Urban districts across the country are at a crossroads. They face still another year of cuts in federal, state and local revenue along with new teacher evaluation systems and the implementation of Common Core standards. Meanwhile, expectations for student performance are higher. Many districts — like Milwaukee Public Schools — are experiencing declining enrollment and competition from charters and other schools. In response to lower levels of funding, districts typically cut central office services, freeze wages and require staff to take furlough days. Doing less with less, however, is unlikely to bring about the transformation necessary to dramatically improve student outcomes.

Education Resource Strategies works with large urban school districts to help identify the resource reallocations necessary to create high-performing schools at scale. We’ve seen the bright spots firsthand — in school districts like Baltimore City, Charlotte and Denver — where district leaders are breaking away from traditional cost structures and working to align their use of talent, time and technology with a transformed vision for the future. Through this work, we’ve developed a framework that describes Seven Strategies for District Transformation. These strategies can free districts from unproductive resource use and enable investment in higher-performing designs for schools and systems.

SPARE SOME CHANGE: Smarter District Resource Use for Transformational Schools

BY JONATHAN TRAVERS, GENEVIEVE GREEN AND KAREN HAWLEY MILES
This chapter explores the school funding system — how the district allocates resources to schools as one of the most immediately impactful strategies for districts like Milwaukee Public Schools. We identify the characteristics of an effective funding system and the critical design features that help ensure that MPS’ funding strategy — alongside other transformational strategies — supports high performance across all schools. We also offer insight into the most important policy and funding barriers that state and other nondistrict stakeholders will need to address for districts like MPS to successfully transform.

SCHOOL FUNDING SYSTEMS
Urban school districts should employ school funding systems — mechanisms, policies and processes that allocate dollars and staffing resources to schools — that are guided by three core principles: equity, flexibility and transparency. Most school districts allocate schools specific staff positions based on the number of students they have. But, in times when school organizations are changing rapidly with the introduction of new ways of grouping students or technology and where school designs vary widely across schools, systems that allocate staff become tricky to administer and compare.

EDITOR’S NOTE
The phrase “follow the money” was first made popular in All The President’s Men when the Nixon administration contact known as “Deep Throat” guided reporters Woodward and Bernstein to learn the facts by simply analyzing the flow of funds.

At a time when urban school systems across the country and especially MPS are facing the double challenge of declining funds and increased expectations, the authors suggest school systems must also analyze their flow of money – the costs and allocation. By doing that, they suggest a hard look at the flow with some adjustments can have a significant impact on the system’s reach and improvement.

The system in place for MPS offers great transparency and flexibility, which is a plus. The majority of money goes to benefits for teachers. MPS currently allocates $620 million or 48% of its total budget of $1.28 billion on teachers, which is near the national average.

But in order to attract and retain high performing teachers and improve student performance, the following steps are suggested:

Reduce the number of small, low-performing schools through closure and consolidation.

Get accurate information on teaching effectiveness and use that to determine retirement incentives for ineffective teachers. The reallocation of as little as 0.2% of the budget would provide bonuses of $10,000 to attract the best teachers.

In the past, special education was considered a sacred cow for fear of law suits and costly penalties. But with MPS spending $189.4 million or 27% of its budget, this is an area that is ripe for overhaul. That should be done wisely, but without fear.

Class size – especially in non-core areas can be altered by just 4 students which would free up .8 percent of the budget. Strict size requirements force the district to spend valuable dollars for more teachers and aides, often with no benefit on effectiveness or allowing students access to high performing teachers.

By looking at the balance sheets, understanding the numbers, which is not that difficult, and combining them with data on performance of schools, teachers and students, there can be tremendous leverage in improvement. And this is critical when all school systems, including MPS, are being forced to do more with less.
Weighted Student Funding (WSF), the system Milwaukee uses, can help enable equity, flexibility and transparency. But whether WSF accomplishes these goals depends on how it’s implemented.

Equitable school funding systems ensure that students who have greater needs, such as those who are English Language Learners or those who require special education services, get more resources to match the cost of extra support (known as “vertical equity”) and that students with similar needs receive similar levels of resources regardless of what school they attend (known as “horizontal equity”).

