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PIONEER INSTITUTE  
PUBLIC POLICY RESEARCH
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NOW in its 17th year, Pioneer Institute’s annual Better Government Competition showcases innovative ideas and programs to improve the efficiency and effectiveness of government. Implementation of previous winning entries has saved Massachusetts citizens over $400 million.

The 2008 edition of the Better Government Competition sought entries that would improve education at both the state and municipal level.

This year’s Better Government Competition Winner is the Florida Virtual School. The Virtual School provides an alternative to failing schools, those in rural areas and schools with a high minority population. The internet-based experience allows students to learn year round, 24 hours a day. Florida Virtual School has changed the roles of the classroom experience, making achievement the constant and time the variable. With a completion rate between 80 and 90 percent, the Virtual School has given choices to students who had very few before, and also offers advanced placement courses for those who wouldn’t otherwise have the option.

The runners-up and special recognition awardees also brought outstanding ideas to this year’s competition. From tax credit programs to specialized substitute teacher programs, each participant put their best forward.

This year, like every year, Shawni Littlehale makes the Better Government Competition happen. The fun just starts when Shawni drafts the annual competition announcement, which defines the problem we want to address. Then she canvasses business people, government employees, university faculty and students, and citizens nationwide, helping each to articulate a proposal. Once entries are in, it is not a question of simply organizing an awards dinner, fun though that may be. Shawni structures a review process by an external panel of judges that is rigorous and focused on program impact.

Heartfelt thanks go to this year’s exceptional Competition judges: James Campanini, editor of the Lowell Sun; Cornelius Chapman, partner at Burns and Levinson, LLP; Gary Gut, trustee of K-12 charter and independent schools; Mark Rickabaugh, executive vice president and CIO of Anchor Capital Advisors, LLC, and Pioneer Board member; and State Representative Marie St. Fleur, co-chair of the Joint Committee on Education, Arts and Humanities. Judges, thank you for your valuable time, insights and wisdom.

Clearly, this Competition has reached a nationwide scale (we even get a number of international entries). But at the end of the day, the Competition is about getting people to believe they can improve their government - that ideas do matter. So I would also like to thank the many state legislators who sent messages to constituents, and the many newspapers and radio stations that publicized the opportunity to offer ideas on how we can improve student achievement, lower dropout rates and increase safety in our schools.

Shawni, after next week’s competition, you can take a couple of weeks off before the 2009 Competition process kicks in again. But, for the rest of the staff, the fun begins—as we advance these ideas in the press, in the State House and with business leaders across the state and New England.

Jim Stergios, Executive Director
INTRODUCTION

Billy Mayhood was born with undeveloped nerves and muscles in the right side of his face, leaving him unable to move it, and the target of teasing from schoolmates. While surgeons had performed five nerve transplants on Mayhood between the ages of 5 and 14, the surgeries left his face swollen, and by middle school, teasing had turned to bullying. Administrators couldn't help. “No matter how many times my parents and I met with administrators to do something, we just never got anywhere,” said Mayhood, now a ninth grader. “By February of my seventh grade year I decided that I needed to get out of that school.”

But rather than giving up education Mayhood discovered the Florida Virtual School that allowed him to take classes in a private, comfortable setting, away from the distractions and bullying of classmates. The differences were stark and immediate. The challenging classes and stress-free setting rekindled Mayhood’s confidence and enthusiasm for school.

“And each week, I was usually finished with all of my course work by Thursday. If I wanted to – and I usually did – I could continue on ahead with my course work.”

Florida Virtual School is helping tens of thousands of students discover their fullest scholastic potential, whether students like Billy Mayhood, scholar-athletes like Lindsey Bergeon, who received an accredited and highly recognized FLVS education that allowed her to practice and travel to golf tournaments in pursuit of her dream of becoming a pro golfer.

FLVS is an innovative educational model that offers an excellent alternative to urban and rural students stuck in poorly-performing schools, schools with limited course options, and schools that are unable to meet medical and other needs of students requiring unique and flexible learning environments. Using the Internet and other technologies, FLVS has radically changed Florida’s educational landscape, and stands to do the same in schools across the country. The FLVS model is appealing because it gives students the flexibility and support they need to achieve at their highest potential, while offering teachers enthusiastic pupils and the satisfaction
of being able to truly teach students and see them achieve their fullest potential. The numbers speak for themselves: FLVS’ completion rate has steadily remained between 80% and 90%. In 2006-2007, more than 50,000 students successfully completed courses at FLVS, while another estimated 80,000 students from a variety of cultures and socio-economic backgrounds are expected to complete 100,000 enrollments this year, with each enrollment equivalent to one semester.

THE PROBLEM

Florida’s population is diverse, transient and experiencing dramatic growth, particularly in coastal areas. As a result, urban schools are often overcrowded while rural schools struggle to recruit and retain quality instructors who are drawn by higher salaries and attractive real estate investments in other school districts just short distances away.

Thus far, few educational alternatives have existed for students in poorly performing or failing schools, either urban or rural. Minority students have been disproportionately affected by these conditions and the lack of alternatives to them. It is also well documented that, whether overcrowded or underserved, poorly performing schools affect high-achieving, low-achieving and average students alike.

Florida’s leaders have, however, come to realize that students need a large variety of options to deal with the large variety of difficult scenarios that confront them. It was in response to this dearth of educational choices that Florida Virtual School was created. Showing foresight and a willingness to try a completely new educational model rather than replicating existing ideas, the Florida legislature has supported FLVS.

Other distance education programs existed when FLVS was launched, but they were mostly for limited populations in remote areas such as Alaska, some western U.S. states, and parts of Canada. These programs ranged from old correspondence-style courses to videoconferences and a blend of satellite-based instruction and networked programs.

FLVS, on the other hand, offers a completely internet-based model that frees students from geographic and socio-economic constraints, and provides them with equal access to educational excellence.

While educators have long known that different students develop at different speeds, our agrarian-based education system offers little or no flexibility to meet individual student needs. The academic clock starts and stops ticking at prescribed times for predetermined periods of the year, regardless of whether or not the student is ready
to learn or has mastered pre-requisite concepts in order to move forward. The quality online or blended learning program offered by FLVS frees students from traditional time constraints.

The success that students have enjoyed with FLVS starts, as CEO Julie Young notes, with one question: “Is this good for kids?”

THE SOLUTION
Florida Virtual School challenged numerous long-held assumptions about the way public education is funded, managed, assessed, and delivered, and it has pioneered radically new approaches to each, including—

- Open enrollments, providing students the option to start their coursework any time of the year versus the traditional fall enrollment period
- Flexible scheduling, allowing students to work any time—day, night, and weekends
- Flexible pacing, allowing students to slow down or speed up as needed to master concepts
- A replacement of the focus on seat time with a commitment to content mastery
- Teacher availability during evenings and weekends
- Annual contracts for teachers versus tenured positions
- Online team teaching and peer interaction
- Performance-based funding that follows the student—even across geographical lines
- Performance-based evaluation of instructors, with professional development targeted to build on specific teacher strengths
- Free access to online courses for all residents of the State, whether public, private, or home educated
- 24/7/365 access to grades, lessons, course accessories and assignments for both students and their parents
- Access for local school personnel to their students’ progress with FLVS courses
- Monthly phone contact with all parents and monthly progress reports
- Online clubs and collaboration that spans geographic, cultural, and time boundaries

Some of these strategies are now being replicated in other K12 venues, particularly in online learning, but in the beginning they were a radical departure from the
way things had always been done. Florida Virtual School pioneered many of these practices, paved the way for others, and even partners and assists others through the process so that, in the end, students everywhere can enjoy the benefits.

Also important to success is the fostering of a “work at your own pace” environment and commitment to a “high touch” philosophy. This means teachers pro-actively engage students not only in one-on-one instruction, but also in group sessions, tutoring, and extension activities, such as student-led webinars, honor societies and academic clubs, as well theme-based online fairs, such as an online Shakespeare Festival.

THE COSTS
In 1997, the Alachua School District and the Orange School District shared $200,000 given by the Florida Department of Education to fund the creation of an online learning program. Two years later, the Florida legislature voted to provide a $1.3 million appropriation that allowed FLVS to develop curriculum, policy, and an operating culture that contrasted sharply from existing bureaucratic structures.

It is important to note that start-up costs then were much higher than start-up costs today. For example, in 1997, FLVS couldn’t simply issue an RFP for an online high school curriculum that met state and national standards. It simply didn’t exist. FLVS had to bear the significant cost burden of developing courses itself. Nevertheless, FLVS developed more than 90 courses, each of them meeting state and national graduation requirements. Today, when advantageous to the curriculum, FLVS partners with outside vendors to create content, but the development team still maintains, refreshes, and completely renews all FLVS courses on a three-year cycle.

