

# Issues

## in restructuring schools

---

### Another Look At High School Restructuring

More Evidence That It Improves Student Achievement,  
And More Insight Into Why

By Valerie E. Lee, Julia B. Smith and Robert G. Croninger

**L**ast fall, we presented compelling evidence that high school restructuring can make a difference for students. By analyzing data on more than 11,000 students enrolled in 820 secondary schools nationwide, we found strong links between restructuring and improved learning by students in the first two years of high school.

In schools that had made significant departures from conventional school organization and practice, students posted bigger academic gains in math, science, history and reading. The achievement gaps between students from different backgrounds were smaller in those schools as well. We also found evidence that students learn more, and that learning is distributed more equitably, in smaller high schools.<sup>1</sup>

In this issue report—the last regular publication of the Center on Organization and Restructuring of Schools—we expand on those findings, by analyzing data on most of those same students in their last two high school years.

We're pleased to report that the positive effects of restructuring and school size observed during the early years of high school also can be found in the later high school years. In fact, the positive impact of restructuring increases a bit in the later grades.

We also look more closely at the question of why restructuring schools boost student learning. We now have a clearer understanding of what makes some schools better places for students to learn.

Last fall, we suggested that the better performance of restructuring schools could be explained by looking at the contrast between schools that are organized bureaucratically and schools that are organized communally. Our latest findings also support that hypothesis. But our latest analysis suggests some specific organizational factors that make such schools work better. We hope these findings encourage educators to emulate those features in schools.<sup>2</sup>

#### Bureaucratic Schools

A bureaucratic model has guided the development of secondary schools in the United States, especially since the 1950s. This model calls for the creation of large, comprehensive schools, which offer students a wide choice of courses and activities. Such schools are meant to let each student pursue his or her particular interests, talents and ambitions. The schools are meant to offer something—but not the *same* something—for everyone.

#### ISSUE REPORT NO. 9 FALL 1995

.....

Study Findings	6
Great News— Greater Challenges	11
Focusing Reform	14
Tackling the Challenges of Restructuring	17

Under this model, a typical large high school is managed by professional administrators, usually led by the principal. This group governs teachers, students and staff in a "top-down" manner through formalized goals and procedures. Within such schools, educators typically divide the different subjects they teach into specific departments. Across departments, students are placed in different tracks, depending on their academic abilities and career objectives. The tracks would guide students' selections of courses within departments.

As dissatisfaction with the performance of U.S. schools has grown, especially at the high school level, reforms consistent with this governance structure have sought to boost student achievement. These reforms typically have included efforts to strengthen formal controls over teaching and learning by raising graduation requirements, standardizing classroom practice, and holding teachers accountable for student achievement as measured by standardized tests.

These reforms have had some positive effects, such as enrolling more low-achieving students in academic courses. But they haven't brought about the dramatic improvements in student performance the critics have called for. Also, many observers feel that the tightening of bureaucratic controls has diminished teacher commitment, satisfaction and performance.

Such concerns have helped to foster the development of another school of thought on reform, an "organic" or "communal" model that views teaching and learning as processes that can't really be controlled through standardized procedures directed from central authorities.<sup>3</sup>

Instead of directing teachers to follow specific, rigid rules and respond blindly to the decrees of administrators, the organic model says teachers should be encouraged to work together to examine the challenges they face, and then decide—as a team of thoughtful, committed professionals—how best to proceed.

The organic model calls for giving teachers much greater authority over issues of curriculum and instruction. The aim would be to engender a more

professional orientation among teachers toward their work. Instead of responding to specific rules and evaluations, teachers would be motivated by commitment to, and identification with, the school's mission. They would work together to identify the challenges faced in their particular school and craft the "best practice" to address them. Teachers might, for example, organize instruction around interdisciplinary teams, and then rely mainly on collaboration to decide what works and what needs revision. The school might also create formal mechanisms for giving teachers more power in the decision-making process.

## Characteristics of Organic Schools

The rhetoric of more organic school reform is plentiful, but real change remains rare. High schools that implement reforms often make only incremental changes in how the school operates. Many reform efforts begin on the drawing board as serious undertakings aimed at fundamental change, but end up being modified or watered down in order to avoid threatening the school's existing hierarchy. Those projects that do implement dramatic reform are often run as small "demonstration projects" within a larger school that remains largely untouched by the innovative programs.

Some schools do, however, operate under more organic organizational models. The question we ponder here is: What effects do these kinds of schools have on students?

We examine this question by looking at two important aspects of schools—academic organization and social organization—and identifying certain qualities associated with schools that are more organically organized. We hypothesize that schools with higher levels of these qualities will be more effective and more equitable. In other words, students in those schools will learn more, and the gaps in learning between students of different social backgrounds will be narrower.

---

*Valerie E. Lee is an associate professor of education at the University of Michigan, where she teaches courses in educational foundations and research methods. Her major research interests focus on educational equity and the effects of educational reforms on students.*

*Julia B. Smith is an assistant professor of educational organization and administration at the Warner School of Education and Human Development at the University of Rochester. She researches the effects of school organizational characteristics on teachers, students and administrators.*

*Robert G. Croninger is a doctoral student in educational studies at the University of Michigan and an associate director of the Programs for Educational Opportunity, a federally funded desegregation assistance center. His major research interests are educational policy, organizational change and the social contexts of schooling.*

*Within a large, bureaucratic school, different students often have very different educational experiences, which are shaped by very different sets of expectations. Students from low-income and minority backgrounds are especially likely to suffer harm from a highly differentiated curriculum.*

### **Academic Organization**

Academic organizational features consistent with an organic model would include:

#### **1 - COMMON ACADEMIC CURRICULUM.**

Within a large, bureaucratic school, different students often have very different educational experiences, which are shaped by very different sets of expectations. Academic departments divert students into different levels of courses based on past performance, past track placement, ability, interest and aspirations. These courses can vary a great deal: Sometimes the same class can be offered in different versions with very different requirements and expectations. Even in the same school and grade, students at one level can receive a much richer, more challenging education than students in another.

Students from low-income and minority backgrounds are especially likely to suffer harm from a highly differentiated curriculum. Research shows that students from these backgrounds are far more likely to end up

*continued on page 4*

**Figure 1**

Frequency of Structural Practices in the 820 Secondary Schools Studied, Classified as Traditional, Moderate, and Restructuring

<b>Structural Practice</b>	<b>Probability</b>
<b>Traditional Practices</b>	
Departmentalization with chairs	.85
Common classes for same curricular track	.76
Staff development focusing on adolescents	.66
PTA or PTO	.64
Parent-teacher conferences each semester	.64
Focus on critical thinking in curriculum	.64
Common classes for different curricular tracks	.62
Increased graduation requirements	.62
Recognition program for good teaching	.56
Parents sent information on how to help kids study	.56
<b>Moderate Practices</b>	
Parent workshops on adolescent problems	.46
Student satisfaction with courses important	.42
Strong emphasis on parental involvement	.38
Strong emphasis on increasing academic requirements	.35
Student evaluation of course content important	.35
Outstanding teachers are recognized	.34
Emphasis on staff stability	.34
Emphasis on staff development activities	.32
<b>Restructuring Practices</b>	
Students keep same homeroom throughout HS	.30
Emphasis on staff solving school problems	.29
Parents volunteer in the school	.28
Interdisciplinary teaching teams	.24
Independent study in English/social studies	.23
Mixed-ability classes in math/science	.21
Cooperative learning focus	.21
Student evaluation of teachers important	.20
Independent study in math/science	.18
School-within-a-school	.15
Teacher teams have common planning time	.11
Flexible time for classes	.09

Each figure in the "probability" column represents the probability that an average high school (one which reports that it has adopted 11 to 13 of the 30 reform practices listed here) engages in each practice.

*continued from page 3*

in less challenging classes. Research also shows that those students are especially helped by schools when a well-defined curricular focus, based on a strong academic component, is experienced by all students. In such schools, low-income and minority students take more academic courses, and there is less variation in the school between the expectations and work offered in different classes.