Funding systems that allocate staff positions based on one-size-fits-all staffing ratios (1 counselor per 550 students) applied across diverse school portfolios typically do not account for differentiated levels of student need. In addition, models that allocate the same position sets (i.e., a principal, assistant principal, instructional coach, school social worker and secretary) across all schools typically end up spending more — sometimes significantly more — per pupil in their smallest schools. Similarly, districts that hold large portions of school resources centrally and allocate them based on the preferences and objectives of individual departments (i.e., the Department of Teaching and Learning budgeting and deploying the district’s instructional coaches) can also have difficulty ensuring schools’ total allocations are commensurate to need.

As a district using WSF, MPS allocates dollars on a per-pupil basis rather than positions, and utilizes higher weights for students with higher levels of need. Choices about which students get weighted how much should reflect the district’s beliefs about which student characteristics require additional resources for students to meet desired outcomes.

While these typically include ELL, special education and free/reduced lunch status, they can also include school-level weightings if the district believes the outcomes desired at different school grade levels require different resource investment levels. Publicly available MPS’ FY13 budget documents indicate that, for example, MPS weights high school students at 1.17, which equates to an additional $666 per pupil to reflect MPS’ intention of pushing additional resources to high school students. While different types of funding systems can lead to equitable distribution of resources, WSF typically offers districts a clear pathway to achieving greater funding equity across many different types of schools.

Equal dollars do not necessarily translate to equal resources. The unequal distribution of effective teachers across the district and the historical neglect of infrastructure in certain schools cause inequities to persist in spite of fair funding weights. Furthermore, getting the financial resource levels “right” across schools and students does limited good unless those schools have the ability to use them based on
their unique needs and instructional models. Therefore, strategic funding systems also seek to be flexible — to give school leaders the authority to match allocated funding to specific school needs. This means ensuring school leaders have the ability to reallocate spending when necessary, make scheduling changes, swap staff positions, and hire teachers and other staff who best fit the school.

Tailoring to specific needs is particularly important when a district’s schools vary widely in size and student characteristics, and when a district seeks to foster innovative ways of organizing resources. Traditional, ratio-based funding systems can try to achieve this by offering principals the ability to “swap” positions or to convert them to dollars to fund non-personnel resources.

WSF systems — by giving schools dollars rather than positions — appear to offer greater flexibility to schools to design staffing configurations and budgets that match their specific needs. However, as we’ve seen in our work across the country, policies that mandate specific resource models (e.g., Florida’s K-3 class size max of 18) can severely limit the true flexibility schools ultimately experience. (For more on innovation and barriers to achieving it, see Horn and Evans, this volume).

Finally, strategic funding systems are transparent. Stakeholders know how much each school receives and understand the basis for the allocation. This means ensuring that funding can be traced to the level of individual schools and that clearly documented procedures on central and school-level budgeting exist. ERS has found that districts with less than 70 percent of total budgets reported at the school level often fail to provide the transparency needed to determine whether resources are used effectively. This can foster mistrust among stakeholders, make it hard to assess true equity and flexibility, and hinder leadership’s ability to make informed resource allocation choices across the system.

Although WSF can be a good approach for increasing equity, flexibility, and transparency in a school district, four critical design factors influence its success. MPS, like other urban districts that employ this funding strategy, should consider the following four questions:

• How differentiated are the weights assigned to specific student populations, and do different weights reflect students’ relative needs? Within the weight assigned to students with special needs, students who require more intensive services should receive a larger allocation than those who do not. Additional student populations should also receive differentiated weights, particularly incoming students in general education at the secondary levels who are at least two grade levels behind.

Sufficiently differentiating student weights will increase the likelihood that a district’s...
weighted student funding formula reinforces equitable resource use. In Baltimore City, district leaders implemented a WSF system that deliberately over-weighted its special education inclusion model relative to self-contained as a means of incentivizing schools to shift to less restrictive environments.4

- **What percentage of the district’s total budget runs through the funding formula?** Weights that impact per-pupil allocation only influence dollars that are run through the relevant formula. It’s reasonable to expect some funding to remain unweighted if it includes expenses that are unrelated to individual student need.

When a significant amount of funding operates outside the formula, however, inequities typically continue to persist, and the system as a whole becomes less transparent.

Several WSF systems allocate special education resources outside the formula. While these systems may be able to more tightly manage special education staffing levels, they risk distributing these resources evenly across schools and limiting schools’ ability to coherently align general and special education resources to meet overall school needs. Systems should periodically review resources held outside the model and assess their impact on equity, flexibility and transparency.

