Chapter 1

Standardization, Defensive Teaching, and the Problems of Control

Standardization reduces the quality and quantity of what is taught and learned in schools. This immediate negative effect of standardization is the overwhelming finding of a study of schools where the imposition of standardized controls reduced the scope and quality of course content, diminished the role of teachers, and distanced students from active learning.

The long-term effects of standardization are even more damaging: *over the long term, standardization creates inequities, widening the gap between the quality of education for poor and minority youth and that of more privileged students.* The discriminatory effects of standardization are immediately evident in the reduction in both the quality and quantity of educational content for students who have historically scored low on standardized assessments. Over time, the longer standardized controls are in place, the wider the gap becomes as the system of testing and test preparation comes to substitute in minority schools for the curriculum available to more privileged students. These new structures of discrimination are being generated by the controls that began in the schools documented in this study and that in the succeeding years have become the dominant model of schooling in one of the nation's largest and most diverse states, Texas. This book documents the immediate educational costs to curriculum, teaching, and children when the controls were first introduced. It then analyzes their growing power to damage the education of all children, but particularly those who are African American and Latino.

In the name of improving educational quality and holding schools and school personnel more accountable for their professional practice, the state government enacted a set of standardized controls to monitor children's learning and teachers' classroom behavior. These controls arose outside the educational system, derived from pressures from the business establishment to fund only those educational expenses that contributed to measurable outcomes. They were implemented from the top of the state bureaucracy, through the district bureaucracies, and subsequently imposed on schools. The controls were set forth as "reforms." The activities they mandated were to be uniform, and the means of monitoring the activities were standardized scoring instruments. In the name of "equity," these reforms imposed a sameness. In the name of "objectivity" they relied on a narrow set of numerical indicators. These hierarchical reform systems seem upon first reading to be extreme, but over time they have become the model for increasingly hierarchical and prescriptive systems being promoted as improving education. More seriously, they have legitimated "accountability" as the presiding metaphor in shifting the power relations governing public education.

The research reported in this volume did not begin as a study of the effects of state-level educational standardization. The findings are all the more powerful because, in fact, they were not expected. Nor were they sought. This research began as a search for organizational models of schooling that provided structural support for authentic, engaged teaching and learning. The research was designed to study schools in which school knowledge was credible, in which teachers brought their own personal and professional knowledge into the classroom, and in which teachers and students entered into shared, authentic study of significant topics and ways of knowing. Analyzing such teaching and learning in its organizational context could shed light on the ways the structures of schooling can enhance, rather than impede, educational quality.

Teaching and learning widely regarded to be authentic, to be meaningful to the students and to their experiences beyond school, was found in a series of urban magnet schools. As exemplars of authentic teaching and learning, the magnet schools carry special importance because their students were predominantly minority, African American and Latino. These schools had been established to be of such high quality that they would serve a city as the vehicle for desegregation through voluntary cross-city student transfers. This book was intended to document the ways that curriculum and learning are constructed and made meaningful in schools whose organizational structure subordinates the credentialing function and other procedural and behavioral controls to

teaching and learning. The magnet schools proved to be schools where teachers and students, free of the constraints of the state textbook adoption list and from state and local prescriptive rules governing curriculum, co-constructed rich academic environments in a multiracial setting.

During the collection of observational data in these magnet schools, while the data on authentic teaching and learning were quite persuasively accruing, the state enacted policies meant to "reform" all schools.[1] These policies brought all schools in the state under a centralized system of prescriptive rules and standardized procedures for monitoring compliance. These exemplary magnet schools, serving racially diverse and in many cases poor students, were not exempt from the centralized controls.

As the controls were imposed, and the regulations increasingly standardized, the quality of teaching and learning at even these exemplary schools began to suffer. Teaching, curriculum, and students' roles in classrooms were transformed by the standardizations and by the categories of compliance they imposed. Within the observational data began to emerge phony curricula, reluctantly presented by teachers in class to conform to the forms of knowledge their students would encounter on centralized tests. The practice of teaching under these reforms shifted away from intellectual activity toward dispensing packaged fragments of information sent from an upper level of the bureaucracy. And the role of students as contributors to classroom discourse, as thinkers, as people who brought their personal stories and life experiences into the classroom, was silenced or severely circumscribed by the need for the class to "cover" a generic curriculum at a pace established by the district and the state for all the schools.

