# School-Level Resource Allocation in Urban Public Schools

### Introduction<sup>1</sup>

By Margaret E. Goertz and Leanna Stiefel

For the last decade, many researchers, policy makers and educators have advocated the use of school-based management (SBM)—the delegation of decision making authority in areas such as budget, personnel, and program—as a way of improving educational quality and student performance.<sup>2</sup> Thousands of school districts across the United States, including most of the country's largest urban school systems, have implemented SBM in at least some of their schools, and many models of high-performance schools incorporate some measures of local school control.<sup>3</sup> In some cases, SBM includes decentralization of some budget authority—or school-based budgeting (SBB)—as well. Recently, school finance researchers Allan Odden and Carolyn Busch proposed devolving at least 75 percent of a school district's operating budget

<sup>1.</sup> The research on which the articles in this special issue are based was funded by the Andrew W. Mellon Foundation. All of the authors gratefully thank the Foundation and our project officer, Stephanie Bell-Rose, for their support. Catherine Clark provided detailed and helpful reviews of all the articles and we are indebted to her for her insights and hard work. All of the statements made and views expressed are those of the authors alone.

<sup>2.</sup> Betty Malen, Rodney T. Ogawa, and Jennifer Kranz, "What Do We Know About School-Based Management? A Case Study of the Literature—A Call for Research," in *Choice and Control in American Education, Volume 2, The Practice of Choice, Decentralization and School Restructuring*, eds. William H. Clune and John F. Witte (New York: The Falmer Press, 1990), 289-342.

<sup>3.</sup> Priscilla Wohlstetter, Susan A. Mohrman and Peter J. Robertson, "Successful School-Based Management: A Lesson for Restructuring Urban Schools," in *New Schools for a New Century*, eds. Diane Ravitch and Joseph P. Viteritti (New Haven, CT: Yale University Press, 1997), 201-225.

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to school sites to support effective school restructuring.4

The structure and substance of SBM and SBB vary widely across states and school districts, but these policies and practices embody a common set of hypotheses about how decentralized management and budgeting can increase the effectiveness and productivity of schools.

First, those people closest to students—parents, teachers, and school building administrators—are more knowledgeable about students' needs than staff in school district central offices, especially those of large urban school bureaucracies. School-based management and budgeting structures bring the perspectives of those closest to students to the decision-making process, leading to better decisions and decisions more focused on the interests of children.<sup>5</sup>

Second, increasing school-level control over budgeting, hiring, and curriculum will enable schools to tailor their programs to the unique needs of their students and their communities and provide the flexibility needed to target resources to appropriate programs and services.<sup>6</sup> To achieve this flexibility, schools should be given greater authority over the mix of professionals at the school site, expenditures on substitute teachers and utilities, the source of supplies and services (including professional development), and unspent appropriations (carry over).<sup>7</sup>

Third, shared decision-making empowers administrators, teachers, parents and other school constituents, increasing their willingness to make and support change.<sup>8</sup> The authors of Chicago's school reform pushed the concept of empowerment further, placing an

<sup>4.</sup> Allan Odden and Carolyn Busch, Financing Schools for High Performance: Strategies for School-Based Financing (San Francisco: Jossey Bass, 1998, forthcoming).

<sup>5.</sup> See, for example, G. Alfred Hess, Jr., *Restructuring Urban Schools: A Chicago Perspective* (New York: Teachers College Press, 1995); Wohlstetter, Mohrman and Robertson, "Successful School-Based Management."

<sup>6.</sup> See, for example, William H. Clune and Paula A. White, School-Based Management: Institutional Variation, Implementation and Issues for Further Research (Rep. No. RR-008) (New Brunswick, NJ: Rutgers University, Consortium for Policy Research in Education, September 1988); Hess, Restructuring Urban Schools.