This clearer, common focus on high-level learning for all students has been associated with Catholic schools, but evidence suggests that public schools with similar structures would also post higher levels of achievement and narrower performance gaps between students from different socioeconomic and racial/ethnic backgrounds.<sup>4</sup>

### **2 - ACADEMIC PRESS.**

In a school with high levels of academic press, all students are expected to meet high academic standards, and to devote substantial effort to their schoolwork. This message is delivered clearly and consistently to students by all faculty and staff.

Delivering this message uniformly, to all students in all classes, is more difficult in schools that follow a more bureaucratic model, where staffs are typically divided into specialized departments. In more organic schools, there is less specialization, which makes it easier for staff members to develop and communicate common expectations.

### **3 - AUTHENTIC INSTRUCTION.**

In a school organized under the bureaucratic model, administrators seek to control education by prescribing the tasks of teaching and learning, and by striving to ensure that those tasks are pursued in a uniform way. Research indicates that this approach doesn't encourage students to develop more advanced thinking skills, higher levels of proficiency in academic subjects, or a sense of themselves as active learners. Instead, they learn to reproduce specific bits of knowledge passed along to them by a teacher or textbook.

In recent years, educators increasingly have called for the adoption of more

"authentic" models of instruction and learning. This approach asks students to move beyond reciting fragments of information from memory, and to learn instead how to engage in sustained, disciplined, critical thought on topics relevant beyond school. Simple information can still be presented in a routine fashion, but students also learn through such practices as independent study, project-based instruction, cooperative learning, student evaluation of instructional practices, and learning that looks more like real-world problem solving.

Few high school students experience high levels of authentic instruction. Even in schools working to adopt new methods and strategies aimed at developing authentic instruction, techniques are often implemented for their own sake, with little relevance to other classroom activities or practices. Students from low-income and minority backgrounds, with records of lower achievement, are more likely to find themselves in classrooms that emphasize low-order skills, repetitive drill techniques, and basic knowledge.

Studies show, however, that disadvantaged students can indeed learn complex tasks and information, and that exposure to richer, more authentic learning environments can lead to gains in achievement for all students.<sup>5</sup>

But authentic instruction presents complex challenges to teachers. There is no tried-and-true procedure for bringing it about in every school and classroom. Teachers who want to pursue authentic instruction must think, invent, and reflect on their work.

Usually, this level of uncertainty is handled best when teachers work closely with colleagues, within an organization that supports teamwork and collective responsibility for student learning. In short, authentic instruction seems to demand a communal or organic social organization.

## **Social Organization**

The bureaucratic model views strong personal relationships in a school, among adults or between adults and students, as hindering the learning

***Authentic instruction  
presents complex  
challenges to teachers.  
There is no tried-and-true  
procedure for bringing  
it about in every school  
and classroom.***

process. These relationships are seen as impeding a uniform and efficient implementation of rules and procedures.

This point of view ignores considerable evidence, including studies dating back to the 1930s, that emotional bonds between students and teachers can play a crucial role in engaging and motivating students to learn.<sup>6</sup> Studies of teachers' work also show that strong ties between staff members directly affect teacher commitment, and thereby indirectly affect student achievement.

Communally organized schools seek to promote an environment where students and staff are committed to the mission of the school and work together to strengthen that mission. Interactions between staff members, and between students and staff, are not limited to the classroom, and staff members are encouraged to see themselves as responsible for the total development of students, not just the mastery of one day's lesson. Teachers share a collective sense of responsibility for their students' success, change their teaching to respond to the specific needs of their students, and coordinate their efforts between classrooms and across grades.

Studies show that in communally organized schools, teachers and other staff members experience more satisfaction and higher morale. Students drop out less often and cut fewer classes. And both staff and students post lower rates of absenteeism.<sup>7</sup>

## The Previous Findings

This study of school restructuring and student learning follows up on the research presented last fall in *Issues in Restructuring Schools* No. 7, "High School Restructuring and Student Achievement."

In that study, we used data from the National Education Longitudinal Study (NELS) conducted in 1988 and 1990. We examined the academic progress made, and levels of student engagement with school, for 11,794 students in 820 secondary schools across the country. The study measured their academic progress from 8th grade to 10th grade.

We also looked at the types of school

reform taking place in (or absent from) those schools. We identified 30 reform practices and classified them as traditional, moderate or restructuring, based on the degree to which they represented significant departures from conventional practice. The "restructuring practices" also represented a movement away from bureaucratically organized high schools and toward a more communal structure. (A complete list of the 30 practices, and the frequency with which they occurred in the schools studied, can be found in Figure 1 on page 3.)

The results of the study were clear and consistent: Schools that implemented three or more restructuring practices posted significantly higher academic achievement than other schools.

Those gains also were more equitably distributed among students from different socioeconomic backgrounds. Schools with more traditional reforms in place outperformed schools with no reform practices at all, but didn't perform as well as schools undertaking reforms consistent with restructuring.

We also found strong evidence that students in smaller schools posted significantly higher academic gains, and that those gains were more equitably distributed.

## New Questions, New Data

While we felt these findings had significant implications for school-reform efforts, we cautioned against drawing inappropriate conclusions from them. Our findings offered no explanation of *why* these reforms were associated with improved student achievement. And since the study only followed students through 10th grade, we hadn't explored whether the effects of restructuring carried over into learning in the last two years of high school.

This more recent study of high school restructuring followed the same students through 12th grade, and tried to account for the effects of specific reform practices by examining the power of the "organic" organizational

*Studies show that in communally organized schools, teachers and other staff members experience more satisfaction and higher morale, while students drop out less often and cut fewer classes.*

*continued on page 7*

## High School Restructuring and Student Achievement—Study Findings

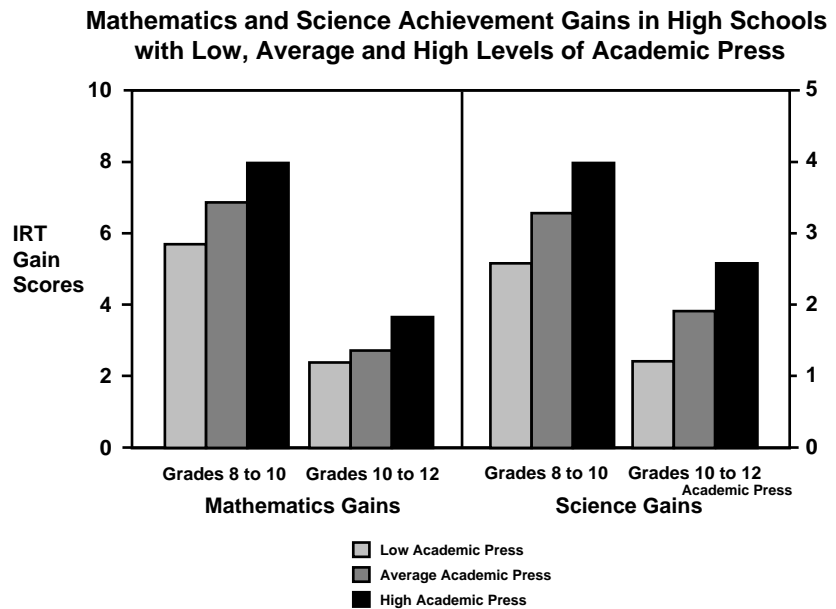
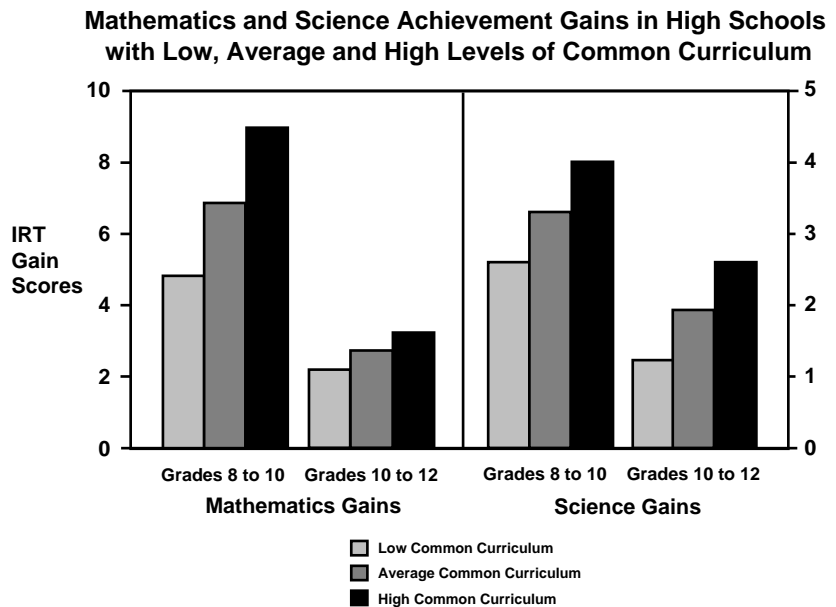
The charts in Figure 2 show the impact on student achievement in mathematics and science of four important school characteristics: common curriculum, academic press, authentic instructional practice and collective responsibility for student learning.