Thanks to its innovative and productive content developers, FLVS has become sort of a clearinghouse for quality online curricula in Florida, obviating the need for each district to pay for its own online curriculum development specialists. FLVS franchises and partners across the nation are now the beneficiaries of these courses, while also provide additional revenue for FLVS.

Other start-up costs include staffing, training, purchasing and supporting a learning management system, help desk and other technical support, and professional development geared specifically to online teams. FLVS provides its staffers with their own computer and the communications tools necessary for a virtual workspace, as well as tools to monitor teacher and student progress.

All staff at FLVS are hired and retained based on their performance, which means, for instance, that teachers are expected to successfully complete a given number of
students each year. Strict academic integrity measures and high professional expectations accompany an equally high level of teacher support and training.

FLVS became a permanent part of Florida’s education funding program in 2003, making it the first online school in the nation to achieve that goal. It was an achievement, however, with a very big caveat—one that FLVS lobbied for and received: The State pays FLVS the full per-pupil allotment only if students actually complete the course successfully.

**THE BENEFITS**

The establishment of a performance-based funding model by FLVS and the Florida legislature is arguably the achievement that carries the greatest positive implications for education as a whole. The model shifts focus away from how much time a student spends in a seat or where they learn and places it on mastery of subject.

Another important FLVS innovation is freeing students from traditional time constraints. FLVS drew heavily from a 1994 report, “Prisoners of Time,” from the National Education Commission on Time and Learning, which urged educators to measure success not by seat time but by achievement. For the first time, K-12 students have the needed flexibility of pace to help them learn better. From an academic perspective, this may be one of the greatest benefits and achievements of online learning for K12.

While pace modification alone abets significant individualization, teachers can further individualize instructional methods as needed with students who are struggling in various areas, whether literacy, second-language challenges, physical limitations, or more. Open enrollment allows students to start any time of year, while flexible scheduling allows students to work evenings or weekends if that is the best time for them.

Consider Billy Mayhood, who said the flexibility and teachers helped him excel. “I also have built really good relationships with my teachers,” Mayhood said, noting that one FLVS teacher spent 90 minutes on the phone with him to help him with algebra problems he was having a hard time understanding. “I have more of a one-on-one connection with my FLVS teachers because I’m not competing for their attention with other students”

Teachers are also benefiting. While many understand how online learning supports individualization, FLVS educators are also realizing the collaborative benefits to online learning and are taking the initiative to design more learning venues that bring students together across socio-economic, political, cultural, and language
barriers.

Also, in a digital environment, it is easier to pinpoint specific teacher strengths and weaknesses. With positive management and excellent support, teachers can grow professionally as never before. Indeed, even veteran classroom instructors report significant growth in their teaching practices after moving to FLVS.

Given these benefits, it is no surprise that Florida Virtual School has grown dramatically. Indeed, our greatest challenge today is to manage growth and change while maintaining quality. More than 100,000 enrollments are expected this year, with every kind of student imaginable represented in the demographic mix, including emotionally and physically handicapped students, students with learning disabilities, and students who are academically advanced.

The legislature has also mandated FLVS to give priority to students from rural, high-minority, and low-performing schools. Minorities comprise about one third of FLVS’s population, exceeding the national online learning participation rate among minorities by about 20%. Among AP students, minority participation was at 39% in 2006-2007. FLVS has also been instrumental in opening up AP and advanced math and science to rural students who otherwise would have no such options. Florida Virtual School’s mandate is to continue to increase opportunities for underserved students, and all development efforts keep that mandate as a priority.

The program also offers students a harder to measure, but well documented, benefit—hope: “I have three more years with FLVS and I’m excited about each one,” Mayhood said. “FLVS saved me from a horrific experience and gave me a chance to
stretch my academic muscles and discover a new and fun way to learn.”

APPLICABILITY TO MASSACHUSETTS
According to the Pioneer Institute’s April 2007 policy brief, “Scaling up Educational Accountability and Innovation,” the problems that Massachusetts and many other states face require an increase in the pace and scale of reform efforts. For instance, the report states that despite progress since the 1993 Massachusetts Education Reform Act, Massachusetts is still struggling to apply the twin forces of accountability and innovation on a wide scale. In 2006, the report noted, 157 schools were placed on the federal “In Need of Improvement” list. As in Florida, and likely throughout the nation, families are desperate for choices. The time has come, in education, to achieve a more flexible, collaborative, innovative, and results-driven model.

Florida Virtual School is one such model. The school’s desire is and always has been to end complacency with mediocrity, the stringent ties to “the way things have always been done,” the temptation to be self-serving instead of student-serving, and to end the bureaucracy that too often blinds educational institutions from the needs of the very students they were created to serve.

Florida’s leaders believed that it was their responsibility to provide numerous options for all students, whether public, private, or home educated. Like Massachusetts, Florida is a state with myriad challenges, but FLVS provides a model for how the right mix of partnerships, innovation, transparency, and accountability can begin to make the dream of education reform a reality.

This bodes well for the future. Currently, FLVS is working with Academic Advanced Distributed Learning (ADL) Co-Lab, the developers and leaders in SCORM-compliant* learning technologies, to develop next-generation online learning applications. Specifically, a greater emphasis on prescriptive-based, object-oriented learning is underway, paired with a focus on gaming, interactive, digital-media formats, and the brain-based research that will underpin this kind of development.

FLVS is also working on pilot programs to deliver math, fitness, nutrition, and science-related problems to students via SMS/text messaging, voice, and video messaging, using cell phones. Questions and problems in a sports-related theme, posed by professional athletes, are sent to students to win points for solving successfully.
CONCLUSION

The Internet, like the printing press or combustion engine, is a technology that has and continues to revolutionize society. The creators of the Florida Virtual School recognized this potential long ago and, fully aware that they have only scratched the surface of the Internet’s possibilities, continue to explore new educational opportunities as the technology evolves. But helping children achieve their fullest academic potential requires more than intelligent uses of technology, it requires educators, politicians and parents to recognize that each individual child finds him or herself in situations that are unique them, and that education must adjust to them, not the other way around. Imagine if Billy Mayhood was required to adjust to bullying, rather than providing him with an option like FLVS.

FLVS understands that the challenges facing families are complex, from juggling hectic work schedules, finding time to spend together, and raising children to skilled, productive and responsible members of society. Because public schools are not always able to accommodate the needs and desires of children and their parents, options such as FLVS need to be available and expanded. FLVS also realizes that, as the numbers of its students grows, parents and education officials are also recognizing that options such as FLVS are indispensable in nurturing the greatest number of American students possible. While FLVS recognizes its value to American education, it is anything but complacent with its achievement, and strives to raise its already high graduation rates while expanding the number of children it can help succeed.
Eager to Read
AppleTree Institute for Education Innovation

INTRODUCTION

Charles M. Payne begins his recent book, “So Much Reform, So Little Change: The Persistence of Failure in Urban Schools,” with the following quotation by G.K. Chesterton, “It isn't that they can't see the solution. It is that they can’t see the problem.”

AppleTree Institute for Education Innovation believes the main problem facing education is the persistent achievement gap in American public schools, particularly urban schools, that is caused, largely, by language, vocabulary and literacy deficits that are a by-product of poverty; and prevent the affected population from succeeding in school, work and life.

THE PROBLEM

This achievement gap exacts a devastating human cost: special education, lower student performance, grade retention, truancy, increased drop-out rates, lower graduation rates, increased cases of teen-age pregnancy, welfare, crime and incarceration.

If the achievement gap were a disease, it would be considered an epidemic. General Colin Powell, of America’s Promise, released a study on April 1, 2008 noting that only 49% of Native Americans, 53.4% of African Americans, and 57.8% of Hispanic Americans graduate from high school each year. That means nearly half of all disadvantaged students are being lost in failing public schools.

America’s “soft bigotry of low expectations” is like the “boiling frog syndrome.” If one throws a frog into a pot of boiling water, it will jump out. But if one places a frog into a pot of lukewarm water and slowly turns up the heat, the frog will boil to death. And so it is with the achievement gap. America has grown too accustomed to urban schools’ failure to educate nearly half of our most at-risk students.