The magnet teachers and their students did not comply thoughtlessly with the new standardizations. Instead they struggled to hold onto school lessons that held credibility in the world outside schools, to lessons that sprang from teachers' passions and children's curiosities, to lessons that built a cumulative base of new understandings for these students, many of whom were counting on the magnet schools to open previously closed doors to college and careers. The work of resistance itself, however, took a toll on time, energies, and the activities that could not be salvaged as the controls became more tightly monitored.

Controlling Myths

The myth of such controls is that they "bring up the bottom," that they are aimed at the lowest levels of performance. The myth further promotes the idea that "good schools" will not be affected and, conversely, that any school that is

adversely affected by centralized controls must not have been a "good" school. The corollary holds for teachers: if teachers are negatively affected by standardized reforms, then they must have been the "weak" or "bad" teachers in need of reforming.

The following analysis shatters the myth that standardization improves education. It challenges the widespread notion that standardization equals, or leads to, "standards." What will be clear from a close-up analysis of the effects of standardization is that, in fact, *standardization undermines academic standards* and seriously limits opportunities for children to learn to a "high standard."

The issue of the confusion between standardization and "standards" is of critical importance because increasingly scores on individual students' standardized tests of academic skills and of the mastery of subject content carry with them serious consequences both for the students and for those who teach them. "High-stakes" decisions, such as grade placement and promotion (or retention), placement in highly stratified academic tracks, and even graduation are increasingly determined by students' scores on centrally imposed, commercial standardized tests. When they are used in "accountability systems," individual and aggregate student test scores are used as indirect measures of teachers' work, principals' "performance," and even of the overall quality of the school. Such practices are highly questionable and are prompting serious scrutiny by policymakers and testing professionals of the possible misuses of student tests (Heubert and Hauser 1999).

The ethical questions raised among testing experts regarding the use of standardized student tests for other purposes such as employee (teacher, principal) performance and school quality tend to be regarded by policymakers in heavily centralized states and districts as points requiring fine-tuning and, in fact, are often used as justification for extending tests to additional grade levels and subjects to "assure that the testing is as comprehensive as possible."[2]

The Texas case is important to study and to analyze at each level of implementation because it demonstrates the wide gulf between academic "standards" and the curricular content to which students have access under a highly centralized system of standardized testing. It is crucial to understand because it provides the first opportunity to examine how issues of quality and "high standards" become so easily co-opted by the similar language—but oppositional philosophy and opposite consequences—of standardization. The "high stakes" to the students, in the use of their scores to regulate an entire system, appear at first to be merely the decisions made about them individually—their promotion or graduation, for example. The schools described in this book in

some detail demonstrate that what is ultimately at stake is the capacity to provide a substantive education that is not driven by, not stratified by, and not reduced by the kinds of standardized tests being increasingly adopted across the states under the guise of "raising standards."

That standardization is harmful to teaching and learning is not a new idea. Critique of the embodiment of technical mechanisms for transforming the power relations within schools and reordering the power relations that govern the larger role of school in society is the subject of a now comprehensive body of theory (Apple 1979, 1995, 1996; Apple and Oliver 1998; Beyer and Apple 1998a; Freire 1970, 1985, 1995; Giroux 1983, 1996; Greene 1978; McLaren and Gutierrez 1998; Sarason 1971, 1996; Wise 1979; Wrigley 1982; and others). Such critical scholarship, including critical cultural studies, studies in the political economy of schools, and critical analyses of pedagogy have emerged as bases upon which to examine the increasing technicizing of public education. At the macrolevel of theorizing, there is, within this body of scholarship, increased attention to and understanding of the conservative transformation of American public education through the use of technicist forms of power. In addition, fine-grained classroom studies, particularly in the area of the sociocultural linguistics and critical race studies, are documenting the linguistic and culturally subtractive effects of generic models of schooling on Spanish-dominant and other immigrant and minority children (Fordham and Ogbu 1986; Gutierrez and Larson 1994; Gutierrez, Rymes, and Larson 1995; Romo and Falbo 1996; Suarez-Orozco 1991; Valenzuela 1999).

