



**PSEA** PENNSYLVANIA  
STATE EDUCATION  
ASSOCIATION



# SOLUTIONS THAT WORK

*We're rewriting the book on education*

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## The Power of a Great Education

**T**he 182,000 members of the Pennsylvania State Education Association (PSEA) are dedicated to children and public education. PSEA members work in service to Pennsylvania’s students to help enrich their lives and reach their full potential through the opportunity and power of education.

We teach in classrooms and university halls, counsel adolescents, help students determine career aspirations, coach sports, lead extracurricular programs, transport and feed students, keep records, and provide virtually every professional service necessary to benefit students and keep Pennsylvania’s schools operating.

PSEA members know policy decisions made at the federal, state, and local levels have a direct impact on our ability to deliver a quality education for the 1.7 million students in Pennsylvania. That is why — in large numbers — we make an effort to be active in civic issues and involved in campaigns at all levels. It is also why we are interested in working with candidates and policymakers to make our vision a reality.

PSEA advocates for quality public education and for our members — approximately 182,000 education professionals — through collective action. We are the preeminent voice for education and a leading force for labor in Pennsylvania. PSEA defends and protects members in all aspects of their working lives, including the areas of compensation, working conditions, and professional development. We are also partners with policymakers, elected officials, school districts, parents, and communities in ensuring that Pennsylvania has strong, effective public schools and the ability to deliver the power of a great education for each student.

### Dedicated Professionals Committed Advocates

Teachers, school nurses, bus drivers, school counselors, coaches, cafeteria workers, school psychologists, secretaries, paraprofessionals, future teachers, higher education faculty, home and school visitors, career and technical education instructors, aides, media specialists, tutors, mechanics, retired educators, custodians, school social workers, dental hygienists, academic advisors, adult correction education specialists, and others who are dedicated to serving students and delivering the power of a great education in Pennsylvania’s schools, colleges, universities, health care facilities, prisons, vocational-technical centers, non-sectarian private schools, and other public institutions.

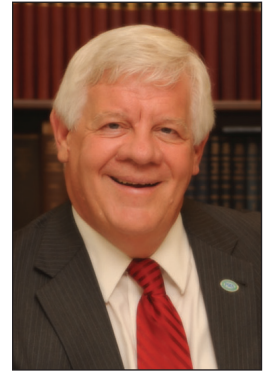
## PSEA leadership

PSEA is a member-driven organization, headed by elected officers, an executive director, and a board of directors.

### **Michael J. Crossey, *President***

Michael J. Crossey began serving as PSEA President on September 1, 2011. Previously, Mike served as PSEA Vice President and PSEA Western Region Vice President.

Mike has more than 20 years as a local association president, most recently with the Keystone Oaks Education Association. Additionally, he served his local as grievance chair, chief negotiator, and PACE/Legislative Chair. Mike has served at the state level as a member of the PSEA Political Action Committee for Education, and committee chair of the PSEA Legislative Committee.



MICHAEL J. CROSSEY

Mike graduated from Duquesne University and went on to earn two Master's degrees and a reading specialist certificate. He has earned certification in seven areas of curriculum and taught at all levels in the school district, most often serving as the high school emotional support program teacher.

In addition to Mike's teaching and association involvement, he has a long history of community involvement and public service, serving as an elected official on the local and county levels. He has served as an Allegheny County Councilman, equivalent to a county commissioner position in many areas of the state.

Mike, his wife Eileen, and family live in the Pittsburgh area.

### **W. Gerard Oleksiak, *Vice President***

W. Gerard "Jerry" Oleksiak began a two-year elected term as PSEA Vice President on September 1, 2011. Previously, Jerry served as PSEA Treasurer, a member of the PSEA Board of Directors, and President of Mideastern Region of PSEA, which includes Bucks and Montgomery Counties. Jerry has been a classroom teacher for more than 35 years, spending most of that time as a special education teacher in the Upper Merion Area School District in King of Prussia, PA.



W. GERARD OLEKSIK

Jerry's Association work is long and extensive. At the region level, in addition to serving as Region President, Jerry served in many capacities, including: Region Secretary, Vice President, and President Elect; Chair of the Coordinated Bargaining Committee;

Region PACE Team; Council for the Advancement of Public Schools (CAPS) Workgroup; Chair of the Region’s Public Education Celebration (2001-2004); Region representative to the Steering Committee for TOPS, Together Organized for Public Schools.

At the local level, Jerry served in a variety of positions for the Upper Merion Area Education Association, including Local Association President, Vice President, Negotiator, Grievance Committee, PACE chair, Public Relations Committee, Executive Committee, and as a Building Representative. At the Montgomery County Intermediate Education Association, Jerry served as Vice President. At the Bucks County Intermediate Unit Education Association, Jerry served as Crisis Committee Co-Chair and as a Building Representative.

Born and raised in Philadelphia, Jerry graduated from Saint Joseph’s University (then called St. Joseph’s College) in 1974. He earned a Bachelor’s degree in International Relations and earned his teaching certificate in social studies. Jerry earned a Master’s degree in education from Saint Joseph’s in 1985 and worked to earn his special education certification through LaSalle University. While working with the Montgomery County Intermediate Unit, he also earned certification as an intermediate unit program specialist.

Jerry has been married for more than 37 years to his wife Dina, a family nurse practitioner who is the Director of Student Health at LaSalle University in Philadelphia. Dina and Jerry live in Glenside, Abington Township, Montgomery County, and have three daughters: Sarah Barnes, Laura, and Kathryn, all of whom attended Abington public schools and have earned their college degrees.

**Dolores M. McCracken, *Treasurer***

Dolores M. McCracken began a two-year elected term as PSEA Treasurer on September 1, 2011. She has served as a paraprofessional in a sixth-grade inclusion classroom in the Council Rock School District with nearly two decades of classroom experience.

Dolores’ statewide association service includes six years as a member of the PSEA Board of Directors, service as ESP Region Treasurer, and as a member of the Budget Committee, Membership Affiliate Committee, and the PSEA Member Benefits Board.



DOLORES M. MCCRACKEN

As a member of the Council Rock Education Support Professionals Association, Dolores served as Vice President and President of her local association, also serving as Grievance Chair, Safety Committee Chair, and Professional Development Committee Chair. As a local leader, she bargained four contracts for her association.

In her community, Dolores serves as Treasurer of the Council Rock Education Foundation as well as Vice Chair of the Northampton Township Democratic Committee.

Dolores was born in New York and raised in Philadelphia. After working for several years as a paralegal, Dolores' involvement in public education began when her children entered elementary school, serving as Parent Teacher Organization (PTO) President. Her PTO service led to a career in public education.

Married for more than 33 years, Dolores and her husband have two children and three grandchildren.

Dolores is currently pursuing a degree in psychology at Penn State University.

**John F. Springer, *Executive Director***

John F. Springer has served as PSEA's Executive Director since June 2008. A member of PSEA's senior management team for more than 25 years, Springer served as PSEA's Assistant Executive Director for Administrative Services from 1992-2008. In that position, he was responsible for PSEA's information technology, membership records, accounting, payroll, financial reporting, treasury management, risk management, property management, printing and distribution, the PSEA Health and Welfare Fund, and PSEA Member Benefits.



JOHN F. SPRINGER

As Assistant Executive Director, Springer designed a successful strategic planning and budgeting process for PSEA. He oversaw and monitored the Association's operational and capital budget. He managed the Association's region service center building projects and redesigned the Member Benefits program. He directed major information technology development initiatives, designed service delivery plans, and conducted operational assessments. He also advised several PSEA committees and boards.

From 1985-1992, he served as PSEA's Health and Welfare Fund manager and served as assistant director for financial management from 1979-1985. Prior to his employment at PSEA, he was an accountant at Peat, Marwick, Mitchell & Company from 1977-1979.

Springer has an M.B.A. from Lebanon Valley College, and a B.S. from Elizabethtown College. He is a certified public accountant and has completed advanced education programs as a certified financial planner and as a certified employee benefit specialist.

## PSEA structure

PSEA's membership is extensive, representing a wide range of professionals in various settings and institutions, including 492 of Pennsylvania's 500 school districts. PSEA members belong to:

**A local association.** There are 1,182 PSEA local associations which deal with issues that directly affect school quality, employment, compensation, working conditions, and professional development. Locals bargain contracts with employers and carry out a broad range of professional and community relations programs.

**A PSEA region.** Although our Education Support Professionals comprise one statewide region, all other PSEA members belong to one of 11 geographic regions. Regions are divided into groups of local associations for representation, collective bargaining, coordination, and other purposes. PSEA staff in the region offices provide bargaining, communications, legal, member rights, professional development, and political action services to local members through UniServ representatives, communications and organizing specialists, and region attorneys.

**PSEA, the state-level association.** PSEA represents and advocates on behalf of our members statewide through our leaders and staff, based in PSEA's Harrisburg Headquarters, in a variety of areas including government relations, communications, research, and legal services.

**The National Education Association (NEA).** NEA, based in Washington, D.C., has more than 3.2 million members who work at every level of education from pre-school to university graduate programs. The NEA, governed through an elected Representative Assembly, provides national research and bargaining support, legal support, political action and lobbying services, and other services on professional and educational issues.

**Chapters.** This designation is reserved for our Student PSEA members who belong to chapters at their colleges or universities and for our retired members who belong to their county chapters.

## PSEA policy

PSEA members decide policy and the organization's direction through a PSEA Board of Directors and PSEA House of Delegates. The Board of Directors is composed of members from throughout the state elected by their colleagues. The Board meets several times a year. The House of Delegates meets twice a year. Approximately 1,000 members elected by colleagues vote on policy issues that set the organization's course.

## PSEA staff

PSEA employs approximately 230 staff persons statewide. Approximately one-half are located throughout our 11 region offices while the remaining one-half are based in PSEA's Harrisburg Headquarters. PSEA enjoys a national reputation for cutting-edge initiatives and ideas and is respected as an authority on education and labor issues. This is due in no small part to our highly qualified and dedicated staff, which includes researchers, education policy experts, labor relations experts, communications staff, organizers, lobbyists, attorneys, and UniServ representatives (the lead contacts with local associations for member rights and contract negotiations).



# Invest in early childhood care and education

High-quality early childhood education is a worthy and wise investment in the future of our children.

## Recommendations

- Expand funding to ensure access to high-quality early learning for all young children.
- Continue efforts to increase the application of the Keystone Standards, Training/Professional Development, Assistance, Resources, and Support (STARS) program to ensure program quality.
- Expand efforts to link early learning experiences with K-12 systems.

High-quality early childhood education is a worthy and wise investment in the future of our children. In fact, it's a winning proposition for the children of Pennsylvania and their families, for our businesses and industries, for our K-12 public schools, and for all Pennsylvanians. Indeed, there is a growing body of research, most prominently authored by University of Chicago economist, James Heckman, which makes the case for investing in early childhood education, particularly for disadvantaged children.<sup>1</sup>

## Pennsylvania values high-quality early childhood education

The benefits of early childhood programs are extensive, and are especially important in helping address needs of at-risk children by closing the learning gaps that begin well before kindergarten. The knowledge and experience students bring with them to Kindergarten matters deeply. Yet differences in learning between middle-class students and students in poverty emerge in the first year of life and continue to increase throughout early childhood, which means that at-risk students come out of early childhood and enter elementary school already significantly behind other age-group peers.<sup>2</sup>

In recent years, the Commonwealth has acknowledged the importance of early childhood education through the development of several integrated programs to increase

*“Every dollar invested in high quality early childhood education produces a 7 to 10 percent per annum return on investment.”*

the quality and quantity of early childhood education. These programs are overseen by the Office of Child Development and Early Learning (OCDEL), collaboration between the Pennsylvania Department of Education (PDE) and Pennsylvania Department of Public Welfare (DPW). The Office of Child Development and Early Learning has overseen the expansion of the Keystone STARS child care quality rating

program, subsidized child care services, Head Start supplemental assistance program, data collection about program characteristics and student results, and Pre-K Counts - a public-private partnership to expand pre-kindergarten.

Starting in 2004-2005, the Commonwealth provided Accountability Block Grants to school districts, and many used these funds to provide full-day Kindergarten programs. Governor Corbett tried to eliminate Accountability Block Grants in his first budget. The General Assembly preserved the program, but with

## Key Points

- The benefits of early childhood education are extensive
- Early childhood programs improve student achievement
- Early childhood programs are cost-effective
- Early childhood programs improve the life chances of children

a reduced amount of funds. As a result, districts across the Commonwealth have reduced or eliminated full-day Kindergarten programs. In 2013-2014, the state provided \$100 million for this program, down from \$274 million only a few years earlier. The 2013-2014 budget also includes very small increases from 2012-2013 in Pre-K Counts funding, the Head Start Supplemental Assistance Program, and child care services (to help low-income families afford child care).

All of these programs have contributed to higher levels of readiness when students enter kindergarten, and early results suggest that these programs may be able to reduce the need for special education services. Continued investments in early childhood care and education, as well as efforts to improve quality, are wise investments for at least three key reasons.

**Early childhood education programs improve student achievement.** Early childhood education is critical to closing student achievement gaps because disparities in student learning begin well before kindergarten. Students from advantaged families tend to arrive at school with substantially higher levels of school readiness, more advanced social skills, and more positive approaches to learning. Conversely, students entering kindergarten from low-income families demonstrate as much as a 60 percent lower knowledge in reading, mathematics, and general knowledge than students from wealthier families.<sup>3</sup> Intervening early to close these gaps is more likely to succeed at lower costs.<sup>4</sup> Both grade retention and special education referral rates are consistently and significantly lower among at-risk students who attended high-quality pre-kindergarten programs than among those who did not.<sup>5</sup> Already, two states with widely available public preschool programs, Oklahoma and Georgia, have confirmed that students participating in the programs have made gains on almost every academic measure.<sup>6</sup> For example, students in Oklahoma's universal pre-K had a 53 percent gain on letter and word identification test scores and a 26 percent gain in spelling scores. Similar outcomes were found in a five-year study of Pre-K programs across five states: large improvements in letter awareness, math skills, and vocabulary.<sup>7</sup>

**Early childhood education programs are cost-effective and good for the economy.** There is a growing consensus that early childhood education is critical to economic growth. Many of our nation's economic competitors realize this. Mexico, Belgium, France, Germany, Italy, and the United Kingdom, for example, already have universal or near universal free preschool enrollment for children from the age of three. More than 75 percent of Mexican children over the age of three are enrolled in early childhood education.<sup>8</sup> India is in the process of expanding programs in early childhood education.<sup>9</sup> These countries understand that knowledge development breeds competitive advantage. American economic researchers and policymakers increasingly agree that investing in the intellectual and social development of children is one of the most promising ways to strengthen our nation's economy.<sup>10</sup> Business leaders also believe that investing in early childhood education makes good sense. In a recent survey, 81 percent of business leaders said that public funding of voluntary pre-kindergarten programs would improve the nation's workforce.<sup>11</sup> In Pennsylvania the Early Learning Investment Commission advocates for early education programs on behalf of the business community.<sup>12</sup>

Furthermore, public and private returns on many high-quality early childhood education programs far exceed the cost of supporting high-quality preschool programs. For example, the RAND Corporation reports that each dollar invested in high-quality early childhood education can return to society somewhere between \$1.80 and more than \$17, depending on the nature of the early childhood program.<sup>13</sup> Heckman et. al. (2010) found that "every dollar invested in high quality early childhood education produces a 7 to 10 percent per annum return on investment."<sup>14</sup>



**Early childhood education programs improve the life chances of children.** The rationale for high-quality early childhood education extends beyond purely academic or economic arguments. High-quality early childhood education improves the social and life chances of children. Some comprehensive preschool programs have demonstrated that at-risk students who attended preschool are less likely to engage in criminal behavior as teenagers or adults.<sup>15</sup> Others have demonstrated that at-risk students who attend high-quality preschools are less likely to demonstrate antisocial behavior later in school, to receive social services as adults, to become parents as teenagers, and to engage in high-risk health behaviors such as using "soft" drugs or smoking.<sup>16</sup> In follow-up studies of one high-quality program, teachers rated at-risk children who participated in preschool as less obstinate, less impulsive, less disruptive and less likely to be involved in fights than a similar group of students who did not receive high-quality early childhood education services.<sup>17</sup>

- <sup>1</sup>Heckman, J. J. (2008). *The Case for investing in disadvantaged young children, in big ideas for children: Investing in our Nation's Future*. Retrieved from [www.TheHeckmanEquation.org](http://www.TheHeckmanEquation.org)
- <sup>2</sup>Halle, T., Forry, N., Hair, E., Perper, K., Wandner, L., Wessel, J., & Vick, J. (2009). *Disparities in early learning and development: Lessons from the early childhood longitudinal study – birth cohort (ECLS-B)*. Washington, DC: Council of Chief State School Officers and Child Trends.
- <sup>3</sup>Lee, V., & Burkham, D. (2002). *Inequality at the starting gate: Social background differences in achievement as children begin school*. Washington, DC: Economic Policy Institute.
- <sup>4</sup>Committee for Economic Development. (2006). *The economic promise of investing in high-quality preschool: Using early education to improve economic growth and the fiscal sustainability of the states and the nation*. Washington, DC: Committee for Economic Development.
- <sup>5</sup>Barnett, W. S. (1995). Long term outcomes of early childhood programs. *The Future of Children*, 5(3), 25-50.
- <sup>6</sup>Committee for Economic Development. (2006). *The economic promise of investing in high-quality preschool: Using early education to improve economic growth and the fiscal sustainability of the states and the nation*. Washington, DC: Committee for Economic Development.
- <sup>7</sup>Isaacs, J. B., & Roessel, E. (2008). *Impacts of early childhood programs*. Washington, DC: Center on Children and Families, Brookings Institution. Retrieved from [http://www.brookings.edu/~media/research/files/papers/2008/9/early%20programs%20isaacs/09\\_early\\_programs\\_isaacs.pdf](http://www.brookings.edu/~media/research/files/papers/2008/9/early%20programs%20isaacs/09_early_programs_isaacs.pdf)
- <sup>8</sup>Organization for Education and Economic Development. (2006). *Starting strong II: Early childhood education and care*. Paris: OECD.
- <sup>9</sup>Levine, M. H. (2005). Take a giant step: Investing in preschool education in emerging nations, *Phi Delta Kappan*, November, 196-200.
- <sup>10</sup>Committee for Economic Development. (2006). *The Economic promise of investing in high-quality preschool: Using early education to improve economic growth and the fiscal sustainability of the states and the nation*. Washington, DC: Committee for Economic Development.
- <sup>11</sup>Zogby, J., Bruce, J., Wittman, R., & Peck, C. W. (2005). *American business leaders' views on publicly funded pre-kindergarten and the advantages to the economy*. Commissioned by the Committee for Economic Development.
- <sup>12</sup>Retrieved from [www.pa-elic.org](http://www.pa-elic.org)
- <sup>13</sup>Karoly, L. A., Kilburn, M. R., & Cannon, J. S. (2005). *Early childhood interventions: Proven results, future promise*. Santa Monica, CA: RAND Corporation.
- <sup>14</sup>Heckman, J. H. (2011) The value of early childhood education. *American Educator*, 31-47.  
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- <sup>15</sup>Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2002). Age 21 cost benefit analysis of the Title I Chicago child-parent centers, *Educational Evaluation and Policy Analysis*, 24(4).  
Yoshikawa, H. (1995). Long-term effects of early childhood programs on social outcomes and delinquency, *The Future of Children*, 5(3), 51-75;  
Lally, J. R. Mangione, P. L., & Honig A. S. (1988). *The Syracuse University family development research project: Long-range impact of an early intervention with low-income children and their families*. In Powell, D. R. (Ed.) *Parent education as early childhood intervention: Emerging directions in theory, research and practice*. Norwood, NJ: Ablex.
- <sup>16</sup>Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2002). Age 21 cost benefit analysis of the title i chicago child-parent centers, *Educational Evaluation and Policy Analysis*, 24(4).  
Yoshikawa, H. (1995). Long-term effects of early childhood programs on social outcomes and delinquency. *The Future of Children*, 5(3), 51-75.
- <sup>17</sup>Ibid.



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## Focus on class sizes

**Every policymaker should focus on class size. Where possible, class sizes should be reduced. Where that is not possible, districts should prevent class sizes from increasing.**

### Recommendations

- Provide adequate school funding at the state level so that districts can halt the trend of increasing class sizes.
- Expand efforts to reduce class size by ensuring that schools receive targeted state investments to provide appropriate and adequate staffing.
- Establish class-size guidelines based on research. When appropriate, weighted class size formulas should be implemented to reflect the inclusion of students with special needs.
- When resources are limited, including money or effective teachers, utilize the results of cost-benefit analyses to determine which students to target for smaller classes.

PSEA has always advocated for reducing class sizes based on our extensive experience in the classroom and decades of sound research. Realistically, due to the funding cuts and concomitant increases in class size, we are now in a position where many districts can only afford to hold the line on class sizes. This is unfortunate, given the strong research behind class-size reduction. In fact, the U.S. Department of Education lists “reducing class size in grades K-3” as one of five examples evidence-based interventions that “have been found to be effective in randomized controlled trials...”<sup>1</sup>

More than two decades of research has consistently confirmed the impact of small class size on student achievement. For example, the Tennessee Student-Teacher Achievement Ratio (STAR) project used scientific research models to examine the consequences of reducing class size in Kindergarten through grade 3. Research examining the STAR project consistently shows that students in smaller classes learned significantly more than students who were not assigned to smaller classes.<sup>2</sup> Furthermore, minority students in smaller classes in the STAR project experienced significant positive attitudinal changes and had a significantly higher likelihood of taking college entrance exams than similar students in larger classes.<sup>3</sup> Research suggests that direct academic benefits of small class size in the early years lasts at least through the eighth grade.<sup>4</sup> This may be particularly true for younger racial and ethnic minority stu-

dents, students from low-income families, and other students who are at risk of failure. **Every policy-maker should focus on class size. Where possible, class sizes should be reduced. Where that is not possible, districts should prevent class sizes from increasing.**

## Class-size reduction works

**Class-size reduction improves student achievement in several ways.** First, smaller classes allow teachers to individualize instruction and recognize and intervene with student learning problems more effectively.<sup>5</sup> Consequently, smaller class sizes provide opportunities for high-quality teaching and learning, leading to higher student test scores. The impact is particularly clear among African-American students and students living in poverty. One study found that reducing classes from 22 to 15 students in the early elementary years could reduce the black/white test score gap by 38 percent.<sup>6</sup>

### Key Points

- Class-size reduction improves student achievement
- Class-size reduction is cost-effective
- Small class sizes in the early grades improve student achievement

Research also has found that when compared to students in average-sized classes, students in smaller classes in the early years take more advanced courses in high school and are more likely to graduate in the top 10 percent of their class.<sup>7</sup> Another study found that African-American students who attended small classes in the early elementary years were more likely to take

the SAT and ACT in high school. This study estimated that smaller elementary class sizes alone could reduce the black/white gap in SAT and ACT participation by 60 percent.<sup>8</sup>

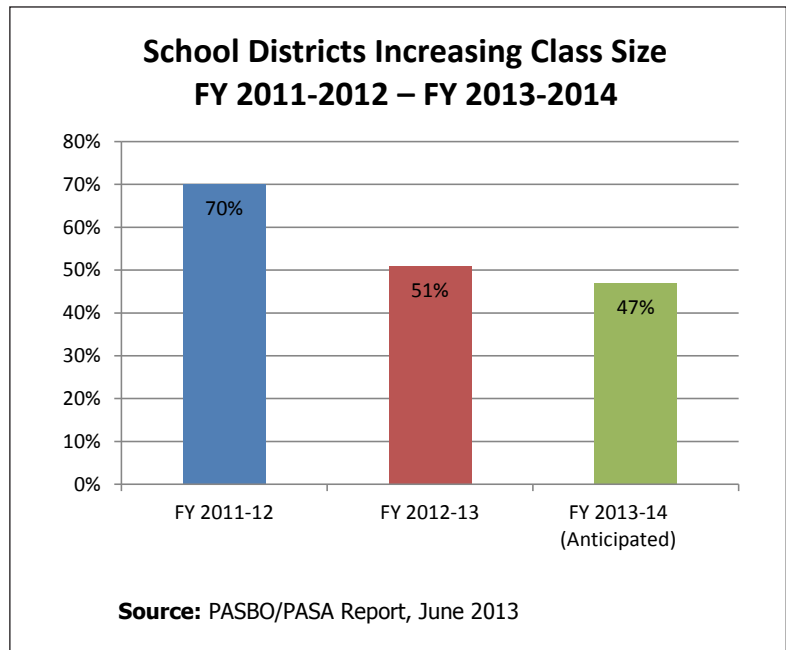
Smaller class sizes also have other, more subtle, positive impacts on a school's learning environment:

- Earlier, more accurate identification of student learning disabilities;
- Improved student behavior resulting in less vandalism,<sup>9</sup> fewer suspensions and expulsions, and fewer classroom disruptions;
- Fewer student retentions in the early elementary grades;<sup>10</sup>
- Fewer high school dropouts. Low-income students who attended small classes in the first four years of elementary school are 18 percent more likely to graduate from high school than low-income students who attended average-sized classes in early elementary school;<sup>11,12</sup>
- Higher rates of college attendance, particularly for black students and students from schools with high concentrations of poverty, and higher rates of college completion<sup>13</sup>; and
- Higher teacher satisfaction due to smaller class size may translate into higher rates of attendance, reduced substitute costs, and less teacher attrition.<sup>14</sup>

Class-size research suggests that students in kindergarten through grade 3 benefit from a class size of about 15, and students in late elementary school should be in classes of 18 or fewer.