MPS currently allocates $691 million or 73 percent of its total $1.17 billion budget, $946.6 million of which is operations, to school-level allocation based on its WSF.5 This represents transparent resource use but may or may not allow for flexibility at the school level, depending on how tightly the district maintains control over how these resources are deployed.

- **Do significant restrictions on the uses of per-pupil funding allocations exist?** As argued above, if mandates require that schools spend a certain amount of their allocated per-pupil funding on specific staff positions or service models, school leaders are unable to exercise the type of flexibility that weighted student funding intends. Restrictions typically come from state and federal grant funding-use requirements (as in the case of Florida’s class size amendment and revenue stream), collective bargaining provisions (typically around teacher load, release time and class sizes) and within-district policy.

School districts should consider what types of funding restrictions they have in place and how existing restrictions limit the school-level flexibility needed to reallocate dollars where they are most needed. This is most challenging for districts with low overall funding levels and a high degree of restriction coming from collective bargaining agreements and state law.

- **Does the district have a lot of small schools that struggle to make efficient use of per-pupil dollars?** Small schools tend to have higher fixed costs and therefore have fewer

“MPS and other districts relying on weighted student funding systems, particularly those with a high percentage of small schools, face unique struggles in the face of declining revenue.”
resources left to implement school designs to match their needs. At the elementary level, for example, size-driven costs increase rapidly on a per student basis as enrollment falls below 350.

Examples of these costs include schools’ front office staffing (all schools need a full-time principal and secretary, for example). They also include extra homeroom teachers that are needed to comply with class size maximums (a school with 30 fourth-graders and a class size max of 28 requires two fourth-grade teachers and will operate with a higher cost per student than a larger school that can staff classrooms closer to the class size max) as well as special education resource teacher positions (in Duval County, Fla., elementary schools were allocated resource teachers for K-2 and 3-5 no matter how few students with special needs were in the school).

Districts that are experiencing enrollment declines or that operate older facilities that were designed to serve smaller numbers of students face a difficult choice over how to cost-effectively provide the best education to the greatest number of students: allow small schools to continue to use a large share of resources in nonstrategic ways or take on politically challenging closures or merges and require students to attend schools further from their homes.

- How much do teacher compensation and quality vary across schools? Most districts that implement WSF use average salary as a means of charging schools for the teachers they employ. This means that regardless of whether a teacher actually makes $40,000 or $70,000, she costs the school the same amount. If teacher compensation varies greatly across schools due to differences in length of service, the practice of charging average salaries as part of the funding formula will actually drive up inequitable spending.

In addition, weighted student funding does not address variation in teacher quality across schools. Additional measures would be needed to address this particular type inequity, including the use of incentives (see below and also see Nair, this volume).

MPS and other districts relying on weighted student funding systems, particularly those with a high percentage of small schools, face unique struggles in the face of declining revenue. They must balance the need to give school leaders adequate flexibility, as WSF intends, and also ensure that all schools remain financially viable and offer a minimum level of services to students.6

In the end, districts like Milwaukee may use the transparency provided through WSF to demonstrate that schools below a certain size threshold aren’t viable without significant subsidy. They can then frame discussions about school closure to be about a quality level of service to all students and not just about saving money.7 Finally, fully addressing the need for equity in districts like MPS requires that funding levels between it and competing education providers are suitably adjusted for differences in the characteristics and needs of the students served by each. It should also take into account the district’s status as the provider of last resort.

Allocating resources to schools equitably, flexibly and transparently is critical to ensur-
ing that systems are making the most of the resources they have, but doing so does not ensure that schools use their allocations productively. The three most significant opportunities for districts to maximize the effective use of resources are within the areas of teacher compensation, school design and special education.

**TEACHER COMPENSATION**

Teacher compensation plays a significant role in shaping a district’s funding strategy and human capital management system: Teacher salaries and benefits now typically account for between 45 and 50 percent of a district’s annual costs. MPS is near the national average. According to data from the Wisconsin Department of Public Instruction, the district spends 48% of its total budget ($620 million out of $1.28 billion) on salaries and benefits for current teachers.