This scholarship has been essential in creating frameworks for questioning the power relations that shape the role of the school in the larger society. In addition, through critical scholarship we have now an established tradition for examining the social and cultural origins of school knowledge, for raising questions about whose interests are served by educational institutions and whose interests and cultures are represented by the knowledge and ways of knowing institutionalized in schools. Critical studies have insisted that our understandings of schools and the educational practices within them not be limited to technical representations of the schools, their programs, or their students' performance. Our conceptualizations of the ways race, social class, social "place," gender, conflicting community histories, and competing definitions of schooling that all shape "schooling" for us are enriched by this growing literature.

Even within an increasingly complex and international body of scholarship, however, there are serious gaps. One of these is the absence of critical scholarship that carries theory into, or builds theory from, what goes on inside

schools. And even more glaringly and ironically absent, given the role of critical scholarship in raising issues of power and power inequities, is the lack of up-close studies of systems of schooling. Jean Anyon's powerful book, *Ghetto Schooling: A Political Economy of Urban Educational Reform* (1997a), stands as an exception. This extraordinarily complex study examines the interrelation of race, local politics, local economics, and even the global economic forces that have over time "pauperized" urban education in a major U.S. city, Newark, New Jersey. Her study is exemplary for situating both the "problems" of urban schools and their potential to become educational for poor and minority children not merely in their internal structures ("Do they 'work'?"), but in the sociocultural contexts of their communities and in the economic and political forces beyond those communities that have over the years come to dominate the resources and political power available in support of these schools. Her analysis is especially powerful because it does not leave these forces at an abstract level, but rather concretizes particular groups, particular legislation, particular individuals' roles in the destruction and rebuilding of the civic capacity of a community to act on behalf of its schools.

Yet even this very detailed study stops at the classroom door. Its analysis of the factors inside schools that have over the years been damaged by increasingly racist and class-based resourcing of schools is descriptive of both the organizational factors (leverage over resources, teacher preparation, administrative authority) and programmatic components (availability of kindergarten, creation of alternative programs for children not well served by traditional schools). But this description and analysis are seen more from an organizational perspective and from the perspective of community constituencies working to reclaim the power to improve schools, rather than from children's experience of these and other aspects of schooling. We still have serious need of studies that not only get inside classrooms but also document from the inside out the ways increasingly differentiated power relations are changing systems of schooling and the ways those systems are shaping what is taught and learned.

It is critical scholarship, then, which gives us a lens for going beyond the appearance, slogans, and indicators, to examine the forces such as standardization that are increasingly shifting both school practice and the power relations shaping that practice. What has been missing from both the global theorizing and the microlevel studies from a critical perspective is an analysis of *how these standardizing forces play out through the system of schooling:* from the political forces shaping the policies, through the bureaucratic systems enacting the policies, to what children are taught and what they experience in

the classrooms under these policy mandates. *Contradictions of Reform* provides the first such comprehensive analysis of a system of standardization and its educational consequences. It overcomes the silence in the critical literature about how standardization comes about, how the innocuous-sounding language of standardization ("high standards" and "accountability") comes to mask the reductions in academic quality, and how technical indicators ("objective measures") transform what is valued in teaching and curriculum. The analysis further fills the gap in the critical literature by situating the voices and experiences of particular teachers and students within a particular system, overcoming the tendency of global theorizing to portray a picture that, even if essentially correct, remains at such an abstract level that it lacks credibility to a broader public trying to understand its schools.

Contradictions of Reform looks firsthand at "best case" schools where teachers and highly diverse students, despite serious resource shortages, had been able within the context of a supportive organizational structure, to co-construct authentic educational experiences.

These schools are recorded here in extensive detail to demonstrate the complexity of creating and sustaining such educational programs and to give tangible evidence of the educational value to students when their classroom knowledge is credible and when the educational process involves the minds and knowledge base of the teachers and the minds and experiences of the students. The study then traces the ways standardized controls directly and negatively impact the teaching, curriculum, and role of students in those schools. These standardized controls are traced from their origins in the business leadership outside schools, through political trade-offs with the governor and legislature that silenced educators and forced them to accept a highly complex system of controls over their work in exchange for even very modest pay increments. The analysis then tracks the bureaucratic implementation of these controls, into "instruments of accountability," to measure teachers' classroom practice and the "outcomes" of children's learning. This systemic analysis, from corporate pressure to legislature to school bureaucracy to classroom, sheds new light on the harmful effects of policies that on the surface seem to be benign attempts to monitor educational quality and to assure that schools are run in a cost-effective manner. In reality these policies of standardization are decreasing the quality of teaching and learning in our schools, especially in the schools of poor and minority children. The analysis concludes with an examination of the longer-term effects of such systems of accountability; there is growing evidence that the institutionalization of standardization is widen-

ing the gap between poor and minority youth and their peers in more privileged schools.

