THE SUPPLY'S THE LIMIT: MEETING THE CHALLENGE OF KNOWLEDGE AND CAPACITY CONSTRAINTS TO SIGNIFICANT EDUCATIONAL IMPROVEMENT

Martin Orland
Evaluation and Policy Research
WestEd
1350 Connecticut Avenue NW,
Suite 1050
Washington, DC 20036
morland@wested.org

INTRODUCTION

The Obama administration's Race to the Top program and related recent educational reform initiatives represent a new milestone for federal efforts intended to foster significant K–12 reform. Starting with the publication of *A Nation at Risk* (NCEE 1983), the federal government has a roughly twenty-five-year history of attempting to advance major system improvements in K–12 education. However, the aggressiveness of the federal role has inexorably increased over this period. What began largely as bully pulpit exhortations stoked by appeals to national security in the 1980s gradually gave way to subsidizing national standards and national testing programs in the 1990s, and then in the past decade to mandating requirements for school performance nationwide through the No Child Left Behind Act (NCLB). Significantly, these efforts have occurred in both Democratic and Republican administrations and have enjoyed greater levels of bipartisan support than most other areas of federal domestic policy (e.g., health care, energy, the environment).

The current federal K–12 education reform agenda has been catalyzed by the unprecedented opportunity for new federal education spending afforded by the "Great Recession" of 2008–9. The passage of the American Recovery and Reinvestment Act (ARRA) provided the

Obama administration with the opportunity to design and administer major new domestic program initiatives without needing to obtain congressional approval. In the area of education, the administration made two significant decisions early in 2009. First, it decided that spending in the education arena would be fiscally significant by targeting about $100 billion of ARRA funding for education (USDOE 2009a). Second, the nature of federal education spending would not be restricted only to traditional fiscal economic stabilization objectives but would also serve substantive educational reform goals (Dillon 2010; USDOE 2009b).

Specifically, ARRA spending would be targeted to promote educational reform in four distinct areas: standards and assessments, teacher quality, educational data systems, and turning around our lowest-performing schools (USDOE 2009c). These areas constitute the four pillars undergirding requirements and programmatic initiatives across the different components of ARRA. Showing satisfactory progress under each pillar will determine states' continued eligibility to receive up to a total of $48.6 billion in FY 2010 state fiscal stabilization funds (USDOE 2009c, 2009d). In addition, ambitious and innovative proposals under each pillar constitute the review criteria for awarding state grants under the $4.35 billion Race to the Top innovation grants competition. The reform agenda also includes targeted grant programs for the separate pillars, including the $3.5 billion school improvement grants program (USDOE 2009c) to be competitively awarded by states to school districts and the $4 billion Race to the Top state assessment grants competition. The administration has also made clear that these four areas and the ARRA initiatives will form the foundation behind its proposal for reauthorizing the Elementary and Secondary Education Act (Dillon 2010).

Taken together, the administration's reform program represents the most ambitious attempt in U.S. history to use the federal grant-in-aid mechanism to upgrade the quality of standards, testing, teaching, data, and interventions in our lowest-performing schools. The question, of course, is the likelihood of these efforts leading to major improvements in student performance. My contention is that to make truly significant inroads in raising student achievement, major shortages in the current supply of requisite knowledge and capacity—including evidence-informed guidance about "what works" and adequate social and human capital, as well as financial resources—will need to be successfully addressed. These, in turn, will require modesty in conceding what we don't yet know, wisdom in rejecting "silver bullet" solutions, patience in not expecting too much too soon, and persistence in supporting systematic experimentation and long-term stable commitments to knowledge and capacity enhancements.

In the balance of this article I support this premise by focusing particularly on one of the four current pillars of federal education reform, that of

turning around the nation's lowest-performing schools. I begin by describing the administration's reform initiatives in this area along with the implicit and explicit assumptions that appear to underlie this improvement thrust. Next I turn to some of the major knowledge and capacity challenges to overcome for turnaround reform expectations to be realized. I conclude with a discussion of the nature of potential investments that I see as holding promise for meeting these challenges, and the critical role of political leadership and the education research community in moving educational policy reform discussions in a more fruitful direction.

