

**Power to the Principals:  
Decentralization in Three Large School Districts**

**By**

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## **Abstract**

School districts have made several attempts at decentralizing. However, decentralization in school districts can mean so many different things that the term has nearly lost its meaning.

This paper reports a study of three large urban school districts that, over almost thirty years, adopted nearly identical approaches to decentralizing, granting control to principals and expanding freedom of choice for families. In all three cases, the goal of improving student achievement was achieved, though with a very small sample.

These three districts are compared to the three largest public districts in North America. The comparisons reveal that the three decentralized districts attained a high level of principal control over school budgets, staffing, schedule, and teaching methods.

## **I. Learning from a Design Intervention**

In 1976, a school district of 80,000 students in Edmonton, Alberta, Canada pioneered a new form of decentralization led by a superintendent, Mike Strembitsky, who served for twenty-two years. Twenty years later, superintendents in Houston and Seattle visited Strembitsky and implemented his decentralization in their own districts. Although these superintendents served for only three years each, the reforms have taken root in their cities as well. Since 2000 this innovation has been transplanted to Cincinnati (Miles and Roza, 2004), St. Paul, Francisco, and Oakland, (Honig, 2003). In 2005 it is being implemented statewide in Hawaii (State of Hawaii, 2004) and pilot programs are underway in Boston, Chicago, and New York City. Other school districts and states are considering similar changes.

Not all forms of decentralization are equal, nor does decentralization by itself produce meaningful change. In all three of the reforms studied, decentralization was accompanied by enhanced public school choice, thus creating a competitive market for education. The districts also undertook other important changes, such as an increased emphasis on both student performance and on training of principals. Although these multiple changes confound the attribution of observed effects solely to changes in decentralization, the results are consistent with the literature on decentralization of large businesses. This paper evaluates the goals of each of the three innovative decentralization interventions, the actions that the designers took, and the consequences of these actions.

## **II. The Impetus for Decentralization in Edmonton, Seattle, and Houston**

In each of the three cases, change was fostered by widespread public dissatisfaction. Let us consider in more detail the conditions precedent to the interventions in each city.

### **Edmonton: The Goal was to Empower Principals**

Our interviews with current and former school district executives confirm that the Edmonton reform sought to reduce friction between the district central office and individual schools (Tucker and Coddling 1998:220-230). Through decentralization, the central office was focused on setting standards and auditing performance, while each school made its own operating decisions. What had been constant friction was resolved into a cooperative relationship that continues to this day.

### **Seattle and Houston: The Goal was to Improve Student Achievement**

In the Houston Independent School District (HISD), public dissatisfaction with low student test scores led to the election in 1989 of several reform-oriented candidates to the school board (McAdams, 2000:1) and to the adoption of a *Declaration of Beliefs and Visions*, which declared that "HISD must decentralize" (Ibid.: 8).

In Seattle, public dissatisfaction with the schools had grown to the point that the Washington State House of Representatives (1990) had severely criticized the failures of the public schools. Enrollment in Seattle public schools had declined from nearly 100,000 students in 1970 to about 39,000 by 1990, by which time about 47% of all students were enrolled in private schools. A coalition of community leaders pressured the school board to find new leadership in Retired Army Major General John Stanford, who became Superintendent in 1995 and subsequently implemented the Edmonton decentralization plan.

### **III. What Actions Did the Designers Take to Implement Decentralization?**

To explain the idea of decentralization in these districts, let us first review some of the organizational literature on decentralization. Next, we will review the approaches to decentralization that have been implemented in other school systems.

#### **The Literature of Decentralization in Businesses and in School Systems**

The study of decentralization has developed in response to the growth of very large business and governmental organizations. Scholars have established that increasing size (measured in total revenues and total number of employees) yields several organizational effects that result in decreased effectiveness (Terrien and Mills, 1955, Blau and Schoenherr, 1971). The antidote to large size is greater decentralization of decision-making authority (March and Simon, 1958, Blau and Schoenherr, 1971, Chapman 1973).