**Class-size reduction is not just good for students: it is cost-effective, good for communities and good for the Commonwealth.** One study found that reducing class size in the early elementary grades results in a net cost savings to society of almost \$170,000 per high school graduate. For low-income students, the cost savings per high school graduate are more than \$195,000.<sup>15</sup> In a different analysis, the Economic Policy Institute found that every dollar invested in smaller class size yields about \$2 in economic benefits.<sup>16</sup>

Of course, small classes are expensive to maintain. When state and local budgets are tight, it is important to determine how class-size reduction can be employed in strategic ways to help districts and the state meet their goals. Because of the powerful impact class-size reduction can have on at-risk students, and in combination with Pennsylvania’s determination to close achievement gaps between at-risk groups of students and average student achievement, policymakers should consider targeting class-size reduction to those students with the greatest need.



Some researchers have studied the relationship between “student-teacher ratio” and student achievement and have come up empty-handed. Critics of class-size reduction efforts use these studies to assert that reducing class size does not improve student achievement. But a “student-teacher ratio” compares the number of students in a school to the number of certified professionals, including librarians, school counselors, special education teachers, and others. For obvious reasons, this calculation does not reflect the actual classroom experience of students or their teachers. As a matter of fact, estimates are that average class size is usually about nine or 10 students larger than the “student-teacher ratio.” In other words, if a school has a “student-teacher ratio” of 15 to 1, the average class size is closer to 25. Understanding this important distinction, there is no evidence to suggest that reducing the “student-teacher ratio” improves student achievement, while some evidence suggests that reducing the ratio of students to teachers within individual classrooms does.

**Research establishes a clear link between class size in the early elementary years and student achievement across the K-12 continuum and beyond.** Newer research also demonstrates the explicit educational value of reducing class size in secondary schools, particularly in classes with high proportions of low-attaining students.<sup>17</sup> As in elementary schools, smaller class size allows high school teachers to individualize instruction more effectively, develop higher quality assignments for all students, and improve classroom management and safety.

- <sup>1</sup>Institute of Educational Sciences. (2003) *Identifying and implementing educational practices supported by rigorous evidence: A user friendly guide*. Retrieved from [http://ies.ed.gov/ncee/pubs/evidence\\_based/](http://ies.ed.gov/ncee/pubs/evidence_based/)
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- <sup>3</sup>Babcock, P., & J.R. Betts. (2009). Reduced Class Distinctions: Effort, Ability and the Education Production Function, *Journal of Economics*, 65, 314-322.
- <sup>4</sup>Konstantopoulos, S., & Chung, V. (2009). What are the long-term effects of small classes on the achievement gap? Evidence from the lasting benefits study. *American Journal of Education*, 125-154.
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## Encourage parent, family, and community engagement

Parental, family, and community involvement in education has an effect on both academic performance and school improvement.

### Recommendations

- Establish policies to assist and encourage parents, families, and communities to be actively involved and engaged in their public schools, including training and networking opportunities that are relevant and engaging<sup>1</sup> for targeted schools.
- Fund professional development programs that give educators the communications skills and knowledge needed to engage parents, families, and other caregivers in students' learning.
- Adopt state standards on parent engagement that are based on those endorsed by the Pennsylvania PTA, including standards on effective parent-community-school partnerships that are linked to school improvement goals.
- Provide staff development on diverse cultural and linguistic backgrounds and on how to communicate with all families.
- Encourage employers through incentives to allow parents to take a reasonable amount of leave to participate in school activities or other education-related activities.
- Develop school district and building-level needs assessment tools for districts that choose to use them.
- Promote exemplary models such as the federally funded Parent Information Resource Centers (PIRCs) for the benefit of school districts, Intermediate Units, Career and Technical Schools, Charter Schools, and Approved Private Schools.

The research is clear and consistent: parental, family, and community involvement in education has an effect on both academic performance and school improvement. Strong school-family-community partnerships foster higher educational aspirations and more motivated students.<sup>2</sup>

### Parent engagement has significant impact on student achievement

In the past, parent engagement was characterized by volunteers, mostly mothers, assisting in the classroom, chaperoning students, and fundraising. Today, that model has been replaced with a much

more inclusive approach: school-family-community partnerships that include parents, stepparents, grandparents, foster parents, other relatives and caregivers, and business leaders and community groups, all participating in goal-oriented activities at each grade level linked to student achievement and school success. While parent and family engagement continues to include parent and teacher interaction to

## Key Points

- In the past, parent engagement was characterized by volunteers
- Student learning improves when schools, families, and communities work together
- Parent involvement declines as students get older
- Home and School Visitors work closely with parents

monitor students' academic progress and parent involvement in school activities, research continues to show that the greatest benefits come from interaction between parents and students at home. In particular, discussions related to school experiences, the importance of school, and expectations for high school graduation and post-secondary education are positively associated with students' academic achievement.<sup>3</sup>

**When schools, families, and communities work together to support learning, students tend to earn higher grades, attend school more regularly, stay in school longer, and enroll in higher-level programs.** The evidence holds true for students at both the elementary and secondary levels, regardless of their parents' education levels, family income, or background. The research shows parental involvement affects students' academic

achievement across all races.<sup>4</sup> In fact, parent and family engagement has been one of the few interventions consistently shown to provide positive, significant, and stable effects on language and literacy development regardless of time, geography, and developmental level.<sup>5</sup>

**Unfortunately, parental involvement tends to decline as students get older with a dramatic drop once students reach middle school.** We must work to maintain strong parental engagement at all age levels. The lack of parental involvement is viewed by teachers, administrators, the public, and even parents of school-age children as one of the biggest problems facing our nation's schools.<sup>6</sup>



As one researcher notes, even the most promising reforms can be “reversed by family, negated by neighborhoods, and might well be subverted or minimized by what happens to children outside of school.”<sup>7</sup>

**In many Pennsylvania school districts, Home and School Visitors work closely with parents on issues related to student attendance, home environment, and keeping students in school.**

The best predictor of parent involvement is what the school does to promote it, making statewide support for programs that support parental involvement a valuable investment.<sup>8</sup>

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## Improve programs and funding for Special Education

**Schools must have the full continuum of services and resources available to meet the needs for students identified with a disability.**

### Recommendations

- Tailor the standards-based instructional system for special education.
- Recognize the instructional accommodations made for special education students in the assessment of their learning.
- Increase federal and state funding for special education and base funding on the actual costs incurred by school districts.
- Adjust the schedules of professional employees and support staff to permit adequate collaboration between special education and regular education instructional, related service, and support staff and to maximize staff contact with students.
- Study the opportunities for using distance technologies to better serve the needs of students with disabilities and their families and the impact of their use.
- Continue emphasis on professional development for all school employees on strategies to identify and serve the needs of students with disabilities and students who are gifted.

The promise of a free, quality public education for all students, including students with disabilities, is a core principle for PSEA. To keep this promise, schools must have the full continuum of services/resources available to meet the needs for students identified with a disability.

Pennsylvania was a leader in special education even before federal law required states to protect the right to a free appropriate public education (FAPE) for all students with mental, physical, and emotional disabilities. Pennsylvania was developing a statewide system to deliver specially designed instruction and supporting services. In the 2011-2012 school year, Pennsylvania's public schools served more than 268,000 special needs students and each of these students has a highly tailored Individualized Education Plan (IEP).<sup>1</sup>

Pennsylvania's leadership in special education and its ability to keep its promise to students with disabilities is at risk because of underfunding. State appropriations for special education have not increased in five years. In the same time period, school districts have faced increased costs and have been forced to

pay increasing amounts to charter schools for the special education they provide. This year federal funding for special education in all Pennsylvania school districts will decline because of sequestration.

## Standards-based approaches, testing accommodations, and appropriate funding

Pennsylvania has established grade-level academic standards for all students. However, certain special education students, due to their diagnosed and identified delays, do not have the ability to perform on grade level.<sup>2</sup> Recently, the Pennsylvania Department of Education (PDE) required the inclusion of special education students in the standards-based approach to learning, meaning that the IEP for each student must be designed for his or her grade level, not for his or her ability level. This approach is sound only for students who are at, or slightly below, grade level. When students are performing more than a grade level below in content areas, setting goals at grade level falsely raises expectations. The student becomes frustrated and unable to achieve the goals within the school year, and the IEP team must consider the student eligible for Extended School Year. Goals based on unrealistic standards frustrate students, parents, and teachers.

### Key Points

- Standards-based approach to IEP development should be adjusted
- Support testing accommodations for special education students
- Change the special education funding structure
- Special education teachers and aides need continual retraining
- Gifted education students need specially designed instruction

When students are performing more than a grade level below in content areas, setting goals at grade level falsely raises expectations. The student becomes frustrated and unable to achieve the goals within the school year, and the IEP team must consider the student eligible for Extended School Year. Goals based on unrealistic standards frustrate students, parents, and teachers.

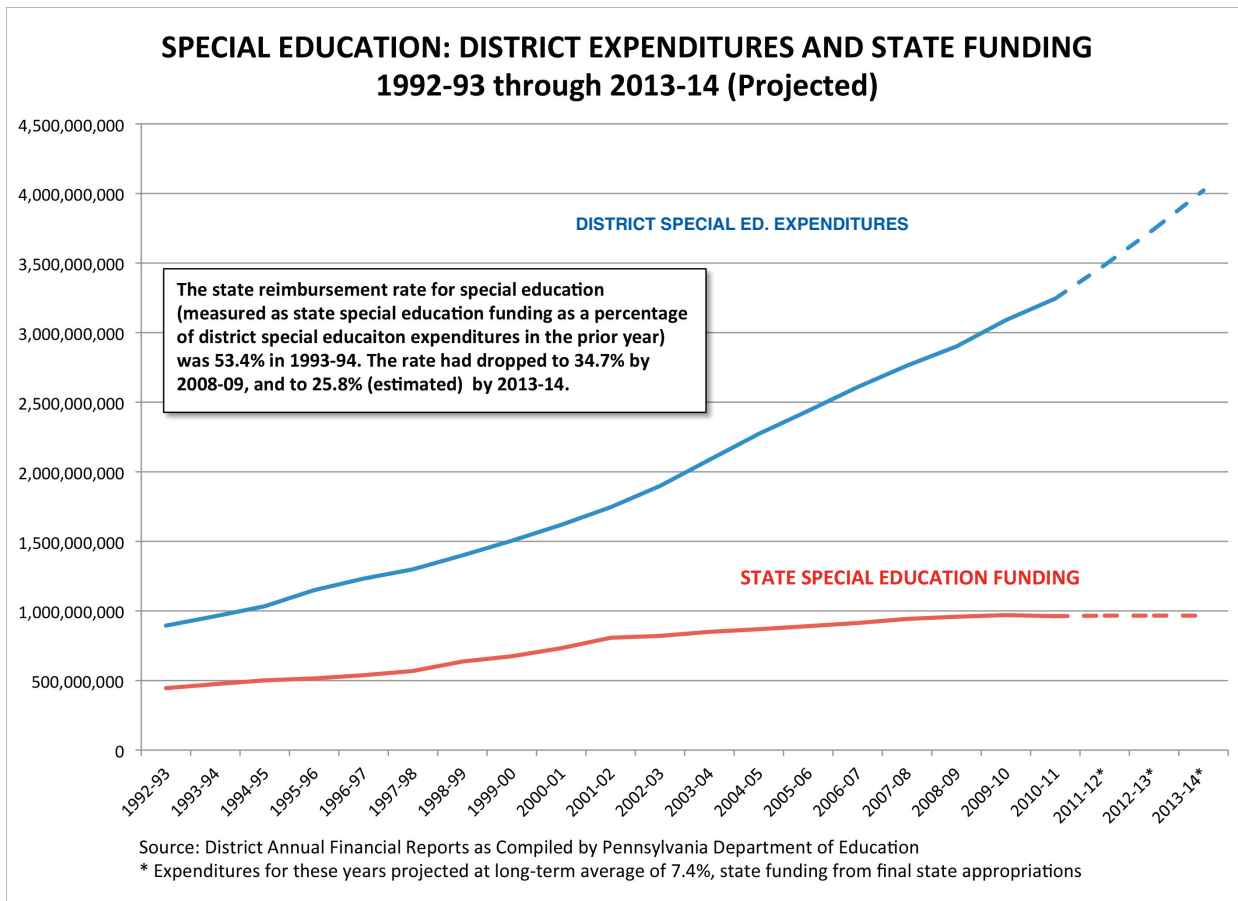
### The standards-based approach to IEP development should be adjusted to reflect the following:

- IEP teams should be free to develop goals at instructional level and should not be compelled to develop goals at grade level for students who perform significantly below grade level.
- In developing and evaluating IEP goals, IEP teams should not be required to focus on PSSA scores. Rather, teams should have the authority to base goals upon the individual needs and instructional level of each student.
- The IEP should be the key determining factor for the way in which student performance is evaluated and for developing education programs for individual students.

**PSEA supports expanding the utilization of accommodations in standardized testing.** Individualized Education Plans often include accommodations that enable students to participate in the general curriculum. Yet, when it comes to administering the state assessments, the Pennsylvania State System of Assessment (PSSA), these accommodations cannot be used. Consequently, special education students

struggle to demonstrate their knowledge when the accommodations they have used all year are not available to them during administration of state assessments. Students are unable to show what they know or the progress they have made. Appropriate accommodations often include reminders to stay on task, to listen to the entire question, to provide one of the available answers, and adjustments to vocabulary in questions which enable students to understand what is being asked. This is a critical factor as it relates to statewide assessments that are used to determine school district and state accountability.

**PSEA supports changes in the manner in which school districts are funded for special education.** Currently, special education funding is based on statewide enrollment averages unrelated to the number of special education students served, the nature of the services provided or the cost of those services. Further there is no accounting of a district's wealth or ability to pay for the extra services these students need in the formula that distributes state special education funding. The result is an unfair funding system. The system is made more unfair by the failure of state and federal appropriation to grow with program costs and by the burden placed on school districts to fund special education in charter schools. Often, this results in school districts having to sacrifice in other areas of their budgets in order to meet the financial demands of special education programs.



**Special education staff members need time to collaborate with general education staff and related service providers in order to more adequately address student needs.** IDEA's emphasis on inclusion means that special education programs must involve a coordinated series of supports addressing lesson delivery, accommodations and modifications to the curriculum, assessment, data collection, review of behavior supports, and integrating therapies. Staff members need sufficient planning time to work together on these activities.

Most importantly, student and special education teacher schedules must be developed with consideration for student contact time, delivery of specialized services, and data collection. Funding cuts have led to staffing overloads, and as a result, special education teachers sometimes have little or no contact with a portion of their caseload. As more and more special education students are appropriately mainstreamed into traditional classrooms, it has exacerbated the issues associated with increased caseload. This is particularly true in the case of Itinerant Support Special Education teachers who are often unable to support their caseloads.

In the highly prescriptive environment of special education, there are substantial and duplicative reporting and paperwork requirements. Unfortunately, this results in lost staff time that could otherwise be better spent with students. That is why PSEA supports relieving some of the duplicative paperwork requirements for special education staff.

**PSEA believes that legislative changes are needed to ensure that paraprofessionals who play a critical role in addressing the needs of special education students have the training and employment protection they deserve.** Paraprofessionals are employees of the public school entity who work with students with disabilities. These individuals may have different titles including aide, assistant, paraprofessional, personal care assistant, one-on-one aide, or support staff. The work performed by paraprofessionals is critically important as these individuals reinforce the instruction, assist in collecting data, support behavior plans, and assist in maintaining the health and well-being of the student. They provide continuity and consistency in the delivery of services to many students. They are required by Pennsylvania's special education regulations to meet pre-service training standards and to obtain 20 hours of training-per-year to maintain employment. Yet, their positions are vulnerable as classes are moved between school entities.

Specifically, we believe the following changes are needed:

- Employers of special education paraprofessionals should provide the 20 hours of training these employees are required to obtain each year.

- The General Assembly should extend to paraprofessionals the protections currently provided to teachers working in programs or classes that have transferred from one education entity to another entity (also referred to as “transfer between entity” protections).

**School employees have a continuing need for training in de-escalation, behavior management, and appropriate restraint techniques.** In addition, school entities and employees need ready access to community resources. Finally, school employees continue to need to have access to a full continuum of placement options and supports for special education students who exhibit violent and disruptive behaviors in school.

There are unique challenges with a special education delivery model when the student is at home and the instruction is provided through technology. Some traditional forms of accommodations do not readily adapt to this electronic medium so IEP teams must look at models that will be successful. It will be important for the staff to communicate regularly with the parents and keep data on the student’s meaningful progress. “Students and parents often fail to realize the commitment required of both of them to be a successful learner and quickly become overwhelmed by managing the number of tasks to be completed by specific deadlines.” (Podoll & Randle, 2005) Parents become the first level of support when the child is at home and they become the person “to ensure the learner is kept on task.” (Carnahan & Fulton, 2013)



**Specially designed instruction is important for academically gifted students.** Administrators are the leaders in their buildings or district and play a large role in the level of support that is given for various programs. Critical to the implementation and success of gifted education programming is the level of training the administrator has received. “The successful preparation of an administrator for special and gifted education is a key factor in the ability to solve problems, lead, work effectively with all stakeholders, and provide training and support to classroom teachers.” (Milligan, Neal, and Singleton; 2012)



<sup>1</sup>Pennsylvania Department of Education, Bureau of Special Education (2013) Penn Data, <http://penndata.hbg.psu.edu>

<sup>2</sup>It has been common practice for educational policy makers and commentators to reference the percentages of students “performing at grade level” in a particular subject. When doing so they mean the percentage of students scoring proficient or advanced on a particular test. More typically, psychometricians define “grade level” as the median score in a distribution of achievement test scores for the norming group for that grade and test. NAEP and most states assessments set proficiency at very different level from the median. The confusion between the two was noted by David Hoff in his Education Week blog when asking, can all students reach proficiency?

That question would be a lot easier to answer if everyone knew what proficiency means. As I reported last year, nobody can agree on the definition. (U.S.) Secretary of Education Margaret Spellings says that it means students achieving at grade level, as she repeated again at the National Press Club last week (Hoff D.J. (2008) “NCLB II: The latest news on the reauthorization of the No Child Left Behind Act.” Edweek.org (January 15, 2008) Retrieved at [http://blogs.edweek.org/edweek/NCLB-ActII/2008/01/nclb\\_and\\_the\\_meaning\\_of\\_profic\\_1.html](http://blogs.edweek.org/edweek/NCLB-ActII/2008/01/nclb_and_the_meaning_of_profic_1.html).)

Former Secretary Spellings apparently was unaware the National Assessment Governing Board (NAGB), which oversees NAEP policies, stated, “In particular, it is important to understand clearly that the Proficient level does not refer to ‘at grade’ performance”...students who may be considered proficient in a subject, given the common usage of the term, might not satisfy the requirements for performance at the NAEP achievement level” (Loomis and Bourque, 2001 quoted in Hull, J. (2008). “The proficiency debate: A guide to NAEP achievement levels.” The Center for Public Education. National School Board Association. Retrieved at: <http://www.centerforpubliceducation.org>

(PDE: defines grade level as proficient with respect to the academic standards for a particular subject and grade. Here we are using the PDE definition.)



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## Expand post-secondary education opportunities for more students

Post-secondary education is more important than ever in today's global economy.

### Recommendations

- State and district policymakers should work together to develop an educational system with multiple career and academic pathways to improve students' access to a wide range of post-secondary education opportunities.
- Increase number of school counselors available to secondary students in order to provide adequate career counseling to all students.
- Improve agreements so students can more easily transfer credits between Career and Technical Education programs, community colleges, and four-year degree granting institutions (commonly called articulation process).
- Expand the Pell Grant Program and state grant programs to include more post-secondary programs, not just college programs.
- Provide adequate funding for CTE programs, community colleges, and programs that allow high school students to take college courses and/or career and technical courses.
- Ensure that students in all Pennsylvania districts have access to a high school curriculum that provides a pathway to a college degree.
- Provide a tax incentive for employers to offer part-time "capstone cooperative" employment opportunities to qualifying students in career and technical education programs.

Post-secondary education is more important than ever in today's global economy. Higher education is critical for creating skilled workers that put the Commonwealth at a competitive economic advantage and producing well-rounded knowledgeable citizens and lifelong learners. PSEA believes that all students should have the opportunity to take part in post-secondary education and maximize their learning and economic potential.

Elementary and secondary education learning can be abstract, theoretical, and organized by discipline. Yet, most careers are concrete, organized by problems and projects, and require specific knowledge. Some students will succeed in this environment, graduating from high school and successfully achieving

a bachelor's degree. For others students, this incongruence between what they do in school every day and what they hope to do once they graduate leads them to disengage and possibly even drop out. Achieving a bachelor's degree is out of reach for some of these students, but the attainment of post-secondary credentials and a meaningful career need not be. Career pathways in high school that link learning to work and promote Career and Technical Education (CTE) programs and community colleges can help these students achieve success in school and beyond. Pathways to Prosperity, a recent report by the Harvard Graduate School of Education, focuses on the connection between education opportunity and economic prosperity. It makes a number of recommendations for investing in America's workforce, many of which PSEA has adapted in this report to build upon Pennsylvania's existing career and technical education delivery system.

At the same time, there are students who are interested in pursuing a college degree, but they face barriers, primarily due to cost, that limit access to post-secondary education programs. The national trend of decreased state support for public higher education has increased costs during a time when incomes for most American households have remained stagnant.<sup>1</sup>

## Career pathways and academic supports

**The reality is that a singular focus on college readiness for every student does not equip young adults with all of the skills and abilities necessary to be successful in the workplace and can limit their ability to transition from adolescence to adulthood.<sup>2</sup>**

While education beyond high school is important for economic prosperity, the Bureau of Labor Statistics estimates that by 2020, only about 20 percent of the total jobs will require a bachelor's degree or more.<sup>3</sup> Furthermore, college is not the only education beyond high school that can offer that prosperity. Career and technical programs offer specific skills needed for their future careers of students who don't intend to go to college as well as some who do. These programs also have the potential to re-engage students who don't relate to most high school classes or students who learn best when abstract concepts are connected to concrete real-life applications.

**An educational system that includes multiple career pathways serves several purposes, including greater academic engagement from students turned off by traditional education, increased number of young adults earning a post-secondary credential, and increased opportunities for students from lower- and middle-class families.** For students who find conventional classroom instruction uninteresting and irrelevant, career pathways with a strong link between learning and work skills offer them a new opportunity to engage in school and fulfill the purposes of education. Once they are engaged and participating in their education, they are more likely to pursue education beyond high school, whether it is in an academic or career and technical program. In either case, they will be earning an advanced cre-

dential, learning important skills necessary in their careers, and gaining greater earning potential. Career pathways also offer students who may not be able to attend college due to a poor academic record or financial constraints the opportunity to see what other options are available to them and how their knowledge, skills, and talents can be utilized in a rewarding career that offers a living wage.<sup>4</sup>

In order to develop and implement the reforms necessary for a successful career pathways program, several barriers need to be removed. For example, not enough emphasis is focused on the current system of career guidance and counseling. There should be an increased number of school counselors available to secondary students in order to provide adequate career counseling to all students.<sup>5</sup> Career and Technical Education (CTE) programs and community colleges have the potential to meet the needs of a diverse range of students and increase post-secondary attainment, but in order to do so, the Harvard researchers stress that there should be greater articulation between CTE and community colleges so students can transfer credits from one CTE to another and from a CTE to a community college or vice versa.

**In addition, the state should offer tax incentives for employers who offer “capstone cooperative” employment opportunities to qualifying students in career and technical education programs.** These tax credits would entice employers to hire students into part-time positions, opening the door for possible employment after graduation.