THE FEDERAL SCHOOL TURNAROUND AGENDA

On 26 August 2009 U.S. Secretary of Education Arne Duncan announced a new $3.5 billion grant program under ARRA designed to turn around the nation's lowest-performing schools:

> If we are to put an end to stubborn cycles of poverty and social failure, and put our country on track for long-term economic prosperity, we must address the needs of children who have long been ignored and marginalized in chronically low-achieving schools. . . . States and school districts have an opportunity to put unprecedented resources toward reforms that would increase graduation rates, reduce dropout rates and improve teacher quality for all students, and particularly for children who most need good teaching in order to catch up. (USDOE 2009b)

The program offers formula grants to state education agencies that are required to identify their "persistently lowest achieving schools" and then administer subgrants to local education agencies to improve these schools by employing one of three generic school improvement models:

> Turnaround model: Replaces the principal and rehires no more than 50 percent of the preexisting staff, and grants the principal sufficient flexibility to implement a comprehensive approach to substantially improve student outcomes.
> Restart model: Converts a school to a charter school managed by an operator, charter management organization, or education management organization selected through a rigorous review process.
> Transformation model: Replaces the principal, takes steps to increase teacher and school leader effectiveness, institutes comprehensive instructional reforms, increases learning time, creates

> community-oriented schools, and provides operational flexibility and sustained support.[1] (EducationNews 2009)

Funding priority is to go to the lowest achieving 5 percent of Title 1 schools and high schools whose graduation rate has persistently fallen below 60 percent (EducationNews 2009). In addition to the school improvement grants program, the state Race to the Top grants competition requires applicants to indicate how they will support local educational agencies in turning around their lowest performing schools by implementing one of the school intervention models (*Federal Register* 2009).

This is not the first concerted federal attempt to stimulate school improvement in low-achieving schools by requiring the adoption of a school improvement model. Just one decade ago Congress passed the Comprehensive School Reform Demonstration Program (CSRD), later incorporated into NCLB. That program required schools to embrace eleven components of comprehensive reform, including developing measurable goals for student performance, developing a comprehensive design for effective school functioning that integrates instruction, assessment, classroom management, and professional development, and adopting improvement strategies consistent with scientifically based research models of effectiveness. Between 1998 and 2006 the program provided three-year comprehensive school improvement awards to some 7,000 low-achieving schools nationwide (Orland, Hoffman, and Vaughn 2010).

Three aspects of the current school turnaround program distinguish it from the CSRD. First, the current models all require that specific large-scale structural changes take place in the target school, such as replacing existing staff, providing school leaders with greater flexibility and autonomy, or converting to a charter school. Second, while the CSRD focused on low-performing schools, it did not specifically target schools that were the very lowest performers. Finally, the scale of support to be provided under the school improvement grant program (initial spending of $3.5 billion for FY 2009) dwarfs that of the CSRD (approximately $1 billion spent over eight years). Despite these differences, the types of programs and behaviors that are assumed to characterize "successful" turnaround schools under the school improvement grants program look very similar to the desired features of "reformed" schools under the CSRD.[2] In fact, school characteristics, such as an academically challenging curriculum,

1. There is also a fourth model labeled "school closure" that I do not classify as a school improvement model for purposes of this discussion because it closes a low-performing school and disperses its students to other schools in the district that are higher achieving.
2. Title I, Part F (CSR) legislation and Elementary and Secondary Education Act of 1965, as amended, Title I, Part A, Section 1003(g).

a culture supporting high expectations for all students, a strong evaluation program, and active levels of parental and community support, have been consistently identified as components of high-performing schools for over three decades (Edmonds 1979). The difficulty has not been in identifying these successful school characteristics, but rather in identifying those policies that are most appropriate to yield more schools possessing them.

THE TURNAROUND SUPPLY CHALLENGE

To understand the magnitude of the turnaround supply challenge, it is first important to appreciate how unusual it is for low-achieving schools to dramatically improve their performance and then sustain such improvement. The literature on school turnaround has generally been imprecise in defining (1) what constitutes a low-performing school, (2) how much improvement in such a school over what time period would constitute a successful school turnaround, and (3) for how long such improvement should be sustained (Herman et al. 2008). This makes it easier for both policy makers and analysts to underestimate the difficulty in turning around large numbers of low-performing schools, preferring instead to cite infrequent but highly visible examples of successful turnaround.

The relatively recent development of state longitudinal school files makes it possible to empirically model the prevalence of successful school turnarounds by making reasonable and transparent assumptions about what constitutes low prior achievement, substantial levels of improvement from such a base, and appropriate time horizons for both obtaining and sustaining improvement. I recently did this with a database of 1,098 schools nationwide that received comprehensive school reform grants in 1998, 1999, or 2000.[3] A school was first defined as low performing if one of these schools' 1999–2000 test performances in both reading and mathematics was at least 1 standard deviation below its state's average.[4] This criterion resulted in the identification of 262 of the original 1,098 schools whose performance was subsequently tracked.