Our analysis of data from the National Educational Longitudinal Study (NELS) indicates that restructuring schools are more likely to exhibit higher levels of these characteristics. And as shown in the charts, students who attend schools with higher levels of these traits learn more than students in other types of schools.

We estimated the levels of these traits in schools by looking at NELS survey data from teachers and principals. The surveys asked them to report the attitudes and teaching methods at their schools. For example: To estimate the level of collective responsibility for student learning, we included responses to such statements as, "I can get through to the most difficult student," and "I feel that it's part of my responsibility to keep students from dropping out of school." Teacher responses to such statements were tallied for each school surveyed, and schools were ranked as low, medium or high based on the average.

We examined students' achievement growth since 8th grade by examining their scores on mathematics and science questions drawn from the National Assessment of Educational Progress (NAEP). The charts, however, don't represent the

**Figure 2**



number of correct answers on a test. They are "scale scores" derived from a statistical method called Item Response Theory (IRT). These scores are considered more useful for representing gains in mathematics and science achievement by students in different types of schools.

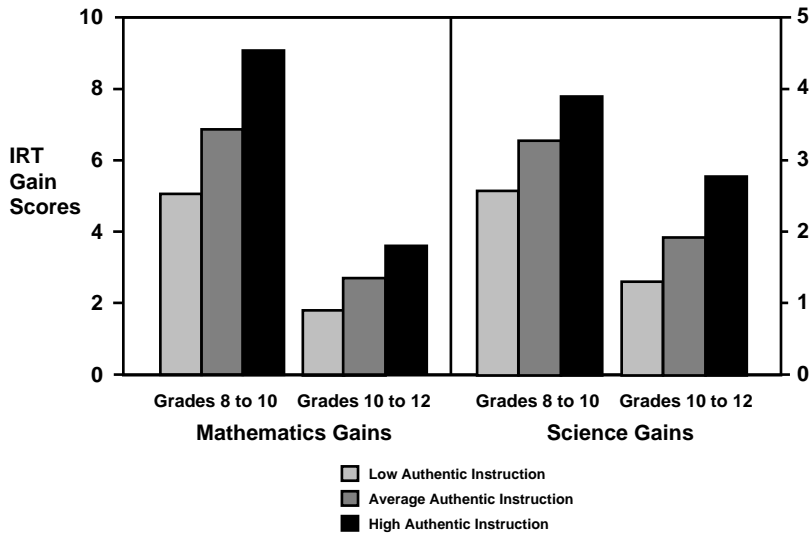
To represent the actual advantage to students attending schools with

high, medium and low levels of the four traits, we looked at the results for an "average" student, one whose performance and socioeconomic status fell at the mean of all students who were studied. The achievement gains for these students are averages compiled from students of different genders and ethnic backgrounds.

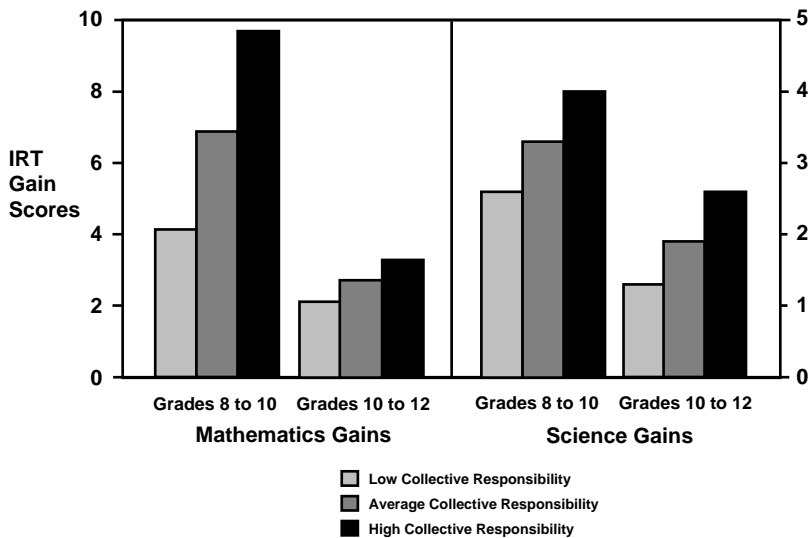
In both mathematics and science,

**Figure 2**

**Mathematics and Science Achievement Gains in High Schools with Low, Average and High Levels of Authentic Instructional Practice**



**Mathematics and Science Achievement Gains in High Schools with Low, Average and High Levels of Collective Responsibility**



academic gains are substantially higher in schools with higher levels of these important characteristics. For example, an average student in a school with high levels of authentic instruction would learn about 78 percent more mathematics between 8th grade and 10th grade than a comparable student in a school with low levels of authentic instruction. An

average student in a school with high levels of collective responsibility would learn more than twice as much science between 10th grade and 12th grade as a similar student at a school with low collective responsibility.

Both students would post gains during those years, but the student in the school with higher collective responsibility would learn much more.

*continued from page 5*

features, both social and academic, described earlier.

This study incorporates another wave of NELS data, gathered in 1992, which describes the academic performance and school experience of those students as high-school seniors. Despite the difficulties of locating the same students two years later and developing significant data on their academic progress, the sample remains large: 9,570 students in 789 high schools.

Our first study looked at student engagement and academic achievement in four subjects: math, science, history and reading. In order to simplify this latest study, and to capitalize on good NELS data on instruction in math and science classrooms, we restricted our analysis of academic performance data to learning in those two subjects.

As in our earlier study, we used a statistical procedure known as Hierarchical Linear Modeling (HLM) to analyze the data. This allowed us to estimate the impact on students' learning for specific factors we wished to examine, and to control for the effects of socioeconomic status, previous academic success and other factors that can influence student achievement. With HLM, we also were able to account for the effects of school factors, such as average socioeconomic status, racial composition and school sector.

## Findings

When we look at student academic progress from 10th to 12th grade, we find that students learn somewhat less in these subjects during the last half of high school than they do in the first half. However, the achievement gains associated with restructuring are maintained. Even after taking into account the demographic and structural characteristics of students and schools, students in restructuring

*In the later high school years, students in restructuring schools continue to post significantly larger academic gains, in both math and science, than students in other types of schools. In fact, the restructuring effects on learning actually increase.*

schools continue to post significantly larger academic gains, in both math and science, than students in other types of schools. In fact, the restructuring effects on learning actually increase during the later years of high school. (Student gains in history and reading also continue, though this analysis doesn't address those subjects.)

Similarly, the greater equity found for restructuring schools from 8th to 10th grade is sustained from 10th to 12th grade, and may even increase during the later high school years.

We also found evidence that the positive relationship between smaller schools and student learning remains strong from 10th to 12th grade. In both the early and late high school years, students are learning more in smaller schools, and the performance gaps between students from different backgrounds are smaller as well.