The language of accountability seems, on a commonsense level, to be about professional practice that is responsible to the children and to the public. The language of standardization appears to denote equity, of assuring that all children receive the same education. Behind the usages of these terms in educational policy, however, is a far different political and pedagogical reality. "Accountability," as will be discussed in the last chapter, reifies both a resource dependency and a hierarchical power structure which maintains that dependency. It further undermines both the public voice in public schooling and the public role of schools in democratic life. "Standardization" equates sameness with equity in ways that mask pervasive and continuing inequalities. Taken together, the increasing use of *standardization,* prescriptive of educational programs, and *accountability,* equating educational accomplishment with outcomes measures, are restructuring public education in two critical ways. First is the shifting of decisions regarding teaching and learning away from communities and educational professionals and into the hands of technical experts following a political agenda to reduce democratic governance of schooling. Second (and particularly serious in its consequences for children in light of the success of the magnet schools in educating highly diverse students) is the restratification by class and race through highly technical systems governing the content and means of evaluation. The final chapter will show how the forms of control, which have their origins in the 1980s reforms, are now deeply entrenched and are not only reducing the overall quality of education but also dramatically widening the gap between poor and minority children's education and the education of more privileged youth.

Standardization in the form of legislated controls over testing and curriculum is an externalization of management controls arising from the bureaucratizing of schooling early in the twentieth century. Its derivations from within the organizational structures of schooling, rather than from theories of child development and learning, have traditionally signaled a separateness from teaching, learning, and curriculum. The perceived separateness between school organization and teaching and learning has been shown, however, to be misleading. Even where there are not in place formal controls over curriculum and teaching, there are, within bureaucratic school structures, imbedded controls. These bureaucratic controls are not separate from the educational purposes of schooling; rather, they play an active role in determining the quality of teaching and the nature of what is taught.

Defensive Teaching and the Contradictions of Control

The public will to provide an education to all the citizens in a democracy carries with it issues of cost (Who will pay for such an education?) and governance (How will so many schools be organized and overseen?). It is one of the great ironies of American education that in order to provide a free public education to all its children, schools were created along the model of factory assembly lines in order to reduce the cost of schooling per child and assure millions of children of a diploma, a credential of school completion (Callahan 1962; Kliebard 1986; McNeil 1986). A school that is designed like a factory has a built-in contradiction: running a factory is tightly organized, highly routinized, and geared for the production of uniform products; educating children is complex, inefficient, idiosyncratic, uncertain, and open-ended. Historically, the two purposes of schooling, that is, educating children and running large-scale educational institutions, have been seen as separate domains. The one is aimed at nurturing individual children and equipping them with new knowledge and skills; the other focuses on processing aggregates of students through regularized requirements of the credentialing process. A bureaucratic school, or a school that is part of a bureaucratic system, is thus structured to be in conflict with itself (McNeil 1986, 3). And at the point of the tension—where the two oppositional forces intersect—are the children, the teacher, and the curriculum. How the tension is resolved will in large measure shape the quality of what is taught and learned in the school.

"When the school's organization becomes centered on managing and controlling, teachers and students take school less seriously." With this statement I summed up the analysis of schools and classrooms I wrote as the book, *Contradictions of Control: School Structure and School Knowledge.* To elaborate, I added, "They [teachers and students] fall into a ritual of teaching and learning that tends toward minimal standards and minimal effort. This sets off a vicious cycle. As students disengage from enthusiastic involvement in the learning process, administrators often see the disengagement as a control problem. They then increase their attention to managing students and teachers rather than supporting their instructional purpose" (McNeil 1986, xviii).