Perhaps the worst example is, ironically, in Washington, DC, the Nation’s Capital. Recent National Assessment of Educational Progress (NAEP) scores rank the District of Columbia Public Schools among the worst in America. Sixty-six percent of 4th graders cannot read at a basic level of comprehension! The disparity between white and black children’s performance in Washington is greater than in any state.
The children who are most at-risk for school failure in Washington, due to their high-poverty backgrounds, come to school two or three years behind their more-advantaged peers. They will never catch up without a systematic, research-based, publicly funded intervention before they enter kindergarten.

THE SOLUTION
We need to understand the problem. With two of every three babies born to single mothers living in poverty, Washington, DC schools simply cannot be reorganized to close this kind of achievement gap. They must be supplemented with an effective early intervention that ensures that every child enters kindergarten with the background knowledge, language and pre-reading skills to succeed. Fortunately, the District of Columbia Council acted this year to fund universal, voluntary access to preschool.

But, there is often a strong disconnect between policy-makers and those who teach in classrooms. Policy and implementation are rarely considered together. One example of what can happen is the reading war between whole language and phonics, which affected a generation of California students. The math wars, fought between those advocating that we replace the systematic teaching of algorithms, and those who favor discovery learning, is another example.

Preschool has what can be called the developmentally appropriate practices war between those favoring unstructured, child-centered play and those advocating early, evidence based interventions in all areas of social, emotional and cognitive development, especially in early language, cognitive, and pre-reading skills.

In their book, “Meaningful Differences in the Everyday Experiences of Young Americans,” researchers Betty Hart and Todd Risley showed that young children from high poverty households tend to hear fewer words and simpler sentences than young children from middle class and affluent households. As a result, poor children tend to be at greater risk for school failure because they enter school with much smaller vocabularies and far less background knowledge than their more-advantaged peers. These deficits limit many at-risk students’ ability to understand even basic kindergarten instruction. Most never catch up.

Language is used to name, describe and understand physical, social, and psychological realities. Children from affluent households tend to experience richer vocabularies and syntax, as well as a greater understanding of what language refers to. This is called foundational knowledge, and it is a point that needs to be underscored.
Children need foundational knowledge as well as literacy skills to understand the letters of the alphabet, the sounds that they make alone and in blends, as well as how the printed word is presented. Children need early math skills. They also need important social and emotional skills that are critical to success in school like attending to instruction, persisting in their effort to learn, following directions from adults and learning how to solve problems with words.

If we agree that the problem is closing the achievement gap in at-risk preschool children before they enter kindergarten, then the solution is a robust, research-based intervention that features a core standards-based curriculum, an instructional program that emphasizes the development of language, vocabulary and pre-reading skills, and teachers who foster self-regulation, exploration and inquiry—to ensure that children enter kindergarten at or above national norms in language, vocabulary, numeracy and pre-reading skills.

The AppleTree Institute for Education Innovation developed Eager to Read™ as an evidence-based early intervention program for pre-school children. The program features aligned training, professional development and an assessment system that is producing outstanding results with the most at-risk children in Washington, DC.

THE COSTS—HOW THE PROGRAM IS FUNDED?
Considered as a new, stand alone program—Eager to Read™ is expensive. But, properly considered as early intervention in a preschool through 12 public education system, James Heckman, the 2000 Nobel Economics Prize winner estimates that a program of this kind will save more than seven times its cost through savings in special education, remedial education, student retention, avoidance of dropping out, avoidance of teen-age pregnancy, avoidance or welfare and incarceration (Wall Street Journal, January 10, 2006).

AppleTree Institute for Education Innovation has raised and invested more than $3.5 million over the past seven years to design, develop, pilot, implement or support and improve Eager to Read™ in eighteen classrooms at five schools in Washington, DC. The sources of funding came from two federal grants, including a $1.75 million Early Reading First grant, as well as foundation and private individual contributions.

AppleTree spends about $15,500 per child to implement Eager to Read™, which is delivered through a public charter school network (AppleTree Early Learning Public Charter School or “AELPCS”). At a recent Philanthropy Roundtable meeting in Washington, DC, Chancellor Michelle Rhee explained to foundation leaders
that the DC school system spends an average of $64,000 (including transportation) per student for special education placements as a result of the system’s abysmal failure to educate children. Twenty percent of DC students are identified for special education. Considered in this light, an ounce of “intervention” is worth a pound of cure.

Washington, DC provides $11,700 under their Uniform Per Student Funding Formula to educate preschoolers. Charter schools receive an additional per student facilities capitation of $3,109. Public preschools are also entitled to federal categorical and competitive grants, as well as funding for English Language Learners and special education. Though high, the costs are in-line with overall student costs in Washington, DC, and a fraction of the cost without an effective, early intervention.

WHAT MAKES UP THE PROGRAM COSTS?

AELPCS teachers are hired with bachelor’s degrees and, once hired, receive specialized training in early childhood education. Research from the National Institute for Early Education Research finds these teachers are more likely to have the skills to engage children in meaningful conversation, expand children’s use of language and build children’s understanding of the world around them.

Classrooms feature low child to teacher ratios that promote greater opportunities for extended language interactions between teacher and students as well as opportunities to differentiate instruction individually and in small groups.

AELPCS has created engaging classroom environments that are safe, inviting, child-sized, furnished and supplied to support children’s learning and exploration. Classrooms have centers for dramatic play, art, writing, library and manipulatives; books and writing materials are available throughout. Evidence of children’s work reflects rich thematic content and authentic opportunities to use print. Teachers are warm, caring and responsive to students and use assessments to measure and improve the quality of their classrooms and instruction.

The standards and curriculum are aligned with research that identify the knowledge, skills and dispositions that are predictive of later schools success including language, early literacy, foundational mathematics, and social-emotional development.

AELPCS uses valid assessments of children’s progress that are used to improve instruction. Children are screened upon enrollment. Throughout the program, teachers use both observational and direct assessment to understand what children are learning. Those who do not make expected progress are provided additional support to ensure they achieve key skills. Data is used for continuous
improvement.

Data driven professional development is intensive, ongoing, research-based and classroom-focused. Data on children’s learning, classroom and instructional quality is used to inform the content of professional development. The effectiveness of professional development is measured in part by the change in classroom and instructional quality.

Eager to Read™ incorporates a Response to Intervention (“RTI”) model-commonly used in the primary years-to prevent reading difficulties and over-identification for special education. RTI recognizes children’s strengths and needs through systematic screening and progress monitoring, provides three tiers of instruction, and includes problem solving with parents and educators to aid in decision-making.

BENEFITS-PROGRESS MADE SINCE THE PROGRAM WAS INITIATED

AppleTree Institute has implemented Eager to Read at AELPCS, and supported implementation at three other schools through a federal Early Reading First grant. Implementation has resulted in strong gains in child outcomes in language, vocabulary and pre-reading skills, as evidenced from overall 2007-08.

AppleTree’s schools and their partners use norm-referenced standardized assessments to measure vocabulary (Peabody Picture Vocabulary Test or “PPVT”) and phonological knowledge (Test of Preschool Early Literacy or “TOPEL”). Since the goal is to get children to national norms, by conducting a pre and post-test, they can measure the progress the children make against a sample of their peers from across America.

Children at partner schools also made very significant gains—10 percentiles—in one year. AELPCS provides support to partner schools including materials, sup-
plies, coach mentors, training and professional development. But there are factors that we don't control or even influence, which can have an effect on outcomes such as teacher quality and teacher-student ratios.

AELPCS outcomes are similar across 3 campuses—and children made greater gains than last year (AELPCS LY) while the charter school experienced 500% growth in enrollment this year (from 36 to 144).

The TOPEL (“Test of Preschool Early Literacy) also measures growth in alphabet knowledge and early knowledge about written language conventions and form; The test administrator asks the child to identify letters and written words, point to specific letters, identify letters associated with specific sounds, and say the sounds associated with specific letters.

A three-year outside evaluation, by Dr. Laura Justice of the University of Virginia’s Curry School, shows Eager to Read™ to be an effective early intervention that builds foundational knowledge and children’s language, pre-reading and cognitive skills to the normative range in those critical domains. Last year, AELPCS contacted a small (25 of 120), but random sample of children who had matriculated from
the program. None of the children contacted had been placed in special education and none had been retained. AppleTree seeks funding to conduct a longer-term evaluation of child outcomes as a larger number of their students proceed through elementary school.

MASSACHUSETTS

Urban schools systems in Massachusetts also spend high levels of tax dollars on failing schools, or worse, with the expensive social consequences of school failure. As Bay State policy makers consider extending education to include preschool, pre-kindergarten and full-day kindergarten, a cost-benefit analysis should be undertaken—particularly in the cities with large numbers of failing elementary and middle schools.