Even more important, in our opinion, were our findings about the impact on student learning of the organic characteristics of school organization described above. We found that the presence of these features explained much of the improvement in student learning noted for restructured schools.

Among the most important findings:

#### COMMON ACADEMIC CURRICULUM

The academic organization of schools has the strongest impact on improved student achievement and equity. More math and science courses in a school, and a lower variation among students in the number of math and science courses taken, were strong predictive factors for schools with high levels of learning in these subjects. In such schools, where course offerings are narrow and academic content is strong, students learn more, and learning is more equitably distributed.

This is explained by the fact that in schools classified as restructuring, students take more advanced math and science courses, and all students take pretty much the same subjects.

#### ACADEMIC PRESS

We also saw a strong connection between "academic press," meaning the expectation that all students will

meet high academic standards and devote considerable effort to academic pursuits, and greater learning in math and science. In more organically organized schools, there is less specialization and departmentalization of faculty, and so teachers have more opportunities to collaborate, making it easier to develop common expectations and convey them consistently to students.

This factor appeared to be more closely associated with achievement in science than in math, however.

#### AUTHENTIC INSTRUCTION

When the level of authentic instruction in math and science is higher in a school, and when that level is more consistent across different classes and students, achievement gains are higher in those subjects. In schools that are instructionally rich and incorporate active learning, and where this type of instruction is widespread throughout the school, students learn more and learning is more equitably distributed.

#### SOCIAL ORGANIZATION

Schools that demonstrate a higher level of social organization post greater and more equitable gains in student achievement in math and science.

For the purposes of this study, we define social organization by examining one factor: collective responsibility for student learning. In schools where most teachers feel they can make a real difference in the academic performance of students—instead of blaming low performance on students' attitudes, background and other factors beyond teachers' control—students learn more and learning is more equitably distributed. In schools organized under a more organic model, teachers are more likely to assume this responsibility. The organic model also provides more opportunity for teachers, working together, to examine and adapt their practices to reflect student needs.

The impact of each of these factors on student learning in math and science is shown in the series of charts in Figure 2 on pages 6 and 7. These charts measure gains in student achievement with scores derived from Item Response Theory. For example, an "average" stu-

dent who attended a school with a high level of authentic instruction would learn about 78 percent more math between 8th grade and 10th grade than a comparable student in a school with a low level of authentic instruction.

Students in schools scoring high on the other factors we studied also had advantages over students in schools with low scores. We found that the restructured schools had higher levels of these organizational characteristics than schools with more traditional reforms, or no reforms, in place.

But this doesn't mean that schools can boost student learning merely by adopting the specific reform practices listed in Figure 1 on page 3. It is the organizational characteristics, not the specific practices, that seem to make the difference.

## Discussion

Our earlier study of high school restructuring and student learning, and information gathered for this more recent study, together offer valuable information on how schools can be organized to promote both greater learning and greater educational equity.

It is clear that school organization really matters. Furthermore, we think we have identified some specific attributes that help explain the success of restructuring efforts. These attributes seem to move schools in a particular direction.

Once again, we find ourselves drawn to examining this question by contrasting bureaucratic school organization with the more organic model. The big, comprehensive high school has been widely accepted in this country. This notion has rarely been challenged: Even in recent times, large high schools run in a top-down manner have been widely viewed as the best venues for efficiently distributing technological and human resources to foster achievement. Making many choices available, in order to respond to

students with different skills and interests, has generally been considered the best way to address the growing diversity among high school students.

We disagree. We contend that there is now strong evidence that schools, especially high schools, should move toward smaller, more organic structures in order to do a better job. What's more, rather than shrinking away after the first two years of high school, where we might expect to see the most influence on students by their new schools, these effects endure. In fact, the effects actually increase somewhat in grades 11 and 12 (although learning itself isn't as dramatic during those years).

This doesn't mean that schools should expect quick improvement in student achievement if they move to adopt these reforms. The characteristics that many of these specific reform practices seek to enhance—such as consistently high levels of authentic instruction, and collectively held attitudes among teachers about student learning and their responsibility for it—cannot be nurtured within a school without a great deal of hard, focused work. Our analysis also suggests that many of the reforms we studied had been in place for years, the fruits of a sustained effort at care and fertilization.

We hope, however, that our results help clarify the sorts of reform efforts that can help all students learn more, given time and adequate support.

For example: The school-within-a-school model, which divides a large student body into smaller units of students and staff, could be a promising strategy for nurturing a "school family" atmosphere within an otherwise impersonal big-school environment. Many of the other reforms we discuss here are also easier to accomplish in smaller schools.

The NELS data didn't allow us to look specifically at the effectiveness of schools within schools. And there is evidence that reform efforts along those lines can lead to unfortunate

*In schools that are instructionally rich and incorporate active learning, and where this type of instruction is widespread throughout the school, students learn more and learning is more equitably distributed.*

***We contend that  
there is now strong  
evidence that schools,  
especially high schools,  
should move toward smaller,  
more organic structures in  
order to do a better job.***

divisions among the different groups within a larger school, if the school ends up creating "specialty shops" in high schools. Nevertheless, if these problems can be overcome, a more communal environment would help foster the types of social organization that we now see as critical to helping high school students learn more. In such schools, we'd expect to see less hierarchy, more cooperation, and much higher levels of teacher collaboration. Teachers also would be more likely to believe they could succeed in teaching all their students, and to devote substantial effort to doing so, instead of blaming poor performance on the students, their families, and the community beyond school.

Schools also need strong academic structures. As we have shown, a narrow curriculum has positive effects on students, especially when it is tied to a strong academic focus and a high level of academic press. In a school with these qualities, classroom practice should be more authentic, and authenticity should be widespread, not limited to a few good classes.

It's difficult to say how such dramatic reforms could be implemented on a widespread basis, especially given that so many different advocates put forth so many different visions of school reform. We hope, however, that the results of our study help schools cut through this vagueness, and that a more desirable direction for change is becoming clearer.



## Endnotes

<sup>1</sup>For a more detailed discussion of this earlier study, see *Issues in Restructuring Schools* No. 7, Fall 1994. Copies are available free of charge and may be ordered using the order form at the back of this issue report.

<sup>2</sup>The complete research paper, "Understanding High School Restructuring Effects on the Equitable Distribution of Learning in Mathematics and Science," which is summarized in this issue report, is available through the Document Service of the Wisconsin Center for Education Research. For ordering information contact Document Service, WCER, 1025 W. Johnson St., Room 242, Madison, WI 53706.

<sup>3</sup>See Rowan, B. (1990). Commitment and control: Alternative strategies for the organizational design of schools. In C. Cazden (Ed.), *Review of research in education*: Vol. 16 (pp. 353-389). Washington, DC: American Educational Research Association.

Also see Bryk, A. S., & Driscoll, M. E. (1988). *The high school as community: Contextual influences, and consequences for students and teachers*. Madison, WI: University of Wisconsin-Madison, National Center on Effective Secondary Schools.

<sup>4</sup> See Bryk, A. S., Lee, V. E., & Holland, P. B. (1993). *Catholic schools and the common good*. Cambridge, MA: Harvard University Press.

<sup>5</sup>For a more detailed discussion, see *Issues in Restructuring Schools* No. 8, Spring 1995. Copies are available free of charge and may be ordered using the order form at the back of this issue report.

<sup>6</sup>See Waller, W. (1932). *The sociology of teaching*. New York: Russell & Russell.

<sup>7</sup> See Bryk, Lee, & Holland, op. cit.

# Great News—Greater Challenges

By Jeannie Oakes

Valerie Lee, Julia Smith, and Robert Croninger's new study heaps even better news onto the good news their work brought us last year: Schools engaged in restructuring not only outperform traditional schools in terms of student learning, they also distribute this learning advantage more fairly among rich and poor students. Moreover, senior highs—long thought to be the most intransigent schools—can obtain and sustain such results with restructuring. Most exciting, this study helps us understand what type of restructuring actually makes a difference: Children learn best when schools provide all children with rich, common opportunities to learn, and when adults assume responsibility for student learning and press all children toward high achievement. We can be quite confident about these results, given the careful use of state-of-the-art methodology by these researchers.