#### **Decentralization as a Property of Organizational Structure**

Studies of decentralization in schools cover so many approaches that comparing them requires caution. For example, school decentralization from the national to the state level (Fiske and Ladd, 2000, Walberg, Paik, Komukai, and Freeman, 2000, Van Langer and Dekkers, 2001) and from the state to local school districts (Corcoran and Christman, 2002, O'Day, 2002) have not yielded consistent effects on student achievement. Scholars have argued that research has not found consistent results because of unmeasured nuances in relations between district offices and individual schools (Honig, 2004, Stein, Hubbard, and Mehan, 2004). Hannaway (1996) has also noted some of the diverse meanings of decentralization in the study of school systems, and Walberg et al. (2000), in a review of international studies of decentralization of education systems, note that,

*...neither policymakers nor scholars agree on the meaning of the terms*

*“centralization” and “decentralization” or their advisability... (p. 1).*

However, Walberg et al., making a crucial distinction, note that while moving decisions from the national to the state or district level is not important, decentralization to the level of the individual school *does* make a difference:

*Decision making ...made at the school level was associated with higher science achievement. These findings remind us of some modern business theories, which hold that central boards and officers set profit or other targets while lower operating units set their own means of organizing their work to attain the targets*  
(p. 6).

Much the same point has also been made by Ferris (1992:338), who identifies budgets, curriculum, and personnel as the three major spheres of decision-making, and by Sizer (1992:57).

The emphasis of these studies on the critical importance of delegation of instructional decisions to the individual school fits very well with recent studies of business decentralization through the creation of semi-autonomous sub-units. This structural concept of decentralization is drawn from the work of Williamson (1975), Chandler (1977), and Williamson and Ouchi (1981), who have described the decentralized structure as the Multidivisional, or M-Form structure. Within this analytical framework, the U-Form (Unitary or functional organization) is inherently centralized, while the M-Form (Multidivisional) is decentralized. The critical feature of the M-Form is that each subunit is sufficiently (but not completely) self-contained that it can be assessed with respect to performance (Williamson, 1975:132-154). Because each subunit can be accurately evaluated, each can be granted decision authority. This structure is found in medium-

sized companies as well as in large ones, and it is also common among large government organizations, such as the U.S. Army, Navy, and Air Force, each of which has an M-Form structure.

Among school districts, the traditional structure is U-Form, with all curriculum design decisions made by one centralized department, all professional development decisions made by another central staff, all special education decisions formed by yet another department, and so on (see Hannaway, 1993:149). Segal (2004:46-49) has created organization charts of the New York City, Los Angeles, and Chicago school districts that depict all three districts as having U-Form structures.

The study districts of Edmonton, Seattle, and Houston all qualify as M-Form, or decentralized districts. This means that each school in these districts controls most of its instructional decisions. Each school must attract its own students – no students are “assigned” to any school. However, certain important functions, such as administrative computing, auditing of schools, bus transportation, food preparation, payroll and pension, and new school construction, are carried out by the central office. Let us consider some examples of the latitude that principals have in a decentralized district.

In a strongly decentralized district, an individual school may choose on its own, without permission, to vary the mixture of types of teachers, the proportion of full-time, part-time, paraprofessional, and outsourced teachers, as well as to choose whether to use part-time or full-time tutors, to hire librarians, to add or to subtract attendance clerks, cooks, custodians, and any other staff category. Decentralization also means that a principal is free to set a school daily schedule of six periods of equal length, or four periods of equal or of unequal length, or to have a different schedule on each day. Each school is free to hire its own internal staff to perform

specialized functions, to buy those services from the central office, or to secure them from vendors of its choosing. Decentralization also means that each school is free to choose its own teaching methods; that is, to group teachers into various kinds of teams or not, to reorganize a large school into several smaller academies, and to purchase teaching materials and provide teacher training of its own choosing.

Scholars have often relied on local budget authority as a central feature of school decentralization. Odden and Busch argue that

*...the most effective strategy...has been to...decentralize power and authority...a key part of this strategy includes providing teams with power over their budget*

(1998:26-27). Beck and Murphy (1996), Joyce and Calhoun (1996), and Wohlstetter et al. (1997), all reach a similar conclusion.

However, several scholars have argued that decentralization in school systems is ineffective. As we inspect some examples of “failed decentralization,” let us ask whether they meet our tests.

### **Earlier Decentralization Interventions**

Among the many waves of school reform, only a few represent attempts at organizational or structural decentralization, and none of these meet the test of the M-Form structure. Some of the better known reforms have been those of New York City, Chicago, and the national adoption of School-Site Based Management. Let us look more closely at these three.