Between 1970 and 2005, overall spending — adjusted for inflation — essentially doubled from $3,800 to $8,700 per pupil nationwide. Eighty percent of the increase in per-pupil spending has gone toward creating additional staff positions and covering the higher cost of benefits. Adjusted for inflation, teachers’ salaries remained essentially flat between 1990 and 2010. The majority of districts’ compensation systems are still rooted in structures that have remained unchanged since the 1970s, and continue to build in automatic salary increases that are unrelated to teacher results or contribution. Compensation structures shape the fiscal sustainability of the district’s budget and have a significant impact on who enters and remains in the district — and, more broadly, in the teaching profession.

Individual systems (Baltimore City, D.C. Public Schools, New Haven, Conn.) across the country are beginning to evolve their compensation systems to better reflect their strategic objectives: to attract and retain high-performers, to leverage highest-performers for continuous improvement, and to create teacher teams and assignments to match school and district performance objectives. These systems are beginning to drive toward a value proposition that recognizes the complexity inherent in teaching and offers advancement opportunities that leverage a teacher’s skill set in support of a district’s goals and priorities.

Typical urban school districts, however, continue to compensate teachers primarily for longevity and the accumulation of education credits — neither of which is strongly linked to performance or contribution. ERS’ analysis of 10 urban school districts found that payments for length of service and education credits typically account for more than 80 percent of a teacher’s potential career salary increase, while only 10 percent is based on strong job performance or taking on increased responsibility. This disconnect compromises a district’s ability to attract and retain top tal-
ent and locks a large percentage of funding into expenditures that are not aligned with its instructional mission.

Urban districts seeking to reform their systems must carry out specific analyses in order to thoughtfully reform their compensation systems.

- **How effectively is it measuring teacher effectiveness?** How is effectiveness distributed across the workforce? New compensation systems must be grounded in accurate data on individual effectiveness and contribution. If the system is unable to identify its high-performers, then the chances of designing a compensation system to retain or leverage them seems remote. In the absence of a valid measurement system, major compensation changes can be designed, but should not be implemented.

- **How much is it spending on education credits and longevity payments?** How are these dollars distributed across the current workforce? This type of analysis will help the district understand which types of teachers receive a disproportionate amount of compensation via mechanisms that are not aligned with teaching effectiveness and will shed light on the best reform approach.

Understanding the nature of this distribution will provide insight on how to best transition from the current compensation system toward a new system based on performance, responsibility and contribution.

The concentration of a small number of teachers at the high end of the salary schedule, for example, opens up more possibilities for targeted and aggressive reform such as early retirement incentives. In contrast, the compression of a larger share of the teacher workforce at the top step will make redefining the salary schedule more difficult because funding the new system will require either significant reinvestment or a reduction in salary. Unless alternative incentives are made available, it will be difficult to retain high-performing teachers on reduced salaries.

- **How does compensation currently fit into a broader teacher value proposition?**

Compensation is just one piece of a broader set of incentives upon which teachers make career choices. Working conditions, career and growth opportunities, and benefits also play a role. A compensation strategy must take these factors into account. A district with a high degree of variation in principal effectiveness and school working conditions may want to invest more in differentiating compensation levels across schools than a more homogeneous district, for example.

Districts like MPS must be cognizant of aspects of the value proposition such as job security and benefits that are beyond their direct control. If states or municipalities are reducing benefits and job security for public sector workers more broadly, the district
must adapt its compensation design accordingly.

- What, then, are the best investments for a district to make in order to meet the compensation objectives described above and achieve its instructional mission? In a typical district, a reallocation of only 0.2 percent from the operating budget’s spending on steps and lanes could free the money needed to provide $10,000 stipends to incentivize the district’s best teachers to teach in the high-need schools, for example. Careful examination of current data will allow MPS to decide on the path of least resistance toward a more effective teacher compensation model.

As with other core aspects of school system reform, incremental change is unlikely to achieve widespread impact. Full redesign of the value proposition will be necessary in order for district like MPS to attract, retain and leverage an excellent teacher workforce over the long term. (For a longer discussion on human capital management, see Nair, this volume.)

**SCHOOL DESIGN**

School design addresses how schools can organize their resource allocations based on their instructional models and specific school needs in the most cost-effective way possible. Three important determinants of student outcomes are relevant to school design — teaching effectiveness, the amount and nature of individual attention that students receive, and how instructional time is utilized. Strategic improvements in how time and staff are utilized offer districts like MPS opportunities to achieve significant cost savings and create better learning environments for students in the process. (For a complete discussion and proposed strategies, see Horn and Evans, this volume).