A critical part of this analysis is to look at the entire picture, rather than preschool interventions as expensive “additional” programs, particularly in challenging cities like Holyoke, Springfield and New Bedford.

The return on investment of a preschool intervention like Eager to Read™ is relatively quick. One would expect significant differences in the 3rd and 4th grade MCAS ELA scores when the first cohort passes through that grade. The number of children being identified for special education would also be reduced dramatically.

In a similar fashion to how the extended learning initiative has been funded, Massachusetts could consider targeting investments in some of the Commonwealth’s lowest performing school districts with the program delivered through five-year, renewable performance contracts that are open to a diverse set of potential providers including school systems, community-based organizations, non-profit or for-profit providers with an accountability rubric that is aimed at closing the achievement gap before kindergarten. Governor Patrick’s proposed “Readiness Schools” might be such a vehicle for some targeted pilots.
Washington, DC is providing significant levels of public funding for innovative models of education, but Massachusetts, which has a rich history of choice, reform and innovation, could implement a program like this on a trial basis with a roll-out strategy if and when the cost-benefits justify the expansion.

**CONCLUSION**

Midas Muffler used to have a famous television commercial that warned, “Pay me now, or pay me later.” Eager to Read™ is a cost-effective, early intervention to close the persistent achievement gap that is the greatest challenge to improving educational outcomes in America. The question is, will the public servants and policy makers who budget and administer public education make the changes to raise the trajectory of learning for all students or continue our disgraceful legacy of remediation, special education and failure. Which will it be?
Teacher Merit Pay in Ohio
The Buckeye Institute for Public Policy Solutions

INTRODUCTION
Ohio policymakers have made improving the state’s education system a top priority, but reforms enacted so far have had marginal effects. While improving the quality of the state’s teachers is one reform that holds promise, efforts towards this goal have been extremely limited.

To address the problems of recruiting exceptional new teachers, retaining the most successful ones, and improving the current teaching workforce, merit pay systems are emerging in Ohio and other states.

Some merit pay plans are impractical for widespread implementation because they require an institutional capacity that does not exist in many schools. However, merit pay does not necessarily require a total overhaul of the current way teachers’ salaries are determined.

In fact, practical and sustainable merit pay plans can be achieved through an injection of market-based incentives—that is, the introduction of bonuses as rewards for excellence. The practical bonus-for-performance system will work with the existing workforce and can be put in place without significant increases in education spending.

Specifically, teachers could receive bonuses of up to $10,000, $7,000, and $4,000. Variation depends upon subject taught, professional responsibilities, supervisor evaluation, and student achievement. The central feature of the prototype plan is that the largest portion of the potential bonuses is based on measures of individual classroom growth and school-wide growth.

As research suggests, a well-designed merit pay program, like the one proposed here, can increase the quality of teachers, improve educational outcomes, and facilitate an environment of collegiality and cooperation among teachers.
THE PROBLEM
Attempts to improve educational opportunities for rich and poor alike have included across-the-board funding increases, changes to the funding formula to create more equity, facilities improvements, the introduction of school choice programs such as vouchers and charter schools, and other smaller programs and policy changes. In the search for promising solutions, education stakeholders have also looked at ways to improve teacher quality.

Although it is now common wisdom that teacher quality matters for student success, most education reforms to date have failed to address problems of recruiting exceptional new teachers, retaining the most successful ones, or improving the current teaching workforce. Changing the incentives offered to teachers as part of their compensation packages is one promising reform.

Currently, most school districts in the United States compensate teachers using the traditional “single-salary schedule,” which bases teacher pay primarily on seniority and the number of higher education credits attained. Introduced in 1921, the single-salary schedule is used in nearly all Ohio schools, with the exception of schools participating in the Teacher Advancement Program (TAP). If lawmakers are truly committed to improving education, they should seriously consider how instituting merit pay reforms can elevate teacher performance.

To be sure, other reforms to teacher compensation have been tried, including across-the-board salary increases and need-based differential pay. Neither of these two options, however, improves the ability of districts to recruit, retain, and reward more effective teachers.

Across-the-board increases have not led to meaningful gains in student achievement. While pay raises might lead to greater teacher satisfaction and might help schools recruit higher quality teachers, they do not motivate teachers to improve their performance or examine their teaching practices. In Ohio, for example, increased spending on schools’ instructional budgets has not led to higher student achievement.

Need-based differential pay, sometimes called “combat pay,” offers higher salaries to teachers in understaffed subjects and schools. While the principle of letting labor markets determine teacher pay in these circumstances is an improvement to the status quo, differential pay fails to provide any incentives for existing teachers to innovate or work harder.
THE SOLUTION
Because “merit pay” is a very general term describing a wide variety of plans, it is important to identify what merit pay is and what it is not. Such plans, also known as “pay-for-performance” or “incentive-based” compensation plans, have been tried since the 1800s, but have varied greatly. Quality merit pay plans are compensation systems that reward teachers for improving student achievement and receiving high marks from supervisors. The central idea of merit pay is that monetary bonuses linked to student achievement do far more to improve instruction than increasing teachers’ salaries because they participate in extra classes at the local college.

The merit pay plan proposed for Ohio is rooted in the principles that self-interest brings about desirable outcomes and that market-based reforms can improve educational environments.

While some merit pay plans can have shortcomings, those that are well-designed and based on individual student achievement growth, rather than absolute achievement, have proven effective. The use of individual student achievement growth recognizes that not all classrooms are the same. That is, bonuses are based on the value added through teachers’ efforts rather than on which students are assigned to their classrooms. Basing awards on growth also takes into account the fact that students start at different points.

Since one goal of the prototype plan is to create incentives for teachers to collaborate and build a positive school environment, all instructional personnel in a school are eligible for bonuses. Moreover, a portion of every teacher’s award is based on improvements in student achievement growth school-wide. At the same time, the largest incentives should be given to those teachers who have the greatest direct impact on student achievement.

Under this proposal, core teachers are eligible for up to $10,000 in bonus pay. The largest portion of that (80%, or $8,000) is based on student achievement growth. Non-core teacher’s maximum award might be $7,000 rather than $10,000, with 80 percent ($5,600) based on student achievement growth. The other 20 percent is based on supervisor evaluations.

There are also important distinctions between different types of non-core teachers. The reading specialist, for example, likely has a greater impact on student outcomes than a teacher’s aide, and should be rewarded as such. Therefore, in this proposal, non-core educators with a smaller direct impact on student achievement could only earn a maximum total award (student achievement and evaluations) of $4,000.
For core teachers, such as math, science and language arts teachers, half of the portion of their award which is tied to student test performance would be based on the improvement of students in their classrooms, and half would be based on overall school improvement. For non-core teachers, such as art, physical education, or support teachers, the portion of their award which is tied to student test performance would be based completely on overall school improvement. Apportioning rewards in this way, while also providing a higher potential maximum award to core teachers, ensures that those with the most responsibility for key academic subjects receive the highest incentives without neglecting the contributions of other personnel.

Student improvement is calculated according to gains in standardized test scores. For example, a prior year’s test score could be subtracted from the current year score to get the individual student’s growth score. The average classroom growth for a core teacher could be calculated by adding up student growth scores and dividing that sum by the number of students. A minimum of five students would be required. The same calculation method could be used to determine school-wide growth.

Principals are also included in this plan to give them incentives to hold teachers accountable. If principals earn awards based on the effectiveness of their teachers, as measured by student test score gains, they will have an incentive to evaluate teachers fairly, thus obviating the temptation to award low-performing teachers with good reviews. Moreover, principals would have extra incentives to be active instructional leaders. Generally, principals would be eligible for the maximum award available for key non-core personnel, or $7,000.

Across all personnel types, 80 percent of award money would be based on student improvement, and the remaining 20 percent would be based on supervisory evaluations. These evaluations address concerns that standardized tests alone cannot capture all of the positive effects that teachers have on children.

School principals would clearly communicate their expectation to teachers at the beginning of the year, and then evaluate each teacher several times per year. Each teacher earning the highest possible rating on the evaluation would earn the maximum award while other teachers would earn an award on a sliding scale.

Principals and assistant principals would also receive evaluations from the superintendent or the appropriate supervisor.
THE COSTS

Many merit pay plans require an administrative capacity and a particular type of teaching staff that most schools do not have. Although such merit pay plans can do much good, they require a substantial increase in both leadership capacity and manpower hours. Furthermore, they can be expensive to implement. The funding for the awards in this prototype plan, however, could come from currently planned budget increases. For example, Ohio’s Columbus Public School district increased its spending for teacher salaries by 17 percent from the 2004-05 to 2005-06 school years, going from $164,708,060 to $192,267,231. Setting aside just 4 percent of this increase for a merit pay program would have provided over $1 million for performance-based bonuses.