From these, I defined a school as having successfully turned around if:

1. By the year 2001–2 (i.e., two years after the base year), its test performance in both reading and mathematics improved by at least .5 standard deviation relative to its state;[5]

3. My thanks to Dr. Joe McCrary of WestEd for his valued assistance in conducting this analysis.
4. One standard deviation below state average achievement corresponds roughly to the 16th percentile, though there is some variability across the states.
5. This constitutes significant but not extraordinary school improvement roughly equivalent to a 15 percentage point gain in performance relative to its state.

2. It did not experience a change of 20 percent or more by 2001–2 in either the percent of students eligible for free and reduced price lunch, percent black, or percent Hispanic;[6] and
3. Its test performance in both reading and math declined by no more than .1 standard deviation (relative to its state) one year later (i.e., in the 2002–3 school year).

Though not heroic criteria, this analysis yielded a total of only twelve successful school turnarounds, or 4.6 percent of the cohort.

One might consider the expectations for two-year turnaround to be too ambitious and that in fact a more prevalent pattern is one of slow and steady school progress over a longer time period. Unfortunately, modeling this improvement trajectory yields an even smaller number of turnaround schools. Taking the same 2000 cohort of 262 initially low-achieving schools, I assumed that it had made slow and steady progress if:

1. Four years later, its gains in reading and mathematics resulted in performance at or above the state average;
2. It did not experience any one-year declines in reading or mathematics during the four-year period;
3. Its test performance in both reading and math declined by no more than .1 standard deviation (relative to its state average) one year later (i.e., in the 2004–5 school year),
4. It did not experience a change of 20 percent over the four-year period in either the percent of students eligible for free and reduced price lunch, percent black, or percent Hispanic; and
5. It was not included in the other list of rapid, successful turnarounds.

The process resulted in identifying only seven additional schools, representing just 2.7 percent of the cohort.

Of course, the administration might well argue that these meager turnaround percentages reflect "business as usual," which is why fundamental school restructurings that lie at the core of its school turnaround initiative are needed. Replacing current principals with new dynamic school leaders, hiring large cadres of new teachers possessing the skills and motivation to work successfully with low-achieving students and contribute to a positive school climate, and converting existing schools to charters with the flexibility to change all aspects of schools operations are what is needed to turn these

6. This is important because substantial changes in school demographics rather than school factors can make inordinate contributions to school improvement.

dismal percentages around. It is this argument that leads directly to questions of supply adequacy.

THE KNOWLEDGE SHORTFALL

The first question concerns adequate knowledge supply—in particular, what prescriptions can be recommended with confidence based on high-quality research regarding how to turn around a persistently low-performing school. Policy maker, analyst, and school improvement entrepreneur assertions notwithstanding, the empirical evidence base on this question is weak. In 2008, the Institute of Education Sciences published a practice guide on turning around chronically low-performing schools that included the most comprehensive and methodologically rigorous review of research ever conducted on school turnaround. The report concluded that the quality of current evidence was low to support four common school turnaround prescriptions: (1) signaling the need for dramatic change with strong leadership, (2) maintaining a consistent focus on improving instruction, (3) making visible improvements early in the school turnaround process (i.e., quick wins), and (4) building a committed staff (Herman et al. 2008).

This research literature suffers from both methodological and conceptual limitations. Methodologically, the studies examined to ascertain common turnaround success factors consist almost exclusively of multiple case studies in which characteristics of successful turnaround strategies are aggregated. This work is useful for understanding the phenomenon of school turnaround and generating hypotheses about causal mechanisms. However, it should not be viewed as constituting evidence of effective practices because it fails to control for the counterfactual—that is, the prevalence of these same factors in what may well be instances of unsuccessful turnaround attempts. Controlling for the counterfactual is a minimal condition for establishing internal validity to make appropriate causal inferences, but as the Institute of Education Sciences (IES) study by Herman et al. points out, it is absent from the school turnaround literature base. Because of this absence we simply have no idea of the extent to which, for example, new strong leaders put in low-performing schools failed to achieve turnaround, or the number of instances in which visible school improvements early in the turnaround process did not lead to improved school performance. Indeed, clear and consistent operational definitions of concepts like "dramatic change," "quick wins," and "committed staff" in the turnaround literature are lacking, making assertions about the presence of such success factors susceptible to exercises in circular logic (e.g., if the turnaround was successful, then the change was sufficiently dramatic, otherwise it wasn't) rather than well-grounded research inferences.