**Community colleges also fulfill a critical role by providing academic associate degree programs and the first two years of many bachelor’s programs offered via articulation agreements with four-year institutions.** Of more than 400,000 community college students in the Commonwealth, almost 220,000 are enrolled in credit-bearing programs. Most of the students enrolled in credit bearing courses at community colleges are participating in transfer programs that lead to a degree from a four-year institution.<sup>6</sup> For students who struggle to afford a four-year college degree and for students who are looking for college opportunities that correspond with the needs of working students or students who prefer to study close to home, community colleges provide a high-quality and cost-effective option.

**Community colleges and CTE programs need the funding necessary to make improvements in their academic and career-focused programs and to align them to four-year degree programs and regional labor demands.** To overcome these barriers, policymakers, educators, and employers need to

## Key Points

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engage in building the organizational infrastructure and political will to make reforms that support articulation programs between community college and four-year universities as well as between CTE and two- and four-year institutions, develop career pathways, and link learning to work.

**Policymakers need to expand the Pell Grant Program and state grant programs to include any post-secondary program that leads to “gainful employment in a recognized occupation,”**<sup>7</sup> not just college programs. They also need to support adequate funding for CTE programs, community colleges, and programs that allow high school students to take college courses and/or career and technical courses.<sup>8</sup>



Educators and parents need to support students who seek post-secondary education outside of college if they choose to do so. Educators should also know their students’ interests and skills in order to develop curriculum that meets their students’ needs. Students should have the opportunity to work together, use their creativity, solve practical problems, and develop interpersonal skills necessary to be successful in school and beyond.<sup>9</sup>

Employers must become more involved in preparing students for their careers. Employers should offer career counseling, job shadowing, and opportunities to work on projects or problems designed by current employees. They can collaborate with colleges to specify the necessary knowledge and skills to be successful in their industry, while also offer-

ing part-time employment to students related to their programs of study and career interests. By supporting young adults as they prepare for work, these employers can give them experience and demonstrate the important link between the classroom and the office.<sup>10</sup>

**In addition to financial barriers, many low-income and minority students need a range of support programs,** starting as early as middle school, to encourage them to attend college or pursue a career, help them prepare for it, and provide support so they complete their degrees and graduate.

According to several research studies, the nature of a student’s high school curriculum counts more than many other factors in providing students with the tools necessary to enroll in college and finish a degree.<sup>11</sup> Students who take more math and science courses and whose high school courses are more challenging are more likely to succeed in college. In fact, taking higher-level math and science courses,

such as trigonometry, calculus, chemistry, and physics, often reduces the disparity between low-income students or students who identify as racial and ethnic minorities and their peers. Challenging course work in other subjects like history, foreign languages, and computer science also helps students achieve greater success in college. Yet, not all students have access to these higher-level and/or elective courses. This is especially true for Latino students and students from low-income families, who often attend schools that do not include such courses in their curriculum. All students, regardless of income or background, should have access to a rigorous curriculum that includes a variety of challenging courses.

The intensity of coursework alone, however, is not enough. **Students also need real-world experiences and hands-on learning in high school in order to succeed.** Learning that is linked to a career and takes into account students' backgrounds and interests is often more meaningful and motivating for students. Students often see the benefits of these courses and develop an understanding of what is necessary for them to succeed in college and their future careers. Courses that engage students and set a goal for them beyond high school graduation often lead to increased enrollments in college.

**Furthermore, students need better guidance as to what is required for college admission.** Many students do not know what they need to do in order to apply to college, and many may not be aware of what high school courses are necessary to pursue their academic aspirations. In cases where their parents do not have a college degree, these students often rely on teachers and other school staff or their peers for information about the application process. Again, many students from low-income families or racial or ethnic minority backgrounds may not have access to guidance counselors and others who have the information necessary to guide these students. Therefore, all students should have knowledgeable staff at their high schools who can assist them in pursuing their academic goals.

**Finally, students need more flexibility in how they earn college credits.** Students who earned college credits while still in high school and those who took courses during the summer are more likely to be successful in college and complete their degree programs. In order for more students to have this advantage, high schools need to work with community colleges and four-year degree granting institutions to develop partnerships, and institutions of higher education need to offer more courses in summer sessions. Providing more opportunities for greater numbers of students to earn college credits can increase the number of students who graduate and are ready to participate in the global economy.

<sup>1</sup>Great Cost Shift. (2012) Retrieved from

[http://www.demos.org/sites/default/files/publications/TheGreatCostShift\\_Demos\\_0.pdf](http://www.demos.org/sites/default/files/publications/TheGreatCostShift_Demos_0.pdf)

<sup>2</sup>Ibid.

<sup>3</sup>Lockhard, C. Brett, and Michael Wolf. "Occupational Employment Projections." *Occupational Employment*. US Bureau of Labor Statistics, Jan. 2012. Web. 18 Oct. 2013. [www.bls.gov/opub/mlr/2012/01/art5full.pdf](http://www.bls.gov/opub/mlr/2012/01/art5full.pdf) (table 6, page 23)

<sup>4</sup>Harvard Graduate School of Education. (2011). *Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century*.

<sup>5</sup>Harvard Graduate School of Education. (2011). *Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century*.

<sup>6</sup>Fact Book 2012-13: Pennsylvania Community Colleges. Available online:

<http://pacommunitycolleges.org/resources/fact-sheet.html>

<sup>7</sup>Ibid.

<sup>8</sup>Lauer, A. (2011). *Status report: Governance and funding reform for career and technical centers in Pennsylvania*. University of Pittsburgh Institute of Politics, Workforce Development Committee.

<sup>9</sup>Brown, T. M. (2007). Lost and turned out: Academic, social, and emotional experiences of students excluded from school. *Urban Education*, 42(5), 432-455.

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<sup>11</sup>ACT. (2010). *Mind the gaps: How college readiness narrows achievement gaps in college success*. Retrieved from

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Revised January 2014

# Provide tutoring programs to help students

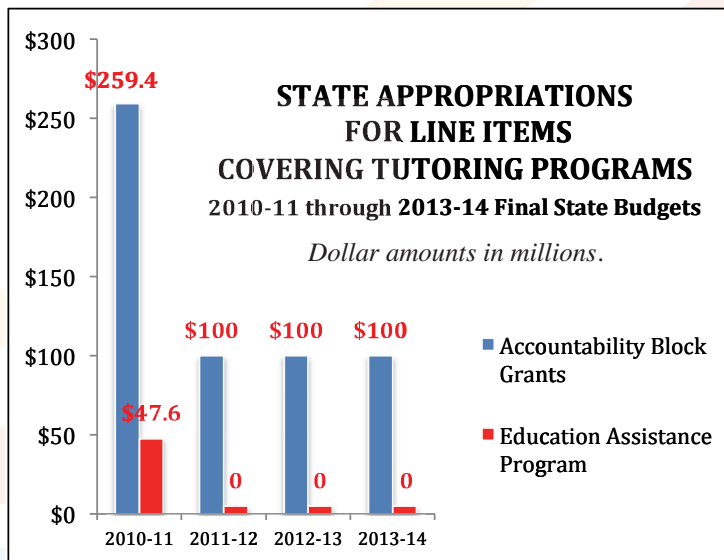
**Tutoring programs work, yet Pennsylvania has diminished its commitment to support them.**

## Recommendations

- Pennsylvania should make a sustained commitment to support high-quality tutoring programs with emphasis on literacy skills in the low grades.
- School districts should implement research-based tutoring strategies and assign struggling students to programs based upon their needs.
- School districts should use peer and volunteer tutors, in conjunction with professional staff, as a way to engage parents and community members to support student academic growth.

Tutoring provides additional, special, or remedial instruction usually in a one-on-one or small group setting. It is generally supplemental to other instruction and may be provided by a highly trained professional with specialized skill, certified teachers, specially trained instructional aids, or volunteers working closely with school professionals.

Pennsylvania public schools have long used tutoring as one support for struggling students. Tutoring has been a primary strategy of federal education policy since the inception of the Elementary and Secondary Education Act (ESEA) in 1964. It remains a key intervention under the No Child Left Behind (NCLB) Act. In addition, Pennsylvania state government has intermittently supported tutoring programs with earmarked state appropriations beginning with TELS in the 1980's and most recently as an option under the Accountability Block Grants. Unfortunately, Pennsylvania has reduced its financial support for tutoring, and general cuts in district funding have made it difficult for schools to maintain tutoring programs without that support.



Source: Data prepared by PA Department of Education.



## Tutoring programs positively impact student success

The U.S. Department of Education reported in 1997 that tutoring works.<sup>1</sup> Features associated with the most positive gains included, (1) close coordination with the classroom or reading teacher, (2) intensive and ongoing training for tutors, (3) well-structured tutoring sessions in which the content and delivery of instruction is carefully scripted, (4) careful monitoring and reinforcement of progress, (5) frequent and regular tutoring sessions, and (6) specially designed interventions for the 17 to 20 percent of children with severe reading difficulties.<sup>2</sup>

### Key Points

- Evidence proves that tutoring programs work
- Tutoring helps students at risk of reading failure
- Peer tutoring is a proven strategy
- Declining state support has led to cuts in tutoring programs

**One-on-one tutoring programs benefit students at risk for reading failure.** A meta-analysis of 29 studies found that well-designed, carefully administered one-on-one reading instruction contributed to improved performance for many students struggling to read.<sup>3</sup> Reading Recovery, a one-on-one instructional program used in Pennsylvania and elsewhere, has been shown to be very effective at supporting students to meet grade-level reading expectations. It depends on early intervention (first grade), specifically trained teachers, and professional development around a teacher's observational skills and intervention procedures.<sup>4</sup>

**Peer tutoring, where students work in pairs under the supervision of a trained adult and help one another learn content and practice a skill, is a proven instructional strategy.** It works best when students of differing ability levels work together and when tutors are explicitly trained in the tutoring process. In addition to higher academic achievement, peer tutoring improved peer relationships, personal and social development, and increased motivation.<sup>5</sup>

**Unfortunately, declining state support has made it difficult for Pennsylvania schools to offer evidence-based tutoring.** Since the 1980's Pennsylvania state



government has funded programs to support remedial programs for students who struggle with basic skill development. Recent programs include Read to Succeed, School Performance Incentives, Pennsylvania Accountability Block Grants, and the Educational Assistance Program, the state has earmarked money that could be used for tutoring. However, in the last few years, state funding support has significantly declined. In 2007-2008, more than 360 million (in three state budget line items) was available for school districts to support tutoring. In 2011-2012, the appropriations for these line items declined to just \$100 million, and has remained frozen at that level through 2013-14.<sup>6</sup>

<sup>1</sup>Wasik, B. A. (1997). Volunteer tutoring programs: A review of research on achievement (Report No. 14). Outcomes Center for Research on the Education of Students Placed At Risk (CRESPAR)

<sup>2</sup>Wasik, B. A. (1997). Evidence that Tutoring Works. Retrieved from [www.ed.gov](http://www.ed.gov).

<sup>3</sup>Elbaum, B., Vaughan, S., Hughes, M. T., & Moody, S. W. (2000). How effective are one-to-one tutoring programs in reading for elementary students at risk for reading failure? A meta-analysis of the intervention research. *Journal of Educational Psychology*, 92(4), 605-619. Retrieved from <http://nichcy.org/research/summaries>

<sup>4</sup>Ibid.

<sup>5</sup>Kunsch, C., Jitendra, A., & Sood, S. (2007). The effects of peer-mediated instruction in mathematics for students with learning problems: A research synthesis. *Learning Disabilities Research and Practice*, 22(1), 1-12.

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<sup>6</sup>Pennsylvania State Budgets (2003-2004) , (2011-2012). Harrisburg, PA: Author.



Revised January 2014

## Address educational needs of English Language Learners

**School districts must provide ELL students with access to appropriate curriculum in order to prevent them from falling behind academically while they are learning English.**

### Recommendations

- Provide English as a Second Language (ESL) and bilingual education according to students' educational needs.<sup>1</sup>
- Diagnose ELL students' learning needs and use the data to inform placement and instruction decisions.
- Assess students' progress and make necessary adjustments in instruction in order to improve students' achievements.
- Provide ELL students who are eligible for special education with appropriate services and instructional accommodations.
- Develop a coherent, standards-based curriculum aligned with assessments in all academic subjects and provide ELL students access to instruction based on curriculum<sup>2</sup> that includes enrichment opportunities, not just remediation, and appropriate supports to improve students' learning.
- Provide professional development to all educators about the needs of ELL students and how to support them.<sup>3</sup>

English Language Learners (ELL) come from more than 400 different language and cultural backgrounds. Some districts have more than 100 different language groups, but most ELL students are born in this country. ELL students are the fastest growing segment of the public school population, and every school district, whether suburban, urban, or rural, is affected. Over the past 15 years, the number of ELL students in the United States has nearly doubled to about 5 million - with projections showing that by 2015, ELL enrollment will double again to 10 million. According to the Pennsylvania Department of Education (PDE), Pennsylvania schools enroll approximately 42,500 ELL students.<sup>4</sup> Schools and districts must provide these students, regardless of their English language skills, with access to the curriculum in order to prevent them from falling behind academically while they are learning English.

## ELL students need long-term, comprehensive accommodations

Learning English (or any language) is a long-term process that takes time (at least four to seven years according to some researchers)<sup>5</sup> before a student reaches appropriate grade-level performance.<sup>6</sup> PSEA believes all students should have access to ESL and bilingual education according to their educational needs. The main goal of these programs should be to teach the curriculum while helping stu-

dents achieve English proficiency, as well as provide support in content areas and other disciplines for ELL and students with Limited English Proficiency (LEP).

### Key Points

- Learning English is a long-term process
- Schools need to do a better job of diagnosing ELL learning needs
- Accommodations allow ELL students to demonstrate academic ability
- Instruction in students' primary language aids their academic ability

**To close the achievement gap between ELL students and their peers, the education system needs to do a better job of diagnosing their learning needs, supporting their learning, and assessing their progress.** PSEA supports providing high-quality professional development and in-service training on addressing, diagnosing, and teaching ELL students.

**Additionally, PSEA supports comprehensive accommodations that allow ELL students to demonstrate their academic knowledge.** PSEA does not support relying on a single measure of academic achievement for making decisions about any student, especially ELL students. Standardized tests generally are

not valid for ELL students, because they were constructed and normed for native language speakers and may not accurately gauge what ELL students know and are able to do. It is important to remember that proficiency in the English language is not the same as the mastery of the content taught. For many ELL students, they must learn English and master academic content at the same time, making their achievement of both more difficult. Even when they appear to have a mastery of English, it should not be assumed that they also have mastery of the academic content. The opposite is also true – their struggles with the English language should not be viewed as struggles with the content. Thus, it is unfair to ELL students to make determinations about their academic abilities based on assessments that do not provide appropriate academic and language supports and accommodations.<sup>7</sup>

**PSEA supports instructional accommodations for ELL students,** including: strategic use of primary language; extended explanations and practice; visual cues and physical gestures; identifying and clarifying difficult words in texts; and providing material with some degree of familiarity.<sup>8</sup>

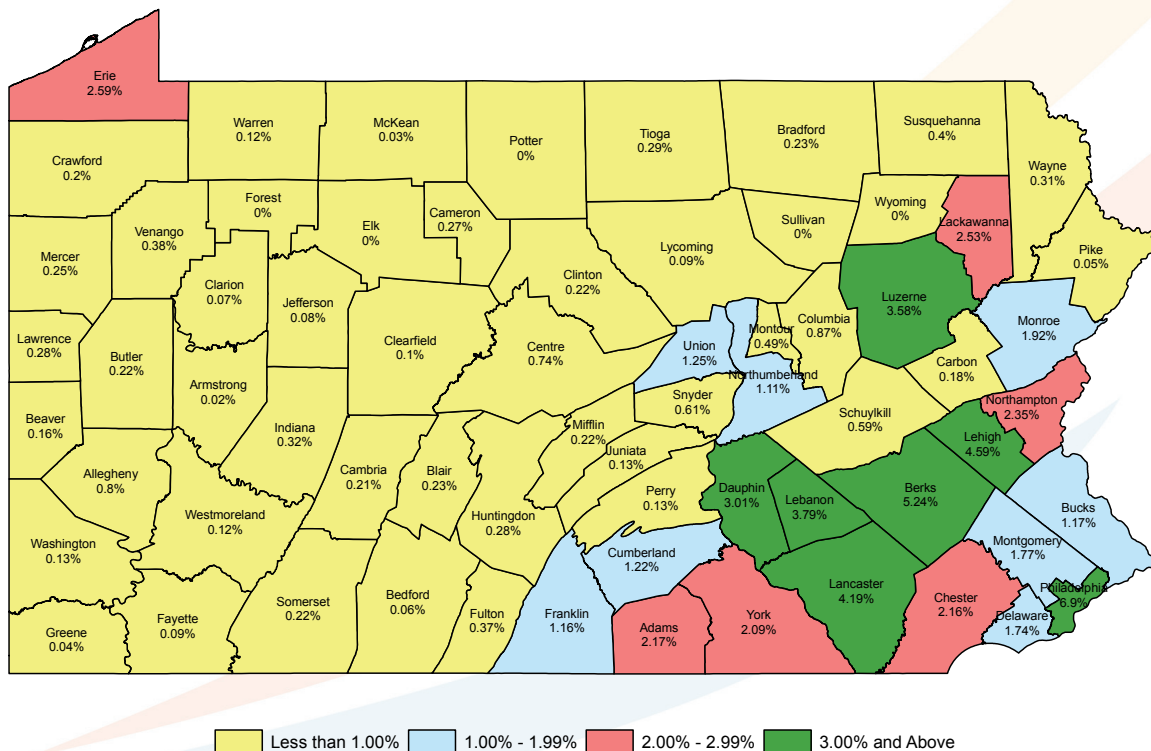
**Several research studies have found that instruction in a student's primary language aids in his or her achievement.** In fact, bilingual instruction has been shown to raise students' achievement levels by

significant amounts, and students taught in bilingual settings outperformed in all subjects of those taught in monolingual environments. Furthermore, teaching reading skills in students' first languages has been shown to be more effective at raising achievement in a second language than immersion in the second language. Researchers believe this is due to the fact that literacy and other skills and knowledge often transfer across languages. Individuals who have learned something in one language often know it or can more easily learn it in a second language. Additionally, many students fail to make progress learning English when they are isolated without the opportunity to interact with fluent English speakers. Through interaction with their teachers and other students, ELL students often develop strong academic skills in their second language. Therefore, students should have access to instruction in both their home language and English and should interact with fluent English speakers whenever possible.<sup>9</sup>

Further, PSEA believes that educators must be involved in the development and implementation of programs to ensure the successful pursuit of the education of students, regardless of their native language, and also must have the support and resources needed from both state and local entities.

**Short-term, remedial programs for ELL students have been found to be less effective than longer programs focused on enrichment.** A typical ELL program often lasts for two to three years, but research has shown that these programs can only close half of the achievement gap that exists between

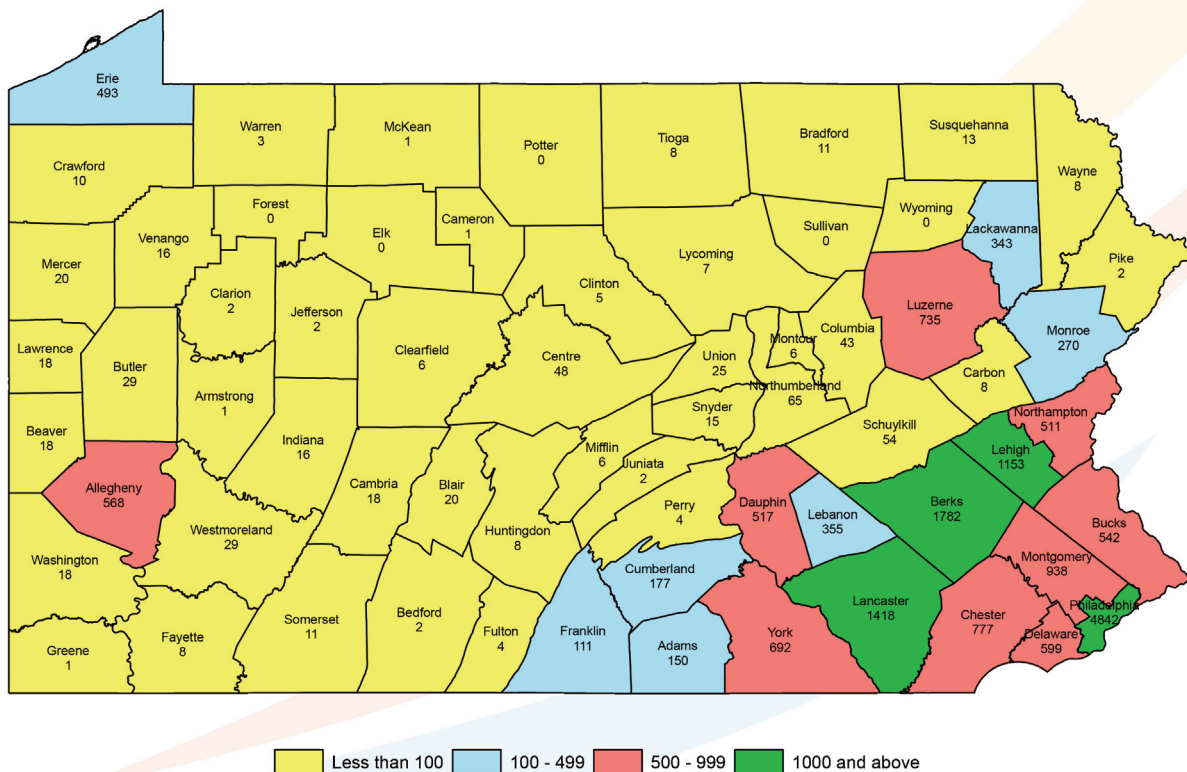
Percentage of students taking the 2011-12 PSSA math tests who are English Language Learners



ELL students and native English speakers. However, programs that last between four and seven years have been shown to decrease the achievement gap even more with many students attaining grade-level performance during that time.<sup>10</sup> In successful programs, teachers have clear goals, objectives, and routines; promote active engagement and participation by all students; provide informative and timely feedback; model and practice the skills and knowledge they are teaching; offer opportunities for students to practice, apply, and transfer new knowledge; allow students to interact with each other; and frequently assess students and reteach as needed. Similarly, these programs attend to students' developmental needs, including linguistic, academic, cognitive, emotional, social, and physical needs. In so doing, they create natural learning environments with numerous opportunities for students and teachers to engage in oral and written language. The curriculum remains challenging while also tapping into students' interests and strengths.<sup>11</sup>

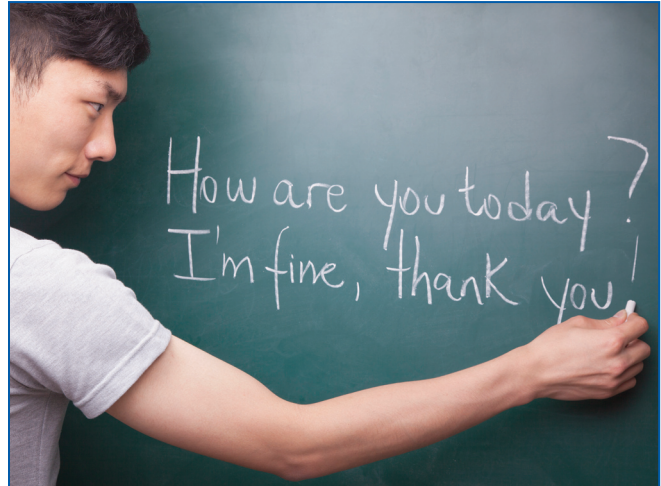
**Not all ELL students are the same; they come to school with different backgrounds and English language preparation.** All teachers must know their students' strengths as well as their weaknesses and must be prepared to take into account the different experiences and needs of all of their students as they plan and teach. This is often not a simple task, but when teachers use their knowledge about the social, cultural, and language backgrounds of their students while planning and implementing instruction, the

Number of English Language Learners taking the 2011-12 PSSA math tests



Calculated from: [http://www.portal.state.pa.us/portal/server.pt/community/school\\_assessments/7442](http://www.portal.state.pa.us/portal/server.pt/community/school_assessments/7442)

academic achievements of students increase. The most successful teachers link their content to students' experiences, believe all students can succeed, and use active and engaging strategies to teach. They also build a sense of community among their students and emphasize cooperation over competition. Teachers need to view their students as learners with worthwhile experiences and ideas to share and use home and community resources that can be built upon to help them master new knowledge and skills. ELL students can achieve more when they feel part of a community, engage in that community, and can learn from their peers, while having their own knowledge and skills respected.