Although a few states and localities use general operating budgets for merit pay bonuses, much of the funding comes from private foundations. The federal government has also made approximately $100 million available through its Teacher Incentive Fund (TIF). To obtain these competitive grants, applicants must design plans that are heavily based on student achievement growth. The first year of awards was for the 2005-06 school year, so outcome data are not yet available. Recipients of TIF grants include school systems in Denver, Chicago, Houston, California, and New Mexico. The NEA “strongly opposes” the program.

THE BENEFITS

This merit pay plan creates positive incentives for effective and innovative teaching by using growth scores to measure student performance. Student ability is taken into account, and teachers are rewarded not for the types of students they have but for the value that they add to the student’s education. The use of average school-wide growth offers positive incentives for collaboration among all staff members in a school.

The plan recognizes that bonuses should be based primarily on improvements in student performance, while acknowledging that supervisor evaluations also provide important measures of teacher performance. This plan offers a meaningful and fair way of allocating bonuses without requiring any radical changes to existing school compensation.

Quality merit pay plans such as the one outlined here can also help with teacher recruitment by attracting higher quality undergraduates to the teaching profession.

Policy experts who study teacher compensation have found that teacher collaboration can increase in schools with well-designed merit pay plans. Current pay structures, by contrast, do not have any incentives that promote collaboration.
One prominent study released in late 2006 by researchers at the University of Arkansas found that teachers in participating schools had greater salary satisfaction, a more positive school climate, and higher student test scores. Another 2006 study by researchers at the University of Florida found that “test scores are higher in schools that offer individual financial incentives for good performance.” Similar examples of merit-pay success exist elsewhere in the country.

**APPLICABILITY TO MASSACHUSETTS**

Despite sometimes vociferous objections from teachers’ unions and other reform opponents, educators and policy makers are increasingly recognizing the benefits that merit pay can offer. Currently, forms of merit pay have been tried in states as diverse as Arkansas, Colorado, Florida, Minnesota, South Carolina, Tennessee, Texas, and Utah. The Milken Family Foundation’s Teacher Advancement Program (TAP), a voluntary merit pay program, is running in thirteen states, including Ohio. Like other states with pockets of particularly low performing schools, Massachusetts is a prime candidate for a merit pay program such as the one proposed here.

The implementation of a small-scale merit bonus pay program in Massachusetts would not require a major cultural shift in the education system. The state has enacted strong accountability measures, and there is widespread acceptance of judging the effectiveness of schools by their academic performance on state exams. A natural extension would be to begin to tie part of school employees’ compensation to performance on state standardized tests.
UVA School Turnaround Specialist Program
Darden/Curry Partnership for Leaders
in Education at the University of Virginia

INTRODUCTION
The University of Virginia School Turnaround Specialist Program (UVA-STSP) is a new and innovative approach to rescuing America’s failing schools by drawing on tried and true strategies from the business world and applying them to the education world. America is the world’s premier business power because of innovation and the ability of business leaders to anticipate and adjust to change, including the ability to revive poorly performing companies. The program has proven that many of the same strategies that have rescued companies from failure can also rescue schools, and their students, from failure. To accomplish this, the program enlists experts from UVA’s Darden School of Business and the Curry School of Education, who bring their knowledge, passion and commitment to the purpose of helping educators make their schools the best they can be.

THE PROBLEM
Since the passage of No Child Left Behind in 2001, a growing number of schools across the nation are not meeting its requirements for raising student achievement. According to the U.S. Department of Education, the number of Title I schools – those schools in which at least 40 percent of the students are from low-income families and are eligible for federal assistance-identified for improvement jumped 50 percent in the 2004-05 school year, from about 6,000 schools to more than 9,000. Alarmingly, the Department of Education estimates that, by the end of this decade, some 5,000 schools are on track to fall into “restructuring,” the most extreme designation under NCLB. These trends will have repercussions for at least 2,500,000 students, many of whom are coming from poor or minority households or are English Language Learners (ELL).

Given the likely consequences of neglecting this problem, it is difficult to overstate the urgency with which school leaders must address student achievement among poor, minority and ELL students. This dire situation calls for the expertise of “turnaround principals” who are capable of achieving quick, dramatic and sustained change to raise student achievement. This, however, cannot be a solo endeavor.
To achieve and sustain a successful turnaround, there must be district and school leadership teams in place with the knowledge and skills necessary to support the turnaround principal.

The difficulty of this task is amplified by the fact that it must be accomplished within the context of a society that is less homogeneous and more diverse in its racial, linguistic, and cultural composition. To rise to this challenge, America’s educational leaders must look beyond the usual skills and strategies that they have traditionally relied on, and seek new ones tailored to handle 21st century realities.

One obvious source of new ideas is the business world, where rescuing and turning around troubled companies has evolved into a valued skill, borne out of economic and social necessity. Unfortunately, America’s educational leaders are typically not exposed to the same general management and leadership principles used by our nation’s top business leaders.

For example, a 2005 study by Frederick Hess and Andrew Kelly, education researchers with the American Enterprise Institute, found the following:

- Just 2% of 2,424 course weeks sampled from preparedness programs at graduate schools of education addressed accountability in the context of school management or school improvement; fewer than 5% included instruction on managing school improvement with data, technology, and empirical research.
- Statistics, data, or empirical research were mentioned or referenced in only 11% of the 2,424 course weeks.
- Only 1% of course weeks dealt with school public relations and small business skills, while less than 1% addressed parental or school board relations.
- Of the 50 most influential living management thinkers, as determined by a 2003 survey of management professionals and scholars, readings from just nine were assigned a mere 29 times out of 1,851 readings.

These figures are especially compelling in light of NCLB’s mandates for accountability and results, which make these topics more relevant to schools now than ever before.

**SOLUTION**

Beginning with the belief that effective leadership is as vital to successful education as it is to successful business, the University of Virginia’s Darden School of Business and the Curry School of Education established the Partnership for Leaders
in Education (PLE). This partnership helps educational leaders help their schools with programs that apply best practices from business and education.

In the spring of 2004, the Virginia Department of Education (VDOE) contracted with the PLE to design and implement the Virginia School Turnaround Specialist Program. The program was a key component of Governor Mark Warner’s landmark Education for a Lifetime Initiative, a set of targeted reforms aimed at improving schools in the Commonwealth of Virginia. Drawing on his experience and expertise as a venture capitalist and successful businessman, Governor Warner wanted to develop a cadre of specially trained principals who would be the equivalent of turnaround managers in business. These individuals would have training and skills tailored to meet the task at hand—improving student achievement in Virginia’s lowest-achieving schools.

The innovation of combining the Darden and Curry schools to create the School Turnaround Specialist Program impressed the Microsoft Corporation. In the fall of 2004, Microsoft’s Partners in Learning program joined forces with the VDOE, the Governor’s office, and the PLE to create and support a nationally replicable model of the turnaround program. Subsequently, in July 2006, the PLE launched the national scale-up of the UVA-STSP by including 24 turnaround specialists from Chicago, Philadelphia, and Broward County, FL., in addition to participants from Virginia. The program now also includes participants from Louisiana, as well as Native American schools from North and South Dakota. A fifth cohort of specialists will begin the two-year program in July of this year.

The program consists of the type of executive education typically received only by top-level business leaders and is designed to address the leadership needs of education leaders charged with turning around low-performing schools. It is worth noting that this program not only provides training and support for school principals, but also for district and school-level leadership teams associated with each school involved. The program includes the following components: executive education residential programs held at UVA’s Darden School of Business; on-site retreats held in participating districts; peer coaching; an online portal; teleconferences; and, a senior project director dedicated to providing support to participants.

Other turnaround programs exist, but are mainly comprised of teams of coaches or mentors who only provide advice to particular principals on a weekly or monthly basis. Extant research indicates that these programs have limited effect. On the other hand, the UVA-STSP is the only turnaround program in the country that combines a top business school and a top education school to provide training and support to turnaround principals, as well as to district and school-level leadership
teams. Moreover, rather than taking over the school as an outside management provider would, this program helps to build internal capacity within both schools and districts.

THE COSTS
Initially, the program required legislative approval of Governor Warner’s budget, which allocated funds for this program. As a result, the program was first funded by the VDOE with a grant of $1,375,322, which paid for two initial cohorts of 20 principals from Virginia. Microsoft’s Partners in Learning also provided $1,599,501, which paid for research and efforts to expand the program outside Virginia. The program now depends on fees for service from new participants each year.