Conceptual limitations in the school turnaround literature and knowledge base derive paradoxically from much of this same case study literature. It suggests that efforts to reduce the phenomenon of school turnaround to lists of success factor "ingredients" severely oversimplify what are inherently idiosyncratic and codependent processes. As the aforementioned IES review points out:

> The case research on school turnarounds and the business research clearly indicates that there is no specific set of actions that applies equally well to every turnaround situation. Every school described in the case studies examined for this guide applied actions and practices tailored to the school and local community. (Herman et al. 2008, p. 7)

A recent examination of eleven initially low-performing schools that subsequently witnessed dramatic improvement, conducted for the U.S. Department of Education by WestEd and American Institutes for Research (AIR), underscores these points. The study found that, at a macro level, each of these schools adopted new leadership styles, practices to improve school climate, new instructional strategies, and strategies to secure external support. However, the strategies varied significantly across the schools. So, for example, while some dramatically improved schools hired new principals who became change leaders throughout the turnaround process, others had multiple principals over their improvement period but instituted distributed leadership practices in which school staff shared leadership responsibilities. In addition, the schools combined improvement practices in very different ways, emphasizing different strategies (Aladjem et al. 2010, pp. xviii–xix):

> Reform strategies interacted in multiple ways, suggesting that the same reforms may be more or less successful depending on differences in leadership, staff capacity, community support, and other factors. Schools engaged in varying combinations of reforms that they often adapted and changed to meet their evolving circumstances. The energy, experience, and stability of leadership and teachers also influenced the interplay of reforms, and this interplay appeared to require ongoing monitoring and fine-tuning.

The implications of these findings for developing a sufficient supply of knowledge that could be employed to drive successful turnaround strategies are profound. In addition to undertaking more methodologically advanced studies of school turnaround that address the issue of the counterfactual, we must also develop and eventually test much more sophisticated and contextually

nuanced theories of change around this issue. This will require sustained nontrivial research and development (R&D) investments in this area for a generation or more.

THE CAPACITY CHALLENGE

Of course, even if a robust R&D agenda on school turnaround were forthcoming and could eventually yield much higher quality evidence to inform policy decisions, policy makers are not waiting until such knowledge bears fruit. Instead, they are looking now for ways to replicate visible turnaround successes—particularly those apparently taking place in schools run by some charter management organizations (CMOs)—on a grander scale. Research evidence aside, what is the likelihood that adequate system capacity currently exists to support such replication and scale up?

Through the current school improvement grants program, the federal government is attempting to mitigate at least one short-term capacity challenge—that of financial resources. As noted previously, the monies now being targeted for the persistently lowest-performing schools under the school improvement grant program is unprecedented. Three and one half billion dollars allocated to five thousand (Duncan 2009) schools yields an average of approximately $700,000 in additional revenue per school, or $1,400 per student in a school with an enrollment of five hundred. In the short term at least, the availability of these funds to states and school districts may well reverse the dynamics of the relationship between charter management organizations and sources of revenue. In the past, CMOs as well as smaller "mom and pop" charters have had to spend substantial portions of their time and efforts chasing the funds needed to support and expand their operations (Education Sector 2009). The most successful have invariably turned to philanthropic support to compensate for both lower public subsidies and higher resource demands compared with the traditional school sector. Now, however, many states and school districts looking to implement "restart" turnaround models are likely to be chasing successful CMOs, attempting to persuade them to take over their failing schools with attractive financing offers. Similarly, systems looking to implement the other federally designated turnaround models will have, at least for the time being, significant dedicated funding streams supporting their efforts.

This school improvement grant windfall from ARRA funds will not continue indefinitely. The 2011 presidential budget asks for only $900 million for school improvement grants. Pressures for federal budget cuts through this decade make it unlikely that large federal subsidies for the lowest-performing schools can be sustained. And judging by the costs that must be incurred to achieve successful turnaround, these added resources are likely necessary. As

Tom Toch has pointed out, "As much as anything, the labor-intensive work of the best CMOs over the past decade makes a strong case for increasing funding for disadvantaged students" (Education Week 2009, pp. 26–27). The Education Sector report "Growing Pains" (2009) discusses how the most successful charter school programs are also the most resource intensive. The additional resources are used to create smaller, more personalized learning environments, longer school days, and the greater sense of community considered essential to overcome conditions of severe educational and economic disadvantage. More comprehensive neighborhood-based programs like the Harlem Children's Zone require even larger resource investments.[7] The school finance research community has largely moved away from debates over "Does money matter?" to more fine-grained hypotheses and investigations that focus on both the size and nature of resource investments likely to make a difference in enhancing student outcomes (Ladd and Fiske 2007). Successful charters in particular are beginning to yield new insights on this question, and the preliminary evidence at least suggests that adequate financial resources are a necessary if not sufficient condition for fostering successful school turnaround.