That earlier research study, an ethnographic analysis of the factors shaping what is taught in schools (McNeil 1986), revealed that the effects of bureaucratic controls on teaching and learning were not vague influences, but rather very concrete and visible transformations of course content and classroom interaction. That study, conducted in four high schools in the midwest-

ern United States, revealed that behind overt symptoms of poor educational quality lie complicated organizational dynamics (McNeil 1988c). The nature of teachers' practice, the quality of course content and the level of students' engagement may not themselves be weaknesses, but may be symptoms that reflect teachers' and students' accommodations to priorities built into the organizational structure of the school.

Where teachers feel that they have no authority in the structure of the school, or where they see the school as emphasizing credentialing over the substance of schooling, they tend to create their own authority or their own efficiencies within the classroom by tightly controlling course content. They begin to teach a course content that I termed *school knowledge,* which serves the credentialing function of the school but which does not provide students with the rich knowledge of the subject fields nor with opportunities to build their own understandings of the subject.

As background for examining the authentic teaching and learning in the magnet schools, it is important to understand the very concrete ways in which teachers in the midwestern schools shaped school content in reaction to the schools' subordination of the educational goals to the goals of control and credentialing. Teachers who wanted their students to comply with course requirements often did so by reducing those requirements in order to gain minimal participation with minimal resistance. I termed this *defensive teaching* (McNeil 1986, ch. 7). Teachers who taught defensively, asking little from their students in order to satisfy institutional requirements with as little resistance and with as few inefficiencies as possible, tended to bracket their own personal knowledge from the treatment of the subject of the lesson. And they used strategies to silence student questions or (inefficient) discussions. These strategies bear reviewing because it is in part their absence from the magnet classrooms that so starkly shows the differences between teaching in a supportive organizational structure and teaching in a controlling environment.

First, teachers controlled content by *omission.* They tended to omit topics that were difficult to understand and or contemporary topics that would invite student discussion. They especially tended to omit subjects, or treatments of subjects, that were potentially controversial. Controversy, and passionate student discussion, might threaten the teacher's interpretation; interpretations that differed from the teacher's were seen as threatening teacher authority. One teacher even said he had eliminated student research papers because at a time of volatile political debate he found that students doing their own research could become "self-indoctrinated," that is, they came to their own interpreta-

tions of the subject (McNeil 1986, 172). At the least, controversy could disrupt the pacing of the coverage of the course material, causing the third-period class, for example, to lag behind the less talkative fourth-period class.

Teachers also maintained a controlling environment in their classes by *mystifying* course content. They mystified a topic by making it seem extremely important, but beyond the students' understanding. It was to be written in the notes for the test, but not understood. In economics class, topics like the Federal Reserve system or international monetary policies would be subjected to mystification; they would be mentioned but not elaborated upon, with the message that students need to recognize the term but leave the understanding of the subject to "the experts." (At times teachers also mystified topics about which *they* had little knowledge, willingly obscuring their students' access to the topic, rather than to learn on behalf of or in collaboration with their students.)

The information that was important to the content of the course, the content that teachers did want their students to learn, would be presented in the form of a list of facts (or names or dates or formulas or terminologies) to be memorized and repeated on tests. Complex subjects that were too essential to the course to be omitted (the Civil War, for example, in a history class; cell processes in biology; the effects of reagents in chemistry) would be reduced to lists and fragments of fact and transmitted by the teacher. In most cases, the lists were presented in a format that condensed and structured the course content into a consensus curriculum. One teacher explained that her job was to read the scholarly literature (in her case, "the historians") and distill the information into a list on which "all historians now agree." This *fragmentation* of course content tended to disembody the curriculum, divorcing it from the cultures and interests and prior knowledge of the students, from the teachers' knowledge of the subject, and from the epistemologies, the ways of knowing, within the subject itself. It also placed barriers between the knowledge as packaged for use in school and its relation to understandings of that subject within the cultural and practical knowledge outside schools. The origins of ideas, the shaping of interpretations, the possibility of inquiry into where this knowledge came from and how it was shaped by human experience were all absent from the curriculum. "School knowledge" was a priori what the teacher conveyed and students received to satisfy school requirements.