Therefore, teachers need to be prepared to teach a diverse body of students and be supported in their own development as teachers of ELL students. The language education of teachers needs to be integrated throughout their teacher education and professional development, including in courses and professional development focused on particular content areas, so that they can create the type of classrooms where ELL students and their peers can learn.<sup>12</sup>

<sup>1</sup>Hakuta, K. (2011). Educating language minority students and affirming their equal rights: Research and practical perspectives. *Educational Researcher*, 40(4), 163-174.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

<sup>4</sup>Retrieved from [www.education.state.pa.us](http://www.education.state.pa.us)

<sup>5</sup>Genesee, F., Lindholm-Leary, C., Saunders, W. M., & Christian, D. (Eds.). (2006). *Educating english language learners: A synthesis of research evidence*. New York, NY: Cambridge University Press.

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<sup>6</sup>Hakuta, K. (2011). Educating language minority students and affirming their equal rights: Research and practical perspectives. *Educational Researcher*, 40(4), 163-174.

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<sup>7</sup>Hakuta, K. (2011). Educating language minority students and affirming their equal rights: Research and practical perspectives. *Educational Researcher*, 40(4), 163-174.

<sup>8</sup>August, D., & Shanahan, T. (Eds.). (2006). *Discovering literacy in second-language learners: Report of the national literacy panel on language-minority children and youth*. Mahwah, NJ: Lawrence Erlbaum Associates.

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<sup>9</sup>August, D., & Shanahan, T. (Eds.). (2006). *Discovering literacy in second-language learners: Report of the national literacy panel on language-minority children and youth*. Mahwah, NJ: Lawrence Erlbaum Associates.

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- <sup>11</sup>August, D., & Shanahan, T. (Eds.). (2006). *Discovering literacy in second-language learners: Report of the national literacy panel on language-minority children and youth*. Mahwah, NJ: Lawrence Erlbaum Associates.
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- <sup>12</sup>Banks, J., Cochran-Smith, M., Moll, L., Richert, A., Zeichner, K., LePage, . . . McDonald, M. (2005). Teaching diverse learners. In Darling-Hammond L., & Bransford, J. (Eds.) *Preparing teachers for a changing world: What teachers should learn and be able to do* (232-274). San Francisco, CA: Jossey-Bass.
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## Ensure students have access to arts education and extracurricular activities

The research is clear that not only are non-core subjects and extracurricular activities important in their own right, but they also have the potential to improve student outcomes academically and socially.

### Recommendations

- Support the inclusion of standards in art, music, physical education, foreign language, and other non-core subject areas in any standards developed in Pennsylvania (e.g., PA Common Core Standards).
- Provide standards-based, sequential, in-school arts, music, and physical education taught by educators certified in the specific subject area.
- Enforce current state regulations (see Chapter 4 of the State Board of Education Regulations) that require planned instruction aligned to the standards in all subject areas, including those not currently tested by the PSSA or Keystone Exams.
- Encourage school districts to support extracurricular activities that promote social and emotional development in areas like team work, self-esteem, creativity, and self-expression.

In an atmosphere of cuts to education funding and high-stakes assessments, subjects like art, music, physical education, and foreign language have been reduced or eliminated altogether in an effort to balance budgets and prepare students for high-stakes assessments.<sup>1</sup> Urban school districts and districts serving large numbers of minority and low-income students are more likely to cut non-core subjects and extracurricular activities, but cuts are occurring in school districts across Pennsylvania. Yet, the research is clear that not only are non-core subjects and extracurricular activities important in their own right, but they also have the potential to improve student outcomes academically and socially.

### Specials and extracurricular activities can improve students' social and emotional development, academic achievement

Researchers have found that students exposed to arts education and extracurricular programs tend to be better at various social and emotional skills and competencies, such as team work, confidence, self-efficacy, communication, leadership, and the development of healthy relationships.<sup>2</sup> Re-

searchers believe that these programs and opportunities often reach students whose needs are not being met by the core subjects, provide students with an outlet for self-expression, present different challenges and problems to solve, build relationships with potential employers, and allow students to develop positive relationships with peers and adults. These outcomes often translate into increased engagement in school and decreased participation in negative behaviors.<sup>3</sup>

## Key Points

- Arts and extracurricular activities improve students' social and emotional skills
- Arts and extracurricular activities foster positive outcomes for students

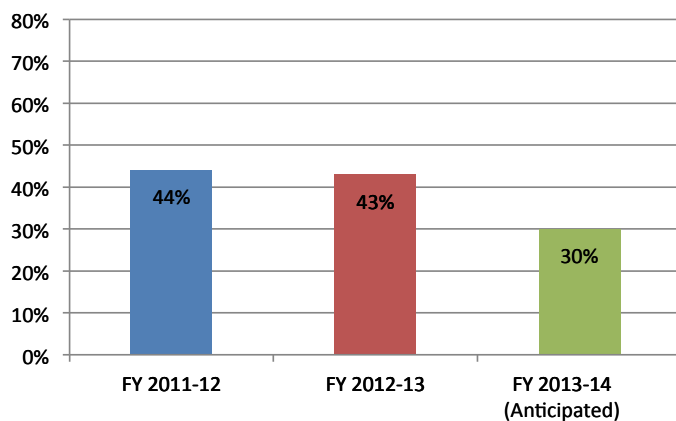
Although research on the effects of arts education, physical education, other non-core subjects areas, and out-of-school programs remains in its infancy, **the research so far has shown strong correlations between access and exposure to these subject areas and programs and increased positive outcomes for students.** Researchers have studied the effects of arts education to a greater extent than other areas, and have found correlations,

and in some cases causal relationships, between the study of the arts (including music and dance) and increases in academic achievement, standardized assessment and SAT scores, creative thinking, school engagement, motivation to learn, and problem-solving skills.<sup>4</sup> Similarly, physical activity, specifically aerobic exercise and physical education programs, have been shown to have positive effects on academic achievement and other cognitive outcomes. The greatest increases have been found with instruction that takes place at least three times a week and in small groups so that activity can be tailored

to the specific needs of the children. Students who participated in these types of programs saw increases in their math and reading achievement, as well as increases in IQ.<sup>5</sup>

Additionally, **foreign language classes may improve student learning in other academic areas.** Researchers have found that learning a new language, especially in early childhood, can improve

### School Districts Cutting Art, Music, Phys. Ed., and Core Courses



Source: PASBO/PASA Report, June 2013

learning in the primary language.<sup>6</sup> Finally, out-of-school programs have also been shown to have positive effects on student achievement, particularly decreasing dropout rates and increasing students' ability to apply their learning to real world situations.<sup>7</sup>

Researchers continue to investigate the academic and social outcomes associated with non-core subjects and extracurricular activities. What we know at this point is that there is at least a correlation, and possibly a casual influence, between the study of art, music, physical education, and other subject areas and students' social and academic growth. As such, state and local policies should encourage and support districts in maintaining, and if possible, expanding their offerings.

- <sup>1</sup>Chappell, S. V., & Cahnmann-Taylor, M. (2013). No child left with crayons: The imperative of arts-based education and research with language “minority” and other minorities communities. *Review of Research in Education*, 37, 243-268.  
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- <sup>2</sup>Chappell, S. V., & Cahnmann-Taylor, M. (2013). No child left with crayons: The imperative of arts-based education and research with language “minority” and other minoritized communities. *Review of Research in Education*, 37, 243-268.  
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 Melnick, S. A., Witmer, J. T., & Strickland, M. J. (2011). Cognition and student learning through the arts. *Arts Education Policy Review*, 112(3), 154-162.
- <sup>3</sup>Ibid.
- <sup>4</sup>Chappell, S. V., & Cahnmann-Taylor, M. (2013). No child left with crayons: The imperative of arts-based education and research with language “minority” and other minoritized communities. *Review of Research in Education*, 37, 243-268.  
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- <sup>5</sup>Fedewa, A. L., & Ahn, S. (2011). The effects of physical activity and physical fitness on children’s achievement and cognitive outcomes. *Research Quarterly for Exercise and Sport*, 82(3), 521-535.
- <sup>6</sup>Hakuta, K. (2011). Educating language minority students and affirming their equal rights: Research and practical perspectives. *Educational Researcher*, 40(4), 163-174.
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## Maximize academic learning time

**Maximizing academic learning time in school and supporting learning during out-of-school time are both critical tools to improve student achievement.**

### Recommendations

- Provide the resources educators need to engage students in meaningful, individualized learning during the traditional school day. These resources may include smaller classes, engaging model curricula, and models of successful programs that relate learning to real-life situations.
- The state should target funding for before- and after-school and tutoring programs, especially for districts in struggling communities and districts where funding cuts have caused these programs to be reduced or eliminated.
- Ensure teachers have sufficient planning time to develop engaging, differentiated instruction for all students in all classes.
- Where an extended school day and/or year are supported by the local community, ensure that the extended time is collectively bargained, that educators receive appropriate compensation for their work, and that the extended hours of instruction are implemented in a manner that extends learning time, not just time in school.
- Expand funding for out-of-school programs for students who need additional academic support, including summer academic programs for at-risk youth and ensure that these programs coordinate their support with the local public school.

Maximizing academic learning time in school and supporting learning during out-of-school time are both critical tools to improve student achievement. Strategies within schools include flexible scheduling, additional tutoring, and smaller classes to ensure more individualized attention. Under the right conditions, extended academic learning time has a positive impact on student achievement in schools that serve low-performing students.

Regardless of the length of the student day or year, there are many ways to maximize academic learning time, such as those listed above. Unfortunately, in too many districts, funding cuts have caused cutbacks in these critical support programs.

Outside of school hours, students should be engaged in enrichment activities that reinforce academic learning and develop positive social and health behaviors. In particular, students in low-income districts benefit from these types of programs.

## Increasing instructional time in school

**Increasing instructional time in school is an appealing academic intervention** in part because it is easy to measure and because of a straightforward assumption that instructional time and learning are directly related. However, it is important to ensure that existing time is well-spent prior to increasing time

in school, and there are several issues to consider when devising strategies to increase instructional time in school. The relationship between time and learning is complicated; research suggests that the quality of instructional time is at least as important as the quantity. Furthermore, increasing the length of the school day or year is costly.

### Key Points

- Increasing instructional time in an appealing intervention
- Maximizing academic learning time matters most
- The impact of more instructional time vary
- Maximizing instructional time requires attention to other reforms
- Before- and after-school programs and summer programs counterbalance the impact of poverty

**What matters most for increasing student achievement is maximizing academic learning time**, which is the portion of instructional time in which a student is paying attention, receiving instruction that is appropriately leveled, and in which learning occurs.<sup>1</sup>

A study conducted in Massachusetts found that extended learning time was most effective when it was highly focused on achieving a small number of academic goals and data-defined needs, allowed time for teachers to individualize and accelerate instruction, specifically allocated time for teacher collaboration around instruction, and included time for enrichment activities like dance, drama, music, visual arts, and sports.<sup>2</sup>

**The impact of more instructional time on different students varies.** Under the right conditions, maximizing academic learning time is related to increases in student achievement.<sup>3</sup> However, extended academic learning time has a greater impact on student achievement in schools that serve low-performing students.<sup>4</sup>

**Maximizing the use of school time requires attention to other reforms.** It is an oversimplification to expect that merely increasing time will enhance learning. Schools that see positive results from extended learning time often pair increases in learning time with other reforms to maximize the use of time. These reforms include efforts to build stronger leadership, differentiated and engaging teaching, high academic expectations, frequent performance monitoring, and a safe, supportive school environment.

**Increasing time can have unintended negative consequences.** For example, Edison Schools used to operate schools with a substantially longer day and year, but found that schools experienced more student absenteeism during the additional weeks of school. Eventually, Edison backed off of its commitment to a longer school year but retained a longer school day. Still, academic results from the Edison model with a longer school day are mixed.<sup>5</sup> Another experiment in extending the school day did not increase student achievement, and two-thirds of staff reported tired children and “burned out” teachers.<sup>6</sup>

**Extending the school day or year, without ensuring more academic learning time, is not the most efficient use of resources.** One study that examined extended time in relation to computer-aided instruction, class-size reduction, and cross-age tutoring found that increasing allocated time returned the smallest benefit per dollar of investment.<sup>7</sup> Others have concluded that relatively large, costly increases in allocated time in school would be necessary in order to develop small changes in academic achievement.<sup>8</sup>

**Persistent achievement gaps between students from high-and low-income families are substantially linked to unequal learning opportunities out-of-school rather than in school.**<sup>9</sup> Evidence suggests that — far from creating achievement gaps — schools do a tremendous job of equalizing learning across high- and low-income students during the school year, but this cannot offset the unequal learning opportunities during a child’s out-of-school time.<sup>10</sup> One study found that about one-third of achievement test score differences between low- and high-income students could be traced to academic differences that existed prior to starting first grade, and the other two-thirds of test score differences could be traced to summer learning differences through elementary school.<sup>11</sup>

**Participation in high-quality before- and after-school programs and summer programs is associated with several positive outcomes that counterbalance the impact of poverty on student achievement.** Organized out-of-school programs for children and youth achieve several positive outcomes:



- Higher levels of academic achievement, including higher achievement test scores, less school absence and tardiness, lower dropout rates, higher rates of grade promotion, higher rates of homework completion, and more engagement in learning;<sup>12</sup>

- Better social and developmental outcomes, including fewer behavioral problems, greater self-confidence, more initiative, better attitudes toward self and school, improved relationships with others, and enhanced social and communication skills;<sup>13</sup> and
- Fewer risky activities, including avoidance of drugs and alcohol, reduction in juvenile crime, delinquency, and violent behavior, and avoidance of sexual activity.<sup>14</sup>

**High-quality out-of-school programs share several characteristics.**

- Academically aligned with the school day.<sup>15</sup> Out-of-school programs should provide academic tutoring and homework help that extends and supports learning. But other activities, including games and field trips, can and should also be scheduled into children’s out-of-school time and used to support the academic curriculum. This coordination requires structured communication between the school and the out-of-school program provider.
- Designed to maximize student participation and attendance.<sup>16</sup> Many factors affect student participation and attendance in out-of-school programs, including “location, transportation, timing, length, program offerings, and frequency of services.”<sup>17</sup> High-quality programs pay attention to access and convenience, and they ensure that their services are attractive to youth and parents.



- Provide one-on-one tutoring to students who need specific academic support.<sup>18</sup> One-on-one tutoring provides students with the individualized attention they need and also provides the time and focus students need to engage in continuous progress assessment and instructional planning.
- Balance formal academic support with fun, hands-on educational experiences and physical activity.<sup>19</sup> Out-of-school programs are voluntary, and students are often fatigued after a long school day or year. This means that programs must be particularly engaging to attract and retain students, and they need to recognize multiple student needs, such as exercise, nutrition, social learning, and engagement in hands-on activities.

- Staffed by certified teachers and trained youth workers. Programs need to be staffed by professionals who are trained to meet the academic, social, and developmental needs of children. This includes full certification for academic staff and youth development training and credentials for other program workers.

<sup>1</sup>Blai, B., Jr. (1986). Education reform: It's about 'time,' *Clearing House* 60(1), 38-40.

<sup>2</sup>Massachusetts Expanded Learning Time Initiative(2010). *More time for learning: Promising practices and lessons learned*. Boston: Massachusetts Expanded Learning Time Initiative, Mass 2020.

<sup>3</sup>Aronson, J., Zimmerman, J., & Carlos, L. (1998). Improving student achievement by extending school: Is it just a matter of time? San Francisco, CA: WestEd.

<sup>4</sup>Smith, B. Et al. (2005). Extended learning time and student accountability: Assessing outcomes and options for elementary and middle grades. *American Educational Research Association*, 5(2), 195-236. Research Points: Essential Information for Education Policy.

<sup>5</sup>Education Sector. (2007). Time on the Clock: Rethinking the Way Schools Use Time, *Education Sector*.

<sup>6</sup>Salvador, S. K. (2008). *Billingsville expanded day evaluation report*, Charlotte-Mecklenburg, NC: Charlotte-Mecklenburg Public Schools.

<sup>7</sup>Levin, H. M., Glass, G. V. & Meister, G.R. (1987). Different approaches to improving performance at school, *Zeitschrift fur Internationale Erziehungs und Sozial Wissenschaftliche Forschung*, 3, 156-176. Retrieved from <http://www.schoolyear.info/drglassresearch.pdf>.

<sup>8</sup>Levin, H. M. & Tsang, M. C. (1987). The economics of student time. *Economics of Education Review*, 6, 357-364. Retrieved from <http://www.schoolyear.info/drglassresearch.pdf>.

<sup>9</sup>Alexander, K. L., Entwisle, D. R. & Olson, L. S.,. (2007). Lasting consequences of the summer learning gap, *American Sociological Review* 72, 167-180.

<sup>10</sup>Downey, D. B., von Hippel, P.T., & Broh, B. (2004). Are schools the great equalizer? School and non-school sources of inequality in cognitive skills, *American Sociological Review*, 69(5), 613-625.

<sup>11</sup>Op cit. Alexander et. al. *American Sociological Review*, 72, 167-180.

<sup>12</sup>Harvard Family Research Project. (2008). After school programs in the 21st century: Their potential and what it takes to achieve It, *Issues and Opportunities in Out-of-School Time Evaluation*, 10.

<sup>13</sup>Ibid.

<sup>14</sup>Ibid.

<sup>15</sup>U.S. Department of Education. (2009). Structuring out of school time to improve student achievement, *IES Practice Guide*. USDOE: Institute of Educational Science.

<sup>16</sup>Ibid.

<sup>17</sup>Op cit. U.S. Department of Education. USDOE: Institute of Educational Science.

<sup>18</sup>Ibid.

<sup>19</sup>Ibid.



Revised January 2014



## Update Pennsylvania's Charter School Law

Comprehensive updates must be made to Pennsylvania's Charter School Law in order to ensure academic and financial accountability for students, parents, and taxpayers.

### Recommendations

- Create a rational and equitable system for funding charter and cyber charter schools.
  - Establish a uniform cyber charter school tuition rate that more closely reflects the actual expenses these schools incur to educate a student, using as a benchmark the actual expenditures of cyber charter schools that have historically met adequate yearly progress targets with the most efficient expenditures.<sup>1</sup>
  - Connect funding for charter and cyber charter schools more directly to the needs of the students.
- Deduct items not directly related to student instruction, such as advertising, lobbying, and, in the case of cyber charter schools, food services, from the sending school district's tuition rate.
- Eliminate the pension "double-dip." School districts must include their full pension costs, prior to the 50 percent reimbursement from the state, in the tuition rate calculation for charter and cyber charter schools. The charter and cyber charter schools that participate in the PSERS system also then receive a state reimbursement for 50 percent of the pension costs for their employees. The state reimbursement to charter schools should remain as it connects more directly to the schools' actual costs, but the school district's pension payments should be removed from the tuition calculation to eliminate this "double-dip."
- Cap charter and cyber charter schools' unreserved, undesignated fund balances in the same way that traditional school districts' balances are capped.<sup>2</sup>
- Place appropriate limitations on payments for educational service providers at fair market value.<sup>3</sup>
  - Fix inequities in the special education funding formula for charter and cyber charter schools, and ensure students receive the services they need.<sup>4</sup>

## Recommendations, *continued*

- Include educators in charter and cyber charter schools in the evaluation system adopted for educators in traditional public schools.
- Ensure transparency and protect against conflicts of interest in the governance and operations of charter schools.<sup>5</sup>
  - Require charter and cyber charter school governance and operations, including contracts with education service providers, to be subject to the state’s Ethics Law and Right to Know Law.
  - Define and prohibit conflicts of interest of charter and cyber charter school board members and administrators.
- Strengthen the authorization process for charter and cyber charter schools.
  - Ensure financial accountability for local taxpayers by maintaining local authorization for charter schools at the school district level.
  - Strengthen the application process for charter and cyber charter schools. Specifically, require the charter and cyber charter school to demonstrate how its curriculum aligns with Pennsylvania’s academic standards and what measurements of program success the authorizer will utilize when determining the initial approval, renewal, or possible revocation of the charter.
- Remove legal barriers that prevent district officials from considering cost implications and the economic impact of new charters when deciding whether or not to approve them.
- Enhance teacher compensation and working conditions in charter and cyber charter schools to attract and retain quality educators.<sup>6</sup>

PSEA supports efforts to provide diverse learning opportunities to students within the public education system, and public charter schools may meet the needs of certain students. However, comprehensive updates must be made to Pennsylvania’s charter school law in order to ensure academic and financial accountability for students, parents, and taxpayers. These updates include creating a rational and sustainable funding formula for charter and cyber charter schools, improving the transparency of governance and operations, improving curriculum alignment with Pennsylvania’s academic standards, ensuring access for all students - including students with special needs, and ensuring taxpayer dollars are invested in student learning.

The national movement to create charter schools began in the early 1990s. Pennsylvania authorized the creation of charter schools in 1997 and in 2002 established cyber charter schools.<sup>7</sup> Since that time, these public schools have grown significantly – as of 2012, more than 150 charter schools and 16 cyber charter schools were in operation serving more than 72,000 and 32,000 students respectively.<sup>8</sup>

Charter schools are approved by local school districts but operate independently from the district and are controlled by a Board of Trustees. A cyber charter school, also an independent public school, operates under a charter from the Commonwealth and provides the bulk of its instruction to students through the Internet or other electronic means. Current law allows charter schools and cyber charter schools to have an initial charter for three to five years with the ability to seek renewal for a five-year period.

The funding formula for charter schools has not been changed since 1997, and the loss of partial state reimbursement since 2011 has significantly exacerbated the negative impacts on school district budgets. The formula requires that charter schools and cyber charter schools bill their pupils' school districts of residence according to each district's average expenditure per regular education student, and that district's average expenditure per special education student. Districts with (1) relatively high expenditures per pupil and (2) rapidly increasing charter school admissions among residents have experienced similarly rapid increases in payments to charter schools as a percentage of their total budgets.

### Key Points

- Eliminating the charter school reimbursement program has magnified funding issues
- Charter schools receive different per student funding amounts from each sending school district
- Academic achievement in most charter schools is either the same or worse than neighboring public schools

## Funding issues are creating a growing crisis, and academic success is mixed

A number of concerns have come to the forefront of the policy debate in Pennsylvania in recent years related to the funding formula for charter and cyber charter schools, including issues around tuition rates more closely reflecting cost of actual services provided to both regular education and special education students, increasing fund balances, and increasing costs for “management contracts,”

While these issues have been debated for years, **the elimination of the state's partial reimbursement to school districts for charter school costs in 2011 brought the concerns to the forefront as the financial impact on school districts was greatly magnified.**

For example, two districts in “financial recovery” - Chester Upland and York City - rank first and third (respectively) in the percentage of their budgets going to charter schools. Chester Upland spent nearly 20 percent of its budget on charter school payments in 2009-10 (after reimbursement by the state), while York City spent 9.3 percent (again, after reimbursement). Their obligations have risen dramatically in the last two years. Indeed, Chester Upland reported charter school expenses in 2011-12 that equaled 34 percent of its total expenditures,<sup>3</sup> while York City’s charter school payments had jumped to 22 percent of district spending that year. None of these payments in 2011-12 were offset by state reimbursement. Thus Chester Upland experienced a net increase in charter school costs (due to higher payments and the loss of state reimbursement) equal to about 14 percent of total expenditures, while York City’s increase equaled nearly 13 percent of total spending.<sup>9</sup>

**Charter schools receive wildly different special education tuition rates from each district** because the formula is based upon the total special education expenditures of the school district. And so while the median regular charter school tuition rate is around \$8,900 per student, the special education tuition rate is significantly higher – just a little more than \$18,000 per student - and the range across school districts is from \$12,000 per student to more than \$41,000 per student, regardless of the exceptionality of the student or the actual cost of the services provided. Because charter schools receive the same special education tuition rate for every special education student, regardless of the extent of services required or the exceptionality of that student, the formula allows for a charter school to receive in excess of \$41,000 for a student with a mild learning disability even though that student may only require minimal special education services. On the other side of the spectrum, the formula does not allow for the charter school to receive a higher rate for serving a special education student with more severe needs.<sup>10</sup>

**While some charters do better academically than nearby public schools with similar student populations, most do about the same and some do worse.** The growth of charter schools nationally and in Pennsylvania has intensified the debate over academic quality and improvements in student performance. Overall, the evidence of charter school performance is mixed. Since 2009, CREDO has conducted two comprehensive studies related to charter school academic performance.<sup>12</sup> The 2009 study found deficiencies in performance and while the 2013 study found small improvements,<sup>13</sup> the findings overall showed that achievement differences between charter schools and traditional public schools are extremely small and, “in fact, that they lack real world significance.”<sup>14,15</sup>

**According to a 2009 study by RAND, non-primary charter schools are producing achievement gains that are, on average, neither substantially better nor substantially worse than those of regular public schools in the area.** The study found no evidence that charter school performance varies by grade level.<sup>16</sup> A study by Martin Carnoy of Stanford University, examined the evidence from studies of

charter schools across the nation and reached the following important conclusions: (1) charter schools do not differ from regular public schools in average student achievement; (2) they have not improved the educational performance of urban, low-income, minority children; and (3) competition from charters has not improved public school performance.<sup>17</sup>

A study by Lubienski and Lubienski looked at mathematics results from the National Assessment of Educational Progress (NAEP) and found charter schools scored a significant 4.4 points lower than non-charter public schools in fourth grade, but scored 2.4 points higher in eighth grade (not a significant difference).<sup>18</sup> The research should be further evaluated before policymakers would move forward with efforts to expand or replicate programs that appear to be successful. For example, two charter school organizations, KIPP (Knowledge is Power Program) and the Harlem Children’s Zone have been highly touted as success stories, leading some to advocate for their expansion. However, more detailed study of both programs is needed before one can reach firm conclusions regarding the performance of the programs, the reasons underlying it, or the wisdom of generalizing the models they use.