Typically, program participation does require some form of budget approval from each participating school district/state, but this does not usually require the passage of legislation.

THE BENEFITS
Results from the first three cohorts, totaling 43 principals, show that the program is meeting its goal of raising student achievement in targeted schools. Approximately 57% of schools from Cohorts I, II, and III either made Adequate Yearly Progress, the benchmark set by NCLB, or saw at least a 5% reduction in failure rates in reading or math.

The program continues to evolve and improve with experience and as research in the school turnaround field grows. For example, more district involvement is now required. A district support team must attend the initial training with the principal(s) involved. In addition, the district must appoint at least one person to serve as the “district shepherd” or point of contact for the turnaround principal(s). The district shepherd must participate in all training and components of the program. The timing for the principal’s appointment of a school leadership team has changed and now occurs midway through the first year of the program rather than at the beginning. Because the principal is typically new (Q10) to the turnaround school, this gives him/her time to determine which staff members are best suited for these roles. Research and experience from the business world show that, most often, a new leader is required for a successful turnaround. This is likely true for a number of reasons including that a visible change in leadership may help communicate the school’s/district’s dedication to change, it may allow the community to invest in a leader who shows new potential, and it may generate organizational pressure that can help to make real change possible. We also know that a culture of high expectations and change in behaviors is crucial to success in high-poverty,
low-performing schools. Leadership that has been in place for a number of years is part of the existing culture, which has become accustomed to consistently low performance, and is therefore unable to create the sense of urgency necessary to motivate staff and initiate dramatic change.

A strategic management system, in this case the Balanced Scorecard, which provides performance measurements, was not introduced until Cohort II. This is now a primary component of the program. The program is now beginning to use new research about leadership skills that may increase the chance of success for school turnarounds. The PLE is also constantly soliciting feedback from participants, practitioners, professors and researchers and using the information to improve the program.

APPLICABILITY TO MASSACHUSETTS

The high number of schools failing to meet NCLB requirements and letting down their students, especially poor, minority, and ELL students, is a national problem faced by every state in the country. For its part, Massachusetts has responded by using outside turnaround partners such as the National Institute for School Leadership (NISL) and the Education Development Center. Moreover, some state legislators and other state leaders proposed, but never passed, legislation in support of a Commonwealth Turnaround Collaborative that would assign turnaround specialists to revamp low-performing schools. According to the Massachusetts Department of Education, as of October 2007, 674 Massachusetts schools have been identified for improvement, corrective action or restructuring.

CONCLUSION

Looking forward, STSP officials are exploring ways to expand the program and make it available to a wider audience. In addition, the PLE is committed to continued work/research in the area of turnaround leadership competencies/abilities in order to better assist states/districts with identifying, recruiting and retaining high-impact turnaround leaders.

The PLE also intends to take advantage of the experience gained through development and implementation of The Executive Leadership Program for Educators at the University of Virginia in association with The Wallace Foundation. This program is offered to state and district legislators, administrators and board members with the goal of encouraging aligned leadership through data-driven decision making, stakeholder engagement and organizational change.

We intend to integrate our work in the Wallace program with our work in the School Turnaround Specialist Program, thereby initiating systemic change from
state levels down to the school level and enhancing the probability for successful/sustainable school turnarounds. The PLE’s experience in working with education leaders at the state through the school levels provides an advantage that few if any other organizations have. Between the past research from which we have learned, our record of success, and determination to find even better ways to improve schools, the UVA-STSP, if scaled nationally, stands to make significant contributions to American education.
Educational Improvement Tax Credit Program
REACH Foundation

INTRODUCTION
Founded in 1991, the REACH Foundation is a grassroots organization in Pennsylvania working for parental choice in education. Comprised of a broad coalition that includes parents, taxpayer groups, ethnic and religious organizations, and members of the business community, REACH–Road to Educational Achievement through Choice–was instrumental in drafting, passing and, most recently, expanding Pennsylvania’s landmark Educational Improvement Tax Credit (EITC) program.

Enacted in 2001 with overwhelming bipartisan support, Pennsylvania’s EITC program has proven that students from the same socioeconomic backgrounds, and with the same level of inherent ability, can achieve a greater level of accomplishment when freed from a failing public school and placed into the school of their parents’ choice. When students are matched with the learning environments best suited for their individual needs, academic and personal growth are enhanced.

The goals of the EITC program are to increase student achievement, ensure that parents and students realize true choice in education, and allow businesses to keep their tax dollars in their communities rather than send them to the state government. This theory is supported by Pennsylvania’s school administrators, parents, and kids, all whom have credited the EITC program for expanding student horizons.

THE PROBLEM
Pennsylvania public schools have suffered many of the shortcomings that public schools across the nation have suffered: overcrowding, substandard student achievement, unimaginative policy thinking where a one-size-fits-all approach to students trumped the view that different students have different needs, and a lack of educational alternatives. Consequently, poorly performing schools continued to perform poorly, draining taxpayer money with little achievement to show. The few alternatives that did exist were unavailable to most families, and were too costly to be implemented in a broad and sustainable manner. This began to change with the introduction of the EITC program in 2001.
THE SOLUTION

The EITC program allows private businesses to donate up to $200,000 to either a registered Scholarship Organization (SO) or an Educational Improvement Organization (EIO) of their choice. In turn, the state’s responsibility is to provide each donating business with a tax credit of 75% of their donation amount, or 90% if they pledge the donation for two consecutive years. The Department of Community and Economic Development collects the donations and allocates the funds to the SOs or EIO’s corresponding to the donors’ wishes. This program enables businesses to contribute to their community while allowing students to use these funds to pay for their individual educational needs.

THE COSTS

Originally, the cap for the program was set at $30 million annually, with two-thirds allocated to SOs and one-third given to EIOs. While this division of funds has remained constant, the total cap has been increased almost annually to its current level of $75 million, including $5 million for pre-K scholarships. During the 2007-2008 academic year, approximately 40,000 students used EITC funds to attend the school of their choice.

There are currently more than 1,850,000 students enrolled in Pennsylvania’s public schools, compared to less than 285,000 students, or about 15%, attending nonpublic schools. While the 40,000 students currently benefiting from EITC scholarships may seem like a significant number, they represent a mere 2% of the state’s total student population. Thus, for every one family with the opportunity to choose the learning environment they feel is best for their child, more than 50 families don’t get this opportunity for lack of funding.

Unsurprisingly, the glaring disparity between students in public schools and those benefiting from the EITC program is reflected in the funding allocated to the two options. While Pennsylvania’s 2006-07 state budget allotted $635 million to pre-K-12 education, only $59 million, or 9.3%, went to the EITC program. That means that for every $10 spent by the state on primary education, only 93 cents is available for the EITC program.

Conventional wisdom holds that the more public taxpayer funds are allocated to public service, more people receiving that service will benefit in some way. The EITC program is unique, however, in that program costs borne by the state and taxpayers are offset by savings inherent in the program’s formula, which includes public-private partnership and an injection of market-driven capitalism into a public service. In fact, the Commonwealth saves taxpayer money as the EITC program continues
to expand and more students are able to realize their potential at the school best suited to them.

Both taxpayers and the public school districts realize savings as the program is implemented and expanded. The funding for one public school student to attend a government-administrated school comes from three sources: the federal, state, and local governments. Federal funding is by far the smallest portion of this total, followed by local funding, in the form of property taxes, while state funding represents the largest portion of the total amount designated to one student. Within the parameters of the EITC program, the school loses its funding on a federal and local level when a student moves from a public school to one using a scholarship. However, the state funding is not taken away from the district experiencing the loss. Thus, the difference in the amount allocated to a public school student and one that has used an EITC scholarship to exit his/her public school is retained by the original district and allocated to the remaining students, raising per pupil expenditures without increasing taxes or other means of funding.

**THE BENEFITS**

The average amount allocated to one public school student within the Commonwealth to educate him/her for one academic year is approximately $11,000, while the average EITC scholarship amount awarded to one student to use outside the system for one academic year is $1,090. That is the average amount the state designates for one student in the public school system is roughly ten times that awarded to a student using an EITC scholarship. If one multiplies the difference ($9,910) by the number of students receiving EITC scholarships (40,000), it is determined that over $396 million is saved by awarding this relatively small percentage of students with EITC scholarships. Conversely, if each of these students, representing barely 2% of the state’s overall student population, reentered the public school system, that figure would represent the costs required to educate them.

