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Strengthening Elementary Education

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Strengthening Elementary Education

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Strengthening Elementary Education

It would seem that in education today the possibilities for reform are as numerous as the reformers themselves—from vouchers and charter schools, to new teacher evaluations and improved training requirements, sorting through the myriad options facing policymakers can be both an exhilarating and overwhelming task. However, it is often said that there are no silver bullets in education, and as such many of these options are unlikely to reverse the course of public education singlehandedly. Therefore, it's compelling to use some combination of promising reforms in order to create a more systemic overhaul of the way our public schools affect their students. The reforms presented here—improved preschool access and quality, use of school report cards to improve accountability and transparency, and higher curriculum standards—have the potential to change the way students learn. However, it is necessary that policymakers find ways for these reforms to complement rather than compete with one another. The reforms examined in this paper are by no means exhaustive, and education leaders should consider these and other promising strategies as they develop a single model for strengthening public education, at the elementary level and beyond.

Preschool and School Readiness:

Research Implications for Improving School Readiness:

High-quality programs for young children have consistently shown a beneficial impact on school readiness, when targeted to high-need demographics (Gormley 2007). Programs such as Head Start provide means-tested preschool services, along with a range of other components including health services and parent involvement. The Head Start Impact Study found positive cognitive gains in children served by Head Start programs (Puma et al). While other research has suggested that these cognitive gains are not as large as those produced by state funded preschool programs, they are supplemented by gains in health outcomes, which may justify the high costs of the program (Gormley, Phillips, Shaw, and Adelstein, 2010).

Notably, new research on the efficacy of Oklahoma’s universal pre-k system has documented the benefits of high-quality preschool programs for a wider range of recipients. The results indicate that there are statistically significant, positive cognitive gains for Tulsa preschoolers across all ethnicities and socioeconomic brackets. Although low-income children gained the most from this program, there are still important benefits to enrolling for middle-income preschoolers (Gormley et al 2005; Gormley 2007). However, generalizing these findings to programs without the same high-quality focus may be problematic—the Tulsa program requires that all teachers have a four-year degree and a certification in early childhood education, and that these teachers are paid using a standard salary schedule. Such findings add

to a rich literature on the positive, cost-effective nature of high-quality interventions for preschool-aged children.

Despite this documentation, there exists far less evidence when researchers examine the long-term consequences of such interventions. Conceptually, if high-quality preschool services are not supplemented by changes in teaching practices and expectations during the elementary and later years, it is likely that these initial gains will fade out over time. Summer-learning loss, the compensatory effects of other targeted programs, and performance measurement changes all offer conceptual support the hypothesis these early comparative gains will fade as children age (Hill, Gormley and Adelstein, 2012).

Long-term assessments of Head Start have attempted to empirically assess the magnitude of such fade-out. While one study documents a complete fade-out by the third grade, concerns with the particular research methods have been raised (McKey et al, 1985). More rigorous evaluations—many of which incorporated sibling comparisons in order to better address selection bias—indicate that the beneficial effects persist for some outcomes, but not others. Additionally, the persistence of effects may vary across demographic groups. For instance, one study found increases in reading and verbal achievement in white and Hispanic students, but no positive changes for black students, or for any subgroup’s math scores (Currie and Thomas 1995; Currie and Thomas 1999). Other studies indicate that the health benefits associated with Head Start also persist over time (Ludwig and Miller, 2007). However, the latest version of the Head Start Impact Study indicates that the

effects of fade out may be rapid, with comparative gains completely disappearing as early as first or second grade (Puma et al).

Targeted, high-intensity demonstration programs, including the HighScope Perry Preschool Project, and North Carolina's Abecedarian project, have also shown positive long-term effects for even the most disadvantaged groups. Evaluations of these programs demonstrate a diverse range of long-term beneficial outcomes, such as reduced criminal activity (in the Perry Preschool case), as well as higher graduation rates and higher rates of employment and earnings in later years (in both cases) (Hill, Gormley and Adelstein, 2012).