A review of the research on KIPP suggests that selection effects (e.g., departure of poorer students, unmeasured motivation of enrollees, dropping of lower performing schools) may enhance the apparent success among KIPP charter schools.<sup>19</sup> In addition, the demands of the KIPP model on children, parents, and staff may limit its scalability. Another study of the Harlem Children’s Zone suggests that creating charters alone, without an extensive investment in community support services for students and their families, will be insufficient to achieve positive results.<sup>20</sup>

<sup>1</sup>The Task Force on School Cost Reduction, established by Special Session Act 1 of 2006, found “establishing a single statewide tuition rate will enable all school districts to pay an equitable share of the costs to support the cyber charter school that the resident student chooses to attend ... Setting a single tuition rate is a critical component of allocating public resources efficiently,” [http://www.pde.state.pa.us/k12\\_finances/cwp/view.asp?a=305&q=123154](http://www.pde.state.pa.us/k12_finances/cwp/view.asp?a=305&q=123154).

<sup>2</sup>Based on AFR data from 2007-2008 to 2011-2012, the five year total fund balance accumulation for charter schools was \$136,599,420

<sup>3</sup>*Report of PDE Secretary, US District Court for the Eastern District of PA, Chester Upland School District, et al., v. Commonwealth of Pennsylvania, et al., March 2012* “...it is worth pointing out that the management fee agreement between CSMI and CCCS contains an escalator clause, such that CSMI’s management fee escalates each year. CCCS’s five year business plan, contained in bond issuance documents dated October 13, 2010, reflect that CCCS’s “General and Administrative” expense will increase to \$6,416 per student by the 2014-15 school year. A note to CCCS’s five-year business plan explains that “General and Administrative is management fees paid to management company for daily management of charter schools.” During the six year period from 2009-10 through 2014-15, CCCS projected that its general and administrative expense as percentage of total income would increase from 35.67% to 49.53%. **In other words, by 2014-15, almost one out of every two dollars spent at CCCS would be allocated towards paying CSMI’s management fee.**” (emphasis added)

<sup>4</sup>*Report of PDE Secretary, US District Court for the Eastern District of PA, Chester Upland School District, et al., v. Commonwealth of Pennsylvania, et al., March 2012* “As a final point relating to CCCS (Chester Community Charter School) and the other charter schools, the Designee notes that the funding mechanism set forth in the Charter School Law – which requires local school districts to reimburse charter schools at a set amount that is not linked in any way to the charter school’s actual costs of educating its students – has contributed at least in part to the current financial crisis in Chester Upland School District. So, too, the fact that the charter schools receive an additional stipend of \$14,500 for every student that is classified as special education, without regard to the level of that student’s challenge or the additional costs associated with educating such a child, has in all likelihood created a climate for the inefficient use of educational funds. In particular, schools may be incented to diagnose students as having borderline speech or language disabilities, which qualifies the school for an additional \$14,500 in special education funding [per student] but does not increase the cost of educating that student nearly as much.”

<sup>5</sup>Act 82 of 2011.

Miron, G., Nelson, C., & Sullins, C. (2002) *Strengthening Pennsylvania’s Charter School Reform: Findings From the Statewide Evaluation and Discussion of Relevant Policy Issues*. The Evaluation Center, Western Michigan University.

<sup>6</sup>Currently, fewer experienced and certified teachers work in charters and cyber charters than comparable traditional public school districts, and pay scales and relative teacher salaries are considerably lower at charter and cyber charter schools than in similar traditional public school districts.

[http://www.wmich.edu/evalctr/charter/pa\\_5year/](http://www.wmich.edu/evalctr/charter/pa_5year/).

<sup>7</sup>Act 22 of 1997

<sup>8</sup>[http://www.pahouse.com/PR/Charter\\_and\\_Cyber\\_Charter\\_School\\_Report.pdf](http://www.pahouse.com/PR/Charter_and_Cyber_Charter_School_Report.pdf)

<sup>9</sup>“Sounding the Alarm 2”. Retrieved from [www.psea.org/soundingthealarm](http://www.psea.org/soundingthealarm)

<sup>10</sup>PASBO Testimony before the Special Education Funding Commission (2013). Retrieved from

[http://www.pasbo.org/CombinedPASBOtestimony9\\_4\\_13.pdf](http://www.pasbo.org/CombinedPASBOtestimony9_4_13.pdf)

<sup>11</sup>PSEA Testimony before the Special Education Funding Commission (2013) Retrieved from <http://www.psea.org/uploaded-Files/Newsroom/Testimony/CrosseyTestimonyOnSpecialEducationFunding-Aug222013.pdf>

<sup>12</sup>CREDO. (2009). *Multiple choice: Charter school performance in 16 states*. Stanford, CA: CREDO, Stanford University.

<sup>13</sup>CREDO. (2013). *National charter school study 2013*. Stanford, CA: CREDO, Stanford University.

<sup>14</sup>Retrieved from <http://www.brookings.edu/blogs/brown-center-chalkboard/posts/2013/07/03-charter-schools-loveless>

<sup>15</sup>A review by Maul & McLelland reached similar conclusions: “...even setting aside all concerns with the analytic methods, the study shows less than one hundredth of one percent of the variation in test performance is explainable by charter school enrollment. With a very large sample size, nearly any effect will be statistically significant, but in practical terms the effects of so small as to be regarded, without hyperbole, as trivial.

Maul, A., & McLelland, A. (2013). *Review of national charter school study*. National Education Policy Center. Retrieved from <http://nepc.colorado.edu/thinktank/review-credo-2013>

<sup>16</sup>Zimmer, R., Gill, Booker, K., Lavertu, S., Sass, T.R. & Witte, J. (2009). *Charter schools in eight states: Effects on achievement, attainment, integration, and competition*. The RAND Corporation.

<sup>17</sup>Carnoy, M., Jacobsen, R. Mishel, L. & Rothstein, R. (2005). *The charter school dust-up: Examining the evidence on enrollment and achievement*. Economic Policy Institute and Teachers College Press.

<sup>18</sup>Henig, J. (2008). *What do we know about the outcomes of KIPP schools?* Boulder and Tempe, CO: Education and the Public Interest Center & Education Policy Research Unit. Retrieved from

<http://epicpolicy.org/publication/outcomes-of-kipp-schools>.

<sup>19</sup>According to Dobbie and Fryer: HCZ has over 20 programs designed to help and empower individuals in their 97 blocks. These investments include early childhood programs (Head Start, e.g.), public elementary-, middle- and high-school programs (i.e. karate, dance, after-school tutoring), a college-success office, family, community and health programs, foster-care prevention services, and so on (2009: 5).

<sup>20</sup>Dobbie, W. & Fryer, Jr., R. G. (2009). *Are high-quality schools enough to close the achievement gap?* Evidence from a bold social experiment in Harlem.” (Unpublished paper.)



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## Implement effective distance learning opportunities

**Distance learning is popular, but it is important to ensure that the presumed benefits of distance learning exist in practice and that the quality of distance learning is high.**

### Recommendations

- Support research to examine the impact of specific distance learning strategies on student learning, as well as the impact of distance learning on students of different ages and in different content areas, to help educators make informed decisions about what constitutes effective distance instruction.
- Engage in cost-benefit analyses to determine the most cost-effective ways to deliver high-quality instruction appropriate for the academic content and likely to meet the needs of the student.
- Ensure that all students have equitable access to distance learning resources.
- Examine the possibility of offering statewide distance school services through a single provider at the state level to more easily ensure cost-effectiveness and quality.
- Provide professional development for all teachers to blend distance technologies with classroom instruction.
- Online courses should only be taught by teachers who are certified in the subject of the course.

Distance, or online, learning opportunities have expanded over the last few years at an extraordinary rate. Recent statistics suggest that more than 600,000 students took at least one online or blended course in 2011-2012, up 16 percent from 2010-2011.<sup>1</sup> Five states now require K-12 students to complete at least one online course to graduate from high school.<sup>2</sup> In Pennsylvania, more than 30,000 students attend school online full-time.

Distance learning is popular because it is viewed as more flexible than traditional public schools, able to provide different kinds of access to instruction to students who cannot or who choose not to attend traditional schools, to disseminate instruction more efficiently than traditional schools, and to increase student-teacher ratios without compromising learning outcomes.<sup>3</sup> However, with growing numbers of students accessing some or all of their education online, it is important to ensure that these presumed benefits of distance learning exist in practice and that the quality of distance learning is high. Further-

more, since many schools and districts are pursuing distance learning, it is important to ensure that distance learning resources are provided in ways that are efficient and cost-effective.

## Different approaches to distance learning

**Distance learning is not a specific form of teaching or learning; the term comprises all types of teaching and learning that are supported by electronic media.** In some cases, distance learning is provided entirely online, through either synchronous (students and teacher meeting online at the same

time) or asynchronous (student can access learning materials at any time) experiences. In other cases, distance learning resources are used to enrich instruction that is provided in traditional classroom settings. Often, distance learning occurs in a “blended learning” format, a formal education program in which a student learns partly through online content delivery with some student control over time and place, or partly at a supervised brick and mortar school building.<sup>4</sup>

### Key Points

- Distance learning includes teaching and learning supported by electronic media
- Distance learning programs differ by sponsor
- Distance learning practice is not yet grounded in a strong research base
- The cost effectiveness of distance learning is unclear
- A public distance school in Pennsylvania receives almost \$13,000 per student
- Other states have adopted different distance learning models

**Distance learning programs also differ in terms of who sponsors them.** Many states have statewide distance schools that provide electronic learning media to all public schools in the state. In Pennsylvania, although there is no state-sponsored distance school, several distance learning options are available to students: distance charter schools provide services to thousands of students across the Commonwealth; several intermediate units offer distance programs for districts to use; a Pennsylvania-based organization called “blendedschools.net” allows districts to collaborate to offer distance learning options; at least one group of districts has entered into a consortium to offer distance learning classes to students; and several districts have developed or independently contracted for distance learning services.

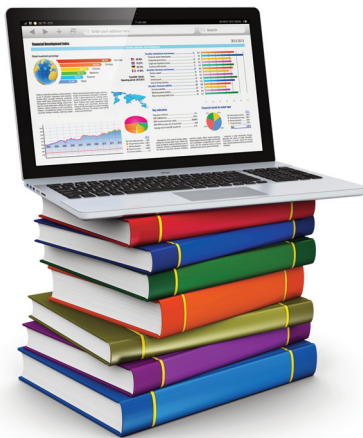
*“Pennsylvania should support research to examine the impact of specific distance learning strategies on student learning.”*

**Although a growing number of schools rely upon electronic media to deliver some or all instruction, an examination of the research literature concerning distance learning makes clear that distance learning practice is not yet grounded in a strong research base.** As a matter of fact, in a 2010 meta-analysis of research on online learning, the U.S. Department of Education found only five



high-quality controlled studies comparing online and face-to-face learning in K-12 education.<sup>5</sup> The report concludes that, “This...still comprises a very small number of studies, especially considering the extent to which secondary schools are using online courses and the rapid growth of online instruction in K-12 education as a whole.”<sup>6</sup> Research in settings other than K-12 public schools suggests that blending learning may be the most promising model of distance instruction although practitioners and policymakers should resist applying broad lessons from outside the field of education to K-12 schools.<sup>7</sup> In order to help educators make truly informed decisions about the effective use of electronic media in instructional settings, policymakers should support continued research in the field of K-12 distance learning, including research that examines the impact of distance learning on the intellectual, socio-emotional, and physical development of our youngest students.

**Just as evidence about the effectiveness of distance learning is scant, so too is any understanding of its cost-effectiveness.** A recent report by the U.S. Department of Education examining the implications of online learning for educational productivity found that, “A review of the available research that examined the impact of online learning on educational productivity for secondary school students was found to be lacking. No analyses were found that rigorously measured the productivity of an online learning system relative to place-based instruction in secondary schools.”<sup>8</sup>



**On average, a public distance school in Pennsylvania receives almost \$13,000 for each student enrolled full-time in online learning, and the educational outcomes attained by our distance charter schools are some of the lowest in the state.** In terms of value-for-money, it is important for Pennsylvania to determine if distance schools are offering the best possible distance instruction at the lowest price. Unfortunately, “Policymakers and educators do not yet have the needed rigorous evidence to answer some seemingly basic questions about when, how, and under what conditions online learning can be deployed cost-effectively.”<sup>9</sup>

**We do know that other states have adopted very different models of distance learning than Pennsylvania and incur different costs.** In Florida, for example, where students took almost 260,000 courses at Florida’s statewide Virtual School, courses cost less than \$500 each.<sup>10</sup> In North Carolina, which offers both a statewide virtual school and virtual charter schools, funding for charter schools is capped at the cost of full-time attendance at the North Carolina Virtual Public School: \$3,504 per full-time student. In both Florida and North Carolina, the cost of educating students in a distance school is significantly less than the average cost in Pennsylvania. Pennsylvania should determine the most cost effective way to provide high-quality distance education services, including consideration of a single statewide distance learning program.

**It is important to note that any requirement to use technology for learning that is inaccessible to any student with disabilities is discrimination and is prohibited by federal law** “unless those individuals are provided accommodations or modifications that permit them to receive all the educational benefits provided by the technology in an equally effective and equally integrated manner.”<sup>11</sup>

**Distance learning is an emerging field in education.** At its most promising, it may be a tool to provide up-to-date, dynamic, and challenging learning to students 365 days a year and at all hours of the day and night. At the moment, however, because it is a new use of technology, the research base cannot help policymakers or practitioners determine the best approaches to online learning. As the technology takes hold in schools across the Commonwealth, it is critical to engage in rigorous research to find the most effective strategies for specific students. It is also critical to ensure that the Commonwealth is building a system that is productive; that is, that gives the greatest benefit to students at the best price to taxpayers. Pennsylvania should examine models of cyber learning in other states to learn how best to ensure cyber learning provides both a good education and good value.

<sup>1</sup>Retrieved from <http://www.usnews.com/education/blogs/high-school-notes/2012/10/24/states-districts-require-online-ed-for-high-school-graduation>

<sup>2</sup>Retrieved from <http://kpk12.com/cms/wp-content/uploads/Table-6-States-with-Online-Learning-Requirements.png> Pennsylvania does not require online courses.

<sup>3</sup>Bakia, M., Shear, L., Toyama, Y., and Lasseter, A. (2012). *Understanding the implications of online learning for educational productivity*. Washington, DC: U.S. Department of Education Office of Educational Technology.

<sup>4</sup>Watson, J., Murin, A., Washaw, L., Gemin, B., & Rapp, C. (2012). *Keeping pace with k-22 online & blended learning: An Annual review of policy and practice*. Durango, CO: Evergreen Education Group.

<sup>5</sup>Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington, DC: U.S. Department of Education Office of Planning, Policy and Program Studies Service.

<sup>6</sup>U.S. Department of Education. (2012). *Understanding the implications of online learning for educational productivity*. Washington, DC: U.S. Department of Education Office of Educational Technology.

<sup>7</sup>Ibid.

<sup>8</sup>Bakia, M., Shear, L., Toyama, Y., & Lasseter, A. (2012). *Understanding the Implications of Online Learning for Educational Productivity*. Washington, DC: U.S. Department of Education Office of Educational Technology.

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## Reduce the high school dropout rate

**Because of the strong connection between high school completion and life success, it is critical for the Commonwealth to reduce the high school dropout rate.**

### Recommendations

- Fund evidence-based programs to identify students at risk of dropping out and intervene to reduce the likelihood of dropping out. Invest in programs that address the social, economic, and community reasons, in addition to school-based reasons, that students drop out.
- Develop data systems to track dropout prevention program implementation and program outcomes.
- Encourage school districts to adopt models that preserve comprehensive student legal rights, particularly for students with disabilities, by serving them within the K-12 public system.
- Promote regular attendance.

Dropping out of high school is a serious decision – for students, the community, our state, and the nation. School dropouts only earn half as much annual income as high school graduates; half of our prisoners are dropouts; and half of the heads of households on welfare are high school dropouts. High school dropouts are three times more likely than high school graduates who do not attend college to be welfare recipients<sup>1</sup> and are also more likely to die younger than those who complete high school.<sup>2</sup> Because of the strong connection between high school completion and life success, it is critical for the Commonwealth to reduce the high school dropout rate.

### Dropout rates: causes and solutions

**Dropout is the result of as many as 25 student, family, community and school factors;**<sup>3</sup> the major determinants of dropping out are sex, race, family assets, presence of biological parents, characteristics of high school peers,<sup>4</sup> maternal attributes, and local industry structure and community income.<sup>5</sup> One study found that 12 percent of high school dropouts left school to care for a family member.<sup>6</sup> Other studies demonstrate that living in poverty causes stress that damages brain cells and decreases memory, which is linked to problem solving and success in school.<sup>7</sup> Home insecurity, another determinant of dropout, is chronic in some urban districts, where about one in five students change schools annually.<sup>8</sup> Many dropout determinants correlate with poverty, which explains why low-income students leave school at a rate five times higher than other students.<sup>9</sup>

Clearly, addressing the complex determinants of dropouts requires multiple programs, and interagency cooperation since schools themselves only control about 20 percent of the variation in dropout rates across schools.<sup>10</sup> Following are research-based approaches to reduce dropout rates:

- Invest in early childhood education. Ninety percent of brain development occurs before age 5.<sup>11</sup> In fact, research indicates, “We intervene too late in the course of a student’s development [and] that certain parts of the profile of a dropout-prone student may be visible as early as the 3<sup>rd</sup> grade.”<sup>12</sup> Investments in early childhood programs that support the emotional, cognitive, and social development of children and provide parent support can significantly reduce dropout rates in later years.<sup>13</sup>
- Build information systems that can pinpoint at-risk students. Students who come from low-income families, have low academic skills, have parents who are not high school graduates, speak English as a second language, are children of single parents, are pregnant or parenting, have a pattern of disciplinary problems or poor socio-emotional development, have been retained, or who demonstrate inconsistent school attendance are particularly at risk of dropping out.<sup>14</sup> Prevention programs can be constructed to serve these students early in their school careers. Districts, however, need a consistent way to find students who would benefit from prevention programs and target specific interventions to specific students. Pennsylvania should develop data systems to pinpoint students who can benefit from prevention programming.
- Promote regular attendance. Chronic absenteeism increases achievement gaps at all grade levels. At least one study found a strong relationship between sixth-grade attendance and the percent of students graduating on time or within a year of their expected graduation.<sup>15</sup> Strategies to promote regular attendance (including use of Home and School Visitors) by connecting with students’ families, enforcing truancy laws, and using school, family, and community partnerships,<sup>16</sup> can improve student attendance and reduce dropouts.
- Build and support student transition programs for the middle years. Transitioning into middle school can be difficult for students, and as a result, many students are retained, particularly in ninth grade.<sup>17</sup> Ninth-grade retention strongly correlates with dropping out

## Key Points

- Many factors impact dropout rates
- Addressing dropout rates requires multiple approaches
- Teachers and support professionals need help addressing dropout rates

*“High school dropouts are three times more likely than high school graduates who do not attend college to be welfare recipients.”<sup>1</sup>*

of high school. There are examples across the country of successful transition programs that help students succeed in ninth grade. The Commonwealth should fund and evaluate programs to support students during critical transition years.

- Support a strong, individualized curriculum with a career-learning component for all students. Some of the most successful dropout prevention programs focus on providing high-level academic curricula that are connected to the real world through experiences such as service learning and hands-on learning in business and industry settings. Unfortunately, the scripted curricula and testing culture found in many schools do not support the kinds of teaching and learning that we know are most effective at engaging “at-risk” youth. We need to resist the temptation to become test preparation institutions that deliver one-size-fits-all scripted curricula and instead focus on high-quality teaching and learning.
- Ensure that all students have meaningful relationships with adults at school. Students who leave school prematurely often do so because they feel disconnected from the school experience. One effective strategy to reduce dropout rates is to build environments in which all students benefit from high-quality sustained relationships with school staff. Recent efforts to build small, intimate learning communities are a step in the right direction. Currently, high school teachers may see 150 or more students each day and many counselors may serve 500 or more students, more than twice the number recommended by the American School Counselor Association.<sup>18</sup>
- Help districts develop and advertise individualized, non-traditional high school options. Building the kinds of comprehensive student supports mentioned above will go a long way to substantially reduce the dropout rate in the Commonwealth. However, for students who continue to fall through the cracks, non-traditional school settings should be available. These options may include intensive tutoring programs, accelerated graduation programs, credit recovery programs, and community college campus-based programs. Although these programs may be offered in collaboration with several education, workforce development, and social service agencies, it is important to continue to serve as many students as possible through the K-12 public school system.



- Ensure that all students have the supports they need to feel safe and supported. Some students leave school because of a hostile school climate. Among lesbian, gay, bisexual, and transgendered (LGBT) students, hostile school climate is the primary cause of dropout.<sup>19</sup> Almost nine out of 10 LGBT students report being harassed at school, and six out of 10 LGBT students say they feel unsafe at school because they are LGBT.<sup>20</sup> The Commonwealth should ensure that all students are safe in school.

**Teachers and support professionals want to help all students succeed, but they need help.** Help comes in the form of comprehensive support systems for students, smaller class sizes, opportunities to enrich curricula and build real-world learning experiences, high-quality early learning experiences, and data systems designed to pinpoint students who need support and encouragement to stay in school.

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## Improve student assessment measures

Students deserve high standards and a well-designed curriculum.

### Recommendations

- Ensure that assessment measures are properly aligned to content standards.
- Adopt assessment policies that include multiple measures of student achievement, not just standardized tests, including classroom assessments, portfolios, and other educator-designed assessments.
- Avoid using the scores from a single assessment to make high-stakes decisions about students and teachers, especially when that assessment has not been determined to be valid and reliable for making those decisions.
- Expand the list of acceptable accommodations for students with disabilities and allow non-standard accommodations that do not compromise the security and validity of the tests, so that students can properly demonstrate their learning.

### Aligning assessments and standards

Today’s students are put through an unprecedented number of tests and other assessment measures. While assessment of student growth and achievement are generally identified as the key purposes for today’s extensive testing systems, the reality is far more complicated, often leaving students, parents, educators, and policymakers confused and frustrated. Educators know the importance of student assessment, which is why PSEA supports tests that measure students’ knowledge of the curriculum and that identify where students need additional instruction or assistance.

PSEA supports high standards that clearly define what students should know and be able to do, coupled with a well-designed curriculum that helps students reach the standards. If the assessment systems we use to measure student learning and achievement are to be more accurate, then they must be based first and foremost on a set of concrete, measureable standards. These standards must guide the curriculum and instruction, creating “instructional coherence” rigorous curriculum frameworks with aligned instructional materials, teacher training, and assessments. Those assessments should more accurately reflect student knowledge of the course content, which in turn, should be based on the standards and the curriculum. However, the lack of resources, especially financial resources, often prevents school districts from achieving “instructional coherence.”<sup>1</sup> It takes time, training, and funding to develop curricula



and instructional materials appropriately aligned with state standards. The recent funding crisis for many school districts in Pennsylvania, combined with rapid changes from the Pennsylvania Academic Standards to the Common Core State Standards (CCSS) to the Pennsylvania Core Standards, have created a set of conditions that are unfair to both students and educators.<sup>2</sup>

## Multiple measures of student and school performance

**Student performance is much more than a single test score on a particular day under a particular set of circumstances.** It is a simple fact of life that human performance is multi-dimensional and varies over time, and therefore, student growth and achievement must be measured using a variety of data points. There are a variety of measures that, in concert with test scores, would provide a much more accurate picture of students' and schools' performances, including: graduation rates of at-risk students; Advanced Placement (AP) and International Baccalaureate (IB) participation rates; the percentage of students continuing their education and training beyond high school; achievement of goals set by school employees, whether these pertain to reduction of dropout rates, the successful completion of a portfolio of course work or a culminating course project; the successful completion of parental/community involvement programs; and/or the successful implementation of a new curriculum. The state should provide a comprehensive list of possible indicators of performance, but the schools should focus on those indicators that are most relevant to their goals.