## In Support of 'Common Sense'

As gratifying as these results are, they bring few surprises. Most educators and researchers have long known that students don't learn rigorous academic content unless they are given the opportunity to learn it. We've known that good learning opportunities require both access to challenging content (in high schools this usually means taking the "right" courses) and pedagogy which makes that content accessible to a wide range of students.

We've strongly suspected that unless the adults in a school demonstrate care for students and confidence in their capacity to learn, students are unlikely to put forth the effort and persistence that the learning of challenging subject matter requires.

Importantly, we've also known that highly differentiated, bureaucratically run high schools ration curriculum and instruction—principally by tracking students or allowing them to "choose" different levels of courses—so that "high-track" or college-preparatory students have far better learning opportunities than their non-college track schoolmates. These arrangements send strong messages to most students that, since they are not in the most challenging classes, neither adults nor their peers expect much from them academically.

We also have long suspected that large, bureaucratic high schools inhibit cultures of caring and efficacy among

both students and teachers. When teachers operate as disconnected specialists who lack sustained engagement—either with one another or with students—it is unlikely that they will come to know one another well, let alone develop or communicate a sense of "collective responsibility" for student learning.

That most of us have known these things all along shouldn't dampen enthusiasm for the findings of this well-crafted study. It should, however, trigger sobering reflections and strong suspicion that these clear, almost common-sense results will prove extraordinarily difficult to incorporate into school policies and practice.

## Enduring Bureaucracy

As Lee and her colleagues point out, the bureaucratic organization of schools has made sense for decades, given the social and political circumstances of U.S. schooling. Bureaucratized schooling has been viewed as necessary and desirable if schools are to be relevant to a school population increasingly diverse in ability, social class, and ethnic background. Large, differentiated school structures and efficient, rule-driven procedures and teaching methods have been considered instruments for producing ethically commendable responses to diversity, and a work force that would bring economic growth and social stability.

That we have never had much evidence

---

*Jeannie Oakes is a professor of education policy and curriculum in the Graduate School of Education and Information Studies at UCLA. Her recent studies focus on schools attempting to create alternatives to ability grouping and tracking.*

*The notion of scientific management – that complicated tasks can be made more efficient when divided into hierarchical levels and specialized categories– persists in schools, even as it loses credibility in industry.*

to support these traditional views has not seemed to blunt our national penchant for organizing and running schools bureaucratically. The factory-like, Industrial Age structure of schools remains solidly intact. Teachers, isolated in assembly-line classrooms, perform their specialized pieces of educational work. Rigid school calendars, and classroom hours wedded to units of school credit, standardize students' learning time. The notion of scientific management—that complicated tasks can be made more efficient when divided into hierarchical levels and specialized categories—persists in schools, even as it loses credibility in industry.

Why have we remained so wedded to these organizational forms despite their lack of efficacy in promoting high achievement and smooth transitions to adult work for so many students?

Viewed through a darker lens, we observe that bureaucratic, differentiated high schools have been very effective in serving other social and political ends. These conventional school practices have been sustained, in part, by the interests of their most powerful constituents.

Traditionally organized schools have provided white and wealthy families a means to transfer privilege to their children (by way of the right school credentials) in the merit-based, modern industrial society. The pressure placed on educators by savvy parents who want their children enrolled in the "best" classes is just one manifestation of these interests. Special academic magnet programs, separate classes for gifted and talented students, and Advanced Placement courses typically provide contemporary enclaves, and the source of high-status school records, for advantaged (mostly white) students in diverse public schools.

In contrast, less challenging academic courses and vocationally oriented programs—which more often serve less advantaged (and often non-white) students—tend to emphasize the work habits and attitudes required to "fit in" as workers (proper deportment, punctuality, etc.). Participation in such programs of study has far less exchange value in higher education and work when students leave high school.

This uneven distribution of educational privilege has been legitimized by hierarchical conceptions of innate, fixed intelligence that suggest that most students by nature won't benefit from rigorous academic content, and by the deep-seated racial and classist attitudes and prejudices these conceptions support. Thus, schools have legitimized class-related adult outcomes—middle-class comfort for those completing higher education; poverty and unemployment for school dropouts—as a function of the extent to which individuals are able and willing to take advantage of the wide range of programs schools offer.

Efforts to tamper with these arrangements—in order to provide high school students with common academic experiences in community-like schools with a strong academic press—will likely run headlong into vehement resistance from individual parents and organized advocacy groups for "high achieving" students. Worried that an opening-up of academic opportunities to all students will inevitably lead to a watering-down of curriculum, such reforms are often resisted as the exploitation of bright students on behalf of the less able.

This political pressure reflects a competitive, individualistic attitude toward the purpose of schooling, but in racially mixed schools it takes on another dimension. Although politically competent parents are not all white, in most schools white parents—especially middle-class white parents—better understand the inequalities in the school structure, and feel more confident that the school will respond positively to their pressure.

All schools need political support; not only for funding and physical resources, but also for credibility. Too often, then, schools retain policies that provide separate, richer educational opportunities to more privileged students—even if they result in racial segregation within desegregated schools—in exchange for the political credit that more advantaged and involved parents bring to a school. The politics of privilege have reined in more than a few educators and policy-makers who have sought reform.

## Building a Basis for Reform

If reforms that press schools to become more academic and community-like are really going to take hold, schools must use the findings of studies like this one as the foundation for changes in school norms and politics. Such findings also must form the basis for reorganizing schools into smaller units and offering a common core of academic courses. If school reformers are going to succeed in building commitment for such organizational changes, they will probably need to confront obsolete conceptions of intelligence head-on, and tackle the deep-seated racial and classist attitudes and prejudices that support conventional practices.

Educators, policymakers, and parents as well must come to view academic ability as primarily a social construction that is structured and practiced by schools. As long as the capacity to learn is perceived as one-dimensional and unalterable, teachers are unlikely to assume collective responsibility for student learning, or to see common academic challenges for all students as sensible.

Additionally, reformers will need to confront the shortcomings of the deeply ingrained desire for bureaucratic efficiency when applied to schooling. For example, they must examine the norms dictating that one teacher alone in a classroom of 30 students provides the most educationally effective combination of adults and children. They must contest the notion that the best way to accommodate differences among students is to sort them into separate classes and provide them with different curricula.


Reformers also must face inveterate American values, which favor competition and individualism over cooperation and the common good. Such values bolster and legitimize norms implying that "good" education is a scarce commodity available only to a few.

At a minimum, then, building support and maintaining political credit for more communal schools

with common academic programs will require that educators demonstrate to their divergent constituencies that—probably through authentic pedagogy—they can create classroom opportunities for all students that are at least as rich and rigorous as those previously enjoyed by a few. But it also will require confronting opposition to a system that—no matter how good it may be overall—takes away the comparative advantages enjoyed and effectively used (both in school and beyond) by children whose parents are privileged.

Accomplishing this will require astute political leadership by educators. They must work to develop power among those parents and community members who are currently without it. At the same time, however, they must not attempt to take power away from those parents who now enjoy it. In this manner, hopefully, they could create a more inclusive and balanced school policymaking process, one reflecting a new norm that schools and classrooms should be participatory and caring communities for all of their members.

Lee, Smith, and Croninger have given us a lucid and compelling argument for a set of organizational changes that are likely to make high schools better places for children to learn. I know that I've complicated the picture considerably by suggesting that such changes will require a fundamental rethinking and realignment of school norms and school politics.

But schools contemplating the organizational reforms that this study supports should not be deterred by these complications. Rather, they should proceed wisely, knowing that these seemingly straightforward changes challenge not only the efficacy of traditional high school organization, but also the moral rightness of entrenched views of what schools are for, how schooling should be conducted, and who should have access to what types of learning experiences. Even with data as powerful as those presented here, such changes present an incredibly tall order for school reform. 

