (2000, April 27) The new, flexible math meets parental rebellion. *The New York Times*, pp. A1, B5
- Helderman, R. (2004, August 3). SOLs keep few from graduating in N.VA. Washington Post, p. B1.
- Herman, J. (2002). Instructional effects in elementary schools. Center for the Study of Evaluation, Graduate School of Education & Information Studies, University of California, Los Angeles.
- Hirsch, E.D., Jr. (1996). The schools we need. New York: Doubleday.
- Hook, C., & Rosenshine, B. (1979). Accuracy of teacher reports of their classroom behavior. *Review of Educational Research*, 49(1), 1–12.
- Hunter, J. (1991). Culture wars: The struggle to define America. New York: Basic Books.
- Hutchinson, D. (2004). A natural history of place in education. New York: Teachers College Press.

- Jackson, P. (1968). The practice of teaching. New York: Teachers College Press.
- Jacob, R. T., Stone, S., & Roderick, M., (2004). Ending social promotion: The response of students and teachers. Consortium on Chicago School Research.
- Jones, G., Jones, B., & Hargrove, T. (2003). The unintended consequences of high-stakes testing. Lanham, MD: Rowman & Littlefield Publishers.
- Joseph, R. (2005, April). No one curriculum is enough: Effective California teachers tailor literacy instruction to student needs despite federal, state, and local mandates to follow scripts. Paper Presented at First International Congress of Qualitative Inquiry, University of Illinois, Champaign-Urbana, Illinois.
- Katz, M. (1968). The irony of early school reform. Cambridge, MA: Harvard University Press.
- Keyes vs. School District No. 1, 413 U.S. 189 (1973).
- Kolker, R. (2006, May 1). A is for apple, B is for brawl. New York Times. Retrieved January 18, 2007, from http://newyorkmetro.com/news/features/16775/.
- Labaree, D. (2004). The trouble with ed schools. Yale University Press.
- Lakoff, G. (1996). Moral politics. Chicago: University of Chicago Press.
- Lewin, T. (2006, September 13). Report urges changes in the teaching of math in U.S. schools. New York Times, p. A18.
- Mayer, D. (1999). Measuring instructional practice: Can policymakers trust survey data. Educational Evaluation and Policy Analysis, 21(1), 29–45.
- McCorry, J. (1978). Marcus Foster and the Oakland public schools. Berkeley, CA: University of California Press.
- Meier, D. (2000). Progressive education in the 21st century: A work in progress. In R. Brandt (Ed.), *Education in a New Era* (pp. 211–228). Alexandria, VA: Association for Supervision and Curriculum Development.
- Nehring, J. (2006, February 1). Progressive vs. traditional: Reframing an old debate. *Education Week*, pp. 32–33.
- Oakland Unified School District. (2001). Evaluation report: Implementation and outcomes of Open Court literacy program, year 1. Oakland, CA: Author.
- Pedulla, J. (2003). Perceived effects of state-mandated testing programs on teaching and learning: Findings from a national survey of teachers. Boston: National Board on Educational Testing and Public Policy, School of Education, Boston College. Retrieved January 18, 2007, from http://www.bc.edu/research/nbetpp/statements/nbr2.pdf.

- Perrone, V. (1972). Open education: Promise and problem. Bloomington, IN: Phi Delta Kappan Foundation.
- Pressler, M. (2006, June 1). Schools, pressed to achieve, put the squeeze on recess. *Washington Post*, p.A01.
- Public Agenda. (1997). Professors of education: It's how you learn, not what you learn that is most important. New York.
- Ravitch, D. (2000). Left back: A century of failed school reforms. New York: Simon and Schuster.
- Rothman, R. (1992, November 4). Performance-based assessment gains prominent place on research docket. *Education Week*. Retrieved January 18, 2007, from http://www.edweek.org/ew/articles/1992/11/04/09perfor.h12.html.
- Shuell, T. (1996). Teaching and learning in a classroom context. In D. Berliner & R. Calfee (Eds.) *Handbook of educational psychology* (pp. 726–764). New York: Macmillan.
- Slavin, R. (1995). Research on cooperative learning and achievement: What we know, what we need to know. Baltimore: Center of Research on the Education of Students Placed at Risk, Johns Hopkins University.
- Sloan, K. (2006). Teacher identity and agency in school worlds: Beyond the all-good/all-bad discourse on accountability-explicit curriculum policies. *Curriculum Inquiry*, 36(2), 119–152.
- Spencer, L. (2001, February 28). Progressivism's hidden failure. Education Week, pp. 29, 32–33.
- Stodolsky, S. (1988). The subject matters: Classroom activity in math and social studies. Chicago: University of Chicago Press.
- Stodolsky, S., & Grossman, P. (1995). The impact of subject matter on curricular activity: An analysis of five academic subjects. *American Educational Research Journal*, 32(2), 227–249.
- Taylor, M. (1990). Leadership responses to desegregation in the Denver public schools, a historical study: 1959–1977. Unpublished doctoral dissertation, University of Denver.
- Tibballs, J. (1996, April 30). Teaching hospital medical staff to handwash. *The Medical Journal of Australia*, 164, 395–398.
- Tyack, D. and Cuban, L. (1995). *Tinkering toward utopia*. Cambridge, MA: Harvard University Press.
- Viadero, D. (2005, November 16). Teacher logs reveal how class time is really spent. *Education Week*, p. 8.
- Viadero, D. (2006, May 24). Survey finds majority of elementary schools still offer recess time. Education Week, p. 14.