## High-stakes impact of assessments

**It is often said that tests should be used as a stethoscope, not a hammer.** The advent of high-stakes testing – using only the scores resulting from one test on one particular day, to judge, label, or determine important decisions – is destructive and counterproductive. Tests can and should provide useful and valuable information about what students are learning, but it is not helpful to use test results to punish or stigmatize students, teachers, or schools. Greater understanding of the wide range of tests and assessment measures that are mandated and used for Pennsylvania's students – both federally and by the Commonwealth – will enhance our collective ability to make better choices for students and public education.

Almost as soon as the Elementary and Secondary Education Act (ESEA), the latest version of which is named the No Child Left Behind (NCLB) Act, was passed, researchers asserted what is now conventional wisdom; that is, the goal of requiring all students to reach proficiency by 2014 and to make Adequate Yearly Progress toward this goal was unattainable.<sup>3</sup> Under ESEA, Local Educational Agencies (LEAs) that fail to make Adequate Yearly Progress (AYP) face consequences such as public school choice, private management, conversion to charter schools, and dismissal of staff. This prediction is now coming true as LEAs approach the Act's 2014 deadline for 100 percent proficiency and more and more schools are unable to make AYP.

Wisely and with good reason, the U.S. Department of Education has approved Pennsylvania’s request for a waiver from the accountability measures in ESEA/NCLB in exchange for new measures. AYP is gone. It has been replaced with the Pennsylvania School Performance Profile which reports multiple factors in school performance. The new accountability measures require LEAs to close the achievement gap by 50 percent over six years. The achievement gap is defined as the difference between the percentage of students scoring proficient or advanced on statewide standardized assessments and 100 percent proficiency. LEAs that fail to meet this requirement will receive additional supports from the state in order to improve. In addition, the highest performing schools that receive ESEA Title I funds will be designated as “distinguished,” and the lowest performing schools that receive federal Title I funds will be designated as “priority schools” or “focus schools” and the highest performing schools receiving Title I funds will be designated as “distinguished.”

The new Pennsylvania School Profile uses the PSSA as its primary measure of student performance. In fact, 90 percent of the Profile is derived from the PSSAs and Keystones. It is used for ESEA accountability and now for other purposes, including teacher evaluation. The PSSA continues to identify four levels of student performance –advanced, proficient, basic and below basic, Pennsylvania has, by design, set relatively, if not artificially high, performance standards and cut scores needed to reach the proficient level on the state assessments.<sup>4</sup> Most of the cut scores recommended through the initial standards-setting process were arbitrarily raised in 2002 by a quarter of a standard deviation upon the recommendation of the PDE to the State Board of Education. In practical terms, PDE staff who oversaw the initial development of the PSSA math and reading performance levels indicated they intended that a proficient scorer on the 11th-grade exams would be able to undertake college level work without remediation, which is more than a year prior to that point in a student’s education.

**It is important that high-stakes policy benchmarks be set at challenging, but realistic levels.** Unfortunately, benchmarks set for AYP overlook important factors, and unintentionally raise the stakes for students who confront the most significant obstacles to learning.

The 11th-grade PSSA tests have now been replaced by the Keystone exams. These exams are designed to be aligned with course content in Algebra, Literature, and Biology. They offer an improvement over the predecessor PSSA tests, but unfortunately are used to make student graduation decisions, creating the kind of high-stakes single measure that is inappropriate.

## Value-added measurement (VAM)

**PSEA believes that effective teacher evaluation is important to ensure quality education, but the use of achievement tests to measure the value teachers add to the education of their students is fraught with problems.**<sup>5</sup> Studies of this practice, commonly known as value-added measurement, are critical of its effectiveness because current methods simply cannot isolate the influence of teachers, or

measure such influence in a valid or reliable fashion.<sup>6</sup> Current value-added methods cannot establish a causal relationship between individual teachers and the changes in their students' test scores.<sup>7</sup> Moreover, the "growth in achievement of a teacher's students" is not a direct measure of the behavior of teachers. In fact, given the changes in topics tested across years within the same general subject areas, value-added methods do not measure student academic growth with respect to specific academic content standards.<sup>8</sup> Using algebra scores from one year and geometry from the next would be analogous to measuring a student's height in one year and his or her weight in another and asking, how much did the student grow?

Pennsylvania uses student scores on the PSSA from one year to another to calculate a "value added" result for schools and teachers known as Pennsylvania Value Added Assessment System (PVAAS). Neither the PSSA tests nor the PVAAS calculations have been validated for evaluating teacher performance.<sup>9</sup> However, Pennsylvania has begun using them for this purpose despite the fact that nationally recognized professional and technical standards require validation of tests for all of their intended uses. It also is important to note that due to the design limitations of the PSSA achievement tests, value-added methods cannot be applied to PSSA results at the academic standard level, thus, providing little if any information to help teachers make improvements in instruction.

**PSEA is concerned that despite all of the unresolved methodological concerns surrounding value-added measurement, the measures resulting from their impenetrably complex quantitative calculations will have undue influence in the evaluation process.** Regrettably, to many individuals, value-added results will simply but inaccurately appear objective and scientific.

The use of a value-added model for any screening or signaling purpose should be subject to full, independent peer review. Because small errors in calculation can lead to large consequences, we do not believe that the proprietary status of any aspect of a system used to measure academic performance should preclude outside review of data, models, computational algorithms, results, and reporting. The testing and measurement processes must be fully validated for all their intended uses. With such complex and opaque measurement systems, policymakers, students and their families, administrators, educators, and the public already are being asked to take a great deal on simple faith rather than sound practice or research. Forty percent of the Pennsylvania School Profile overall score is based on PVAAS (the state's standardized calculation of growth), which is based on PSSAs and Keystones.

## Students with disabilities

**Due to a lack of appropriate accommodations, special education students are often prevented from demonstrating what they know when taking the PSSA and Keystone exams,** which leads to the inappropriate identification of school entities for sanctions under NCLB.

Because it is impossible for the state to identify every permissible and appropriate accommodation, the PDE Accommodations Guidelines must be revised to authorize the use of non-standard accommodations which do not compromise the validity of the test. State officials who are experts in the use of test accommodations must also provide direct and ongoing training to those responsible for administering the test, particularly to those responsible for designing or providing accommodations to students with Specific Learning Disabilities or Attention Deficit Hyperactivity Disorder (ADHD).

PSEA believes that the Individualized Educational Plan (IEP) team should dictate which required state and local assessments are appropriate for students with exceptionalities and allow for exclusions and/or alternative forms of assessment.

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## Improve new teacher induction and mentoring

**The Commonwealth should support the creation and expansion of comprehensive induction and mentoring programs for new teachers.**

### Recommendations

- Develop statewide policies that are based on best practices and require, guide, and finance high-quality new teacher induction.
- Identify funds to pay mentors, including release time for mentors and those being mentored, and provide financial incentives for districts to design innovative programs.
- Provide flexibility in the induction and mentoring programs so that schools and districts can develop programs that best fit their needs and allow authentic relationships to develop between teachers and mentors.<sup>1</sup>

Pennsylvania is experiencing a major demographic shift in the educator labor force. As large numbers of newer teachers enter the profession, the need for strong mentoring and induction programs is evident in order to keep quality educators in the profession and grow the leaders of the future. However, high-quality, comprehensive teacher induction and mentoring programs have been shown to positively influence teacher retention, increasing the likelihood that new teachers have the opportunity to develop the skills required to improve student achievement.<sup>2</sup> All new teachers would benefit from these programs. Good professional support improves the likelihood that new teachers will stay in the field, and lack of professional support is associated with higher levels of teacher attrition.<sup>3</sup> Good professional support also allows promising professionals to stay in teaching and fully develop their expertise.

### Comprehensive approaches to induction and mentoring

**Effective support for new teachers includes comprehensive induction and mentoring, and can cut attrition rates in half.**<sup>4</sup> However, success of induction and mentoring programs depends on the amount and types of support new teachers receive. In fact, the more comprehensive the program is, the greater the likelihood that new teachers will remain in the classroom.<sup>5</sup> Research has defined what constitutes effective new teacher induction. It includes:

- More than one year of developmentally appropriate professional support.

- A strong program to train and support experienced mentors, who (a) work in the same content area as the new teacher, (b) are compensated for their mentoring work, and (c) have release time to work with a new teacher in the classroom during school time and/or include recently retired master teachers.<sup>6</sup>
- Common planning and collaboration time with other teachers in the content area.<sup>7</sup>
- Standards-based formative feedback to new teachers, in an environment that is meant to support professional growth rather than evaluate for tenure and/or job security.
- Professional development opportunities that are job-embedded and targeted specifically to the needs of new teachers.

## Key Points

- Comprehensive induction and mentoring can cut attrition rates in half
- Retaining teachers makes economic sense
- Retaining teachers improves student achievement

### **Retaining teachers makes economic sense for districts.**

Keeping energetic, promising professionals in our schools is not just wise for our students, but it also is wise for district budgets. “Induction has shown to create a payoff of \$1.37 for every \$1 invested,”<sup>8</sup> according to the Alliance for Education. Money spent constantly recruiting new teachers could be better spent on long-term investments in teacher retention and quality rather than on replacing large numbers of new teachers who enter and exit districts in a short period of time. In a report providing best practices for teacher induction, The National Commission on Teaching and America’s Future shows that state induction and mentoring policies are fiscally prudent. The Commission says

that while many states require teacher induction programs, only a few finance these programs. “Wong and Breaux estimate that each teacher who leaves the profession during the induction years costs taxpayers more than \$50,000. Using other industry model estimates, the Texas Center for Educational Research found that the cost of teacher turnover in Texas is \$329 million per year, if conservative numbers are used. Alternate industry models for these costs yield a far higher price tag: as high as \$2.1 billion each year for teacher turnover in Texas alone.”<sup>9</sup>

**Retaining teachers also is an important way to improve student achievement.** Research consistently demonstrates that teachers with five or more years of experience achieve better student learning outcomes than newer teachers.<sup>10</sup> Researchers have also found that comprehensive induction and mentoring programs have a positive effect on teachers’ job satisfaction, their commitment to the profession, and their practices. In particular, teachers who participated in induction and mentoring programs were better (as compared with teachers who did not participate in such programs) at keeping students on task, developing lesson plans, using effective questioning practices, adjusting instruction and activities to students’

needs and interests, and maintaining positive classroom climate. As a result, students of teachers who participated in induction and mentoring programs were more likely to achieve higher scores on achievement assessments and/or show greater gains on these assessments.<sup>11</sup>

PSEA believes these programs are very worthy investments.

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## Support comprehensive professional development and collaboration

**Teachers develop their skills and knowledge throughout their entire careers and complete additional coursework and requirements to maintain their certifications/licenses.**

### Recommendations

- High-quality professional development should be provided to all educators, including certificated substitutes, to ensure that all students receive instruction from excellent teachers.
- Educators must have release time to participate in professional education programs. It should be the responsibility of the school entity and the state to provide for and finance these programs.
- Policymakers and state administrators should ensure that professional development programs provided by the state are evaluated in terms of impact on teacher practice and student achievement. Information about program effectiveness can be used to make targeted investment decisions in future professional development efforts.
- Professional development should be designed to be collaborative and to encourage teachers to learn from each other in a collegial environment.

Teachers develop their skills and knowledge throughout their entire careers and complete additional coursework and requirements to maintain their certifications/licenses. Individual teachers undertake many professional development courses and activities during their private time and also participate in traditional school district-sponsored professional development activities. In 2011-2012 alone, public school educators in the Commonwealth completed more than 6.3 million hours of continuing professional education.<sup>1</sup> Because of the way time is used during a school day, traditional professional development usually happens after school, on in-service days, or during the summer which does little to encourage educators to learn from others' practices. In addition, it is hard for professional development to be a sustained experience when in-service days and after-school workshops are short and scattered through the school year. In short, "the kind of high-intensity, job-embedded collaborative learning that is most effective is not a common feature of professional development across most states, districts, and schools in the United States."<sup>2</sup>



## Characteristics of high-quality professional development

**High-quality professional development happens within the classroom context.** There is simply no substitute for finding time during the day for educators to collaborate, apply new ideas, and share their learning. Evidence shows that effective professional development needs to be seen as a regular, on-going part of school life and “suggest[s] that the development of opportunities for long-term teacher collaborative interactions is an important and effective professional learning option.”<sup>3</sup> Focused, rich and sustained professional development matters.<sup>4</sup>

**High-quality professional development takes time.** Research also indicates that time and focus are important elements of effective professional development. A study funded by the National Science Foundation examining professional development for math and science teachers found that effective professional development focuses subject area content knowledge and pedagogical content knowledge and commonly lasts for 50 hours or more.<sup>5</sup>

**High-quality professional development is collaborative.** Training needs to be accompanied by coaching during the school day, and educators need to have opportunities to share experiences and learn from each other. In order to accomplish this, school leaders must develop systems to allow educators to observe and collaborate, alter scheduling so that key groups of teachers can have shared planning time, provide early-release days so that teachers can work together during afternoons, and use existing meeting time in new ways to foster professional collaboration.

Research suggests that professionals operate best when working in an environment that fosters both collegiality and autonomy.<sup>6</sup> For teachers, interacting cooperatively with colleagues and joining with fellow teachers on joint projects and assignments can have at least two positive impacts on schools: it can help retain high-quality teachers in schools and help schools improve teaching and learning. For example, schools that provide mentoring and other kinds of collegial programs for new teachers have lower rates of turnover among new teachers.<sup>7</sup> In general, teachers are more likely to remain in schools that have “integrated professional cultures” organized to build, support, and sustain collegiality.<sup>8,9</sup>

**Collegial and collaborative work environments also result in more positive attitudes among teachers.**<sup>10</sup> Even among experienced teachers, those who leave teaching often say that a lack of collegial supports was a major reason for their decision to leave. Conversely, the presence of collegial supports and quality relationships among staff is a major reason why teachers choose to remain in teaching.<sup>11</sup>

### Key Points

- High-quality professional development happens during the school day
- High-quality professional development is collaborative
- High-quality professional development focuses on student work and instructional content

**Collaborative approaches toward professional learning can lead to changes in schools which go beyond changes in individual classrooms.**<sup>12</sup> The U.S. Department of Education cites teacher collaboration as a common approach to improving instruction in chronically low-performing schools that achieved substantial gains in student achievement within only three years. USDOE finds that effective teacher collaboration takes many forms, including teachers meeting in teams to review student work; teachers working together to select targets for instructional improvement; teachers engaging in shared planning time; teachers learning about data to guide instructional decision making; and teachers receiving coaching support. USDOE also found some evidence that teachers formed teams to plan their own professional development, and teachers also worked across grades to ensure that lessons were aligned.

*“In 2011-2012 alone, public school educators in the Commonwealth completed more than 6.3 million hours of continuing professional education.”*

**When schools are very strategic about building time into the school day to foster collaboration and collegiality among teachers, they may also develop higher levels of consistency in instruction, increased willingness among teachers to share practices, and higher rates of solving practice-related problems,**<sup>13</sup> all of which is beneficial for student learning.

**High-quality professional development focuses on student work.** Studying student work is an important way to share understanding about student learning, discuss instructional ideas to intervene for struggling learners, consider enrichment activities for advanced learners, and discuss real student work in relation to state and local standards. Research has shown that regular study of student work is one of the most effective ways to improve student learning.<sup>14</sup> “Nothing motivates and engages teachers more than examining student work and engaging in conversation with other teachers about how that work was achieved.”<sup>15</sup>

**High-quality professional development focuses on instructional content.** There is a strong relationship between teacher content knowledge and effective instruction. “Teachers with a deep, conceptual understanding of their subject ask a greater number of high-level questions, encourage students to apply and transfer knowledge, help students see and understand relationships between and among ideas and concepts, and make other choices in their instruction that engage students and challenge them to learn.”<sup>16</sup> Professional development, properly constructed, can be a powerful tool to help teachers develop these specific kinds of knowledge and skills.

**High-quality professional development is evaluated in terms of its impact on teaching and learning.** Evaluation of professional development needs to examine multiple outcomes, including changes in instructional practices, and possible connections between instructional practice and student learning.

The Commonwealth provides many different professional development opportunities for teachers, but these opportunities are not generally evaluated in terms of their relationship to teacher practice or student learning. Thomas Guskey suggests that there are at least five levels on which teacher professional development should be evaluated: participant reaction, participant learning, organizational change, participant use of knowledge and skills, and student learning outcomes.<sup>17</sup> The National Science Foundation has found that specific kinds of professional development can be successful in terms of organizational change, participant use, and student learning outcomes, but the Commonwealth needs to engage in coordinated evaluation of statewide professional development in order to ensure that state resources are being targeted to support the most effective professional development.



**High-quality professional development meets the needs of all teachers.** Students are taught by substitute teachers as well as full-time professional employees. It is in the interests of all educators to ensure that any teacher who is delivering instruction to students has access to high-quality professional development. Often substitute teachers find it difficult to participate in high-quality professional development. The Commonwealth should encourage schools and districts to include all teachers in professional learning.

**High-quality professional development is collaborative and focused on solving important problems.** Efforts to reform professional development often fail because the system is not structured to support the intended reform. For example, edu-

cators may try to find time to study and compare student work, but scheduling often makes it hard for staff to meet together during the day. Nevertheless, evidence is growing that working collaboratively is important: when educators work collectively, they are more likely to believe that what they do has a positive effect on students. This belief changes behavior in important ways and improves student achievement.<sup>18</sup> Because of the link between collegiality and student achievement, successful professional development helps educators think about their practice in the context of a professional community. It also gives educators opportunities to use their collective expertise to make decisions about instruction.<sup>19</sup>

**Fundamentally, professional development does not exist in a vacuum;** schedules, curriculum, student and teacher evaluations, school mission, goals, vision, and expectations must all be aligned with professional development in a coordinated system. Aligning the system for effective professional learning means removing obstacles to effective professional development (such as costs and schedules). It also means building supports for effective professional development. The Commonwealth should invest in high-quality professional development for all educators that examines student work, curriculum, and instructional strategies in a collaborative context.

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## Value Education Support Professionals

Education Support Professionals keep schools safe, keep students healthy, and deserve a living wage.

### Recommendations

- Protect the stability of services offered by education support professionals to students and the school community by establishing accountability around subcontracting of services by school districts and providing education support professionals with living wages.
- Enact model legislation (see Illinois Public Act 095-0241 – House Bill 1347<sup>1</sup>) that would establish accountability and transparency around the efforts of school districts to privatize the work traditionally performed by school district employees – i.e., providing student transportation, cooking and serving meals to students, cleaning and maintaining school buildings and grounds.

PSEA represents the largest number of education support professionals (ESP) of any union in Pennsylvania with more than 33,000 individuals who serve Pennsylvania public school students as classroom aides, secretaries, paraprofessionals, bus drivers, cafeteria workers, maintenance workers, mechanics, and others. Our ESP members are the backbone of our school communities.

### Subcontracting or privatization of services and the need for a living wage

Privatizing jobs held by public school employees is often presented as a way for school districts to reduce costs and ease the burden for busy school administrators. Contracting commonly replaces public school employees with for-profit employees in providing pupil services such as transportation, food service, building maintenance, and paraprofessionals.<sup>2</sup> However, savings rarely occur; administrative tasks simply change; and public accountability can be lost. New issues are created for school boards, which remain legally responsible for providing a variety of vital public functions, but which have relinquished much of their control to the entity now providing those services.

**Privatization costs communities more.** It is difficult for districts to anticipate all the costs which will be incurred when private contractors are hired. As a result, administrators and school boards are frequently disappointed to discover that contracted services actually cost much more than anticipated. Too often, cost overruns, contract language loopholes, penalty payments for additional levels of service, or changes to the service itself cost more than the district budgeted for the contracted service.

## Key Points

- Privatization costs communities more
- Privatization leads to loss of flexibility and accountability
- Living wage means increasing workers' compensation to a level above the poverty line
- A community's tax revenues should not create or perpetuate poverty

**Contract renewals often add costs too.** Private contractors, like other for-profit companies seeking business, often under-price the original bid to obtain the first contract, then raise prices – sometimes significantly – when the contract is up for renewal. In the case of the largest contractors, there is little economic pressure from competitors. In addition, contracting for services does not save districts the costs of maintaining equipment and facilities, providing cleaning services and products, and paying attorney fees.

**Privatization changes the dynamics between the schools and the community.** America's public education system is based on the principle of local control of school systems. Introducing large — in some cases, even multinational — corporations into the mix changes the dynamics in a negative way. The overwhelming majority of education support professionals live in the school district where they work and often have children attend-

ing those same schools. Incorporating a contractor from outside the school district disrupts the sense of community. Support professionals are very likely to live in the district where they work. Contractors are rarely required to hire all the workers who previously performed the work. They will bring in workers from other cities, and maybe even other states, to do the work previously performed by district residents. In addition, labor relations are removed from the district's control. This is neither good for the district and its employees, nor the students they serve. Private sector workers are not subject to the same strong requirements as are public sector employees.

**Privatization leads to loss of flexibility.** When citizens complain about a contracted service, the district becomes only a “middleman” who can only complain to the contractor or enter into costly contract renegotiations or lengthy termination proceedings. Most privatization contracts contain additional charges for any change or addition – and some will even require continued payment for a discontinued service.

**Privatization leads to loss of accountability.** Public officials are less accountable when services are privatized. They are still responsible for providing the service. They are less able to monitor and direct the service for which they are responsible. As more public services are shifted to the private sector, dis-

tricts move from an open and accountable system to one that is further removed from public scrutiny.

**Privatization may reduce direct costs to a single district by shifting costs to taxpayers outside of the district.** This is immediately apparent in the case of transportation. Districts receive an additional state subsidy if they contract out their transportation service, shifting the cost of providing transportation in their district to residents across the Commonwealth.

This was confirmed by a 2012 study by the Keystone Research Center. The study found that contractors “low ball” prices

*“If every school district in Pennsylvania in-sourced transportation services, taxpayers would save an estimated \$78 million.”*

during the bidding process.<sup>3</sup> Once districts are locked in, they have no leverage over increased costs for services or bargaining during contract renewals. The study noted that one-time, lump-sum payments that districts receive from the sale of their bus fleets greatly influences their decision to contract out. But once they sell, it is extremely difficult for districts to go back to managing their own transportation services because it is so expensive to purchase a fleet. Total costs for all taxpayers add up to as much as \$223,900 higher when a typical Pennsylvania school district goes from providing all bus services in-house to contracting with a private operator. If every school district in Pennsylvania in-sourced transportation services, taxpayers would save an estimated \$78 million.

In addition, contractors are rarely required to hire all qualified employees who apply, leaving any employees they do not hire as unemployed. Districts will pay the unemployment compensation premiums for the first 26 weeks, but after that the district where the employee worked only pays half the cost of benefits, again shifting the cost outside the district. This is exacerbated if any of those workers are eligible for public assistance programs.

**Education support professionals keep school buildings and equipment functioning and students safe and healthy.** As committed and caring members of a school community, they impact the lives of students every day.

Yet, ESPs are woefully underpaid and sometimes unable to afford to live in the communities they serve. In many parts of the state, school support professionals work two or even three jobs to feed and shelter their families, or earn so little that they qualify for government assistance.



**The term living wage describes efforts by workers to increase their compensation to a level above the poverty line.** Generally, a living wage means a wage rate sufficient to pay for basic necessities in a given community. The guiding principle is that people who work a full-time job should not have to live below the poverty line. A living wage would be sufficient to pay for rent, food, utilities, taxes, health care, transportation, and child care.

**A community's tax revenues, which are used to pay the wages of public school employees, should not create or perpetuate poverty.** When public sector employers – including school districts – pay wages to working families at a level that results in their employees being eligible for public assistance, the employer is not paying a living wage but rather is shifting costs to taxpayers statewide for the public assistance programs the employees may need to provide food, health care, transportation, and other essentials. In addition, poor pay drives employee turnover, which erodes workplace efficiency and the institutional memory of the school community. But when school districts – often times one of the largest employers in the community – pay more, their employees spend more, driving the local economy and spurring economic development.