<sup>7.</sup> Guilbert C. Hentchske, "Budgetary Theory and Reality: A Microview," in *Microlevel School Finance: Issues and Implications for Policy*, eds. David Monk and Julie Underwood (Cambridge, MA: Ballinger Publishing Company, 1988), 311-336; Priscilla Wohlstetter and Thomas Buffett, "Promoting School-Based Management: Are Dollars Decentralized Too?" in *Rethinking School Finance: An Agenda for the 1990's*, ed. Allan R. Odden (San Francisco: Jossey-Bass, 1992), 128-165.

<sup>8.</sup> Clune and White, School-Based Management; Helen F. Ladd, "Introduction," in Holding Schools Accountable: Performance-Based Reform in Education, ed. Helen F. Ladd (Washington, DC: The Brookings Institution, 1996), 1-22; Malen, Ogawa and Kranz, "What Do We Know About School-Based Management?; Wohlstetter, Mohrman and Robertson, "Successful School-Based Management."

Introduction 437

unparalleled level of control in the hands of parents and the community. The theory underlying this "democratic localism" is that expanded local participation will create a political force for improvement, leveraging and sustaining the organizational and instructional changes needed to raise student achievement.<sup>9</sup>

Fourth, successful implementation of school-based management and budgeting requires the dissemination and use of financial and strategic planning information, including data about school priorities and goals, student performance, revenues and costs, expenditures, and personnel. It is hypothesized that this dissemination will lead to meaningful involvement of the school community in children's education.<sup>10</sup>

Fifth, in making the current *intra-district* allocation of resources more transparent to the public, school-based budgeting and school-based financing will spark a debate regarding equity—between schools within districts, and between elementary, middle, and high schools.<sup>11</sup>

Most research studies on decentralized decision-making have focused on whether and how SBM has expanded the participation and power of members of the school community, and, in doing so, changed instruction and curriculum. We know much less about the design, implementation and impact of school-based budgeting *per se*. The research on school-based budgeting has looked primarily at the design of different approaches to school-based budgeting and the organizational and procedural changes within schools and school districts adopting these reforms. <sup>12</sup> We know little, however, about the *impact* of decentralized governance and finance struc-

<sup>9.</sup> Anthony S. Bryk, David Kerbow and Sharon Rollow, "Chicago School Reform," in *New Schools for a New Century*, eds. Diane Ravitch and Joseph P. Viteritti (New Haven, CT: Yale University Press, 1997), 164-200; Hess, *Restructuring Urban Schools*.

<sup>10.</sup> Priscilla Wohlstetter and Amy Van Kirk, "Redefining School-Based Budgeting for High-Involvement," in *Where Does the Money Go?: Resource Allocation in Elementary and Secondary Schools*, eds. Lawrence O. Picus and James L. Wattenbarger (Thousand Oaks, CA: Corwin Press, 1996), 212-235. Schools also need to receive and disseminate information on budgeting and resource allocation techniques, and processes for ongoing monitoring of the school budget. Participants in school-based budgeting activities also need technical training to build managerial knowledge (such as training in fiscal accounting) and process training to develop skills in working in groups.

<sup>11.</sup> Odden and Busch, Financing Schools for High Performance, Chapter 9.

<sup>12.</sup> See, for example, Clune and White, School-Based Management; General Accounting Office, School-based Management Results in Changes in Instruction and Budgeting (Washington, DC: Government Printing Office, August 1994); Wohlstetter and Buffett, "Promoting School-Based Management: Are Dollars Decentralized Too?;" Wohlstetter and Van Kirk, "Redefining School-Based Budgeting for High-Involvement."

tures on the allocation of resources to and within schools, the knowledge and participation of members of the school community in budget decisions, the interaction of resource allocation and educational programming decisions at the school level, and the equity of intra-district resource allocations, especially in our country's large urban school systems.

This special issue of the *Journal of Education Finance* reports the findings of a study that was designed to address these gaps. Using a common research methodology and a common set of research questions, the authors of the articles included in this volume collected and analyzed data on school-based budgeting in four cities—Chicago, Fort Worth, New York, and Rochester. The next section of the Introduction identifies the major research questions, presents the rationale for the study sites, and describes the study methodology. The third and fourth sections explain the organization of the articles, summarize the major findings of the study, and discuss the implications of these findings for the design of school-based budgeting systems.