An even more daunting challenge than financial resource supply is obtaining the requisite human and social capital necessary to replicate and expand successful school turnaround models. A shortage in the number of high-quality staff needed to meet the learning needs of our student population has been a consistent refrain of analysts in recent years (NCES 2004; Clotfelter et al. 2007).[8] The problem is of course especially severe in our lowest-achieving schools, where student needs are most acute and the knowledge, skill, and commitment demands on teachers and school leaders are consequently greatest. Assuming the 5,000 lowest-performing schools in the country employ about 100,000 teachers and 10,000 school administrators,[9] what is the likelihood that an adequate supply of human capital currently exists to meet the school turnaround challenge?

Once again the experiences of charter schools having noteworthy successes in serving disadvantaged populations are illustrative. The typical commitments of teachers and administrators in these schools far exceed the current norm. They work longer days and often longer school years than their traditional public school counterparts. They also have significant added responsibilities with respect to parent and community involvement, providing more personalized student attention, working with their colleagues on school improvement

7. For example, preschool services are estimated at $17,000–$19,000 per year per student.
8. See, in particular, NCES tables 24-1 to 24-4. These figures are based on 1999–2000 data, however.
9. This estimate is based on an assumption of an average of 640 students and two administrators per school. It was derived by calculating average school size and pupil-teacher ratio data for 2006 from the Digest of Education Statistics 2008, tables 63, 80, 99, and 100.

strategies, and participating in team-building activities related to creating and sustaining a positive school climate conducive to academic achievement. Given the demands, it is no wonder that turnover rates in these schools appear to be significantly higher than average (Education Sector 2009). In his recent examination of eight highly successful "no excuses" charter schools in the Boston area, Wilson (2009) found that these schools' faculty hailed disproportionately from elite higher education institutions and that the schools battled fiercely among each other for the scarce teacher supply pool. If such schools struggle so mightily now to attract and retain the extraordinary talent needed to achieve successful school turnaround, the prospects seem remote that a talent pool literally hundreds of times larger can be successfully identified and recruited.

Having substantially higher levels of financial and human capital within schools than is likely to be available for successful turnaround would not be such a problem if parental and community characteristics did not reinforce these shortfalls. Indeed, one could argue that if sufficient social capital already existed to support students from low-income families, there would be a considerably smaller school turnaround challenge in the first place. It is an empirical fact that family and community characteristics are important predictors of student achievement independent of school and classroom factors (Parcel and Menaghan 1994). This does not mean, of course, that schools don't matter. What it does mean is that the challenges faced by schools are heavily influenced by the presence or absence of social capital existing outside classroom walls.

What is social capital? James Coleman's classic article, "Social Capital in the Creation of Human Capital," defines it as, like other forms of capital, a productive asset, "making possible the achievement of certain ends that in its absence would not be possible" (Coleman 1988, p. S98). He goes on to say that social capital both within and outside families plays an especially important role in creating "human capital in the rising generation" (p. S109). Within families, social capital is represented by the relationship of parents to offspring in order to transfer their own (i.e., parental) human capital to further (among other things) their children's educational development. Similarly, close reinforcing relationships between parents and the staff of their children's schools, and staff with each other, are forms of social capital that can foster children's educational growth.

Strong relationships between low academic achievement and poverty and both low achievement and poverty with family and community characteristics underscore the importance of both parental human capital and social capital in school turnaround. The impacts of these factors on student achievement appear to be significant (in both the statistical and substantive sense) as well as cumulative. This can be illustrated by data from the National Center for Education Statistics' Early Childhood Longitudinal Survey Kindergarten cohort

study (ECLS-K), which tracked student achievement growth from kindergarten through grade 5 (Rathbun and West 2004). ECLS-K classified students by the presence or absence of four specific student nonschool risk factors—poverty, mother's highest education, living in a single-parent household, and speaking a language other than English in the home—and then analyzed growth in student achievement by the number of risk factors present (zero, one, two, or more).