Evaluations of preschool programs have been less common, and there is much variation in the quality and intensity of services in this area. A recent evaluation of the Chicago Child-Parent Centers found positive short-term gains, as well as statistically significant differences in follow-up surveys conducted with participants and nonparticipants at ages 20 and 28 (Reynolds et al 2001). British researchers found similar benefits for young children participating in the Effective Provision of Pre-school Education Project, as compared to nonparticipants at age 11 (Sammons, 2010). In contrast, the Early Childhood Longitudinal Study (ECLS), a nationwide assessment of preschool programs, found evidence of complete fade-out of preschool gains, as early as first grade (Magnuson, Ruhm, Waldfogel, 2007). Since this evaluation includes both good and bad programs, it is likely that program quality and intensity were dramatically different from other research, which could potentially explain the large differences in research findings.

In the Oklahoma analysis, researchers examining two separate cohorts of students found that early learning gains from preschool participation persisted through third grade for the later of two cohorts, in math, though not in reading (Hill, Gormley, Adelstein, 2012). When broken down by subgroups, researchers showed statistically significant improvements in math scores for boys (but not girls) as well as free-lunch eligible students. The effect size is estimated to be larger for black males in particular.

Preschool and the Recession:

Unfortunately, achieving these positive outcomes has become much harder due to recent budget shortfalls faced by many states. Enrollment in state-funded preschool programs has remained relatively constant, with total state spending declining by nearly \$30 million and overall expenditures falling by \$144 per child, despite supplemental funding from the American Recovery and Reinvestment Act. Quality is also a concern: only 17 states met the ten benchmarks specified by the National Institute for Early Education Research. When it comes to access, there is significant variability from state to state, with nationwide state-funded education programs enrolling only 27% of eligible four year olds and 4% of eligible three year olds, on average. Clearly, across states, there exist serious disparities in the quality, spending, and enrollment in pre-K programs (NIEER, 2011).

Preschool Policies in DC Public Schools:

One important element of preschool quality is the preschool curriculum. DC Public Schools have recently switched a substantial portion of their pre-K classrooms to a new curriculum model, known as Tools of the Mind. This program

emphasizes executive functioning, otherwise known as “soft skills” such as creativity, planning, self-control, working memory, reasoning, flexibility and motivation. These skills are thought to build lifelong habits that promote academic achievement, and may be more important than IQ in predicting later school success. A variety of factors have been shown to improve these skills, including physical activities like yoga and martial arts, computer training, other games, and various curriculum models, including Tools of the Mind (Diamond, 2011). After piloting the program in two schools last year, nearly every pre-K student in these schools met the district’s benchmarks for school readiness. The district has since expanded Tools of the Mind to a total of 28 schools, serving three and four year olds in more than 150 classrooms (DCPS).

The expansion of the Tools of the Mind curriculum has been strictly limited to schools serving Title I students, and seems particularly well suited to classrooms being led by Teach for America corps members. It would seem natural that veteran teachers would have more established systems in place, and exhibit greater resistance to the outward imposition of curriculum changes. In contrast TFA corps members, who are generally quite new to the teaching field, seem to find the prescribed methods and emphasis on classroom management techniques useful.

In addition to the Tools of the Mind classrooms, DCPS has four schools offering Montessori programs, usually beginning in preschool (3 year olds) and continuing through pre-kindergarten (four year olds), and ending anywhere between kindergarten and fifth grade, depending on the school. Montessori schools feature mixed-age groups and focus on individualized instruction, with children

working independently with specific manipulatives and developing necessary living skills. In addition to these schools, DCPS also provide Reggio Emilia inspired classrooms in preschool and pre-K, which provides a curriculum built around project-based activities, which emphasize the child's interests (DCPS).

In general, access to Pre-K for four-year-olds in DCPS is among the best in the nation. However, access for three-year-olds seems to be a more complex issue. Some principals suggest that three-year-olds are not ready for school, while in other schools the number of slots available constrains the number of three-year-olds who can be served. Additionally, the variable quality of pre-K programs within the district leads some schools to experience very long waitlists while others do not (DCPS).