A fourth strategy these teachers used to control course content, and with it classroom interactions, was what I have termed *defensive simplification.* When teachers perceived that students had little interest in a lesson or that the difficulty in studying the lesson might cause students to resist the assignment,

they made both the content of the assignment and the work students were to do as simple as possible. They minimized *anticipated* student resistance by simplifying course content and demanding little of students. This strategy was used when the topic was complex and in need of multiple explanations if all students were to understand; labor history might be reduced to a list of famous strikes, labor laws, management policies, and key labor leaders. The connections among these would go unexplained; they would simply be names on a list. Student assignments were reduced to taking notes on lectures, copying lists from the blackboard, filling in blanks on worksheets, and reading one or two pages on the subject. Extensive writing that called for student interpretations, for student research beyond the classroom, for engagement with text was absent from these classes—in stark contrast to the responsibilities that, as will be demonstrated, the magnet students assumed on a regular basis.

The thin academic content in these classes, surprising because these were known as "good schools," gave the impression that the teachers were undereducated in their subjects. Interviews with the teachers, however, revealed that they were well read, that they kept up in their fields, that they discussed literature and current events and new discoveries with their friends. They frequently talked with adults, in the teacher's lounge or over lunch, about complex ideas and about what they were learning from their personal reading and travels. When they came into the classroom, however, the subject they had discussed outside the classroom would be rendered unrecognizable when presented to their students as lists and facts. They rarely brought their personal knowledge, or their professional knowledge of their subjects, into the classroom (Shulman 1987); personal knowledge and school knowledge were for them quite separate. In interviews teachers explained that they feared that if the assignments (and treatment of course topics) were too complex, then students would not do the work. In addition, they feared that if students knew how complex the world is, particularly our economic institutions, then they would become cynical and discouraged about their futures and about "the system." They mistook their students' compliance for acceptance of what they were being taught.

Although most of the students in these middle-class, White schools sat quietly and appeared to be absorbing the information provided by their teachers (most of them passed the subjects), interviews with students at all achievement levels revealed that the students did not find the school knowledge credible. School was far from their only source of information; they had televisions, jobs, grandparents, and peers. They did not necessarily have sophisticated

understandings of various subjects, but they knew that for some reason "they only tell you here what they want you to know." I had been in the schools for so many months before interviewing students that when we did sit down to talk, several expressed their concern that I might be taken in by the content of the lessons. They advised, "Don't believe what they tell you here," and then each would go on to tell of a school-supplied fact that was directly contradicted by a personal experience or by something learned from a job or a parent. (Some of the school-supplied information was more reliable than what they learned at their jobs or from their friends, but not having the opportunity in school to examine and to come to understandings of what was being taught, they assumed a greater credibility on the part of what they learned outside school.)

The students and teachers in these schools were meeting in an exchange to satisfy the bureaucratic requirements of schooling. The teachers recognized full well that if the school were smooth-running and few students failed their courses, then the administration would be pleased, and that any extra efforts—to develop an interesting curriculum, to assign and grade student research papers, to stay late to meet with students wanting extra help—would not only not be rewarded but also be disdained as unnecessary. The students knew that if they exerted at least minimum effort, then they would pass their required courses; if they ventured opinions and tried to start discussions, then they would be viewed as disruptive. (*Contradictions of Control* includes examples of student attempts to bring their own ideas into the classroom; one teacher lowered "class participation" grades if students tried to discuss).

In response to impersonal bureaucratic schools that emphasized the controlling and credentialing functions at the expense of the educative goals of schooling, teachers and students were engaged in a vicious cycle of lowering expectations. When teachers tightly controlled the curriculum, the students mentally disengaged; teachers saw student disengagement as the reason to tighten controls. When administrators saw teachers and students exerting so little effort, they saw the school as "out of control," and in response they tightened up administrative controls, issuing new directives and increasingly formalizing the hierarchical distances between the administration and the classroom. Within this cycle of lowering expectations, the school, for both teachers and students, begins to lose its legitimacy as a place for serious learning.