The data reveal that the gap in reading achievement between kindergarten and fifth-grade students widens significantly over time based on the number of risk factors present, from a seven-point gap in the fall of the kindergarten year to a twenty-five-point gap by the spring of fifth grade (Digest of Education Statistics 2008, table 115). In a separate multivariate regression analysis examining the relationship between student reading growth and the number of risk factors, the NCES concluded:

> As the number of children's family risk factors . . . increased, children made smaller gains in both [reading and mathematics] subjects, after controlling for [the] other child, family, and school characteristics. (Rathbun and West 2004, p. 23)

Leaders of successful turnaround schools in both the charter and traditional public school sectors seem to recognize the need to develop both human and social capital outside the classroom as key components of their programs. This is why the Harlem Children's Zone (HCZ) has a "baby college" to help train parents in parenting skills (HCZ 2009) and is why KIPP schools (Knowledge Is Power Program) require that parents sign a contract indicating their commitment to working as partners in their child's education (KIPP 2010). It is also why the Mass Insight school turnaround model is centered on overcoming the reinforcing conditions of individual and family risk factors, and community and environment, along with resource inequality (Calkins et al. 2007).

For all their enormous challenges, successful charter schools with these types of programs and services have one intrinsic advantage in building family and community supports relative to the vast majority of low-performing schools that are the targets of the current federal school improvement initiative: they are voluntarily subscribed to. No parents are forced to send their child to a charter school. The parents signing on to these programs agree to the significant participation requirements and expectations that are foundational to these schools' improvement models. Such commitments to both their child's education and the building of a robust school community make these schools' success more likely. (It is also this circumstance that makes straight-line inferences about the impact of these models at scale so problematic because the voluntary nature of participation severely compromises external validity.)

The preliminary evidence suggests that sustaining such significant commitment levels on the part of parents and children is a major challenge for school faculty and administrators, and one that is not always successfully met. SRI International researchers, for example, found that student attrition at four Bay Area KIPP middle schools between fifth and eighth grades was 60 percent (Woodworth et al. 2008). If charters like KIPP already struggle mightily against attrition in order to maintain the levels of commitment needed for success, what is the likelihood that these models can be dramatically scaled up amid conditions where parental and community supports will usually be much more limited? Once again, supply—in this case, the requisite supply of social capital needed to replicate successful school turnarounds—is the limit.

SUMMARY AND IMPLICATIONS FOR FUTURE POLICY

I have attempted in this essay to indicate critical knowledge and capacity challenges for successfully turning around the vast majority of the nation's lowest-performing schools. In so doing I have relied on three primary sources. First, I looked at data from the federally funded comprehensive school reform program to show both the rarity of successful and sustained turnaround and the complex and varying constellation of factors that appear to be associated with dramatic school improvement. Second, I examined the research base on the effectiveness of school turnaround strategies and found it to be both methodologically and conceptually weak. Finally, I extrapolated some early lessons from highly successful charter school models to argue that the extraordinary investments in human and social capital that appear to be hallmarks of successful turnaround in these instances cannot reasonably be expected to be replicated on a large scale.

I see three major implications from this thesis for future policy directions. First, develop a positive but realistic perspective on the role of successful charter school models in fostering school turnaround. Much like Al Shanker's original vision for public schools to be innovative and have greater autonomy to meet the diverse needs of students, some charter schools have indeed shown themselves to be successful engines of innovation and reform (Shanker 1988). These achievements should be embraced both for what they have accomplished in educating many students who would otherwise likely have floundered and for the lessons they provide the school improvement community more generally about keys to successful school reform. Specifically, policies should be adopted at all levels of government to sustain singularly successful charters, and artificial barriers to their expansion should be identified and reduced.

However, to expand successful charters beyond the available supply of needed financial, human, and social capital is unrealistic and perhaps

counterproductive. Policies attempting to do so pose a serious danger of inducing successful charters to dilute the very elements that were responsible for these schools' noteworthy achievement in the first place. Both the federal government and successful CMOs should be deliberate and cautious in scaling up successful CMO models beyond current limitations in financial, human, and social capital needed to support them (Smith et al. 2009; Education Sector 2009).

Second, create more policies and programs that focus directly on current knowledge limitations and financial, human, and social capital shortfalls that inhibit taking successful school turnarounds to scale. Efforts to enhance capital supply should focus less on school reform delivery mechanisms (i.e., charter schools versus traditional public schools) and more on capital supply enhancements that need to be addressed independent of sector. This means recognizing the significant long-term resource investments that are a necessary (though not sufficient) condition for large-scale successful turnaround. It also means prioritizing investments that hold promise for significantly enhancing the quality of teaching in our lowest-performing schools as well as securing the family and community supports that will contribute to successful outcomes.