Preschool Policy in the D.C. City Council:

New legislation introduced by DC City Councilman Vincent Orange and Marion Barry would require—among other things—that the DCPS chancellor be responsible for ensuring that students entering kindergarten are ready to learn. This would mean placing the burden of school readiness in the hands of DCPS staff. The bill also requires the district to ensure that fourth graders are able to read at grade level and do basic math. The bill was passed in late March, by a nearly unanimous vote, and includes a variety of other education provisions, like new requirements that all high school students to take the ACT or SAT and apply to at least one college or university, as a graduation prerequisite (The Washington Post).

School Report Cards:

A key provision of No Child Left Behind, school report cards—federally-mandated, state-issued catalogs of academic indicators in individual districts—have encouraged parents and community members to investigate how their schools are doing. Regrettably, the typical state report card is, unfortunately, limited to those academic indicators explicitly required by the law: things like the percentage of proficient students, usually broken down by subject content, grade level, and demographic subgroups are the primary focus of state report cards as we currently know them.

Many are concerned that this is not enough. The Education Trust, to name one example, would like to see state-issued school report cards include more comprehensive indicators that would allow taxpayers and parents to better assess the efficacy of the school systems they live in. While additional information may be necessary, imposing too many reporting requirements may risk excessively burdening both those charged with gathering data and the very consumers of information report cards are designed to assist. For this reason, it is important that school report cards strike the right balance by building report cards that are both comprehensive and comprehensible, as well as valid, relevant and functional (Gormley and Weimer, 1999). This will allow for both top-down and bottom-up accountability: parents will be able to assess the strengths and weaknesses of the schools in their communities, and respond accordingly, while the appropriate government officials will be better equipped to clearly gauge various performance

indicators for each school and district under their jurisdiction (Gormley and Weimer, 1999).

Making School Report Cards More Effective:

Because school report cards are designed and distributed at the state level, there exists tremendous variation in what is and is not reported nationwide, with some states doing a much better job of distributing information on the most useful indicators. All school report cards are publically available, primarily through the state's department of education's online resources, although federal law explicitly indicates that use of the internet alone "is not a sufficient means for disseminating state and district report cards" (Office of the State Superintendent of Education).

Examples of particularly comprehensive school report cards can be found in Massachusetts, Georgia, Colorado and Texas.

The Education Trust lists several additions to the minimum federal reporting requirements that parents would find most useful:

1. School report cards should include individual growth measures in student academic achievement, in addition to current indicators, which provide information about proficiency levels only. The addition of growth measures allows for transparency regarding which struggling schools are making large gains, as well as which successful schools are merely coasting through.
2. Information on graduation rates currently required under NCLB should be supplemented by more detailed information about what students are doing during and after high school. This should include reporting on course

- selection (such as AP and IB course participation), ACT and SAT scores, and information on how students perform in the workplace and in college.
3. Currently, school report cards do not include information on school climate. Factors like suspension and expulsion rates, attendance information, and the number of violent incidents in each school would allow parents to have better insight into whether or not their school has a positive and safe learning environment.
 4. Under current law, school report cards include minimal information about teachers, such as the percentage of teachers who are “highly qualified.” To allow parents and communities to better evaluate the teachers in any given school, this should be expanded to include information on subject-content certification, the percentage of first year teachers, and performance on teacher evaluations.
 5. Report cards should include information about schools within districts. Specifically, report cards should describe how funding is distributed across low and high poverty and low and high minority schools, and should also break down other indicators by schools within districts.