### **New York City: Decentralization from Chancellor to Superintendents, and Back Again**

Diane Ravitch (1974) has detailed the history of reform attempts in the New York City schools from 1805 until the 1970s as a process that has alternated centralization and decentralization between the



Chancellor and local area superintendents, but that has never delegated control to the individual schools.

Ravitch concludes:

*Neither centralization nor local control has solved the problems of the school system. Each has its advantages and disadvantages, which cause a pendulum movement over the years from one form to the other. (1974:401)*

One New York City principal in our study described his lack of local discretion:

*The union contract says no more than 34 students to a classroom, so I get 250 units (one unit is one teacher). I cannot reallocate priorities across categories. As a result, I have discretion over about 2 units, or 1 percent of my budget.*

### **Chicago: “The Worst School District in America”**

In 1988, U.S. Secretary of Education William Bennett visited the city of Chicago and declared that its public schools were the worst in the nation (Ouchi and Segal, 2003:3). This bombshell followed closely on the heels of other local reports that had revealed shockingly low graduation rates and achievement test scores (Bryk et al., 1998:17-18). The response was for the state legislature to pass a law that created parent-majority Local School Councils to be elected in each school and to be granted limited power over a portion of the school’s budget. In practice, according to the study by Bryk et al., this law did not give principals enough autonomy to make substantial local adjustments. Goertz and Hess (1998:4) quote one principal who claimed to have control over only twelve percent of his school’s budget. Overall, the authors said, “We were surprised by the limited amount of discretion that schools have over their budgets”... (ibid: 8). The result of this limited attempt at decentralization was continued deterioration in student performance. Bryk et al. summed it up thus:

*...fundamental change is needed in school governance arrangements. Absent this, ineffective school performance is likely to continue. (1998:11)*

Following the election of Mayor Daley, the state legislature passed another new law in 1995, granting the mayor full control over the school district budget, effectively ending the decentralization experiment but leaving the school councils in place. A principal in Chicago put it this way:

*There is a veneer or a façade of decentralization, and people use the rhetoric of decentralization at central office sometimes, but the reality is very tight central control over the budget and finances. (Ouchi and Segal, 2003:72).*

### **School-Based Management Across America**

Several studies have evaluated the widespread adoption of school site-based management (SBM), a movement that Chubb and Moe date to the 1970s (1990:199). Typically, this approach includes the election or appointment of a committee of teachers, parents, and community members at each school, but usually in an advisory rather than a decision-making capacity (Mohrman and Wohlstetter, 1994). Malen (1994) notes that these committees typically control only a “modest” allocation of funds at the school site, meaning at most a few thousand dollars. Van Langen and Dekkers observe that the SBM approach, having reached 60% of districts with 50,000 or more students by the early 1980s, had declined to 31% of districts by 1988 (2001:367). Perhaps SBM faded because site committees soon learned that they could discuss and plan all they wanted, but they did not have the budget control that they needed to implement their ideas.

These failed attempts at “decentralization” did not meet the tests of a decentralized M-Form structure. Control over budgets and decision-making authority did not pass to individual

schools. Let us turn now to a description of research methods, and then on to the actions that the designers took in Edmonton, Houston, and Seattle, and the results of those actions.

### **Research Methods**

In each of the nine school systems in the study, the field research team of nine people carried out extensive interviews with most of the district senior staff, as well as with middle managers and analysts. We visited each school district on four or more separate occasions.

Data collection focused on three elements. First, we obtained from each district data on standardized tests for at least the most recent four years. Second, we interviewed central office staffs in order to classify the structure as U or M-Form. Third, we interviewed at least five percent of the principals in each district (sixty-six principals in New York City public schools; forty-two principals in the Los Angeles public school; thirty-one principals in the Chicago public school system; sixteen principals in Edmonton; sixteen principals in Houston; and seventeen principals in Seattle, and went through the school budget with each one in order to determine how much of that budget was under local school control. We also interviewed each principal about the performance of students, the management of the school, and the relationship between the school and the district central office. In cities that had regional offices, we interviewed some of the local assistant superintendents. In each city, we also interviewed local academic and other school district experts. The research team was in the field nearly continuously for about eighteen months

### **IV. What Actions Did the Designers Take in Edmonton, Seattle, and Houston?**

## **Edmonton**

In 1973 Mike Strembitsky was appointed superintendent of Edmonton Public Schools.