*Too often, schools retain policies that provide separate, richer educational opportunities to more privileged students—even if they result in racial segregation within desegregated schools—in exchange for the political credit that more advantaged and involved parents bring to a school.*

# Focusing Reform

How the Lee, Smith and Croninger Report Can Enhance School Restructuring

By Brian Rowan

**W**hy do restructured high schools improve student achievement? Valerie Lee, Julia Smith, and Robert Croninger have given us a well-reasoned and highly sophisticated answer to this question, and I am honored to be asked to comment on their work. My comments are organized around three questions: What does this study tell us about school restructuring? What *doesn't* the study tell us? And what should we do to promote school restructuring?

## What This Study Tells Us

**T**he main conclusion I draw from the work of Lee, Smith, and Croninger is that school restructuring involves a *bundle* of factors. One factor involves changes to the instructional organization of high schools. We know, for example, that restructured high schools are more likely to have a common curriculum for all students. We also find that restructured high schools have organizational arrangements that promote sustained and productive interactions among members of the school community. In restructured schools:

- ◆ Students develop sustained relationships with teachers (e.g., by remaining in the same homeroom for several years or by participating in a school-within-a-school).
- ◆ Teachers develop productive relationships with one another through the formation of cohesive work groups (e.g., in interdisciplinary teams with common planning periods).
- ◆ Students work productively with one another (e.g., in mixed-ability groups using cooperative learning approaches).
- ◆ Parents are brought into the school community as volunteers.

All of these organizational changes encourage sustained and personalized interactions within the school, allow all members to make important contributions to the well-being and productivity of the school, and promote group cohesiveness.

A second set of factors associated with school restructuring involves changes in instructional practice, particularly the development of what Lee and colleagues—as well as earlier publications by the Center on Organization and Restructuring of Schools—call "authentic" instruction. The data analyzed in the study point consistently to the benefits of instruction that is both student-centered and constructivist in orientation.

In restructured high schools, teachers work as coaches: They demonstrate and model, provide students with "hands-on" experiences, and encourage students to use resources beyond the textbook. Students formulate problems, discuss solutions, and critique their classmates' work. Thus, classrooms in restructured schools look very different from conventional classrooms, where lecture, recitation, and teacher-assigned work dominate. In restructured schools, classes are more student centered, more discussion-oriented, and more focused on complex academic tasks.

A final set of factors associated with restructuring involves the motivational

***The data analyzed in  
the study point consistently  
to the benefits of instruction  
that is both student-centered  
and constructivist  
in orientation.***

commitments of teachers and their expectations for students. Lee and colleagues refer to these as "collective responsibility for student learning" and "academic press," terms that appear to describe settings in which teachers have a strong sense of teaching efficacy, an internal locus of control, high expectations for student learning, and high morale.

Teachers in restructured schools feel successful, and they derive this feeling from a sense that they can affect student achievement through their own efforts. As a result, they place a high priority on student learning, press students to achieve, and make students apply themselves to their academic work.

## What This Study Doesn't Tell Us

**W**hile Lee, Smith, and Croninger have given us a rich portrait of restructured schools, they haven't told us how the schools they describe actually developed.

One possibility is that restructured high schools aren't restructured at all. Instead, they might simply exist in a special niche and be well-adapted to that niche. We know from the analysis conducted by Lee and colleagues, for example, that restructured high schools are more likely to be private, to have students who are high achieving upon entry, and to serve students from higher SES backgrounds. In this environment, it is relatively easy for a

school to bear the costs of small school size, to stress a common and demanding academic curriculum, to give students a leading role in instruction, and to press students to achieve. Likewise, teachers are more likely to attribute their success to personal efforts. In all likelihood, such things are even demanded by the students, parents and the overall community served by the school. Thus, we might argue that restructured schools do not arise because of special and extraordinary efforts by administrators and teachers. Instead, these schools develop naturally in special—even privileged—environments.

There is probably a good bit of truth to this argument. But one shouldn't belabor the point, since many of the "restructured" high schools studied by Lee, Smith and Croninger weren't privileged in the ways just described. Indeed, some otherwise ordinary high schools are included among the small group of schools that Lee, Smith, and Croninger find to be "restructured."

More importantly, when these otherwise ordinary high schools take on some of the same qualities found in schools in more privileged environments (i.e., they become more "restructured"), they apparently reap the same benefits as their more privileged counterparts: They succeed in promoting high academic achievement among all students.

The problem, then, is how to transform ordinary high schools into restructured high schools.

A common approach today is to promote a structural solution to this problem. Advocates of such an approach might say: "If only we could get ordinary schools to make certain structural changes—for example, to create schools-within-a-school, form interdisciplinary teams, reduce tracking, and emphasize a common curriculum—student achievement would undoubtedly improve."

The findings presented by Lee and colleagues should make us somewhat suspicious of this strategy. The data show that restructured schools don't achieve positive effects on student performance from structural changes per se. Once we take into account the

differing instructional practices and motivational commitments of teachers in restructured schools, the effects of structural change on student achievement largely disappear. The only exceptions to this pattern appear to be the persistent, positive effects of small school size and the common academic curriculum.

### **Crafting Real Success**

The finding that structural change alone does not produce positive benefits should not be surprising. Studies of restructuring in education and in the private sector have, for many years now, confirmed the idea that successful structural change almost always depends on two additional factors: the extent to which structural changes help (rather than hinder) work performance; and the extent to which workers have the motivational fortitude to weather the ups and downs of early implementation.

Lee and colleagues seem to have found much the same thing in high schools. It is not structural change per se that creates successful schools. Instead, structural changes succeed in improving school performance only if they are consistent with, and support changes in, work practices (e.g., authentic instruction), and only if they are undertaken by a committed work force of teachers.

Given that successful restructuring depends on teachers' work practices and motivational commitments, it may make more sense to begin the school restructuring process by focusing on these elements, while ignoring changes in the organizational structure of schools. For example, we might begin the restructuring process by trying to persuade teachers that all students really can achieve, that teachers really do control their own fate in the classrooms, and that good things will happen if teachers press students for success. We might also encourage school leaders to recruit teachers who already have these commitments, even though the work rules developed by districts and teacher unions present many barriers to such a strategy.

*Classrooms in restructured schools look very different from conventional classrooms, where lecture, recitation, and teacher-assigned work dominate. In restructured schools, classes are more student-centered, more discussion-oriented, and more focused on complex academic tasks.*

---

*Brian Rowan is a professor of education and associate dean for research at the University of Michigan's School of Education. His research focuses on issues of school organization and effectiveness.*

*Structural changes  
succeed in improving  
school performance only  
if they are consistent with,  
and support changes in,  
work practice, and only  
if they are undertaken  
by a committed  
work force of teachers.*

The problem with this strategy, however, is that teachers who take responsibility for student learning and have high expectations still may be unsuccessful. After all, teachers need more than commitment and motivation to succeed. Teaching also requires a great deal of skill, including knowledge of one's subject and an arsenal of effective instructional practices. Moreover, even the most motivated and skilled teacher needs a supportive organizational environment in order to succeed. Thus, motivational strategies for change may result in quite limited effects, unless they are accompanied by attention to other dimensions of school restructuring.

If structural and motivational fixes are insufficient as starting points in school restructuring, perhaps it makes sense to begin by promoting change in instructional practices.

For example, we could begin by helping teachers adopt "authentic" forms of pedagogy. While we cannot underestimate the difficult problems associated with changing teaching practices, the data presented by Lee, Smith, and Croninger suggest that if instructional practices do become more student-centered and constructivist in form, student achievement should rise.

Moreover, it makes sense to assume that if we succeed in getting teachers to adopt this form of instruction, two other changes might occur. First, as teachers succeed with "authentic" forms of instruction, they should begin to experience enhanced motivation and feelings of personal efficacy. This, in turn, should lead them to demand more of students.