DCPS Report Cards:

DCPS report cards are published by the Office of the State Superintendent of Education (OSSE), which serves as the State Education Agency for the District of Columbia. This report card primarily sticks to legally prescribed indicators of student achievement—percentage of proficient students by age, subject and subgroup; percentage of schools making adequate yearly progress; the percentage

of licensed, certified and highly qualified teachers; and schools identified as in need of improvement. The report card does include information from both the Comprehensive Assessment System (DC CAS), in addition to the National Assessment of Educational Progress (NAEP). The former is tied to the DC Learning Standards, while the latter gives important information on achievement in DCPS that is comparable to test scores across other states and localities. This version of the report card has only been in place since 2008. As a relatively new tool for assessing student achievement, a great deal of potential exists in the report card as a tool. For starters, the DCPS report cards should begin to take on more indicators of teacher quality and student growth.

In improving DCPS report cards, there are several factors that must be considered, including content and presentation. Although DCPS report cards include proportions of “proficient” students, they make no use of so-called “risk adjustment” techniques that would make these numbers more meaningful across students from different schools who are likely to face varying levels of poverty and other risk factors (Gormley and Weimer, 1999). Additionally, while the overall “success” of different schools is inherently a multidimensional issue, the DCPS report cards fail to report data on many of these metrics. These could be improved by including measures of school climate, funding distribution and teacher credentials, as outlined above.

In addition to improvements to content, the DCPS report cards could improve in the area of presentation. Although the information they do provide is relatively clear and easily digestible, there is some evidence to suggest that the

length of the report card may be problematic. Researchers have found that report cards over 14-pages in length tend to overwhelm rather than inform recipients (Gormley and Weimer, 1999), and the most recent DCPS report card rings in at a whopping 36 pages. It is crucial that policymakers recognize the connection between brevity and comprehensibility in creating and revising organizational report cards.

Policymakers should also be cautioned about using information about individual teachers in school report cards (Gormley and Weimer, 1999). Although it is tempting to provide both parents and school officials with in-depth information at the smallest unit of analysis, providing information on individuals in this context has several risks. First, since there is so much variability in students across classrooms, reporting achievement for students of individual teachers may be difficult to interpret or even misleading. Additionally, the small sample sizes many teachers work with lead to imprecise estimates of effectiveness due to high standard errors—meaning that the accuracy of individual estimates is too questionable to be used in such high stakes circumstances (Gormley and Weimer, 1999).

Common Core State Standards:

Completed in 2010, the Common Core State Standards were developed by the National Governor’s Association (NGA) and the Council of Chief State School Officers (CCSSO), utilizing feedback from teachers, school administrators, postsecondary educators and civil rights groups in 48 states, 2 territories and the District of Columbia. The standards are internationally benchmarked and grounded in research and empirical data. The ultimate goal for the standards is to ensure that students are “college and career ready.” Universities and employers played a major role in specifying the content knowledge and skill sets high school graduates should have in order to excel in postsecondary education or employment. Standards specific to each grade level were then mapped backwards to guarantee that expectations keep students on track for success after graduation. Thus standards now exist in both math and English language arts for all students from Kindergarten through 12th grade. According to surveys at the state and district level, the majority of officials believe that the standards are more rigorous than the ones previously in place, and that they are likely to improve student learning (Center on Education Policy). To date, 45 states, along with the Northern Mariana Islands, the US Virgin Islands and the District of Columbia, have adopted the standards in full; Minnesota has adopted the standards in English Language Arts.

Challenges for the Common Core:

Challenges within School Districts:

School districts have cited the implementation timeline as a potential problem for schools and teachers—because teachers are learning the new standards

as they are introduced in classrooms, teachers will have limited time to interpret the new curriculum and adapt their practices accordingly. Additionally, some districts have struggled to fund appropriate professional development for their teachers. Districts have also cited inadequate state guidance as a serious concern with implementation (Center on Education Policy).

The lack of appropriate assessments is another problem for district and state administrators alike. Truly aligned assessments are still in development; as a result, teachers may be hesitant to adopt teaching practices until they better understand what will be evaluated under the new standards. Similar to the high-stakes testing of No Child Left Behind (NCLB), successes and failures are tied to assessment results, not adherence to the standards themselves (Center on Education Policy). This is particularly important in places like DC, which have made use of test results in their teacher evaluation and payment systems, IMPACT and IMPACT Plus. Assessments are also problematic in that they represent an additional financial expense for cash-strapped districts and states.