Strembitsky went through the entire budget of the Edmonton system and, piece by piece, gave control to the principals beginning with a pilot program in 1976 that reached all schools within three years. He also put into place an accountability system (Strembitsky, 1997) that measured test scores and budget performance. School employees, students, and parents rate their school and the leadership provided by their principal each year on brief questionnaires, with response rates typically above 90%. Principals, in a similar questionnaire, rate the superintendent and the school board. All of these results are made public. Strembitsky also initiated an “open schools” choice plan under which each family simply tells their school of choice that their child will enroll there. Today, more than 50% of all Edmonton Public students attend out-of-zone schools. Students receive subsidized bus passes, and a student who cannot afford a pass is typically provided with help by the receiving school.

A senior official of the union that represents teachers and principals, interviewed in 2001, offered this assessment of the decentralized approach in Edmonton:

*As far as I am concerned, decentralization is a wonderful thing, because it gave teachers the opportunity to be empowered and to have a role in making decisions about their schools...It used to be that someone else, somewhere at central, would decide what books I should be using and send them to me. It would be a surprise to me when the books arrived! Under decentralization, they send the money to the school, and now the teachers have decisions to make for themselves. (Ouchi and Segal, 2003:27)*

One of the distinctive features of the Edmonton approach is a funding mechanism that assigns a weight to each student based on such characteristics as the family's income level, whether the student is a native English speaker, is gifted and talented, or has learning disabilities. Under this Weighted Student Formula (WSF), the "maximum" weighted student receives nearly five times as much money per year as the "minimum" weighted student, and each takes their money to the public school of their choice (Ouchi and Segal, 2003:87-90; Petko, 2005). This funding approach provides that money intended by the state or province to help students of various need levels is actually attached to those students. WSF is now beginning to achieve recognition as a practical way to redress past inequities in funding the public education of students who are low-income, poor, and either gifted or challenged (Miles, Roza, and Ware, 2003, Roza and Hill, 2004).

### **Houston**

The Houston Independent School District (HISD) elected a reform-oriented school board and began decentralization in the early 1990s (McAdams, 2000). They implemented the Edmonton model in 1999, after several visits to Edmonton.

The HISD differs from Edmonton because Edmonton has an exceptionally strong union, while collective bargaining is prohibited by law in Texas. The HISD also dictates the books that teachers must use in the primary grades, while Edmonton does not.

Houston principals were enjoying their new autonomy when we studied them. One commented:

*I have control over whether I want ten custodians or eight custodians, whether I want an additional assistant principal or a business manager, whether I want to*

*hire another math teacher or another history teacher. I don't need any approvals from anyone above to make these decisions. I do have to spend X amount on special education kids and Y on limited-English-proficiency kids, I have guidelines for how much I can spend on furniture, and approved vendors I'm supposed to use...*

## **Seattle**

In Seattle, businesses formed a coalition with community organizations and sponsored reform candidates for the school board. The new school board hired a non-traditional superintendent, retired Army Major General John Stanford, who visited Edmonton and then implemented the approach the following autumn (Stanford, 1999). General Stanford died of leukemia during his third year as superintendent and was succeeded in that office by Joseph Olchefske, who continued to press the decentralization until he left office in 2003.

In the Seattle implementation of WSF, each school first receives a block allocation (approximately \$195,000 to each elementary school, \$418,000 to each middle school, and \$529,000 to each high school in 2001-02) and then its per-student funds. Weights in Seattle ranged from a minimum of 1.0 to a maximum of 9.2, with the student's weight multiplied by the basic allocation of \$2,616 (for 2001-02) to arrive at the weighted student funds for each student, which can range from \$2,616 to \$24,067 (Seattle Public Schools, 2001). That amount follows the student to the public school of his or her choice, as in both Edmonton and Houston.

The design interventions in Edmonton, Houston, and Seattle were remarkably true to the original Edmonton formulation. We turn now to an examination of the consequences of these actions by the designers.