Such efforts should be multiple and reinforcing. In the area of teaching, quality supply enhancement, for example, should include new teacher incentive mechanisms, new models that more tightly couple the pipeline between teacher preparation and the human capital requirements for specific school turnaround models (as is beginning to occur in some high-quality CMOs), and professional development approaches (both pre-service and in-service) that hold promise for imparting dramatically improved knowledge and skills among teachers, to name just a few. A similar agenda should be developed and implemented around increasing the supply of effective school leaders in our lowest-performing schools, and in family and community development efforts in neighborhoods hosting our lowest-performing schools. Furthermore, these investments need to be integrated with a robust R&D agenda examining specific mechanisms for addressing capital supply shortfalls. While we should not wait until research provides better guidance than is currently available about what works in school turnaround, we should also not ignore this opportunity to begin to build a much stronger knowledge base on how to meet the challenges of underperforming schools that can make future investments more efficient and effective. Both analysts and policy makers from the AEFA/AEFP[10] should be leaders in these critical knowledge-building efforts.

10. At its June 2010 meeting, the board of directors of the American Education Finance Association (AEFA) changed the organization's name to the Association for Education Finance and Policy (AEFP).

Finally, policy makers should recognize that success in turning around significant percentages of the nation's lowest-performing schools will resemble a marathon and not a sprint. It is imperative that the school turnaround at scale be seen as a long-term agenda that will not be accomplished simply or quickly. The supposition that if truly significant successes in school turnaround can be achieved in some places there is no reason why they cannot easily be replicated in many more is fundamentally flawed. It trivializes efforts needed to achieve major school improvements at scale. Indeed, understanding the experiences of places attaining some degree of success in school turnaround should temper the views of anyone believing that achieving such results at scale will be anything other than a long and arduous struggle.

No challenge in education reform has proven more vexing than how to convert extraordinary islands of educational excellence into ordinary "business as usual" accomplishments of the educational system as a whole. For decades, achieving robust improvements at scale has been a preoccupation of educational leaders, whether the focus is improving reading, math, or science achievement, lowering the dropout rate, making better use of technology, improving teaching quality, or turning around schools. Consistently, over the years promises of dramatic improvements at scale in any of these areas through specific policy actions have fallen short. There are of course many explanations for these failures. However, I would argue that at the core, it is because policy makers (at least in their rhetoric) overestimate the power of singular policy reforms rather than the sustained long-term investments in capital supply and systemic change needed to penetrate deep-seated and multifaceted educational problems.

It would be highly beneficial if the present generation of educational leaders could break this unproductive and cynicism-inducing "hopes raised—hopes dashed" cycle. We in the education finance and policy communities can make a significant contribution to this end by promoting in our own work and interactions with policy leaders the value of such a "rhetorical turnaround."

REFERENCES

Aladjem, Daniel K., Beatrice F. Birman, Martin Orland, Jenifer Harr-Robins, Alberto Heredia, Thomas B. Parrish, and Stephen J. Ruffini. 2010. Achieving dramatic school improvement: An exploratory study. Report prepared for the U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. Washington, DC: WestEd.

Calkins, Andrew, William Guenter, Grace Belfiore, and Dave Lash. 2007. The turnaround challenge: Why America's best opportunity to dramatically improve student achievement lies in our worst-performing schools. Boston: Mass Insight Education and Research Institute.

Clotfelter, Charles T., Helen F. Ladd, Jacob L. Vigdor, and Justin Wheeler. 2007. High poverty schools and the distribution of teachers and principals. *North Carolina Law Review* 85: 1345–80.

Coleman, James. 1988. Social capital in the creation of human capital. *American Journal of Sociology* 94(Supplement): S95–S120.

Digest of Education Statistics. 2008. *List of 2008 digest tables.* Tables 63, 80, 99, 100, and 115. Available http://nces.ed.gov/programs/digest/2008menu_tables.asp. Accessed 25 August 2010.

Dillon, Sam. 2010. Obama to seek sweeping change in "No Child" law. *New York Times,* 31 January.

Duncan, Arne. 2009. Turning around the bottom 5 percent. Speech presented at the National Alliance for Public Charter Schools Conference, Washington, DC, 22 June. Available http://www2.ed.gov/news/speeches/2009/06/06222009.pdf. Accessed 25 August 2010.

Edmonds, Ronald E. 1979. Effective schools for the urban poor. *Educational Leadership* 37(1): 15–24.