Currently, assessments are under development through two state-level consortia: the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balance Assessment Consortia (SBAC). Both groups are funded through federal grant programs, and are working together as they develop the tests, so that the assessment results will be comparable across the two systems. PARCC has slated the release of sample items this summer and is currently working to develop formative assessments for the K-2 levels (DCPS).

Although the standards are meant to apply to all children, testing certain demographic groups can prove difficult—particularly for special needs students, very young children and English Language Learners (ELL). How the new standards will impact these groups is similarly dependent on the assessments that emerge: teachers, districts and states are unlikely to be rewarded for gains that cannot be measured.

Challenges within States:

State-level challenges, including state budget shortfalls and economic hardships, have also caused difficulty. Some states have utilized awards from the competitive grant program Race to the Top; however, even these states are faced with the conundrum of how to finance the transition once federal funds have been exhausted, while states without this luxury face more immediate cost concerns. Some private grants have been secured, but this does not alleviate concern over long-term funding strategies (NGA).

New standards require new resources, including textbooks and math manipulatives. McGraw-Hill and other textbook publication companies have released statements claiming that their products are indeed aligned with the common core standards, but these assertions are difficult for administrators to assess. New assessments designed to work in conjunction with the standards represent an additional requirement, and districts and states must find the resources to pay for development and administration of these new tests. Simultaneously, the economic crisis has meant that school systems are often being

asked to do more with less—many states have recently cut total education spending, exacerbating financial struggles.

In addition to financial resources, state education agencies must ensure that all districts are able to move forward with the standards. Consistency across districts poses a potential obstacle as discrepancies in district-level leadership, resources, and overall enthusiasm for the standards create the possibility that some areas will lag behind in the implementation process (NGA).

Implementation in the early grades:

In addition to the Common Core Standards in K-12, many states have adopted early learning standards. These specify a wide range of developmental objectives for students in pre-school classrooms, and in some states infants and toddlers. Early learning standards are designed with developmental psychology in mind, and include a range of nonacademic indicators to ensure healthy social, emotional, cognitive and psychological growth. As of yet, these standards have not been connected to the new K-12 specifications set forth in the Common Core Initiative. This means that many states may need to revisit their early learning standards to ensure that the two systems are complementary. In doing so, it is important that policymakers not lose sight of the crucial nonacademic aspects of development for this age group (NGA). For very young children sound emotional development is of critical importance (Heckman); however these factors are not reflected in the standards, which could potentially lead to their being neglected.

A further challenge for elementary and early childhood classrooms concerns the implementation process itself. Several states have released transition plans that

begin by implementing standards in K-3, while others have taken a “top-down” approach that begins with college and career readiness and moves back to early grades. This has created concern that some states may be setting targets for early grades that are not grounded in what we know about how children learn (NGA).

Political and philosophical resistance:

Despite being developed and adopted exclusively by state-level leaders, and reflecting the input of almost every state, the pervasiveness of the standards has created a common misconception that they are federal in nature. This misapprehension may emerge as an avenue of political resistance, particularly among those who value the highly localized nature of our education system (NGA).

Similarly, the rigor of the standards has become a political concern, particularly in states that have historically been leaders in education. However, surveys of State Education Agencies, and district leaders, have indicated that those with the best access to information about the standards believe they will be more challenging than those currently in place (Center of Education Policy). Additionally, provisions exist for states to go beyond the specified curriculum, meaning that the standards are a commitment to a minimum level of academic goals (CCSSI).

However, even if the new standards are indeed more rigorous, some say that this will not translate into achievement gains for students. Tom Loveless of the Brookings Institution has suggested that there is little correlation between more rigorous standards and student performance on the National Education Assessment Program. What this means is that the common core standards will only benefit

students to the extent that states are able to find ways to implement them across all districts, and in a way that makes instruction itself more effective (Loveless, 2012).