In studying school-level resource use, we’ve identified several common misalignments that can be redirected to improve efficiency.

- **Uniform class sizes.** Although class-size mandates historically intended greater individual attention for students, these restrictions often prevent principals from staffing teachers according to student need. Strict class size requirements force a district to spend money on a greater number of teachers or aides, ignore the district’s distribution of teaching effectiveness and limit the number of students who access high-performing teachers.

Districts that are already down a path of accurately evaluating teacher effectiveness can use an incremental increase in class size as means of improving overall teaching effectiveness through performance-based layoffs. ERS estimates that a typical urban district could free close to 2 percent of its total operating budget by increasing average class size in grades 4-12 by only two students. If this increase occurs in the context of strategic
school design changes, a greater number of students could receive targeted intervention at a lower overall cost to the district.

- **Low class sizes in non-core and advanced areas.** Most districts we study invest in two-to-four-student-smaller classes in non-core and electives than in core subjects, despite a strategic focus on English and math. This misalignment results from an effort to offer a full breadth of course offerings to maximize student choice and engagement, combined with conventional course structures.

In a typical district, increasing secondary non-core class sizes by four students would free up 0.8 percent of the district’s total budget. Pooling elementary classes across special subjects at the elementary level, shifting some non-core classes to be single semester and making their teachers itinerant over multiple schools at the middle school level and exploring nontraditional course offerings (virtual, university/other partnerships) for high schools are examples of cost-reduction techniques for non-core classes that preserve breadth of offering.

In order for MPS and similar urban districts to organize resources in schools effectively — in ways that focus on performance goals and student needs and maximize return on investment, they must rethink the traditional uses of time and staff that hinder student progress. Overall, truly strategic school designs demand more than incremental change around the edges of existing systems. Efforts to improve teaching effectiveness, individual attention and instructional time must be coordinated to build new structures — strategic school designs — that maximize resources and leverage the full potential of the school day.

**SPECIAL EDUCATION**

The final area of school-based spending where we see substantial misalignment is in special education. District leaders often treat special education spending as a black box: They are unclear on how it connects to service delivery and wary of realigning resources without triggering compliance violations, costly penalties or even lawsuits. Ironically, it can be the system’s response to regulations and restrictions that compromises the effectiveness of services to the students they intend to protect.

In many systems, reallocating resources away from cost-inefficient practices can enable districts to curtail annual special education spending increases and instead reinvest spending toward improving outcomes for students with disabilities. With spending of $189.4 million on special education, MPS’s investment of 27 percent of its operating budget on special education is significantly higher than other urban districts we’ve studied. Given the magnitude of special education spending, it warrants close scrutiny. We commonly find two areas of inefficiency:
• **Overclassification.** Districts often place an unnecessarily high number of students in special education when general education would be more appropriate. Lack of consistent or high-quality academic interventions for struggling students results in costly special education referrals that could have been avoided. In one district we worked with, identification rates for African-American boys in the middle grades were several times the rates of other students. In other districts, state or district funding policies have provided perverse incentives for schools to over-classify students, such as the maintenance of specific staff positions that are directly dependent on the share of classified students.

Classification as special education does not by itself provide the basic instructional elements that students need to be successful — including access to an effective teacher, high expectations and a rigorous curriculum. Effective and timely instructional differentiation strategies, such as Response to Intervention (RTI), make it easier for teachers to assess and respond to individual student progress and help reduce the incidence of inappropriate referrals.

It should be noted that urban districts with large student populations enrolled in private and charter schools often have above-average classification rates — as district schools typically serve a disproportionate share of special education students relative to other school types. Given the estimate by the School Choice Demonstration Project of the University of Arkansas that somewhere between 7.5 percent and 14.6 percent of Milwaukee voucher pupils are classified as having special needs, this may in fact be contributing to Milwaukee’s classification rate of almost 20 percent (relative to a national average of 13.2 percent).

• **Low “fill rates.”** Overstaffing is an additional source of inefficiency in special education. Although students with specific types of disabilities often require smaller class sizes, the number of teachers and teaching assistants who staff special education classrooms tends to be higher than the minimum number required by the district or the state. This difference is called the “fill rate” — the minimum number of staff required by staffing ratios divided by the actual number of staff in classrooms.