During the 2005-2006 academic year, the average annual parochial school tuition was $2,607 for elementary grades and $5,870 for secondary grades. When a student is awarded an EITC scholarship at $1,090, families must account for $1,517 for elementary students and $4,780 for secondary students. Correspondingly, during the same academic year, the average annual tuition cost for one private, non-parochial school student was $14,000 for grades 1-5, $15,000 for grades 6-8, and $16,000 for grades 9-12. When awarded an EITC scholarship at the average amount, $1,090, families must make up between $12,910 and $14,910 in private, non-parochial school tuition. Despite the relatively low income cap on those eligible for EITC funds, families readily accept this significant financial burden in order to provide
their children with what they believe to be the most appropriate and beneficial learning environment.

Since its inception seven years ago, EITC funding has increased roughly 150 percent, from an original $30 million cap to the current $76 million level, including a $5 million allotment to pre-K scholarships not present under the original design. While this increased funding represents noteworthy progress towards real choice for Pennsylvania families, the benefits are available to too few students.

Governor Rendell’s 2007 budget proposal allocates $1.4 million in new funding to the EITC program. Under current program specifications, one-third ($466,666) of the funding would go to innovative EIOs, while two-thirds ($933,333) would go to EITC scholarships. If the average scholarship amount remains $1,090 per student, that means 856 more students now enrolled in PA public schools, or a paltry 0.05 percent of Pennsylvania’s total public school student population, would have the means to choose a school better suited for their individual.

Based on this proposed rate of expansion, even excluding population growth, it would take over one millennium for choice in the form of EITC scholarships to reach only half of PA public schoolchildren.

Conversely, the relative statistical triviality in terms of number of students is contrasted by the considerable savings to the state. If only those 856 students used EITC funds to enroll in a nonpublic school, given the disparity in allocation to one public school student versus one average EITC scholarship, the savings would be almost $8.5 million for just one year. Similarly, if $25 million was added to the program, an extra 15,290 students would be awarded EITC scholarships, at a savings of over $150 million. If $50 million was added to the program, 30,581 new students could receive scholarships, at a savings of over $300 million. Finally, if $100 million in new funding was added to the EITC program, 61,162 students could receive scholarships, and save the Pennsylvania General Fund over $600 million in one year—only $35 million less than the annual public school system K-12 budget.

These potential savings cannot be realized without expanding the EITC program. The good news, however, is that national and statewide surveys suggest that there is significant demand from both businesses and families to increase the EITC program. An April 2006 survey conducted by the REACH Foundation of 500 Pennsylvania parents found that 77% said they support a government-sponsored tuition scholarship program that would help them send their children to a school of their choice, public or non-public. The survey also showed that 60 percent of parents
would take advantage of a $3,000 scholarship to send their children to the school of their choice.

In a 2003 Commonwealth Foundation survey of 21 parents with schoolchildren who have left Philadelphia public schools with the aid of Futuro Educacional EITC scholarships, the results show similar support. The vast majority of parents responded rated their child’s new school better than the school which he or she had left.

While these surveys provide valuable insight into the opinions of parents about the EITC program, the number of families and businesses registering to receive and donate towards EITC scholarships indicates that the demand for EITC far exceeds supply. For example, families living in Diocese of Pittsburgh requested some $11.3 million, but received only $2.2 million annually. The Neumann Scholarship Foundation puts its need at $3.2 million, while it can distribute only $1.2 million. Similarly, Business Leadership Organized for Catholic Schools (BLOCS) said only 2,971 of their 5,323 EITC-eligible applicants received scholarships.

The excess demand exists on the other side of the EITC spectrum as well. The PA Department of Community and Economic Development estimated that more than 500 businesses pledging more than $11 million to the EITC program during the 2006-07 fiscal year had their donations rejected because of the current cap.

APPLICABILITY TO MASSACHUSETTS

It is this type of successful and innovative corporate tax credit program that our proposal recommends for the Commonwealth of Massachusetts. Pennsylvania currently enjoys this type of school choice, and the potential benefits available to students, schools, and businesses in Massachusetts are plentiful.

While Massachusetts public schools consistently rank very well compared to other states, myriad signs show that many schoolchildren in the Commonwealth need better educational opportunities. Students from the Commonwealth rank 30th in composite SAT score and 21st in percent change in this score over the last ten years. Likewise, according to the Education Week newspaper, 27% of Massachusetts children never graduate from high school. The National Assessment of Educational Progress determined that 51% of Massachusetts 4th graders and 57% of 8th graders are not ranked as “proficient” in mathematics. Similarly, 43% of 4th graders and 49% of 8th graders are not ranked as “proficient” in reading. In short, Massachusetts schoolchildren, confined to traditional, government-run public schools, have not reached their potential.
If Massachusetts were to implement a corporate tax credit program similar to the EITC program in Pennsylvania, donations would allow many public school students to attend private and parochial schools. If freed from the public schools where they are chronically underperforming, students in the state (and their parents) could choose the school that best suits their unique educational needs.

CONCLUSION

The REACH Foundation believes that student achievement increases in settings where the child feels more comfortable. Results from studies on this transition overwhelmingly support school choice. Students and schools (public and nonpublic) in Milwaukee improved once a voucher system was installed in the city. While one might deduce that students who remained in public schools would suffer, results show the opposite; that these students improved markedly because of classes that were smaller and unburdened by students for whom public school was not a good choice, and who were either disruptive or slowed down their classmates. The public school system kept a portion of funding not appropriated to follow the student to their new schools, resulting in a higher per pupil expenditure. Parents, students, and schools in Milwaukee all benefited from having school choice made available. This has lead to bipartisan praise of the program and calls for its expansion.

The Massachusetts public school system has also proven to be a serious strain on local and state budgets, and ultimately taxpayers. Massachusetts spends $12,566 for each public school pupil in the state—more than 35% above the national average—ranking it 7th in the nation on per-student expenditures. Likewise, the average salary of instructional staff in these schools is just under $50,000 per year, and ranks 10th in the nation in that category. These costs are borne disproportionately by Massachusetts taxpayers. Federal sources provide Massachusetts with 6.7% of its school funding, while the remaining 93.3% is covered by state and local sources of revenue. With a thriving economy and many metropolitan centers, the Massachusetts’ private sector would welcome the opportunity to spend its tax credits within local communities instead of sending those monies to the State Legislature.

The EITC program is an innovative and remarkably successful school choice program. Businesses, taxpayers, students, teachers, and both public and private schools benefit from this program in Pennsylvania. Our state provides a template as to how effective a school choice program can be with bipartisan legislative support, as well as the backing of school officials, business owners, parents, students, and the general citizenry.
MITS 2008 Summer Institute
The Museum Institute for Teaching Science

Science literacy is a critical but overlooked skill that, if learned at an early age, helps develop critical thinking, reading abilities and computation skills needed to make informed decisions in daily life. The mission of the Museum Institute for Teaching Science (MITS) is to improve the teaching of science, technology, engineering, and mathematics (STEM) in elementary and middle schools (K-8). We use inquiry-based, hands-on methods for teaching, and collaborate with informal science institutions to raise student interest and literacy in science, and to encourage more STEM graduates.

MITS was founded in the 1980s by seven Boston area museum directors who were concerned about the declining number of students majoring in science and engineering, and the threat this posed to America as the world leader in innovation. MITS believes that students are most vulnerable to losing an interest in science during their formative K-8 years, and thus offers two-week programs, or Summer Institutes, to train K-8 teachers to teach their students about science and engineering more effectively. The programs can accommodate 400 teachers annually. The fact that many teachers return for Summer Institute training is a testament to its success.

The MITS model is unique because it taps the expertise of educators from 43 museums to teach the Summer Institutes in nine regions throughout Massachusetts. The program is economical and competitive with typical in-house professional development offered by school systems. This year, the central theme is *Headline Science: Science, Math, and Literacy Behind the Headlines*. Teachers will learn about the science making headlines, including global warming, water quality, the ecosystem, and the effects of the environment on our bodies. Teachers will learn how to teach these subjects using inquiry-based methods on three levels: directed, guided, and open inquiry. In directed inquiry the teacher informs the students of the questions, materials, and data they wish addressed. They are told how to analyze the data and how to communicate the findings. In guided inquiry the teacher provides a question that needs clarification by the student. The student is given data and asked to analyze it and uses evidence to formulate an explanation. They are given the possible connection to scientific knowledge and provided broad guidelines to sharpen
communication. In open inquiry the student initiates all the steps from posing the question, to deciding the evidence needed, collecting it, summarizing and explaining it. Hands-on methods involve having students do the experiments, usually in small groups. Inquiry can be done with a teacher lecturing, but is most effective when the students do the activity themselves.