Finally, some, including the nonprofit group “commoncore.org” are concerned with the standards’ focus on ELA and Mathematics, believing that these improvements will come at the expense of other content areas. This—a common criticism of NCLB—stems from the belief that important content areas, such as fine arts or sciences, will be neglected due to a lack of easily measurable outcomes.

The Local Impact of the Common Core:

DC Public Schools has begun implementing the Common Core standards this school year: the standards have been fully realized in ELA, while K-2 students have experienced a “soft” implementation of math standards. The district expects to fully employ the standards for the 2012-13 school year, including math standards at all grade levels. This is an exciting step—as a large urban district, DCPS is frequently compared to whole states under traditional metrics such as the National Assessment of Education Progress. The common core standards and accompanying assessment systems will allow DCPS to be measured in comparison with similar districts, rather than at the state level (DCPS).

The process of aligning DCPS to the common core requirements involves changes to curriculum, assessment, and professional development practices. The first prong—curriculum changes—entails adjusting what students are expected to know and when they are expected to know it. The district has partnered with several nonprofit agencies to develop a systemic plan outlining what teachers should teach and when, as well as obtaining new texts and manipulative sets to

improve learning in both math and ELA. The second aspect of DCPS's common core work involves appropriate professional development for their teachers. The district employs "learning circles," where an individual or a small group of teachers work with a coach to improve in a particular area. Applying this system to the common core implementation will help to ensure that each teacher is adjusting his or her instructional practice to align with the new expectations of the common core. The third area of alignment is ensuring that assessments are reflecting the content of the new standards. DCPS uses formative assessments, paced every six weeks, that allow teachers to evaluate each student's progress and make adjustments to their teaching based on the results. In addition to this, DCPS is part of a consortium of states working to develop core-aligned assessments—as we've seen, the end-product from the consortium will have an enormous impact on the actual classroom changes made by teachers nationwide and locally (DCPS).

Just outside the district, the state of Virginia is one of only a handful of states that have elected not to implement the Common Core Standards. However, it is still possible that the availability of new and improved curriculum materials will positively impact Virginia's students. Virginia's board of education has elected to revise its existing standards to align with or exceed the rigor of the proposed common core standards. In doing so, the board hopes to achieve a level of academic success comparable to other states, without having to undergo the transitional difficulties and disruptions associated with a complete overhaul of its curriculum.

Across the river in Maryland, the State Board of Education had approved the common core standards as early as June of 2010—making them one of the first

states in the country to do so. After a yearlong process of adjusting their curriculum in order to align with the Common Core Standards, Maryland adopted the new State Standards in June 2011, for implementation the following academic year.

High Hopes for New Standards:

The common core standards were designed to improve student achievement. By shifting the focus of instruction from content acquisition to content synthesis, the standards hope to improve critical thinking and complex learning processes. Challenges to implementation exist at nearly every level of administration, and the actual impact on student achievement remains to be seen. However, the standards represent a unique opportunity to transform public education, but it would seem that success will be in large part determined not by whether states adopt the standards, but how.

Final Thoughts:

Each of these reforms presents its own challenges, in addition to the potential for positive changes in the way our schools are run. To change our education system for the better, it is important to think carefully about the potential drawbacks and benefits of each proposed reform, plan implementation strategies that ensure that local-level needs are being met at all times, and continuously reevaluate the outcomes of our students. However, the proposed strategies, if properly implemented, can transform education in this country. Better preparing our students for school from an early age will ensure that they are emotionally and developmentally prepared for the task of learning, potentially alleviating trouble before it begins. Likewise, a continuous system of accountability and transparency is necessary to ensure that parents, community leaders and government officials at all levels have the information they need to make informed decisions and evaluate the effectiveness of their area schools. Finally, raising the bar and moving to a more cohesive curriculum and evaluation system will ensure that all children face high expectations, and that results are comparable across jurisdictions nationwide. While no single reform can expect to comprehensively address every problem facing our education system, it is important to continuously move forward.

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