And second, as teachers succeed with new instructional practices, they may begin to discover a need for new forms of instructional organization, and thus develop the kinds of structures that Lee and colleagues have found in restructured high schools.

### **What We Should Do**

**G**iven all of this, what should policymakers and educational

leaders do to promote successful restructuring in schools?

In my view, we should abandon the search for a quick structural solution to the problems of schooling, except perhaps to encourage U.S. high schools to get smaller in size and adopt a more challenging and uniform curriculum for all students.


Further, I believe we need to get beyond the rhetorical call for more motivated and demanding teachers. A commitment to hard work, taking responsibility for one's actions, and pressing students to work hard are all admirable and needed goals for U.S. schools. But such attitudes and dispositions are much more likely to result from, and develop in, environments where people are already experiencing success. In the difficult circumstances that call out for school restructuring, their development is less likely.

How, then, do we promote instructional success? I believe the key lies in promoting changes in instructional practice. If we want U.S. students to do well on complex academic tasks, we must develop a pedagogy that is suited to this end and implement it in schools.

Lee, Smith, and Croninger have sketched here the basic outlines of this pedagogy under the heading of "authentic" instruction, and they have marshaled some evidence to suggest that when this form of instruction is implemented in schools, all students have a better chance at academic success.

Thus, if I had to place my resources behind a single focus of reform, I'd focus my resources on the problem of changing instructional practices in schools, in the hope that motivational and structural changes would follow.

While this is not exactly what Lee, Smith, and Croninger found in their study, the idea makes a lot of sense in light of their findings and is consistent with much of what we already know about schools and schooling.

As a result, I believe this report will help point the way toward meaningful, lasting reform. 

# Tackling the Challenges of Restructuring

An Interview with Paula Evans

By Leon Lynn

To Paula Evans, the findings in the new Lee, Smith, and Croninger study “are very common-sensical in some ways.” Evans, director of professional development for the Annenberg Institute for School Reform at Brown University, says the findings “reflect some ideas that have been around for a long time. It is wonderfully confirming to have research documenting that smaller schools, schools that pay attention to relationships, and schools that set high standards for all students, do in fact make a difference.”

These “common-sensical” ideas pose a tremendous challenge to schools, educators and policymakers, Evans says. “They call for some changes that are radical, and turn schools inside-out.”

Evans believes the Lee, Smith and Croninger study reinforces the need for much greater attention to what curriculum is taught and how it’s delivered. The study also should prompt educators to look hard at how teachers are prepared for their jobs, the work conditions they encounter in schools, and the principal’s role in the building. And Evans says the study’s findings give her confidence that schools need to recognize the importance of sustaining a culture of reform, and building ways to involve parents and the larger community.

These may sound like daunting tasks, but educators should find encouragement in the study’s findings as well, Evans says. “This research suggests that some schools have figured out ways to make some good changes. Maybe these schools can teach us something about tackling the challenges of restructuring.”

## Crafting a New Vision

When parents pull their children out of public schools, Evans says, they often cite reasons echoed

in major themes of the Lee, Smith and Croninger study: They want their children to receive more individual attention, for example, or they want them to be pushed harder academically. “They leave because they see public schools falling short. Teachers are responsible for too many students, and curriculum is watered down.”

Evans sees these shortcomings as a reflection of the “old vision” that has shaped public schools—especially high schools—into large, impersonal institutions trying to serve a diverse student body by offering many different choices. “We see what this vision has wrought,” she says. “In many schools, our standards are quite low. We imagine that many kids can’t do substantial work. Students just aren’t pushed very hard, especially if they falter.... They end up with work that would bore anyone.”

All too often, “many of the choices that schools seem to be offering students are bogus,” she says. “It’s school as low-level maintenance for kids who don’t want to be there, keeping them off the streets. If we don’t think clearly about what we teach, plumb the depths of a discipline, push kids to ask questions and use evidence, then they’re missing out.”

“We have to recognize that many students have much work to do to meet minimal grade level standards,”

*“This research suggests that some schools have figured out ways to make some good changes. Maybe these schools can teach us something about tackling the challenges of restructuring.”*

***“Size is directly related to the curriculum you offer, the standards you demand from students. In large schools, it will be harder to make significant changes in programs, student-teacher ratio and curriculum.”***

---

*The Annenberg Institute for School Reform seeks to identify and support school restructuring efforts by sponsoring research, stimulating a national dialogue on school reform and sustaining schools and practitioners at the forefront of school change.*

Evans says. “We need to start with these students where they are. At the same time, we should be asking more and more of them. They have to work harder and faster than other students—not more slowly—just to get up to speed so they can join the mainstream.”

### **The Question of Size**

Evans concurs with Lee, Smith and Croninger that school size is an important factor in delivering high-quality instruction to all students. “Size is directly related to the curriculum you offer, the standards you demand from students,” she says. “In large schools, it will be harder to make significant changes in programs, student-teacher ratio and curriculum.”

Some districts where large schools have long been the norm, such as New York City and Chicago, are now working hard to create fully autonomous smaller schools. These smaller schools share a building, but don’t share a common administration. They negotiate for use of common facilities, such as science labs and cafeterias, instead of relying on an overarching bureaucracy to divide up resources. In that sort of arrangement, “you avoid issues of haves versus have-nots,” Evans says.

Educators must be wary of some pitfalls that can come with downsizing in more traditional ways, she says. In the past decade, for example, many schools have been subdivided into schools-within-a-school, only to find that the new structure “can breed acrimony and divisiveness. In a school-within-a-school you give teachers some authority to develop programs and curriculum, but they are still accountable to the larger school framework. They’re regulated by the large school’s schedule, overseen by the administration. That limits their authority. You can’t teach in 80-minute blocks with a 45-minute lunch break, instead of 45 minute blocks with a 23-minute lunch, if the rest of the school can’t handle it.”

At the same time, structural

change doesn’t automatically lead to better school conditions, Evans warns. “I know of one small school in a building with two others, and the principal couldn’t name either the principal or any staff member in the other two. The autonomy was admirable, but she was floundering and didn’t have peers to guide her. The structure did not lead to the kind of collaboration that could have been helpful.”

Schools and districts that want to foster smaller schools will need to strike a balance between freedom and isolation, Evans says: “It’s going to take time to figure out how to work in this way. There are lines that need to be walked off here.” But the Lee, Smith and Croninger study “gives us a lot of evidence that it’s worth it.”

### **The Long Road Ahead**

Although many educators now sing the praises of reform, true change in classroom practice remains rare, Evans says. “Many schools that say they are reforming don’t feel or work any differently than traditional high schools.” Staff members may take part in budget discussions, for example, or may be skilled in cooperative learning, “but there’s no feeling of ownership, no accountability for what students are able to do.” New classroom practices, such as the regular use of student portfolios that are available for public scrutiny, “are still on the fringes.”

New teachers are graduating from schools of education “that are still preparing them to teach in bureaucratic, depersonalized schools, where curriculum comes from on high, and they go through the rituals of preparing kids and testing them in traditional ways....” she says. “We don’t see the majority of new teachers coming out of schools of education ready to do things differently. I don’t see younger teachers coming out radicalized.”

Many new teachers “have had no opportunity in their training to teach collaboratively or to create their own

curriculum,” Evans says. “They often lack experience in the development and implementation of standards. And some have little exposure to serious intellectual learning in their own lives. Teachers must encounter genuine intellectual stimulation, so they’ll see its value and want it for their own students.”

Much of the burden for helping teachers—novices and veterans alike—to develop these new skills and talents must fall on school principals, Evans says. “They can lead the school in taking risks, learning how to share power, and creating an intellectual climate for teachers, administrators and students.”

The principal also must spearhead a school’s efforts to reach parents, and convey the importance of school reform to them “so they will demand no less,” Evans says. Otherwise parents may balk at some of the school’s plans for reform, and might even actively oppose some ideas.

For example, many parents might object if their school announced plans to narrow its curricular choices. “They don’t want their kids to be denied anything,” she said, recalling the dilemma of one principal “who had four elective music classes but wasn’t willing to cancel any of them because she knew she’d get 10 angry phone calls from parents.”