Some urban districts have fill rates as low as 50 percent, meaning they have staffed double the number of teachers and/or TAs that their own guidelines require.

Where districts accurately evaluate teacher effectiveness and have the ability to reduce staffing based on performance, increasing fill rates of special education programs can significantly increase the share of special education students who are taught by effective
teachers and reduce costs.\textsuperscript{29} Districts with large numbers of small schools, significantly enrollment decline (or significant redistribution of enrollment across schools), or with policies that strongly promote high-needs special education students being served in their neighborhood school are more likely to have lower fill rates.

Ultimately, the objective of special education is to improve educational outcomes for children with exceptional needs. In order to meet this objective, districts will need to reconsider when and how to spend scarce funding. For example, through capturing increased efficiency on fill rates and bringing special education class sizes from 65 percent to 75 percent, a typical district will save 1.2 percent of its budget. In a district the size of MPS, this would amount to $11.4 million.\textsuperscript{30} This funding could be directed to preventative measures such as the expansion of Pre-K and the implementation of a Response to Intervention program.\textsuperscript{31}

CONCLUSION
Urban systems across the country are facing the double challenge of declining funding and increasing expectations. Many, including Milwaukee also must compete with charter and other alternative providers for enrollment. Meeting these challenges will require doing more with less. To this end, systems must look aggressively at how they’re using their resources, focusing first on four core areas: school funding, teacher compensation, school design and special education. In order to reallocate resources more strategically and support improvements in teaching and learning, districts like Milwaukee Public Schools should consider the following action items:

- **Support equity, transparency and flexibility in the funding system.** When districts such as MPS rely on Weighted Student Funding, they must answer critical questions around equitable weighting of student need, the percentage of funding that runs through the formula, flexibility among school leaders to deploy resources, and whether there is an equal distribution of effective teachers across schools.

Fully addressing the need for equity in districts like MPS requires that funding levels for competing education providers are suitably adjusted for differences in the characteristics and needs of the students served by each and for the district’s status as the provider of last resort. Answers to these questions will determine the district’s next steps, which may include reducing their number of small, low-performing schools through closure and consolidation and the modification of its portfolio.

- **Structure teacher compensation to recruit, retain and leverage effective educators.** Ac-
curate information on teaching effectiveness is needed in order for districts to make fair decisions about teacher compensation. This means that establishing a rigorous and reliable evaluation system is typically a district’s first step. Districts should then transition away from longevity and education credits as the primary determinants of salary.

A key part of this transition is the district’s articulation of its value proposition to teachers, the components of which must be consistent with the district’s goals. The shift to a new teacher compensation system will likely take multiple years, and districts should design the new system in a way that will be financially sustainable.

- **Facilitate a more strategic approach to school design.** Principals, their supervisors and district leaders should scrutinize whether each school’s resources are aligned with its overall academic improvement plan and the district’s broader vision for reform. Resources may need to shift towards students with higher needs, which will require moving away from uniform class sizes and re-directing resources towards maximizing individual attention and efficient use of time.

- **Encourage transparency and efficacy in special education spending.** Districts must clearly document, either internally or with the help of an external expert, how exactly special education dollars are spent and work to identify if spending patterns are rooted in mandates or status quo practices. Greater efficiency and quality of service delivery may be achieved through alignment of special education and general education resources.

Systems like Milwaukee must start by assessing current resource use in these targeted areas, quantifying resource misalignments and identifying barriers to change. Once leaders have a sense of the size of the opportunities and how they connect to an overall reform strategy, they can prioritize realignments based on ease, cost and impact.

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6. Seattle and Cincinnati are two examples of districts that recently chose to convert from WSF to a foundation formula that funds a core set of basic services across all schools.
15 Karen Hawley Miles and Stephen Frank, The Strategic School: Making the Most of People, Time and Money. (Corwin Press, 2008).
19 Education Resource Strategies, School Budget Hold’em.
20 Core subjects are English, math, social studies, science (and foreign language at the secondary level)
21 Education Resource Strategies, School Budget Hold’em.
24 Ibid.
25 Ibid.
29 Ibid.
31 Education Resource Strategies, School Budget Hold’em.