#### OVERVIEW OF THE STUDY

#### Major Research Questions

The major research questions in this study are designed to test the validity of the underlying hypotheses about school-based budgeting in large urban school districts. Questions addressed are:

- How equitable is the allocation of resources across schools within a district?
- How much and what kinds of budgetary and personnel discretion do schools have under school-based budgeting?
- What do schools spend their discretionary resources on?
- Who participates in making budget decisions and how?
- Do school members have access to school-level budget data in order to participate in shared decision-making?

The articles in this volume answer these questions in differing degrees of detail for each of the four cities. (See Organization of the Volume below.)

REASONS FOR CHOOSING FOUR CENTRAL CITIES FOR THIS STUDY

Educating children in US central cities is extraordinarily challenging. Compared to most other places of residence, our central cities are home to very large numbers of children who are poor, who are first generation immigrants from non-English speaking countries, and who are from families headed by single parents. In addition, most central city school districts have more students and more schools than school districts located elsewhere. All of these factors make the search for effective education strategies in central cities urgent and difficult. In districts where diversity of needs is wide, it is unlikely that one education path will be right for all. In districts where there are hundreds of schools, effective management strategies will be more difficult than in those where there are four or five schools. Because the task is so large in central cities and because school-site budgeting and management in theory address so many of the large city concerns, it seemed important to the researchers in this study to focus on central cities.

The four cities we chose to study had all implemented some degree of school-based budgeting in at least some of their schools at the time of this study. Chicago and Fort Worth had made a commitment to the process in all schools, Rochester in a set of nine pilot schools, and New York City in some of its community school districts and some of its high schools. All of these cities have the characteristics of central cities described above. The number of schools ranged from 50 in Rochester to over 1,000 in New York City, the number of students from over 34,000 in Rochester to over 960,000 in New York City. Poverty rates among school children were high (ranging from 53 percent in Fort Worth to 85 percent in Chicago) as were the percentages of students with limited English proficiency (over 15 percent in all cities). Achievement levels as traditionally measured were on average low (for example, a 64 percent four-year graduation rate in Chicago, or a 19 percent pass rate on Regent's Examinations in New York City). To the extent that increased autonomy and accountability could be a successful strategy in such districts, policy makers and researchers may have uncovered a relatively low cost intervention for improving the performance of large numbers of schools serving some of the most atrisk students in America.

#### STUDY METHODOLOGY

Three methods were common to all the studies conducted in all four cities, although to conserve on space, only results from selected methods are reported for each city in this special issue. First, building-level data were obtained for all schools in each district on budgets or expenditures, and were joined with data on student

demographic characteristics and on some outputs (mostly test scores). These quantitative data bases were used to assess intra-district input equity for all cities.<sup>13</sup>

Second, a self-administered survey was distributed to individuals in 30 schools in each district. The sample of schools was not random. Rather, the schools in each district were selected to represent elementary, middle, and high schools, both high and low achieving schools as measured by test scores of students, different racial/ethnic mixes of students, and different locations in the city. The subset of schools that met our criteria and that we sampled were chosen in cooperation with central district business managers or superintendents.

Within the schools, approximately 30 members of the school community were chosen to receive the survey. The 30 school members included the principal and other school administrators, teachers, support staff, and parents. Where possible, individuals who were most likely to have some knowledge of budgeting in the school were surveyed. The specific individuals surveyed were chosen either by the district or sub-district business managers or superintendents, or school principals. Individuals were sent a postcard that introduced the researchers and the study and stated that the district superintendent or business manager had approved the study. The survey was then sent by mail to the individuals and returned directly to the researchers in a pre-addressed, stamped envelope. A second postcard reminded survey recipients to return the instrument. A second survey was sent to non-respondents, again with a pre-addressed, stamped envelope.