If a principal can convince parents that reform will offer their children a more personalized and rigorous school experience, “then a narrower curriculum will be a lot easier for parents to accept,” she says.

“It is incumbent on us” to help parents see the importance of ideas like those in the Lee, Smith and Croninger study, Evans says. “The challenge is to make these ideas accessible. We need to make them useful to people who care about kids and who want to help, so that they can become advocates for the kinds of school change highlighted by this study. These changes can make a difference for students, in their academic development and their development as people.”

## OTHER PUBLICATIONS

The Center on Organization and Restructuring of Schools offers a wide variety of briefs and issue reports on critical topics in school restructuring. Single copies are free. Photocopies may be substituted for some publications that are no longer in stock.

### ISSUE REPORTS

- No. 1—A Framework for School Restructuring—Fall 1991
- No. 2—Making Small Groups Productive—Spring 1992
- No. 3—Restructuring School Governance: The Chicago Experience—Fall 1992
- No. 4—Standards of Authentic Instruction—Spring 1993
- No. 5—Social Capital: The Foundation for Education—Fall 1993
- No. 6—School-Wide Professional Community—Spring 1994
- No. 7—High School Restructuring and Student Achievement—Fall 1994
- No. 8—Authentic Pedagogy: Standards that Boost Student Performance—Spring 1995

### BRIEFS

- No. 1—Introduction to School Restructuring Issues—Fall 1991
- No. 2—Collaborative Planning Time for Teachers—Winter 1992
- No. 3—When School Restructuring Meets Systemic Curriculum Reform—Summer 1992
- No. 4—Estimating the Extent of School Restructuring—Fall 1992
- No. 5—Collegial Process versus Curricular Focus—Spring 1993
- No. 6—School Community Collaboration: Comparing Three Initiatives—Fall 1993
- No. 7—Opportunity to Learn—Fall 1993
- No. 8—Building Parent Involvement—Winter 1994
- No. 9—School-Based Management—The View from “Down Under”—Summer 1994
- No. 10—New Directions for Principals—Winter 1994
- No. 11—Teacher Teaming—Opportunities and Dilemmas—Spring 1995
- INFORMATION PACKET—A 12-page guide to the Center’s mission and research.
- 1995 Bibliography on School Restructuring

\_\_\_\_\_

Name

\_\_\_\_\_

Title

\_\_\_\_\_

Affiliation

\_\_\_\_\_

City

\_\_\_\_\_

State, Zip

\_\_\_\_\_

Phone

Center on Organization and Restructuring of Schools  
 University of Wisconsin-Madison  
 1025 West Johnson Street  
 Madison, WI 53706

## SUCCESSFUL SCHOOL RESTRUCTURING

A REPORT TO THE PUBLIC AND EDUCATORS  
BY THE CENTER ON ORGANIZATION  
AND RESTRUCTURING OF SCHOOLS

**K**ey results of the Center's five-year program of research and data analysis are available in book form. "Successful School Restructuring: A Report to the Public and Educators," examines whether structural reforms really can boost student learning, and what other conditions are necessary as well.

This summary report synthesizes findings from Center research on data collected in more than 1,500 elementary, middle and high schools across the United States. The report includes in-depth examples from specific schools engaged in restructuring, as well as data reflecting overall trends.

Each person on the Center's mailing list will receive a copy of the summary report free of charge.

Copies also are available for \$9.95 from each of the following agencies:

American Federation of Teachers  
Attention: AFT/Successful School Restructuring  
555 New Jersey Avenue, N.W.  
Washington DC 20001  
(prepayment required)

National Association of Elementary School Principals  
Educational Products Division  
1615 Duke Street  
Alexandria, VA 22314-3483  
(800) 386-2377

Association for Supervision and Curriculum  
Development  
1250 N. Pitt Street  
Alexandria, VA 22314-1453  
(800) 933-2723

The National Association of Secondary  
School Principals  
Attention: Publication Sales  
1904 Association Drive  
Reston, VA 22091  
(703) 860-0200  
(800) 253-7746

## A GUIDE TO AUTHENTIC INSTRUCTION AND ASSESSMENT: VISION, STANDARDS AND SCORING

*Fred M. Newmann, Walter G. Secada, Gary G. Wehlage*

**F**rom 1990 to 1995, the Center on Organization and Restructuring of Schools studied how school restructuring can promote authentic instruction and student performance. Using material gathered from 130 teachers and 3,000 students in mathematics and social studies from 24 "restructured" elementary, middle and high schools nationwide, this Guide presents:

- A rationale for the importance of students constructing knowledge, through disciplined inquiry, to produce discourse and performance that has value and meaning beyond school.
- A set of integrated standards for analyzing teaching, assessment practice and student performance according to this rationale.
- Examples of teachers' lessons, teachers' assessment tasks and student performance which succeed on the standards.
- Specific rubrics and scoring rules for applying the standards in elementary, middle and high schools.

This guide is intended to stimulate teacher reflection on standards for authentic intellectual quality, with the ultimate goal of helping teachers develop more authentic instruction, assessment and student performance. It includes scenarios and general guidelines for adapting the standards to the needs of particular schools, grade levels and subjects. **Price: \$9<sup>00</sup> each in the U.S. and Canada, \$7.50 each for orders of 25 or more.** For orders to other countries, please call.

WCER Document Service  
1025 W. Johnson Street, Room 242  
Madison, WI 53706  
Telephone: (608) 263-4214

Please send \_\_\_\_\_ copies of "A GUIDE TO  
AUTHENTIC INSTRUCTION AND ASSESSMENT:  
VISION, STANDARDS AND SCORING."

Total amount enclosed: \_\_\_\_\_

Ship to:

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone \_\_\_\_\_

### Issues in Restructuring Schools

was prepared by Leon Lynn at the Center on Organization and Restructuring of Schools, University of Wisconsin–Madison. This publication was supported by the U.S. Department of Education, Office of Educational Research and Improvement (Grant No. R117Q00005–95), and by the Wisconsin Center for Education Research, School of Education, University of Wisconsin–Madison.

The opinions expressed herein are those of the authors and do not necessarily reflect the views of the supporting agencies.

This publication is free on request

**Director:** Fred M. Newmann

**Associate Director:** Gary G. Wehlage

**Dissemination Coordinator:**

Leon Lynn

**Administrative Assistant:**

Diane Randall

**Graphic Designer:** Linda Endlich

## CENTER MISSION

The Center on Organization and Restructuring of Schools was created to study how organizational features of schools can be changed to increase the intellectual and social competence of students. The five-year program of research focused on restructuring in four areas: the experiences of students in school; the professional life of teachers; the governance, management and leadership of schools; and the coordination of community resources to better serve educationally disadvantaged students.

Through syntheses of previous research, analysis of existing data and new empirical studies of education reform, the Center focused on six critical issues for elementary, middle and high schools: How can schooling nurture authentic forms of student achievement? How can schooling enhance educational equity? How can decentralization and local empowerment be constructively developed? How can schools be transformed into communities of learning? How can change be approached through thoughtful dialogue and support rather than coercion and regulation? How can the focus on student outcomes be shaped to serve these principles?

## FINAL ISSUE REPORT

This issue report is the last regular publication of the Center on Organization and Restructuring of Schools. However, the Center will continue work on several projects through August 1996.

For information on the Center's publications and research, contact:

Center on Organization and Restructuring of Schools  
1025 W. Johnson Street, Madison, WI 53706  
Telephone: (608) 263-7575



printed on recycled paper  
recyclable

Issue Report No. 9

Fall 1995

## Another Look At High School Restructuring

### CENTER ON ORGANIZATION AND RESTRUCTURING OF SCHOOLS

School of Education

Wisconsin Center for Education Research

University of Wisconsin–Madison

1025 W. Johnson Street

Madison, WI 53706

Nonprofit Organization  
US Postage

**PAID**

Madison, Wisconsin

Permit No. 1622