During their training, teachers develop lesson plans that accrue Professional Development Points approved under the Massachusetts Frameworks and which reflect how well they have understood the training and how they envision using their new skills in the classroom. MITS also provides resource materials and a subscription to our quarterly publication, Science is Elementary (SIE). The activities included in SIE are simple experiments that the students can carry out to explain and clarify a concept that is part of the curriculum. The program also includes three Professional Development Seminars for museum staffs on topics that enhance their teaching and update them on educational reform. STEM booklets are currently being created on CD’s.

The program costs $200 per teacher, or $175 per teacher if two or more come from the same school. MITS is working with the Department of Education to develop a workshop program for an urban district, and is also seeking to establish a multi-year commitment to a Summer Institute from a school district in one or more regional areas.
Specialized Substitute Teacher Empowerment and Accountability Program
Christopher Fick

There’s a reason most of us remember classes taught by substitute teachers as wasted or boring instead of useful or interesting. Consider how substitute teachers typically end up in a classroom. In what might be a typical situation, a high school history teacher is halfway through a unit on the Vietnam War, but has to miss a day to attend a professional development seminar. She will request a substitute teacher through a large district call system that will most likely contact the substitute the day of the assignment. The substitute will be asked to read and digest a lesson for the day, turn on a movie or supervise students as they complete mundane class work. It's a situation that benefits no one – not the regular teacher, the substitute teacher or the students. Indeed, it’s a waste of precious time that hurts everybody involved.

On any given school day, roughly 275,000 substitute teachers will stand before our nation’s school children. The quality of these teachers varies dramatically – hardly a surprise given the mottled requirements that states and districts have for substitute teachers. In Alabama, the only requirement needed to serve as a substitute teacher is a high school diploma or a GED. In Georgia, substitute teachers are also required to attend a four-hour training session before receiving clearance to teach. In fact, nine out of the ten lowest-ranked states in National Assessment of Educational Progress (NAEP) testing allowed substitute teachers with only a high school diploma to teach in their schools. Even more shocking is that 77 percent of school districts provide their substitute teachers with no training and 56 percent never meet with their substitute teachers prior to them entering the classroom, according to the Substitute Teaching Institute at Utah State University.

Instead of asking substitute teachers to be stand-ins who teach pre-planned lessons outside of their expertise, we should ask them to be specialists who only teach subjects which they are trained in, and who develop their own lessons. These lessons would have state-based objectives and graded in-class assignments and/or quizzes to ensure student comprehension. Lessons would be self-contained, meaning that the lesson could potentially be taught at any point in the school year, would
require little, if any, later review and would not interfere with the regular teacher’s long-term planning. The substitute teacher would provide the regular teacher with grades for each student, completed assignments and a brief summary of the state objectives covered that day.

Districts would post on a substitute teacher website, linked to the district’s site, the different state-based objectives that a substitute teacher specializes in teaching. This would ensure that regular teachers are aware of the objectives to be covered by the substitute teacher and can adjust accordingly. This would also guarantee that students aren’t covering objectives more than once. Teachers, in the instances of planned absences, could even accommodate substitute teachers specialties in their long-term plans.

Allowing substitutes to develop their own lesson plans lets them draw on their strengths and expertise. As well, students receive a distinctive perspective they normally wouldn’t get from their regular classroom teacher. This would increase a substitute teacher’s investment and enjoyment of teaching. Furthermore, freeing regular teachers from the onerous task of planning for a substitute teacher and then verifying that the substitute teacher effectively taught the students would provide the regular teacher with more time to plan for future lessons.
Middle School Aspirations and Pathways to College
Roxbury Preparatory Charter School

Located in Mission Hill, Roxbury Preparatory Charter School, a 6-8 public school, prepares its students to enter, succeed in, and graduate from college. Since its founding in 1999, Roxbury Prep’s enrollment has grown to 200 students. The student body is currently composed entirely of students of color. Most students live in single-parent households and 68 percent qualify for either free or reduced-price lunch. Roxbury Prep’s entering 6th graders arrive with poor academic skills—one-third enroll scoring two years below grade level on the Stanford 9 Achievement Test. Despite these hurdles, Roxbury Prep sends one hundred percent of its 8th grade graduates to high schools with explicit college missions.

With Roxbury Preparatory Charter School’s mission-driven needs and the body of research indicating that most intervention programs designed to propel historically underrepresented students to college begin too late, Roxbury Prep created the Middle School Aspirations and Pathways to College (MAPS to College) Program in 2003. The success of the MAPS to College Program is due in large part to the fact that Roxbury Prep reaches students in 6th grade, before underachievement and lack of interest in school has become the accepted – and expected – norm, and then maintains that connection through the challenging high school years. Roxbury Prep has a rigorous academic program that strengthens students’ core academic skills. Academic achievement is celebrated in weekly Community Meetings and through a system of positive reinforcements and rewards. College banners adorn the doors to classrooms and the hallways and discussions between staff, students, and families are often put in the context of applying to, enrolling in, and graduating from college. In order to help students identify with college more closely, each grade visits a college campus every year.

According to the Massachusetts Department of Education, the 2006 high school dropout rates for Hispanic (43%) and Black students (36%) are more than double those of White students who drop out in the same four-year period. The MAPS to College Program has reversed this trend for Roxbury Prep alums – 87 percent of Roxbury Prep’s first two graduating classes graduated from high school and are
currently enrolled in college.

The two Graduate Services Coordinators visited Roxbury Prep alumni in over 60 area high schools, coordinating meetings with guidance counselors and coaches to ensure that students are on track to graduate high school and attend college. The MAPS to College Program also provides seminars on scholarship opportunities and saving for college. In addition, the MAPS to College Program has provided a ten-week study skills workshop for first year students in high school, and has coordinated college visits for high school juniors.

Generally, students who attend urban public middle schools in Massachusetts do not have a college preparatory program like MAPS to College available to them. Students in urban schools need to start thinking about and preparing for college before high school. Unfortunately, these types of resources are not in place. The MAPS to College Program can and should be replicated statewide on a school-level to enable students in urban public schools to enter, succeed in, and graduate from college.
State Taxpayer Funded School Construction Grants
Massachusetts School Building Authority

Like many other states, Massachusetts has struggled with out-of-control spending on school construction, often putting money into many unnecessary projects at the expense of more deserving projects. State Treasurer Tim Cahill, a long-time entrepreneur who took office in 2003, linked the wasteful spending to an antiquated system of reimbursements and a lack of oversight, and responded by spearheading the effort to create the Massachusetts School Building Authority (MSBA) in 2004.

Since 1948, Massachusetts taxpayers have subsidized local school construction through a reimbursement program that initially reimbursed 20 percent to 60 percent of local school construction costs, but today reimburses at rates between 50 percent and 90 percent. Without an oversight entity like the MSBA, the reimbursement system operated without a budget, had no system to verify the necessity of projects, allowed local communities to build what could not be paid for, and resulted in a backlog of reimbursement requests. By fiscal year 2004, the liability for what the Commonwealth had promised to communities grew to approximately $11 billion for projects at over 1,100 schools, while the wait for funding grew to 13 years before a community would receive their first payment.

Since 2004, the MSBA has initiated a total reform of the way the state pays for school construction. The MSBA is funded by a 1 percent state sales tax, drawn from an existing five percent sales tax. The MSBA cannot overspend its annual allocation of sales tax revenues and is prohibited by trust agreements from borrowing more than it can repay. The MSBA requires districts to articulate why a project is “necessary,” versus “desirable,” and to support their request with evidence. The MSBA responds to the request with due diligence, such as double-checking student enrollment projections and site visits to verify problems and review proposed solutions. The sales tax dedication, coupled with the accountability measures, has forced local school boards and the MSBA to align expectations with fiscal reality.

The results are telling. In the past three years, the MSBA has completed more than 700 of 800 outstanding audits inherited from the former program, and generated
over $700 million in savings for taxpayers. The MSBA’s “pay-as-you-build” payment system for school construction projects audits and pays a community monthly, based on invoices submitted through a website the community can access. This provides communities with much needed cash flow during construction while avoiding the need to issue bond anticipation notes or other debt financing, which saves on interest and other finance-related costs. Reimbursement rates have been reduced to a range of between 40 percent and 80 percent, based upon a community’s relative wealth or poverty.

As work continues, the MSBA is expected to grow to a staff of roughly 50 employees who will eventually manage and oversee the competitive selection process for a project’s introduction into our capital pipeline, and manage and oversee the design and construction of approved projects. This will accelerate the reform process, whose goal is to provide students with stimulating and safe learning environments while getting the taxpayers the most out of their money.