The survey itself was a 15 page instrument.<sup>14</sup> It raised a number of issues relating to the school and school-level budgeting, including: respondents' background; respondents' knowledge about the budget, school goals, and their development; constraints limiting school budget choices; the relative power and influence of individuals and groups internal and external to the school; respondents' willingness to participate in school budgeting activities; possible school-level responses to budget cuts; and respondents' satisfaction with their schools.

An initial pilot survey instrument was constructed through con-

<sup>13.</sup> Output data were not rich enough to permit either output equity assessments or efficiency analyses of the relationship of inputs to outputs.

<sup>14.</sup> Most of this paragraph and the next one are taken from Ross Rubenstein, "School-Level Budgeting and Resource Allocation in the Chicago Public Schools: Processes and Results" (Ph.D. diss., Robert F. Wagner Graduate School of Public Service, New York University, 1997), 128-129.

Introduction 441

sultation among members of the research team and tested in a pilot district in upstate New York. Respondents in the pilot district were asked to respond to the survey and also to comment on the survey instrument. After receiving feedback from the pilot district, the survey was revised to reflect input from respondents. A general survey form was finalized for use in the four cities. For each city, specific wording and questions were revised slightly to reflect each districts' structure and terminology.

In all four cities a total of 1,899 responses were received. (The response rate from all recipients ranged from 41 percent in Chicago to 62 percent in New York City.)<sup>15</sup> This number of responses represents more data about the current perceptions of school members about school-based budgeting in American cities than is presently available from any other source. The surveys were used to study decision making processes in the four cities.

Third, in-person interviews were conducted with six to ten school members in each of 10 schools in each district. Once again the selection of schools and interviewees was purposeful. The 10 schools were chosen from the 30 surveyed and included elementary and high schools, as well as low and high achieving schools (as measured by student test scores). Interviewees represented people likely to know about budgeting and included administrators, teachers, staff, and parents. The individuals were selected by principals. Interviews were conducted in a private space and were tape recorded if the interviewee agreed. A protocol, similar across all cities, was used in the interviews. The protocol asked specific questions as well as more open-ended follow-up questions. More than 200 interviews were completed across all four cities. The interview data supplemented the survey data in the study of decision making in the schools.

The strengths of the methodology are perhaps obvious. These include: the availability of population data on school-level budgets or expenditures, demographic characteristics, and test scores; the large numbers and percentages of responses to self-administered surveys; and the follow up data to the surveys from qualitative interviews. We were able to study school-level budgeting from multiple perspectives and to use several methods to check our results.

<sup>15.</sup> Ranges in response rates for specific groups of respondents were as follows: administrators (54% to 76%); teachers (45% to 60%); guidance counselors (35% to 63%); non-professionals (41% to 61%); parents (30% to 70%); and other in Chicago only (37%). The highest response rates were in New York City or Rochester. Specific response rates in each city are reported in the papers in this special issue that report the city findings.

There were also limitations to the study. For example, none of the districts was doing full-scale school-based budgeting in the sense of allowing their schools to have decision making power over the majority of their budgets. Further, the quantitative data were inadequate with respect to performance measures, resulting in our inability to measure output equity, efficiency, or productivity. Finally, the sample of schools, although large, was not random and neither was the choice of personnel to interview. Especially with respect to personnel, we learned from people most likely to know about budgeting. Keeping these limitations in mind will help the reader interpret the results of the study reported in the articles in this special issue.

#### ORGANIZATION OF THE VOLUME

The first two articles in this volume examine intra-district input equity. Stiefel, Rubenstein, and Berne review existing studies of intra-district resource allocation, propose a conceptual framework for studying intra-district equity, and summarize the results of the school-level equity analyses conducted in the four cities. Chicago had the best school-level quantitative data at the time of this study, allowing Rubenstein to conduct detailed analyses of within-district equity.