The *Contradictions of Control* schools held within them the potential for authentic teaching and learning. It was to be found not in merely changing the dispositions of individual teachers, but in breaking the cycle of lowering expec-

tations set up when teachers teach defensively and students find school knowledge not worthy of their effort. Breaking this cycle within the traditional bureaucratic school structure, in which the credentialing and controlling processes of schooling so easily came to dominate the educational purposes of schooling, can be difficult. The teachers in the midwestern schools were not under legislated curriculum directives, nor was their pay tied to student test scores or compliance with standardized mandates. These teachers were not directly de-skilled by a regulatory context. They were participating in their own de-skilling by bracketing their personal knowledge when they entered the classroom and by using on their students the controlling practices they so resented from administrators.

One school stood out from the others as a school whose administrative structure was organized not to enforce rules and credentialling procedures, but to support teaching. That school (McNeil 1986, ch. 6) demonstrated that when the professional roles, resource allocations, and procedures of a school are organized in support of academics (rather than oppositional to "real teaching"), teachers feel supported to bring their best knowledge into the classroom. They are willing to take risks in incorporating into lessons their questions and uncertainties as well as their deep understandings of their subject. They are willing to let their students see them learning and asking questions (rather than controlling all discussion) and, in turn, they invite their students to make their own questions, interpretations, and partial understandings a vital part of the learning process. Seeing that school, where curriculum content was not "school knowledge," but was congruent with the knowledge that teachers held and with the subject as it is encountered in the world outside schools, raised the question of what other structures of schooling might foster authentic teaching and learning. Observing that school where scarce resources went first to instruction in a variety of imaginative ways, and where administrative personnel put their own time and efforts at the disposal of their faculties, raised the possibility of identifying other examples of schools structured to support educating children in ways consistent with their need to be nurtured and with their need to learn content whose purpose went far beyond building a record of grades and school credentials.

Contradictions of Control cut new theoretical ground for understanding the complex relationships between school organization and what is taught and learned. The wisdom that school administration and instruction are loosely linked domains was challenged by the clear evidence that a controlling administrative environment undermined teaching and learning by the responses it invoked in teachers and students.

The analysis presented here began with the selection of the magnet schools as counterexamples to the organizational de-skilling of teachers. These schools, as the next three chapters document, proved that schools can be organized in ways that do not put teachers in conflict with administrative purposes when they do their best teaching. They show that in a supportive environment, teachers will work alone and collaboratively to develop complex and up-to-date curricula, that they will tackle complex and controversial topics essential to their students' understandings, that they will struggle to find ways to make learning possible for all their students. The magnet schools carried many agendas as they were established and as they came to be the chief conduits to college for hundreds of minority youth in a city with a long history of discriminatory school practices. For this analysis, their benefit is in exemplifying the possibilities for authentic teaching and learning when schools are structured to foster learning rather than to process students or control them.

The success of the magnet schools in providing a substantive education for diverse urban students was jeopardized when a layer of organizational controls became state law (chapter 5). These controls, centralized and highly standardized, threatened the educational programs by imposing on the magnet school curricula magnified versions of the simplifications used by the midwestern teachers to limit their students' access to knowledge. The magnet teachers refused to be de-skilled, but as chapter 6 will dramatically record, the costs of new standardization policies fell heavily on their curricula and on their students and threatened to drive them out of public classrooms when remaining meant participating in the de-skilled teaching of "school knowledge."

The experiences of the students and teachers in the magnet schools under increasingly standardized controls raise serious questions about the purposes behind these controls. For educators, they also raise serious questions about the long-term effects of students whose entire educational experience is dominated by standardization. In chapter 7, I discuss those long-term effects, both on children and on the system of schooling. When standardization becomes institutionalized, and student testing comes to be used for monitoring "accountability" throughout a state's educational system, the negative effects fall most heavily on the poorest children, minority children whose entire school experience comes to be dominated by an attempt to raise their (historically low) test scores at any cost. I will document those effects in chapter 7, showing how standardization, when it begins to shape a whole system, in effect creates a new system of discrimination.

Notes

Chapter 1: Standardization, Defensive Teaching, and the Problems of Control

1. A note on methodology: this study began as an analysis of the factors shaping curriculum in schools whose organizational and administrative structures were designed to support, rather than control, teaching and learning. For that analysis, daily observations in classrooms over the course of at least a semester in each school formed the primary data on curriculum and teaching. Interviews with teachers, students, administrators, and parents, and historical research into the schools and their programs, were conducted formally and informally at strategic points before, during, and following classroom observations. Interviews with central office administrators in the offices of curriculum, gifted-and-talented programs, magnet services, and evaluation and research provided key information on the administrative and legal contexts of the magnet schools during their formation and in the years leading up to and inclusive of the time of the study.