<sup>1</sup>In 2007, Illinois enacted legislation that required third-party vendors to demonstrate the following prior to a school district entering into a contract: capacity for liability coverage, benefit packages for third-party employees comparable to the package provided to school employees currently providing the services, minimum 3-year cost projection based on generally accepted accounting principles and not subject to change, and criminal background information regarding private employees. The school district must also provide a cost comparison of every expenditure category based on continuing to provide services in-house or privatizing services. Review and consideration of all bids must be sunshined to the public and occur during a school board meeting.

<sup>2</sup>For more information on the role of paraprofessionals, please read STW Section 5, Special Education.

<sup>3</sup>Price, M., & Herzenberg, S. (2012). *Runaway spending: Private contractors increase the cost of school student transportation services in Pennsylvania*. Keystone Research Center. Retrieved from <http://kestoneresearch.org/publications/research/school-bus-transport>



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## Support quality teacher preparation

**Policies and programs in Pennsylvania need to ensure that all new teachers are prepared in high-quality, university-based, comprehensive teacher preparation programs.**

### Recommendations

- Insist on curricular balance within preparation programs among content knowledge, pedagogical knowledge, and monitored clinical experience.
- Create incentives for institutions of higher education to build training for teaching in urban and rural areas into the preparation program, including “grow your own” programs that link institutions of higher education with hard-to-staff districts to encourage local residents to enter teaching.
- Resist “fast-track” programs that fail to ensure that all teacher candidates fully develop content knowledge and pedagogical knowledge and have multiple experiences, over time, to engage in closely monitored clinical practice.
- Evaluate teacher preparation programs using multiple measures and resist the use of value-added test scores in the evaluation process.

Teacher preparation programs are the first critical link in building a quality teacher workforce.<sup>1</sup> Policies and programs in Pennsylvania need to ensure that all new teachers are prepared in high-quality, university-based, comprehensive teacher preparation programs that ensure all teacher candidates meet the standards delineated in the Pennsylvania Department of Education’s Program Approval Guidelines. In order to increase the likelihood that all students will be taught by teachers prepared in excellent preparation programs, lawmakers and policymakers in the Commonwealth should support the following initiatives.

### Research defines several components of high-quality teacher preparation

**High-quality teacher preparation programs include study of academic content and pedagogy paired with significant monitored clinical experience.** Critics of traditional teacher preparation programs have suggested that individuals with academic content knowledge make good teachers. Research does demonstrate a correlation between teachers’ academic preparation and their impact on student

achievement. But higher levels of teacher pedagogical knowledge also correlate with higher levels of student achievement. Furthermore, although clinical experience is no substitute for academic preparation, when teacher candidates' clinical in-classroom experiences dovetail with academic preparation, clinical practice is one of the most powerful elements of a comprehensive teacher education.<sup>2</sup>

Consequently, relying solely upon evidence of an academic major or related work experience as a proxy for teacher content knowledge may not represent all of the knowledge and skills new teachers require. Effective teacher preparation programs insist that candidates combine academic content knowledge with pedagogical expertise and significant clinical practice.<sup>3</sup>

**High-quality teacher preparation programs are comprehensive, which means they usually take time.** Although only a small number of studies have compared the effectiveness of teachers from traditional and fast-track programs<sup>4</sup>, research does suggest that alternative preparation programs that “fast-track” candidates into the profession may have several unintended negative consequences. For example, one study in New York City concluded that graduates of college-based comprehensive teacher preparation programs were significantly more effective math teachers than teachers lacking full certification, including teachers from Teach for America.<sup>5</sup> In Houston, teachers who entered teaching as temporary or emergency hires or via alternate routes, were less effective than fully prepared beginning teachers.<sup>6</sup> Finally, a survey examining three alternative programs (Troops to Teachers, the New Teacher Project, and Teach for America) found that only half of the alternate route teachers felt prepared for their first year of teaching, compared to eight out of 10 teachers prepared in traditional university-based programs.<sup>7</sup> Fast-track teacher preparation programs also tend to have a very limited capacity to teach or measure subject-matter content, which research demonstrates is critical to effective teaching.<sup>8</sup>

## Key Points

- High-quality teacher preparation programs include academic content, pedagogy, and monitored clinical experience
- High-quality teacher preparation programs are comprehensive
- High-quality teacher preparation programs prepare teachers to work where they are most needed
- High-quality teacher preparation programs are evaluated on multiple measures

*“Effective teacher preparation programs insist that candidates combine academic content knowledge with pedagogical expertise and significant clinical practice.”<sup>3</sup>*

**Furthermore, graduates from comprehensive teacher preparation programs may achieve higher student outcomes than graduates from fast-track programs.** Research confirms that graduates of comprehensive university-based teacher preparation programs are significantly more effective than teachers lacking certification or graduates of many alternative, fast-track teacher preparation programs.<sup>9</sup> A comprehensive analysis of 57 studies found consistent positive relationships between comprehensive teacher preparation and teacher effectiveness.<sup>10</sup> Finally, although some fast-track programs may attain teacher quality outcomes similar to or slightly higher than traditional teacher preparation programs<sup>1</sup>, attrition rates among beginning teachers who have not attended a comprehensive preparation program are twice as high as among teachers with extensive preparation (18 percent versus 9 percent), after controlling for confounding variables.<sup>11</sup> National data show that 49 percent of uncertified or fast-track entrants left teaching after five years, compared to only 14 percent of those who entered teaching fully prepared.<sup>12</sup> State policies requiring extensive teacher preparation rather than fast-track programs clearly contribute to the continuity of instructional programs and avoid the persistent and high costs incurred by districts forced to replace teachers who leave.



**High-quality teacher preparation programs are designed to prepare teachers to work where they are most needed.** Teacher shortages in Pennsylvania are neither chronic nor widespread. Rather, teacher shortages are specific and targeted. Urban districts find it particularly difficult to attract graduates from high-quality, comprehensive teacher preparation programs. In Pennsylvania, where many public institutions of higher education are located in rural areas and small towns, preparing teacher candidates for positions in the schools that need them most can be particularly challenging.

**High-quality teacher preparation programs are evaluated upon multiple measures and avoid relying on value-added scores to measure program quality.** Measuring the quality of teacher preparation programs is challenging for several reasons. For example, the National Academy of Sciences points out that using assessments of student learning to measure program quality is fraught with difficulties, including the fact that much of the K-12 curriculum is not measured by these assessments, and the complex nature of educating children makes establishing causal links between teacher preparation and student outcomes nearly impossible.<sup>13</sup> Furthermore, research is beginning to emerge that differences in the quality of teacher candidates within programs may be substantially greater than differences across programs, making comparisons across programs less powerful as a tool for teacher improvement than focusing on raising standards within all programs.<sup>14</sup>

- <sup>1</sup> For example, in a 2013 study of secondary math teachers in low-income school districts, Mathematica, Inc., compared the performance of Teach for America Teachers to teachers with a comparison group of non-TFA teachers (41% were from alternative certification programs and 59% were from traditional certification). The teacher samples were not matched. Mathematica found that those trained by Teach for America had students who scored .06 standard deviations higher on end-of-year math assessments than students assigned to teachers prepared via traditional routes. This is a statistically significant difference, although the resultant differences are small; apply only to secondary mathematics teachers, which is a disproportionately small portion of TFA teachers overall; and do not address the fact that teachers from TFA, even if effective, are likely to leave teaching at substantially higher rates than traditionally prepared teachers. See <http://ies.ed.gov/ncee/pubs/20134015/pdf/20134015.pdf>.
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- <sup>11</sup>Boe, E. E., Cook, L. H., & Sunderland, R. J. (2006). *Attrition of beginning teachers: Does teacher preparation matter?* Center for Research and Evaluation in Social Policy.
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## Ensure a safe and secure school environment

**Safety efforts must be focused on improving students' overall sense of physical and emotional safety and security.**

### Recommendations

- Continually engage in comprehensive planning and preparation for potential emergencies with all community supports by enhancing coordination among state agencies for guidance and assistance to schools and by increasing meaningful interaction between schools, law enforcement, and social service agencies.
- Fully fund a program that reimburses costs for renovations of school buildings and facilities for protecting the health and safety of students.
- Support facility renovations identified as needed for improving emergency preparedness.
- Adopt statewide, evidence-based<sup>1</sup> standards for school climate.
- Fund quality alternative education programs for consistently disruptive and potentially violent students.
- Support bullying prevention policies and programs.
- Encourage parent and family involvement programs.
- Encourage mentoring programs.
- Develop minimum training protocols for school security personnel.
- Require quality training on regular basis (annual if possible) for all school staff on bullying prevention and school's emergency protocols.

Students, parents, teachers, and administrators have the right to expect their schools to be safe havens of learning. PSEA believes safety efforts must be focused on improving students' overall sense of physical and emotional safety and security.<sup>2</sup> PSEA supports comprehensive, evidence-based efforts to establish a positive school climate,<sup>3</sup> ensure quality supervision, and prepare appropriately for emergencies.

Several important strategies and resources can be used to create safe, positive, and secure school environments: the quality of relationships between staff and students and their families; adequately trained staff; support from the community, including law enforcement and social service agencies; and safe physical buildings and grounds.

## School Safety Plans, Partnerships with Law Enforcement, Alternative Education, and Bullying Prevention

**One of the most effective measures for keeping schools safe and secure includes the development of school safety plans and prevention programs that support students' healthy social and emotional development.**<sup>4</sup> Pennsylvania should require each public school to establish a School Safety Committee to bring staff, students, administrators, and parents together in a cooperative effort to maximize safety in each school building<sup>5</sup> It is also important to ensure that these schools engage in planning and professional development and have adequate resources to address safe school issues.<sup>6</sup>

### Key Points

- School safety plans are key
- Model crisis management plans help schools
- Alternative education programs help all students
- Educators need training to prevent bullying
- School safety committees and family liaisons keep schools safe

**Schools also need successful models to create proactive partnerships with law enforcement and social service agencies,** including deliberate strategies to prevent bullying, gang activity, and other issues that put students at risk. Schools require resources to expand access to counseling, anger management, and peer mediation services.<sup>7</sup>

**With these resources, the state should develop comprehensive crisis management plans** that include contingencies for both natural and human-made crises that schools can use as models for planning. The plans should be flexible, easily managed and implemented, and account for a variety of factors. The most critical part of any emergency plan is preparation during non-crisis times; therefore, schools and staff must continuously update the plans, provide quality training for staff and students on a regular basis, maintain necessary supplies and equipment,

and coordinate with local and state agencies responsible for responding to an emergency.<sup>8</sup>

**The state and school districts should require specialized training for school resource officers** (or others providing security such as guards or municipal officers) to ensure they have been properly trained and prepared to work with children in the school setting. The training should cover conflict resolution, peer mediation, working with children with disabilities or other special needs, and schoolwide positive behavioral support.

**Schools must have adequate structures and technologies in place in order to fully provide a safe and secure learning environment.** However, the age of many of Pennsylvania’s school buildings create significant challenges and require costly renovations or retrofits. This reality has been exacerbated due to the moratorium of Planning and Construction Workbook (PlanCON).

PlanCON is PDE’s long-standing, 11-step process for approving partial reimbursement to school districts for school construction, including renovations and retrofits. There is currently a moratorium that extends through the 2013-14 fiscal year. The monies for the program are allocated through the Authority Rentals and Sinking Fund, which was cut by \$20 million since 2011, significantly reducing the ability of the program to reimburse school districts for necessary construction projects. According to the Pennsylvania Association of School Business Officials (PASBO), there are more than 160 school construction and renovation projects that have received no state funding, some for almost three years since completion.

The districts followed the complex state process of PlanCON, but the Commonwealth has not met its commitment to fund the projects, even though the projects have been completed. Some districts have already incurred costs because they had completed the PlanCON process and now will be forced to pay at the local level. Other districts continue to forestall much needed renovations for health and safety due to lack of financial support from the Commonwealth.

Funding for PlanCON should be restored, and the moratorium should be lifted.

**A positive school climate is key to fostering healthy child development and high-level learning and is directly linked to student academic performance.**<sup>9</sup> School climate reflects multiple aspects of people’s experience of school life, including: norms, goals, values, and interpersonal relationships. Safe school climate indicators are directly linked to student academic performance.<sup>10</sup> A positive school cli-

*“According to PASBO, there are more than 160 school construction and renovation projects that have received no state funding, some for almost three years since completion.”*

mate is also associated with fewer student behavioral and emotional problems.<sup>11</sup> Research examining the impact of school climate in high-risk urban environments finds that a safe, supportive school climate can have a particularly strong impact on the academic success experienced by urban students.<sup>12</sup> Finally, a positive school climate is associated with greater job satisfaction among school staff<sup>13</sup> and higher rates of staff retention.<sup>14</sup>

**The state can provide supports to school districts by developing tools to help measure school climate,** creating accountability expectations that extend beyond academics to account for all the needs of children, and providing resources and technical assistance to help all schools achieve the school climate standards. The state can also support and disseminate evidence-based models of school practice.<sup>15</sup>

PSEA supports schoolwide positive behavior supports as a program that helps to create a positive school climate. PBS is a proven, cost-effective, system-wide approach that eliminates barriers to learning and creates and maintains a safe and effective learning environment in schools; it is an effective approach to creating, teaching, and reinforcing students' social, emotional, and academic learning skills.

PBS uses a three-tiered approach of interventions, which allows for the early identification of students in need of behavioral health supports. While the number of Pennsylvania schools utilizing the program has grown over the years, Pennsylvania should provide the funding necessary so that all schools that want to implement this proven program are able to do so.<sup>16</sup>

**Establishing policies that allow for alternative schooling for students who place other students or staff at risk for serious bodily injury or who are habitually disruptive can benefit all students.**

However, it is important that the alternative schools meet the needs of the students who attend them. Attributes of effective alternative education include:

- **Academic instruction<sup>17</sup>:** A clear focus on academic learning that combines high academic standards with engaging and creative instruction and a culture of high expectations for all students. Learning must be relevant and applicable to life outside of school and to future learning and work opportunities. Students have personalized learning plans and set learning goals based on their individual plans.
- **Instructional staff:** Instructors in successful alternative programs choose to be part of the program, routinely employ positive discipline techniques, and establish rapport with students and peers. They have high expectations of the youth, are certified in their academic content area, and are creative in their classrooms. They have a role in governing the school and designing the program and curriculum.
- **Professional development:** Successful alternative education programs provide instructors with ongoing professional development activities that help them maintain an academic focus, enhance teaching strategies, and develop alternative instructional methods.



- **Size:** Programs with a low teacher/student ratio and that have small classes that encourage caring relationships between youth and adults.
- **Facility:** Clean and well-maintained buildings (not necessarily a traditional school house) that are attractive and inviting and that foster emotional well-being, a sense of pride, and safety.
- **Relationships/building a sense of community:** Link to a wide variety of community organizations and business community to provide assistance and opportunities for participants.
- **Leadership, governance, administration, and oversight:** Studies highlight the need for administrative and bureaucratic autonomy and operational flexibility. Administrators, teachers, support services staff, students, and parents should be involved in the different aspects of the program.
- **Student supports:** Support students through flexible individualized programming with high expectations and clear rules of behavior. Structure, curricula, and supportive services are designed with both the educational and social needs of the student in mind.

**State government should require districts to establish alternative schooling opportunities and provide funding** to ensure that these programs effectively meet the behavioral and mental health needs of the students who attend them.<sup>18</sup>

**In order to better identify, respond to, report, and prevent bullying, high-quality training for all school staff is essential.** This will help ensure that the individuals interacting with students are provided the tools they need to recognize and intervene in student-to-student bullying situations and implement a successful prevention program in their school community.



The nature of bullying has changed over time, and its prevalence has increased. Bullying can involve direct physical contact such as hitting but can also include verbal aggression in the form of threats, name calling, or spreading rumors intended to cause emotional harm.

In recent years, students face cyber bullying and harassment, which elevates bullying to a new level of intensity. Using interactive technologies such as text messages or social media, cyber bullying can occur around the clock, and the text or images can be widely disseminated well beyond school grounds. Unfortunately, laws have not been sufficiently updated in a manner that assists districts or law enforcement in their efforts to address cyber bullying, harassment, and identity theft.



**Bullying is disruptive to learning and harmful to the development of our students into confident, respectful adults.**

These behaviors can be addressed and modified by helping our school communities implement commonsense policies and strategies proven to be effective. That is why students must have the tools and resources to know how to communicate with adults about rumors, threats, or abusive behavior that may be impacting their lives.

**State government should help school districts with tools to create school safety committees and prevention task forces** involving a diverse group from the school community – parents, teachers, support professionals, students, administrators, law enforcement, and other volunteers. These groups should collect feedback from the school community about

which strategies are working and which may need to be revised or improved; and offer programs that seek to engage adults, including parents, more directly in prevention efforts.

**PSEA recommends that each school district have a family liaison, available for parents after normal school hours, to facilitate the transmission of information between families and teachers.**

Meaningful interaction between school staff, students, and their families is an important component of creating a positive school climate. PSEA also recommends that school districts be required to have school-based social workers on staff to help students most at risk secure the support they need.

Understaffed schools are not safe schools. It is necessary to have enough adults to ensure students are appropriately supervised and that access to the school and school grounds is appropriately monitored.

Staff should be selected who have the skills and education necessary for their assignment and screened prior to employment. Staff should also be provided adequate, ongoing training to prepare them for the ongoing safety challenges they face on a daily basis protecting students and working to foster a positive climate.

- <sup>1</sup>Centers for Disease Control and Prevention. Retrieved from [www.cdc.gov/violenceprevention/pdf/School\\_Violence\\_Fact\\_Sheet](http://www.cdc.gov/violenceprevention/pdf/School_Violence_Fact_Sheet)
- <sup>2</sup>School Safety. Retrieved from <http://www.nea.org/tools/16364.htm>; [http://www.cdc.gov/violenceprevention/pdf/SchoolViolence\\_FactSheet-a.pdf](http://www.cdc.gov/violenceprevention/pdf/SchoolViolence_FactSheet-a.pdf)
- <sup>3</sup>National School Climate Center. Retrieved from <http://www.schoolclimate.org/climate/faq.php>.
- <sup>4</sup>Booth, B., VanHasselt, V. B., & Vecchi, G. M. (2011). Addressing school violence. *FBI Law Enforcement Bulletin*, 80(5), 1-9.
- <sup>5</sup>Monk, D. (2008). *Ten essential elements to examine to enhance school safety*. Presentation at the May 2008 PSEA House of Delegates.
- <sup>6</sup>Ibid.
- <sup>7</sup>Ibid.
- <sup>8</sup>Kingshott, B. F., & McKenzie, D. G. (2013). Developing crisis management protocols in the context of school safety. *Journal of Applied Security Research*, 8(2), 222-245.
- <sup>9</sup>National School Climate Center. Retrieved from <http://www.schoolclimate.org/climate/standards.php>.
- <sup>10</sup>See, for example, Freiberg, H. J. (Ed.). (1999). *School climate: Measuring, improving and sustaining healthy learning environments*. Philadelphia, PA: Falmer Press.
- Good, T. L., & Weinstein, R. S. (1986). Schools make a difference. *American Psychologist*, 41, 1090-1097.
- <sup>11</sup>Kuperminc, G. P., Leadbeater, B. J., Emmons, C., & Blatt, S. J. (1997). Perceived school climate and difficulties in the social adjustment of middle school students. *Applied Developmental Science*, 1(2), 76-88. Retrieved from <http://education.gsu.edu/schoolsafety/downloadpercent20files/wpppercent202002percent20schoolpercent20climate.pdf>.
- <sup>12</sup>Haynes, N. M., & Comer, J. P. (1993). The Yale school development program process, outcomes, and policy implications. *Urban Education*, 28(2), 166-199. Retrieved from <http://education.gsu.edu/schoolsafety/downloadpercent20files/wpppercent202002percent20schoolpercent20climate.pdf>.
- <sup>13</sup>Taylor, D. L., & Tashakkori, A. (1995). Decision participation and school climate as predictors of job satisfaction and teacher's sense of efficacy. *Journal of Experimental Education*, 63(3), 217-227. Retrieved from <http://education.gsu.edu/schoolsafety/downloadpercent20files/wpppercent202002percent20schoolpercent20climate.pdf>.
- Gregory, A., Cornell, D., & Fan, X. (2012). Teacher safety and authoritative school climate in high schools. *American Journal of Education*, 118(4), 401-425.
- <sup>14</sup>National School Climate Center. (2007). *The school climate challenge: Narrowing the gap between school climate research and school climate policy, practice guidelines and teacher education policy*. New York, NY: Center for Social and Emotional Education.
- <sup>15</sup>Centers for Disease Control and Prevention. Retrieved from [www.cdc.gov/violenceprevention/pdf/School\\_Violence\\_Fact\\_Sheet](http://www.cdc.gov/violenceprevention/pdf/School_Violence_Fact_Sheet)
- <sup>16</sup>Pennsylvania Partners in Positive Behavior Support. Retrieved from <http://www.papbs.org/Home.aspx?PageID=68a5038d-36df-414f-8e1f-a78737463ace>
- <sup>17</sup>Aron, L. Y. (2006). *An overview of alternative education*. Retrieved from [www.urban.org/publications/411283](http://www.urban.org/publications/411283)
- <sup>18</sup>Pennsylvania Department of Education. *Alternative education for disruptive youth*. Retrieved from [http://www.pde.state.pa.us/alt\\_disruptive/site/default.asp](http://www.pde.state.pa.us/alt_disruptive/site/default.asp).



Revised January 2014

## Focus on districts with high levels of poverty

There is a real gap between the school performance of students from low-income families and their more affluent neighbors.

**In particular, research shows students in school districts with high levels of poverty would most benefit from:**

- High-quality early childhood education.
- Tutoring, particularly one-to-one intervention that addresses specific learning needs.
- High-quality English as a second language programs, including content area instruction in the students' first language while also teaching English.
- Attention to measures that prevent students from dropping out of school.
- A concerted focus on safety by all segments of the community, including law enforcement, social service agencies, parents, and school officials.
- Appropriate alternative placements for disruptive and potentially violent students to foster their own success and that of their classmates.
- A full range of opportunities to prepare students for work or post-secondary education.

PSEA is deeply committed to the success of all children, and we believe Pennsylvania policymakers should invest in priorities that build the foundation for learning in all districts. However, there is a real gap between the school performance of students from low-income families and their more affluent neighbors.

### **Students in poverty tend to be concentrated and need more services.**

**Low-income students often live in the same neighborhoods as other low-income students**, and as a result, they are concentrated in specific schools districts or specific schools within a school district.

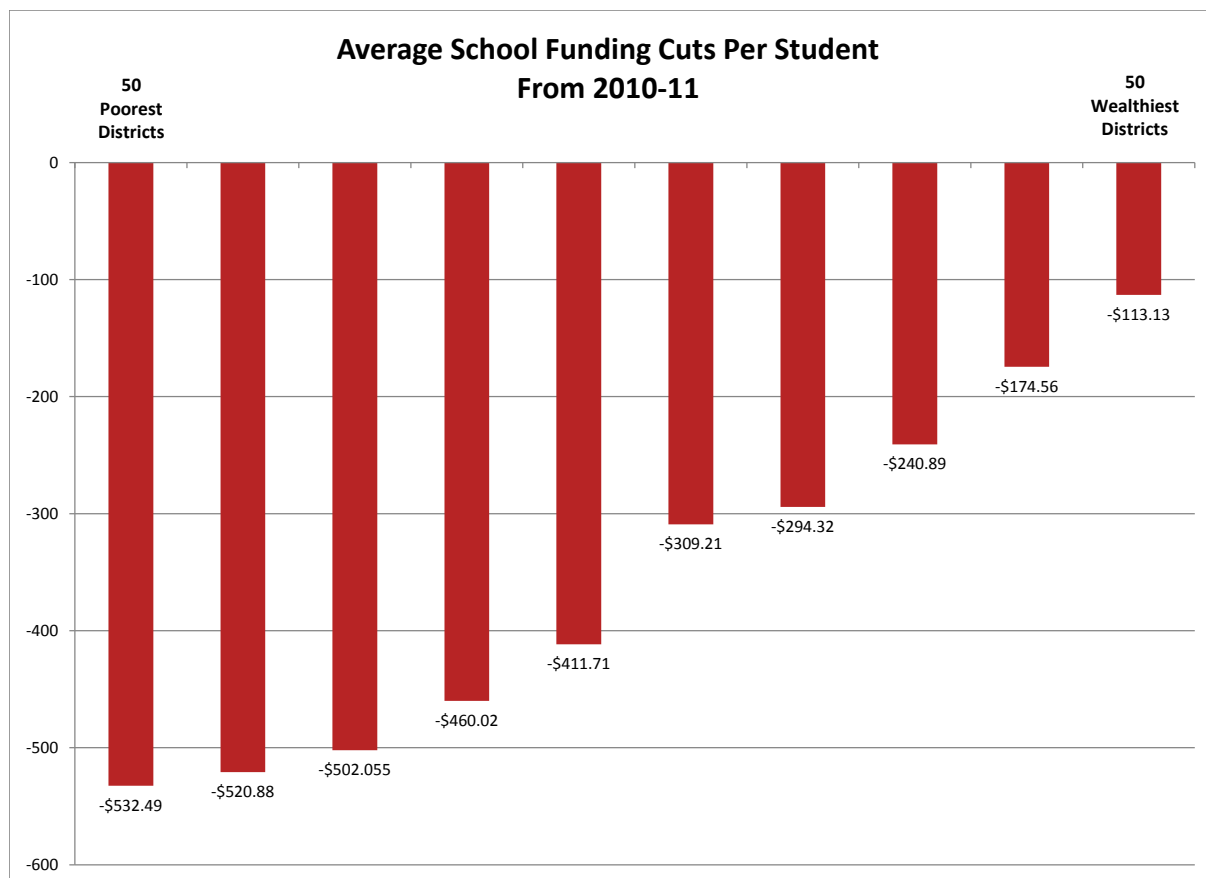
In addition, **the concentration of poverty is often associated with other factors that also impact the overall school climate:** unstable neighborhoods, plagued by unemployment and crime; higher incidence of students with developmental lags; higher incidence of students with disabilities; and higher concentrations of English language learners.