The remaining four articles look at school-based budgeting processes in the four cities. Goertz and Hess briefly review the literature on school-based budgeting, identify patterns across the four cities in budgetary discretion, discuss participation and influence in decision making, and examine the interaction of autonomy and accountability in Chicago. In the articles that follow, Moser (Rochester), Peternick and Sherman (Fort Worth), and Iatarola and Stiefel (New York City) analyze the survey and interview data in the specific contexts of the kind of school-level autonomy available in these cities. For example, Moser compares processes and opinions in schools that did and did not participate in Rochester's pilot school-based budgeting project. Iatarola and Stiefel contrast practices and perceptions in high and low performing schools in New York City.

## Major Findings Useful to State and Local Policy Makers

As explained above, the study's results are reported in two parts—one on intra-district equity of resource allocations and the other on decision making processes. We remain with this division as we summarize major findings. The findings we choose to high-

light here are ones we believe are most useful for policy makers who are implementing school-based budgeting as a resource allocation and governance solution to urban education problems. Some of the results more useful to researchers are contained in the individual articles themselves.

#### **EQUITY OF INTRA-DISTRICT RESOURCE ALLOCATION**

There are six conclusions relevant to equity of resource allocation in districts that have, or are planning to pursue, school-based budgeting. First is the need to make sure that there are data on dollars, positions, outcomes, and demographics *integrated into one data base*. Without this integration, only dedicated researchers will be able to ferret out results and then only with a considerable lag in time. The public surely will be interested in the fairness of the distribution of resources once some real control is given to the community over budgeting, but they will want the information close to the end of the fiscal year not several years later.

Second, value judgments or community norms about what is fair and why will need to be developed as statistics are produced. The analytic/research community has far less experience with intradistrict equity studies than with inter-district ones. For example, while some researchers have come to accept that coefficients of variation in the range of 0.10 to 0.15 for non-compensatory dollars are in the equitable range for inter-district horizontal equity within a state, it is not clear that such a conclusion would hold intra-district.

Third, the whole concept of horizontal equity, especially how and when it should apply, will likely be debated once statistics are available. An example of one important issue is whether there is a "base" or "general education" amount of funds that should be available to all students equally. If a community is more focused on vertical equity than horizontal equity, that community might expect to see per pupil base funds (or positions) positively correlated with poverty. In New York City in 1992-93, this occurred at the middle school level. Would the community have said that this was not right because it produced some horizontal inequity? We do not know.

Fourth, vertical equity issues will also need to be reconsidered. The general concept of vertical equity is that pupils who are unequal should receive unequal amounts, or translated to the education setting, that pupils more in need should receive more

<sup>16.</sup> Specific findings about input equity in the four cities in the years studied are reported in Stiefel, Rubenstein, and Berne, this volume, and are not repeated here.

resources. The idea of "more in need" usually implies need with respect to performance. In that latter sense, vertical equity is highly related to output equity, since for both concepts one would want to know how much more in resources is needed in order to achieve a given level of performance. People in a district may have to become quite a bit more specific than most researchers have been about the relationships between different kinds of need and performance in order to judge whether the magnitudes of vertical equity relationships, measured statistically, are adequate. At present, most analysts look to see if the sign of the relationship is positive (more per pupil resources with more per pupil need), but leave the magnitudes unanalyzed.

Fifth, a vertical equity issue that will surely surface in intra-district analyses is the probable contrast between distributions of per pupil positions versus per pupil dollars. The first (per pupil positions) may be correlated positively with poverty of pupils, and the latter (per pupil dollars) may be correlated negatively. This is because per pupil positions, including compensatory education positions, are often higher in schools with students who are poor, while per pupil teacher salaries (the largest portion of per pupil dollars) are often lower in schools with students who are poor. As long as allocation formulas to schools are based on positions and not dollars, as is true in most unionized cities and many others as well, this contrasting situation is likely to continue. How the community judges the fairness of these distributions will become more clear once regular equity studies showing quantitative effects are available.