Education Sector. 2009. Growing pains: Scaling up the nation's best charter schools. Washington, DC: Education Sector Reports.

EducationNews.org. 2009. *Title I school improvement grants.* Available http://www.ednews.org/articles/title-i-school-improvement-grants.html. Accessed 25 August 2010.

Education Week. 2009. Charter management organizations: Expansion, survival, and impact. *Education Week* 29(9): 1–32.

Federal Register. 2009. Part IV: Department of Education overview information; Race to the top fund; Notice inviting applications for new awards for fiscal year (FY) 2010. *Federal Register* 74(221): 59836–72.

Harlem Children's Zone (HCZ). 2009. From cradle through college: Using evidence-based programs to inform a comprehensive pipeline. New York: HCZ. Available http://www.hcz.org/images/stories/From%20Cradle%20through%20College_11.6.09.final.pdf. Accessed 26 August 2010.

Herman, Rebecca, Priscilla Dawson, Thomas Dee, Jay Greene, Rebecca Maynard, Sam Redding, and Marlene Darwin. 2008. *Turning around chronically low-performing schools.* IES practice guide. NCEE 2008–4020. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Available http://ies.ed.gov/ncee/wwc/pdf/practiceguides/Turnaround_pg_04181.pdf. Accessed 25 August 2010.

KIPP Bay Area Schools. 2010. *About KIPP bridge charter school.* Available http://www.kippbayarea.org/wp-content/uploads/kbcs_cte.pdf. Accessed 26 August 2010.

Ladd, Helen F., and Edward B. Fiske. 2007. *Handbook of research in education finance and policy*. New York: Routledge.

National Center for Education Statistics (NCES). 2004. *Contexts of elementary and secondary education*. Available http://nces.ed.gov/programs/coe/2004/section4/indicator24.asp. Accessed 26 August 2010.

National Commission on Excellence in Education (NCEE). 1983. *A nation at risk: The imperative for educational reform*. Washington, DC: NCEE.

Orland, Martin, Amanda Hoffman, and E. Sidney Vaughn III. 2010. Evaluation of the comprehensive school reform program implementation and outcomes: Fifth year report. Report prepared for U.S. Department of Education. Washington, DC: WestEd.

Parcel, Toby L., and Elizabeth G. Menaghan. 1994. Early parental work, family social capital, and early childhood outcomes. *American Journal of Sociology* 99(4): 972–1009.

Rathbun, Amy, and Jerry West. 2004. *From kindergarten through third grade: Children's beginning school experiences*. NCES 2004–007. Washington, DC: National Center for Education Statistics, U.S. Department of Education.

Shanker, Albert. 1988. Trying to improve schools: The second reform movement. *Vital Speeches of the Day* 54(21): 664–69.

Smith, Joanna, Caitlin Farrell, Priscilla Wohlstetter, and Michelle Nayfack. 2009. *Mapping the landscape of charter management organizations: Issues to consider in supporting replication*. Issue Brief. Washington, DC: National Resource Center on Charter School Finance and Governance.

U.S. Department of Education (USDOE). 2009a. *American Recovery and Reinvestment Act report: Summary of programs and state-by-state data*. Washington, DC: USDOE.

U.S. Department of Education (USDOE). 2009b. *Press releases: Obama administration announces historic opportunity to turn around nation's lowest-achieving public schools*. Available http://www2.ed.gov/news/pressreleases/2009/08/08262009.html. Accessed 25 August 2010.

U.S. Department of Education (USDOE). 2009c. *The American Recovery and Reinvestment Act of 2009: Saving and creating jobs and reforming education*. Available http://www2.ed.gov/policy/gen/leg/recovery/implementation.html. Accessed 25 August 2010.

U.S. Department of Education (USDOE). 2009d. *State fiscal stabilization fund*. Available http://www2.ed.gov/policy/gen/leg/recovery/factsheet/stabilization-fund.html. Accessed 25 August 2010.

U.S. Department of Education (USDOE). 2010. *Press releases: President's education budget signals bold changes for ESEA*. Available www2.ed.gov/news/pressreleases/2010/02/02012010.html. Accessed 25 August 2010.

Wilson, Steven F. 2009. Success at scale in charter schooling. *Education Outlook* 3: 1–7.

Woodworth, Katrina R., Jane L. David, Roneeta Guha, Haiwen Wang, and Alejandra Lopez-Torkos. 2008. San Francisco Bay Area KIPP schools: A study of early implementation and achievement, final report. Menlo Park, CA: SRI International.