## **V. What Were the Consequences of These Actions?**

### **Variety in Schools**

One striking consequence of decentralization in all three districts was the development of a great variety of very unique schools, where previously all schools had been very similar. Consider the variation among three elementary schools in Seattle, among them the John Hay Elementary School (K-6) in an upper-middle class neighborhood. At John Hay, the principal controlled approximately \$25,000 before the change to decentralization and now controls about \$2,000,000 per year, which is virtually the entire school budget. After the change, the principal in consultation with her teachers decided to throw out the standard schedule of six periods per day and instead adopted an innovative schedule that made more efficient use of teacher time. The principal also used her new freedom to hire twelve part-time reading and math coaches and set up a tutoring station outside of every classroom with another station in a wide hallway for “turbo-tutoring” the gifted children. Now, reading in that school is taught in groups of five to seven students, while other classes are in larger sections, and every student who is behind grade level receives one-on-one tutoring. Over a four-year period following the change, the school’s standardized math scores rose from the 36<sup>th</sup> percentile to the 62<sup>nd</sup>, and reading scores rose from the 72<sup>nd</sup> percentile to the 76<sup>th</sup>. In third grade, black and white students now have identical reading scores, and all of them are at or above grade level.

In Seattle’s Skid Row, the Bailey Gatzert Elementary School (K-6) serves a student population of which about 30% are homeless, while 100% are low-income and of color. These children all carry high weights, with the result that the school has enough money to hire the many specialists these children need. Teachers there have long tenure, which is unusual for such

a school, and they reported that stayed because WSF gave them the resources with which they could enable their students to succeed. As the study concluded, Bailey Gatzert School was preparing to shift from a traditional school year to one of twelve months, because the teachers unanimously believed it would better serve their unique group of students.

In the John Stanford Elementary School (K-6) in a section of Seattle near the University of Washington, the principal conducted a market survey. She found that her neighborhood predominantly included families of graduate students and young faculty, who were from all over the world. She thus designed a school in which every class is taught from a global perspective, and in which every first-grade student must choose a second language that is not their own and then receive half of their education in that second language in grades one through six. After one year of operation, the school had a waiting list of 170 families.

It is hard to imagine three elementary schools that are more different from one another than these three. These examples dramatize the way that decentralization permits each school to customize its staffing, schedule, materials, and teaching program to its unique constituency.

### **Basic Description of the Districts**

The study compares the three innovative decentralized districts with three traditional districts that had attempted various forms of decentralization as described above, but that had remained centralized, never having attempted to move substantial budget control to local schools. Table 1 describes the six public school districts.

Insert Table 1 here

It is apparent that the three centralized public districts are much larger than any of the three decentralized public districts, though all six would be among the 100 largest districts were they all in the United States (Young, 2002:4). The resulting set is comprised of the three largest



U-Form districts and the three largest M-Form districts. Unfortunately, the small sample size made it impossible to control statistically for district size, political context, or to perform a statistical analysis of educational inputs v. outputs. A follow-on study now in progress with a larger sample will go further in this direction.

There are also some missing data and some differences in financial reporting between districts. These, however, are not of great magnitude.

### **Decentralization of Decision Authority**

The most critical indicator of the extent of decentralization was the proportion of school spending that is controlled by principals. Table 2 presents these results.

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What is remarkable about the results in Table 2 is the consistency of local budget control in the three decentralized school districts. It should be noted that because these schools constitute the universe of districts that were using the Edmonton model (rather than a sample), statistical tests are not reported.

### **Administrative Ratio**

We also measured the number of personnel who reported to the central office rather than to a principal. Table 3 presents these results.

Insert Table 3 here

We expected to find that districts that decentralize have fewer central office staff. Table 3 shows that the results generally support that expectation, but not unequivocally. In particular, both Houston and Seattle have larger central office staffs than we expected, perhaps because both are new at the M-Form and are still shedding their formerly large central staffs.

In Edmonton, which has a very small central staff for its number of students, Superintendent Angus McBeath commented that,

*We have a small central staff. We can't afford more. All of the central maintenance staff have to sell their services to the schools. All of the consultation staff, plus the reading specialists, social workers, and psychologists.*

Edmonton staff consistently reported that their practice of establishing a billing rate for central office services and permitting principals to buy services either from the central staff or from outside vendors had produced a notable improvement in the service orientation of the central staff employees.

School district officials typically feel that they are underfunded and thus cannot add enough teachers to reduce class size or to offer art, music, and sports instruction. Table 4 reveals that decentralized districts place far more of their money in the classroom than do centralized districts (according to accounting protocols established by Cooper and Associates, 1994, and with Prof. Cooper as consultant to our team).

Insert Table 4 here

Again, Seattle is an outlier. Recall that Seattle had experienced a sharp drop in enrollment from about 100,000 students in 1970 to 39,000 by 1990. Seattle did not close schools as enrollment dropped (due to powerful neighborhood resistance to school closings), and the result is very small average per-school enrollment and relatively high administrative costs. This effect, combined with the previously mentioned large central staffs has produced a low rate of classroom spending in Seattle compared to the other decentralized districts.