Once the state-mandated reforms under House Bill 72 and related state education agency directives began to affect the schools, subsequent investigation was made into the role of the SCOPE committee, Perot's use of advisors, state implementation of the legislation, and the offices and structures through which these policies were implemented within the school district. Reviews of legislative and committee documents, correspondence, initial evaluation reports, administrative documents, and related materials from a wide range of observers and participants in the state-level reforms and district implementation were essential to the understanding of not only the content of the reforms but also the rationale being used at each level to justify their implementation. Interviews with several key shapers of these policies, both from outside and from within SCOPE and the state government, were extremely helpful in tracking how decisions were being made, and the assumptions of schooling on which they were based. (None of these sources was available to or known to the teachers being observed, who were receiving the directives as rules emanating from a higher but undesignated level in the bureaucracy.) Copies of district and state standardized tests and test-driven curricula and teacher assessment instruments from a number of years were examined. The schools have been followed for several years following

the initial implementation of the curriculum directives and teacher assessment instrument, through the successive state test-driven programs, which have followed from the proficiencies, with site visits to the schools, periodic interviews with teachers and administrators, and information gathered through a wide association with these schools.

The contemporary legacy of these early standardizations (especially in chapter 7) is analyzed here on the basis of extensive work with urban teachers and administrators through the teacher enhancement programs of the Rice University Center for Education, school visits and observations, analysis of TAAS-related materials from the state and the testing companies, interviews with teachers, conversations with a wide range of teachers and administrators, parents, and students, regarding the impact of the TAAS on classrooms, press coverage and district administrative bulletins related to the TAAS, and a variety of other formal and informal sources.

To counter any tendency to generalize from an in-depth but relatively small data sample, or from individual occurrences, several correctives were built into the research. First, any outlier occurrences, for which there was not a pattern beyond those occurrences, were not deemed as "data" for the purpose of the overall analysis. (Individual occurrences held significance in themselves, but are not reported in this analysis unless they indicate a *pattern of teaching* and *of the effects of standardization* that go beyond that any one occurrence.) There is no reliance on "horror stories" for this analysis, in other words, or exceptional events. Second, at each step of data collection and interim analysis, counter examples to trends in the data have been actively sought. For example, when it became apparent that biology teachers were having to eliminate many of their lessons, particularly those that integrated biological concepts around hands-on phenomena such as student-built marine aquaria or a natural habitat, interviews were scheduled with biology teachers at other schools to determine whether this problem was specific to the magnet schools, or even these teachers, or whether these curricular deletions were widespread. Also, counter interpretations were investigated; for example, if a teacher was having to delete a portion of the curriculum, further research was conducted to see if factors other than the prescriptive testing had had an effect, perhaps a less visible effect.

The search for counter examples and counter interpretations is significant because this analysis is not a mere listing of problems or "unintended consequences" of an otherwise sanguine set of policies. As discussed in chapter 7, the negative effects of the standardizing policies have been their primary effects on classrooms and teaching, and their effects on the locus of control over schooling have become visible as, in fact, intended consequences, not circumstantial by-products.

2. This perspective has been reiterated by proponents of state testing, and the Texas Accountability System specifically, in public meetings and private discussions at which this researcher was present.

Chapter 2: Magnet Schools: "The Best Schools Money Can't Buy"

1. The magnet schools were established to address a long history of racial inequalities in the schools. They were created as the school district's response to a federal court order to desegregate by race. The district, school by school, was monitored for the schools' changing rations of student population by race. Racial categories of students and teachers, therefore, are central to both the district's and the students' understandings of one role of the magnet schools, to help desegregate this highly segregated district. The terms used in this book to designate the students and teachers by race are drawn from the common local usage of the participants and also from designations used by the school district. "Black" rather than "African American" is used more frequently in this book because the teachers, students, and parents who participated in this research study used "Black" to describe themselves, their families, neighborhoods, and schools. While "African American" is also in local usage, particularly in formal discussions of culture or policy, "Black" was used more commonly, especially self-referentially among