Finally, issues surrounding race, ethnicity, and location, which we have labeled equal opportunity relationships, will become more stark with more publicity on intra-district equity. While race, ethnicity, and location are not variables associated directly with educational need, they are political variables that many people think about when assessing equal opportunity. Surely most people would find intra-district allocations that favored non-minorities or richer parts of a central city unfair. These kinds of relationships, if they exist, will show up in intra-district equity studies.

#### SCHOOL-BASED BUDGETING PROCESSES

Several of the major research questions for this study focused on who makes what kinds of resource allocation decisions and how. Looking across the four cities, we highlight five findings.

First, as currently structured in Chicago, Fort Worth, New York,

Introduction 445

and Rochester, school-based budgeting takes place at the margins. The amount of discretion that schools have over their budgets is limited by district budgetary and/or personnel allocation guidelines. Truly discretionary funds are generally limited to less than 20 percent of their resources, and schools are limited in their ability to choose the mix of staff they need to meet school goals by collective bargaining agreements and/or district policy.<sup>17</sup> Members of the school community feel that other external factors, such as regulations attached to categorical programs (e.g., special education and Title I), further restrict their flexibility, although principals of schools with Title I school-wide programs were pleased with their increased flexibility in the use of these dollars.

Second, school-based budgeting did not appear to provide an impetus for schools to do business differently. Schools used whatever budgetary flexibility they had in traditional ways: reducing class size; expanding pre-school and/or social services; enriching literacy, art, and/or music programs; and/or purchasing professional development and materials in support of new curricular programs. The schools we visited were not engaged in a major restructuring of their schools or academic programs. When schools did want to restructure programs or positions, few sought waivers that might allow them to do so. These behaviors may reflect the external constraints under which they operate, a lack of knowledge of more comprehensive reform approaches, the organizational culture of the district, and/or views about what is really effective.

Third, regardless of the structure, composition and relative authority of the SBM committees and their constituent members, respondents in all four districts feel that the principal has considerable power in deciding how money is spent in their schools. Teachers, parents, and community representatives in schools where they have a formal role in budgeting decisions do not view themselves as much more influential than their counterparts who have less authority. Therefore, if policy makers want to strengthen the role of teachers and parents, they must do more than create formal structures for their involvement.

Fourth, one possible explanation for teachers' and parents' reports of limited influence is that they have limited access to information on or knowledge about school budgeting. They were unable to answer basic questions about the budget development process, or

<sup>17.</sup> Wohlstetter and Buffett found the same constraints in their earlier study of school-based budgeting in five cities (one of which overlaps this study). See Wohlstetter and Buffett, "Promoting School-Based Management: Are Dollars Decentralized Too?"

about the role of external influences, such as state and federal programs and mandates, on how money is spent at the school. True shared decision-making, however, will require all parties to have equal access to information required to make school budget decisions and training in how to use budget, personnel, program, and student performance data.

Fifth, as policy makers devolve more dollars and budgetary powers to the school site, they must consider who is ultimately responsible and how for the fiscal and academic performance of schools. Many school personnel in our study felt constrained by the strings attached to budget allocations and categorical programs, but fiscal and programmatic regulations are often designed to protect taxpayers from fiscal mismanagement and insure that students with special needs receive the services to which they are entitled. Similarly, increased school-level authority over programs and budgets is viewed as a critical condition for improving student achievement, but what happens if schools fail to improve? In a growing number of states and schools districts, including Texas and Chicago, the state and/or district can impose sanctions on low-performing schools, such as firing principals and reassigning teachers. What are the implications of these actions for school-based decision making? As districts decentralize and deregulate, how do they insure that schools are meeting the needs of students and taxpayers?

#### Conclusion

The research on which the articles in this issue are based took place over a four year period. School-based budgeting continues to be a major reform strategy, and we hope that the results reported here will be informative and helpful to those researching and implementing SBB. As policy makers, educators, and policy analysts design new SBB systems and modify existing ones, we urge them to consider the issues of equity, participation, power, and accountability raised in the following pages.