## **Student Performance**

Perhaps the most important question was whether decentralization produces improved student performance. The analysis of test scores that follows should be viewed within the context of our interviews. Consider the opinions of Edmonton Superintendent Angus McBeath:

*Under centralization when somebody at the...board level asked how come kids in this school aren't doing better in mathematics...the principal would say, don't blame me. You guys select the staff, you decide how many I have, you pick the textbooks, you pick the methodology, and what am I in charge of?*

A senior official of the teachers' union argued that decentralization has been the major cause of Edmonton's success:

*During the past twenty years, since we have become decentralized, we have become much more desirable as a district. People think that our schools are wonderful.*

In Houston, a senior official commented on what is important about decentralization to principals:

*You have to fly our flag, but you can decide how to run your school.*

One high school principal evaluated the new system as follows: "We have pretty much free rein to do whatever we need to, to improve the academic achievement of our students." An elementary school principal commented on her new situation:

*We can do practically anything we need to make this school successful... We've started Saturday tutorials, mandatory for fourth graders by my decision, and optional for grades three, five, and six...to fund the tutorials, we are using extra "materials and supplies" money.*

In Seattle, a senior official explained that,

*We had a one page staffing standard: every school gets one principal, one librarian, and one teacher for every twenty-eight kids. This plan decided the allocation of \$200 million out of our budget of about \$300 million. We were counting adults, not kids...we decided that we're in the student business, not the school business...In a district that was viewed as incompetent, the core of our incompetence was the way that we spent money...On curriculum, embedded in all this freedom is the idea that each school should pick its own way. It's not a one size fits all world.*

The principal of a school in a wealthier neighborhood described her challenge:

*Having a pretty firm understanding that money accompanies the child, we know that viable enrollment will mean a viable school, so we pretty early on began thinking about recruitment. In this particular neighborhood, my focus had to be on looking at maintaining the parent group that we had that was middle class and more affluent, and pulling more of those parents in...public school can keep up with private school in terms of its academic rigor...we started looking at who is available to teach reading besides first grade teachers...We said let's put some money together and hire a full time reading specialist to do nothing but teach us how to teach reading better and to take a small group. Largely we were able to start thinking that way because the weighted student formula came into place...we never got more money, by the way, out of WSF, we came out about even...we were just able to think about redistributing it.*

A parent volunteer at the same school reacted this way:

*We really would not be able to do things through this partnership [between parents and teachers] if it wasn't for that site-based management or the autonomy. We would still be subject to what the district would be putting forth.*

My observer's notes on one classroom included this selection:

*This is a first grade class and they are now doing literacy...half of the class has been pulled out and is with the reading specialist so that each can have a smaller group. The teacher has divided her remaining students into two subgroups, one of six students and another of five. The group that is doing Amelia Bedelia is working at a higher level than the other team. One team is working on comprehension and analysis of an entire book and writing out full sentences to lay out their analysis. The other group is working on recognizing words like could, should, and reinforcing their ability to deal with words like me, my, home, and map.*

With respect to student achievement, we were able to make only limited comparisons. Each state is free to use any standardized test of its choice, and several such tests are in use. However, Houston and the Los Angeles Unified School District used the Stanford Achievement Test – Ninth Edition, or SAT 9. Seattle and Chicago used the Iowa Test of Basic Skills, or ITBS. Edmonton uses a provincial Alberta test and a local test. In every case we obtained achievement score results for every tested grade level for each year analyzed. We performed our own analysis and did not rely on the district to provide us with their computations of year-to-year comparisons, district averages, or comparisons between ethnic groups.

The most compelling comparison is between Houston and Los Angeles, since both are among the ten largest U.S. districts, and both are about 90% minority in their student enrollment with 80%

from low-income neighborhoods. Table 5 displays the SAT 9 scores in reading and math for the comparison of students in Houston with those of the Los Angeles Unified School District.