Weinstein, C. (1991). The classroom as a social context for learning. *Annual Review of Psychology*, 42, 493–525.

- Wilson, S. (2003). California Dreaming. New Haven, CT: Yale University Press.
- Yee, G. (1995). Miracle workers wanted: Executive succession and organizational change in an urban district. Unpublished doctoral dissertation, Stanford University.
- Yee, G. (2004, April). Who leads? The school board and governance change in the Oakland public schools, 1960–2004. Paper presented at annual meeting of American Educational Research Association, San Diego.
- Zimmerman, J. (2002). Whose America? Culture wars in the public schools. Cambridge, MA: Harvard University Press.
- Zoch, P. (2004). Doomed to fail: The built-in defects of American education. Chicago: Ivan Dee, Inc.

About the Author

Lary Cuban

Stanford University

Email: cuban@stanford.edu

Larry Cuban is Professor Emeritus of Education at Stanford University and the author of Teachers and Machines (1986), How Teachers Taught (1993), Tinkering toward Utopia (1995, with David Tyack), How Scholars Trumped Teachers (199), Oversold and Underused (2001), and The Blackboard and the Bottom Line (2005), among other writings.

EDUCATION POLICY ANALYSIS ARCHIVES http://epaa.asu.edu

Editor: Sherman Dorn, University of South Florida

Production Assistant: Chris Murrell, Arizona State University

General questions about appropriateness of topics or particular articles may be addressed to the Editor, Sherman Dorn, epaa-editor@shermandorn.com.

Editorial Board

Noga Admon Jessica Allen

Cheryl Aman Michael W. Apple
David C. Berliner Damian Betebenner

Robert Bickel
Anne Black
Henry Braun
Nick Burbules
Marisa Cannata
Casey Cobb
Arnold Danzig

Linda Darling-Hammond

John Diamond

Gunapala Edirisooriya

Chris Frey

Misty Ginicola

Harvey Goldstein

Chad d'Entremont

Amy Garrett Dikkers

Camille Farrington

Richard Garlikov

Gene V Glass

Hee Kyung Hong
Craig B. Howley
William Hunter
Jaekyung Lee
Benjamin Levin
Jennifer Lloyd
Sarah Lubienski
Les McLean
Roz Mickelson

Heinrich Mintrop Shereeza Mohammed

Michele Moses Sharon Nichols

Sean Reardon A.G. Rud

Michael Scriven Lorrie Shepard
Ben Superfine John Weathers

Kevin Welner Ed Wiley

Terrence G. Wiley Kyo Yamashiro

Stuart Yeh

Archivos Analíticos de Políticas Educativas

Associate Editors

Gustavo E. Fischman & Pablo Gentili

Arizona State University & Universidade do Estado do Rio de Janeiro

Asistentes editoriales: Rafael O. Serrano (ASU-UCA) & Lucia Terra (UBC)

Hugo Aboites

UAM-Xochimilco, México

Claudio Almonacid Avila

UMCE, Chile

Alejandra Birgin

FLACSO-UBA, Argentina

Mariano Fernández Enguita

Universidad de Salamanca. España

Roberto Leher

UFRJ, Brasil

Pia Lindquist Wong

CSUS, USA

Alma Maldonado

University of Arizona, USA

Imanol Ordorika

IIE-UNAM, México

Miguel A. Pereyra

Universidad de Granada, España

Romualdo Portella de Oliveira

Universidade de São Paulo, Brasil

José Ignacio Rivas Flores

Universidad de Málaga, España

José Gimeno Sacristán

Universidad de Valencia, España

Susan Street

CIESAS Occidente, México

Daniel Suárez

LPP-UBA, Argentina

Jurjo Torres Santomé

Universidad de la Coruña, España

Armando Alcántara Santuario

CESU, México

Dalila Andrade de Oliveira

UFMG, Brasil

Sigfredo Chiroque

IPP, Perú

Gaudêncio Frigotto

UERJ, Brasil

Nilma Lino Gomes

UFMG, Brasil

María Loreto Egaña

PHE, Chile

José Felipe Martínez Fernández

UCLA, USA

Vanilda Paiva

UERJ, Brasil

Mónica Pini

UNSAM, Argentina

Paula Razquin

UNESCO, Francia

Diana Rhoten

SSRC, USA

Daniel Schugurensky

UT-OISE Canadá

Nelly P. Stromquist

USC, USA

Antonio Teodoro

Universidade Lusófona, Lisboa

Lílian do Valle

UERI, Brasil