Insert Table 5 here

Given the complexity of measuring student achievement, the results in Table 5 cannot be considered to be other than suggestive. Given that these two districts have nearly identical student demographics, though, the higher performance of the Houston schools might be attributable to decentralized management. The Texas Education Agency rates every public school in the state as exemplary, recognized, acceptable, or low-performing. In 1993, Houston had no exemplary schools, four recognized, 186 acceptable, and fifty-five low performing schools. By 2001, the distribution had changed to thirty-five exemplary schools, eighty-eight recognized, 137 acceptable, and two low performing. The Houston district has been the subject of criticism by the national press for alleged mis-reporting of graduation rates and test scores, and surely Houston is not immune from these problems, which afflict nearly every public school district in the nation. However, our review of the evidence convinces us that the district has made real and dramatic improvements in student achievement.

We also have some limited longitudinal data on the ethnic achievement gap in these two cities. White and Asian students typically attain higher scores on standardized tests than do African-Americans or Hispanics (Tyack and Cuban, 1995:22-28). If each of these groups will learn best under a different teaching approach, then decentralization should result in a smaller ethnic achievement gap, as McNeil (1999:209-216, 2000:270) and Oakes et al. (2000) have argued. We evaluated the ethnic achievement gap in Los Angeles and Houston, which had comparable ethnic composition and both of which used the same standardized test. Table 6 presents the data.

Insert Table 6 here

The achievement gap was reduced by a greater amount in Houston than in Los Angeles. These results for Houston are confirmed in a longitudinal study by Snipes, Doolittle, and Herlihy, 2002:91.

Although they are quite different in student demographics, we can also compare the districts that use the Iowa Test of Basic Skills: Chicago and Seattle. The Seattle students outscored their Chicago counterparts by 59 to 40 in reading, and by 65 to 44 in math in 2001. These are very large differences, but Seattle has barely half the proportion of low-income students that Chicago does, and Seattle has 41% White students, compared to 10% in Chicago. In every grade level and on every test, Seattle students performed above the Washington state averages in 2001, despite the fact that Seattle is the most urban school district in the state. From 1990 to 2002, Seattle increased its enrollment from 39,087 to 44,831 and regained eight market share points from the Seattle private schools.

In Canada, school districts permit only aboriginal students to self-identify their ethnicity and do not record any measure of poverty for individual students but do use neighborhood statistics for that purpose to classify some schools as “high needs” or “high transiency.” Edmonton Public Schools estimates that 10% of its students are aboriginal. In Edmonton, 30.6% of households had incomes of less than \$30,000 (Canadian) in 2001, compared to 25.8% for the province of Alberta as a whole. 23% of Edmonton children lived in single parent households, compared to 17% for the province. Edmonton is a large, urban, mostly middle and low-income city. For all five years 1999-2003, Edmonton Public Schools achieved higher scores than predicted by prior achievement in all comparisons performed by the province, the only district in the province to have done so. The three-year high school completion rate for the tenth grade

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cohort rose from 51.1% in 1996 to 57.2% in 2000 and is predicted to rise to 63% for the 2004 cohort. Greene (2001:16) reports that among the fifty largest U.S. districts, Chicago had a graduation rate of 47% in 1998, with Houston at 52%, New York City at 55%, and the LAUSD at 56%. Seattle was not among the fifty largest districts.

Finally, virtually no private schools remain in Edmonton, with three of the largest remaining private schools and all of the charter schools having voluntarily become part of Edmonton Public within the past five years.

Although the comparisons between centralized and decentralized districts on student achievement are fragmentary and the number of districts is small, the pattern is consistent. The evidence supports the view that decentralized districts outperform centralized districts both in overall student performance and in reducing achievement gaps between racial groups.

Decentralization is also attractive to teachers. A Lou Harris poll (2004) found that by a margin of four-to-one, California teachers (almost all of them unionized) would support adoption of the Edmonton model.

## **VI. What Can We Learn From these Design Efforts?**

The practical implications of this research are three: first, that effective decentralization must grant to each school autonomy over staffing, scheduling, and teaching methods. It is not enough for a superintendent to establish school-site advisory committees that have no control over the essential elements of an instructional plan, nor is it meaningful to declare that schools have control over their budgets and then have the state or district central office dictate a staffing formula, teaching methods, or schedules. Second, district central offices and state and federal education agencies should set standards and then audit performance. If a state dictates through



categorical funds or detailed instructional rules what schools should do, or if a superintendent micro-manages principals, they then have a conflict of interest if they attempt to audit or hold principals accountable. In effect, the superintendent (or the state education agency) is then auditing its own decisions. Instead, central offices should leave instructional decisions to the schools and then audit them carefully. Third, the public should have clear information on school performance. When families know just how much money their child's school has and how their school and school district compare to others, they will apply pressure for better performance.

If we take a step back, we might observe that the study of organizations is well-served when the student closely observes not only organizations at rest, but also organizations as they undergo change, especially when they are the subjects of intentional design intervention. Natural change often moves an organization gently in roughly the direction that it was already going, while a designed intervention almost by definition seeks to take it in a new direction. When that happens, routines will be disrupted and much furniture broken, but perhaps the beating heart of the complex and subtle being will be revealed in new ways.

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**Table 1: Description of the School Districts, 2001-02**

	Enrollment	Total Operating Budget	Per Pupil Expenditure	Number of Schools	Average School Size
New York City Board of Education	1,105,045	\$12.419 bill.	\$11,823 per pupil	1,211	913
Los Angeles Unified School District	722,727	\$6.966 bill.	\$9,638 per pupil	789	916
Chicago Public Schools	435,470	\$3.575 bill.	\$8,210 per pupil	597	729
Houston Independent School District (WSF)	208,672	\$1.160 bill.	\$5,558 per pupil	288	725
Edmonton Public Schools (WSF)*	80,862	\$0.465 bill.	\$5,750 per pupil	209	387
Seattle Public Schools (WSF)	44,831	\$0.435 bill.	\$9,710 per pupil	94	477
Archdiocese of New York City	115,000	NA	NA	286	402
Archdiocese of Chicago	130,000	NA	NA	302	430
Archdiocese of Los Angeles	~100,000	NA	NA	269	372

\*Edmonton data are in Canadian dollars.



**Table 2: Percent of School Budget at Principal's Discretion, 2000-2001**

Organization Type (n)	Mean of Principals	Principal's Discretion		
		District	Principal Discretion	Rank
1. U-Form (3)	10.7%	New York City	6.1%	1
		Los Angeles	6.7%	2
		Chicago	19.3%	3
2. M-Form (3)	76.5%	Houston	58.6%	5
		Seattle	79.3%	7
		Edmonton	91.7%	8
Mean (9) = 54.0%		Standard Deviation = 35.1%		

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**Table 3: Central Office Staffs in Nine School Systems**

Organizational Type (n)	System	C.O. payroll FTEs	C.O. Payroll FTEs per 100k students	Rank
1. U-Form (3)	New York City	25,500	2,311	2
	Los Angeles	11,896	1,646	4
	Chicago	4,279	983	5
2. M-Form (3)	Houston	3,730	1,787	3
	Edmonton*	437	540	6
	Seattle	1,613	3,401	1
Mean (9) = 1,234		Standard Deviation = 1169		

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**Table 4: Classroom Teacher Pay as a Percent of Total Budget**

District	2001-2002 Operating Budget (millions)	Number of Teachers	Avg. Teacher Salary	Total Teacher Pay (millions)	Pay as % of Operating Budget	Mean	Rank
New York City	\$13,236	79,156	\$47,763	\$3,781	28.6%		1
Los Angeles	\$6,966	39,268	\$51,181	\$2,010	28.9%		3
Chicago	\$3,575	26,348	\$50,411	\$1,328	37.2%		4
U-Form (3)						31.6%	
Houston	\$1,160	13,060	\$43,070	\$562	48.5%		5
Edmonton	\$465	4,382	\$55,000	\$241	51.8%		6
Seattle	\$435	2,798	\$44,765	\$125	28.8%		2
M-Form (3)						43.0%	
Grand Mean (6)						37.3%	

**Table 5: System-wide Scores for Three Districts**

	1999	2001
<b>SAT-9 System-wide Reading Scores (National Percentile)</b>		
LAUSD	28	33
Houston	38	42
<b>SAT – 9 System-wide Math Scores (National Percentile)</b>		
LAUSD	36	42
Houston	42	49

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**Table 6: The Ethnic Achievement Gap:**

System-Wide National Percentile Difference of Whites/Asians *versus* Blacks/Hispanics

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	1998	1999	2000	2001
<b>Reading Gap</b>				
Los Angeles*	35	35	36	35
Houston		40	35	36
<b>Math Gap</b>				
Los Angeles*	36	38	37	36
Houston		34	30	29

\*Los Angeles scores only reflect students that take the test two years in a row and are therefore not directly comparable to other improvement scores.