**Students in poverty often need more education and support services, but the schools they attend are typically the least resourced and unable to provide the services these students need.** This problem has been exacerbated in Pennsylvania by unprecedented school funding cuts that have particularly hurt students in the state’s most financially challenged school districts. The average per student funding cut in Pennsylvania’s 50 poorest school districts is \$532, while the average per student cut in the 50 wealthiest school districts is \$113. (see [www.psea.org/schoolcuts](http://www.psea.org/schoolcuts).)

**PSEA encourages policymakers to place the highest priority on implementing programs where the need is greatest, schools in communities that struggle with poverty.** We offer *Solutions That Work* as recommendations for worthy investments in all schools. However, PSEA recognizes that the Commonwealth must prioritize its resources and human capital in a fiscally responsible manner. These schools must be given the requisite tools to help teachers and parents make sure each child reaches his or her full potential.



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Source: Data prepared by PA Department of Education.

## Adequately fund public education and restore school funding

Education is a critical investment for the economic and social success of individuals, their families, and the communities in which they live. For Pennsylvania to improve public education for children and reduce the current over-reliance on local property taxes, the state share of public education funding must be increased.

### Recommendations

- Restore school funding.
- Provide sufficient additional funding to move Pennsylvania toward a fully implemented, data-driven funding formula that:
  - Provides students with the educational opportunities they deserve and the resources they need to be successful, regardless of their families' financial situation, the communities they live in, or other possible barriers they may have for learning; and
  - Recognizes the differing abilities of local communities to fund schools from local property taxes. Wealth varies widely from district to district - taxpayers in *high-need, low-wealth* districts can provide limited resources even with higher tax efforts. It is important for any funding formula to take into account a community's *ability—and willingness-to raise* funds locally.
- Provide increased special education funding, driven out through a more rational formula that recognizes the varying needs among students, the relative wealth of the local communities in which those students are educated, and local tax effort.
- Create a rational and equitable system for funding charter and cyber charter schools. *(Please refer to PSEA's Solutions that Work, page 48 for specific recommendations and additional information).*

Pennsylvanians are proud of their public schools and the many achievements of individual students. They recognize that successful public schools are essential for the health of our communities.<sup>1</sup> The economic strength of our townships, boroughs, and cities is inextricably linked to the opportunities our public schools provide and how those opportunities are funded. Education is a critical investment for the economic and social success of individuals, their families, and the communities in which they live.

The quality of our public schools can influence crime rates, housing needs, health issues, business development, and cultural engagement – all of which are critical to the Commonwealth’s social and economic vitality. Unfortunately, school districts must rely primarily on property taxes to fund public schools. This over-reliance on property taxes has been exacerbated in recent years due to the nearly \$1 billion in cuts to state funding. As a result, Pennsylvania school children depend far too much for their educational and economic opportunities on the ability and willingness of local taxpayers to provide the required resources. Substantial differences in districts’ abilities to raise resources locally create substantial differences in the opportunities students have to succeed academically. State funding plays a critical role in equalizing those opportunities for all students, regardless of their zip codes.

For Pennsylvania to improve public education for children and reduce the current over-reliance on local property taxes, the state share of public education funding must be increased.

## Pennsylvania’s students, taxpayers, and communities deserve better

**Our public schools, students, and surrounding communities face unprecedented challenges.** At a time when expectations are increasing, a slow economic recovery and the impacts of \$1 billion in funding cuts are wreaking havoc on a system already stretched thin. Taxpayers and students are frustrated with the state’s unwillingness to live up to its promises.

The funding cuts coupled with the current economic condition cast a harsh light on the dysfunctional nature of the state’s school funding “formulas,” local tax limits through referendum, and the imbalance between state and local funding sources. For at least a decade, Pennsylvania has consistently been among the lowest **20 percent** of states in contributions from state sources. In 2010-11, our state government provided only 34 percent of the funding needed compared to the national average of 45 percent (Pennsylvania ranks 47th in the nation).<sup>2</sup> While progress was made between 2008-09 and 2010-11 toward a better funding formula, the cuts in 2011-12 reversed the improvements that had been made. School districts lost the equivalent of 3.4 percent of their revenue, on average, with the cuts in 2011-12. Recent state budgets have restored only about one-fifth of what was lost. The cuts have led to an erosion of opportunities for Pennsylvania’s students, from the drastic measures taken in lower-wealth districts to the surprisingly deep reductions in wealthier districts.<sup>3</sup>

Pennsylvania students, their families, educators, and local taxpayers are living in a new reality. **Students are going to schools with larger classes, less individualized attention, little or no tutoring, reduced or eliminated art and music programs, fewer athletic opportunities, sport programs they have to pay for, shuttered libraries and fewer supportive adults to turn to such as counselors and school nurses.** Some children are going to schools farther from home because their neighborhood schools have

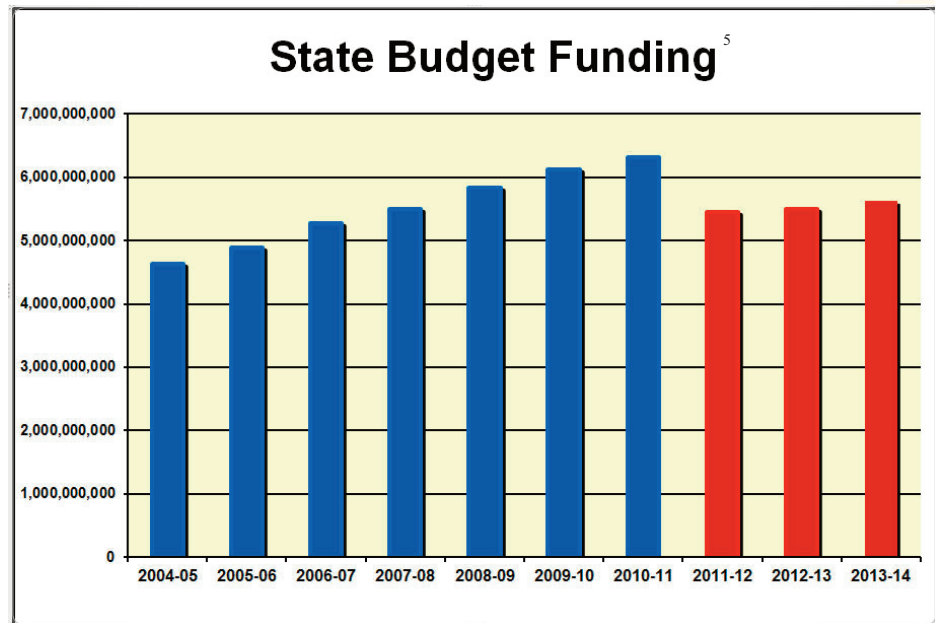
been closed. Pennsylvania is doing a disservice to an entire generation of students who will not get a second chance. Local taxpayers are seeing increases in their property taxes while program after program is being cut from their schools.

**Now, more than ever, we must realize that money matters in education.** Money matters for providing a safe environment, quality teachers, smaller class sizes, individualized learning, and opportunities for enrichment. As renowned school finance expert Bruce Baker noted in a recent report: “Schooling resources which cost money...are positively associated with student outcomes... While money alone may not be the answer, more equitable and adequate allocation of financial inputs to schooling provides a necessary underlying condition for improving the equity and adequacy of outcomes. The available evidence suggests that appropriate combinations of more adequate funding with more accountability for its use may be most promising.”<sup>4</sup>

**We need to once again make investments in public education a top priority for the Commonwealth.** This is essential to shift from struggling communities and declining economic development, to economic development and prosperity. There is no better investment the state can make than to more fully and fairly fund our public schools.

Pennsylvania can begin to repair the extensive damage by restoring the \$1 billion in funding and moving our state in the right direction by implementing a multi-year funding formula that provides students what they need to be successful and reduces the increasing burden on residential property taxpayers. This new formula

for distributing increased state monies needs to be sensitive to both the demographics of students as well as the demographics of communities. The formula must recognize that there are different costs associated with meeting different student needs, and that no school district should have to tax itself disproportionately in order to provide quality educational opportunities to its students.





Pennsylvania must begin to build the foundation for establishing investments in public education as a top priority of the Commonwealth, and lead the way toward implementing a predictable, equitable, and data-driven approach to funding our public schools. This includes providing the funds necessary for

## Key Points

- Students face unprecedented challenges
- Larger classes, no tutoring, no art, music, and libraries are now the norm
- Money matters in education
- Public education must be a top priority

students to have quality, research-based educational programs including early childhood education; a safe and secure learning environment; the opportunity for individualized learning through tutoring or smaller class sizes; a well-rounded curriculum of arts, music, and extracurricular activities; and guidance and support for post-secondary opportunities including higher education or the workforce.

In addition, changing school funding in Pennsylvania by increasing the state share of funding and distributing those funds in a way that supports students and recognizes varying wealth is an essential component of any comprehensive plan to improve the economic, cultural, and social growth of Pennsylvania.

In addition to revising how Pennsylvania funds our schools, the Commonwealth must keep its promise to our retired, current, and future public school employees and continue to make the responsible payments required by Act 120 of 2010.

<sup>1</sup>2013 Poll, Lake Research Partners,

<https://www.pccy.org/userfiles/file/PressReleases/PCCY-Attach-MemoEducationPollResults.pdf>

<sup>2</sup><http://www2.census.gov/govs/school/11f33pub.pdf>

<sup>3</sup>Sounding the Alarm, PSEA, June 2013. See esp. Appendices A, B, and C for program cuts.

<sup>4</sup>[http://www.shankerinstitute.org/images/doesmoneymatter\\_final.pdf](http://www.shankerinstitute.org/images/doesmoneymatter_final.pdf)

<sup>5</sup>The Basic Education Funding amount for 2009-10 includes \$4,733.5 million in state funds, and \$654.8 million in ARRA State Fiscal Stabilization Funding. The final Basic Education Funding for 2010-11 includes \$4,732.1 million in state funds, and \$654.8 million in ARRA State Fiscal Stabilization Funding, and \$387.8 million in EducJobs Funding and FMAP Restoration.



Revised January 2014

## PSEA salary facts

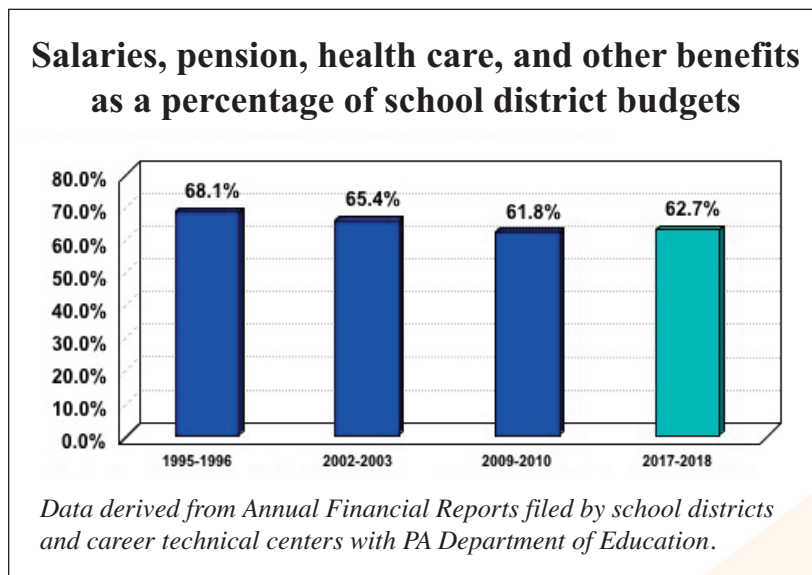
### Key indicators regarding the salaries of Pennsylvania educators.

- **Pennsylvania's average teacher salary was \$61,934 in 2011-2012.**
- The average Pennsylvania teacher in 2011-2012 had 13.2 years of service. Approximately half of Pennsylvania's teachers in 2011-2012 earned Master's degrees.<sup>1</sup>
- For 2012-2013, the starting teacher's salary average across the Pennsylvania's districts, Vo-techs, and IUs was \$41,490.
- **Relative to the price of goods and services, Pennsylvania's average teacher salary decreased by 7.8 percent over the past 15 years.**
- Pennsylvania's average teacher salary increased slower than inflation in 10 of the past 15 years.
- Even without adjusting for inflation, Pennsylvania's average teacher salary has only marginally increased at a rate of 2.1 percent per year.
- **Since September 1, 2010, PSEA teachers have agreed to half of their previous on-scale raises, on average.**
- On-scale increases for contracts settled before September 1, 2010, averaged 2.1 percent for the years 2010-2011 through 2013-2014.
- Contracts settled after September 1, 2010, averaged only 1.0 percent on-scale raises for the same years.
- Since September 1, 2010, negotiated PSEA average salary increases have dropped 39 percent.
- Projected average salary increases (including step movement) dropped from 3.9 percent for those agreed to before the 2010-2011 school year to only 2.4 percent for those agreed to after August 2010.

### Key Points

- 2011-2012 average teacher salary was \$61,934
- Average teacher salaries decreased 7.8 percent over the past 15 years
- Teacher salaries failed to keep up with inflation
- Teacher salaries and benefits as a percentage of school district budgets have fallen

- **The salaries paid to beginning and experienced teachers struggled or failed to keep up with inflation.**
- From 1998 to 2013, the Consumer Price Index (which measures the prices of goods and services) increased by an average of 2.8 percent per year, while the average starting salary increased by 2.8 percent per year, and the average career rate increased by only 2.5 percent per year.<sup>2</sup>
- **Pennsylvania’s teachers earn less than similarly educated Pennsylvanians.** Pennsylvania’s teachers have a weekly wage disadvantage of 18 percent relative to the wages of similarly educated college graduates in Pennsylvania.<sup>3</sup>
- Even accounting for health benefits, Pennsylvania’s teachers have a 15 percent weekly wage disadvantage relative to similarly educated Pennsylvanians. Nationally, the teacher benefit “bias” for health care, pension, etc. is only 2.8 percent (state-level data is not available).<sup>4</sup>



- **Salaries, pension, health care, and other benefits as a percentage of school district budgets have fallen over the past 15 years, from 68 percent to 62 percent.**
- Even with the pension contribution rate increase, the percentage will only go up 0.2 percent by 2017-2018.<sup>5</sup>

<sup>1</sup>PSEA analysis of Pennsylvania Department of Education’s professional personnel data.

<sup>2</sup>PSEA analyses of Pennsylvania Dept. of Education data and U.S. BLS CPI-U data.

<sup>3</sup>Allegretto, S.A., Corcoran, S. P., and Mishel, L. (2008). *The teaching penalty: Teacher pay losing ground*. Washington, DC: Economic Policy Institute.

<sup>4</sup>Ibid.

<sup>5</sup>Data from Annual Financial Reports filed by school districts and career technical centers filed with the Pennsylvania Department of Education. Calculation includes salaries and benefits for ALL school employees in basic education school districts and career technical centers, net of the state’s reimbursement for pensions. To project from 2010-11 to 2017-18, we used the following assumptions: salaries would increase by 3.2%/year (average of last 4 years); pension contribution rates as projected by PSERS; all other benefits would increase by 4.3%/year (average of last 4 years); all other expenditures would go up by 2.3%/year (which is smaller than the 4 year average). We used the PSERS Projections as of June 30, 2012.

## Good news about Pennsylvania public schools

Pennsylvania public schools are among the best in the nation, according to many objective measures and research from respected institutions. For a decade, student achievement has been improving, thanks to the efforts of teachers and education support professionals who work with our children every day.

However, this good news is tempered by recent declines in student performance on PSSAs. PSSAs are only one indicator of student achievement, but they are an important one. Policymakers should be aware of this decline and respond with policies, such as those recommended in Solutions That Work, to help students achieve in the future.

Many Pennsylvania taxpayers may not realize what a good return they get on their investment in public schools. The facts and figures below prove that public schools are a wise investment for taxpayers.

### Key Points

- NAEP Math and Reading scores are among the best in the nation
- AP scores are among the best in the nation
- A high percentage of PA students plan to continue their education.

While research demonstrates much success, it is always important to understand exactly what each test is designed to measure and how the information gathered can be used as part of a total picture. Knowledge of what each test strives to measure and how the results are intended to be used allows everyone to make honest interpretations of both results and implications. This report provides information on accomplishments of note and shares research information necessary to fully understand the results and their meaning.

Here are just a few of the good news facts and successes that help demonstrate the remarkable ability of Pennsylvania's public schools to provide students with high-quality education.

*“The facts and figures below prove that public schools are a wise investment for taxpayers.”*

## National Assessment of Educational Progress (NAEP) indicators of success

### Pennsylvania's reading scores are among the nation's best:

- Only three states have statistically significant higher fourth-grade reading scores than PA.
- Only two states have statistically significant higher eighth-grade reading scores than PA.

### Pennsylvania's math scores are among the nation's best:

- Only seven states have statistically significant higher fourth-grade math scores than PA.
- Only five states have statistically significant higher eighth-grade math scores than PA.

### Pennsylvania vs. other countries:

Researchers from the National Center for Educational Statistics performed a study that statistically linked state performance on the National Assessment of Educational Progress (NAEP) eighth-grade mathematics and science tests with international performance on the Trends in International Mathematics and Science Study (TIMSS) eighth-grade mathematics and science tests.



- **Science:** Pennsylvania's NAEP performance would rank it below only six education systems (Singapore, Chinese Taipei, Korea, Japan, Finland, Alberta-Canada), comparable to four, and above 37.
- **Math:** Pennsylvania ranked below only six education systems (Korea, Singapore, Chinese Taipei, Hong Kong, Japan, and Russia), comparable to Quebec, and above 40.

### NAEP Reading scores are up:

- The proportion of Pennsylvania public school fourth-graders who scored at the highest two levels in reading in the National Assessment of Educational Progress (NAEP) has increased by 21 percent since 2003.
- The proportion of Pennsylvania public school eighth-graders who scored at the highest two levels in reading in the National Assessment of Educational Progress (NAEP) has increased by 31 percent since 2003.

**NAEP Math scores are up:**

- The proportion of Pennsylvania public school fourth-graders who scored at the highest two levels in mathematics in the National Assessment of Educational Progress (NAEP) has increased by 22 percent since 2003.
- The proportion of Pennsylvania public school eighth-graders who scored at the highest two levels in mathematics in the National Assessment of Educational Progress (NAEP) has increased by 40 percent since 2003.

According to a study by the Brookings Institution, the performance of Pennsylvania students on math and reading NAEP tests in both fourth and eighth grades places the state among the nation’s top 10 performance gainers, in both the short term (since 2003), and in the long term (since 1992).

The NAEP is the most appropriate test for use in comparing performance among states. In 1988, Congress created the National Assessment Governing Board (NAGB) to devise procedures for interstate comparisons of test scores. For example, unlike Student Achievement Test (SAT) data, NAEP procedures require a scientifically valid sampling plan whereby 100 schools are randomly selected to represent all public schools in the state.

While the NAEP tests are a valid manner in which to compare relative academic performance by students in different states, it is important to remember that states still differ in the characteristics of their populations. Some states have many more students from urban areas, those who have lower socio-economic status, and lower levels of parental education than do other states. So while we can use the NAEP tests as an accurate barometer of student performance, the question remains as to what meaning to give to any observed differences between the states.



*“The performance of Pennsylvania students on math and reading NAEP tests in both fourth and eighth grades places the state among the nation’s top 10 performance gainers.”*

## Pennsylvania System of School Assessment (PSSA) indicators of success

### Then...

Between 2002 and 2011, PSSA scores increased significantly:

- 5th grade math: 4.1% average annual increase
- 5th grade reading: 1.9% average annual increase
- 8th grade math: 4.5% average annual increase
- 8th grade reading: 3.7% average annual increase

### And now...

In the last two years, PSSA scores have fallen:

- 5th grade math: 4.9% average annual decrease
- 5th grade reading: 4.8% average annual decrease
- 8th grade math: 1.9% average annual decrease
- 8th grade reading: 3.0% average annual decrease

### PSSA math scores are up since 2002:

- The proportion of Pennsylvania public school fifth-graders who are proficient or higher in math in the state proficiency test (PSSA) has increased by 30 percent since 2002.
  - In 2002, 53 percent were proficient or advanced. In 2013, 69 percent were proficient or advanced.
- The proportion of Pennsylvania public school eighth-graders who are proficient or higher in math in the state proficiency test (PSSA) has increased by 43 percent since 2002.
  - In 2002, 52 percent were proficient or advanced. In 2013, 74 percent were proficient or advanced.

**PSSA reading scores are up since 2002:**

- The proportion of Pennsylvania public school fifth-graders who are proficient or higher in reading in the state assessment test (PSSA) has increased by 7 percent since 2002.
  - In 2002, 57 percent were proficient or advanced. In 2013, 61 percent were proficient or advanced.
- The proportion of Pennsylvania public school eighth-graders who are proficient or higher in reading in the state assessment test (PSSA) has increased by 31 percent since 2002.
  - In 2002, 59 percent were proficient or advanced. In 2013, 77 percent were proficient or advanced.

The PSSA indicators make repeated references to the categories of “Proficient” and “Advanced.” Like the identically named NAEP performance categories, the PSSA performance levels must also be interpreted with caution. The cut scores for these performance levels have not been externally validated. Such evidence that exists suggests that many students who score below proficient still are able to enroll in non-remedial college courses in the same subject area.

## Other performance indicators

**Pennsylvania is a national leader in “AP Honor Roll” school districts,** with 37 districts receiving this distinguished designation. This places Pennsylvania in the top 10 states. AP Honor Roll districts have expanded the percentage of students taking college level AP exams, while increasing or maintaining the percentage of students whose scores can earn them college credit.

**Advanced Placement (AP) tests:** Pennsylvania also has a high percentage of public high school students who score high enough on AP exams to qualify for college credit when taking the exam, ranking 16th in the nation.

**More students participating in AP Courses:** The number of Pennsylvania public high school students taking and testing in an Advanced Placement course has increased 83 percent over the past 10 years.

**High School Graduation Rate Among the Best in the Nation:** Pennsylvania's public high school graduation rate is among the top 10 in the country.



**A high percentage of high school graduates plan to continue their education:** More than seven out of 10 Pennsylvania high school graduates plan to continue their education after high school.

**Among the best in the nation of students performing in college:** Pennsylvania ranks fourth in the nation in the percentage of full-time college students who complete their bachelor's degrees.

**Student Achievement Tests (ACTs):** Pennsylvania ranks 11th on the average ACT scores, and 47th in the proportion of students who take the ACT. Inasmuch as Pennsylvania has one of the lowest proportions of students taking the ACTs, an overall higher ranking among states is not unexpected.

**Student Achievement Tests (SATs):** Pennsylvania ranks 37th on the average SAT scores, and 11th in the proportion of students who take the SAT. Inasmuch as Pennsylvania has one of the highest proportions of students taking the SATs, an overall lower ranking among states is not unexpected.

- In 2013, across all states there was a strong inverse relationship between participation rates and SAT scores, i.e., the greater the percentage taking the test, the lower the score. For this reason, it is not appropriate to use SAT scores to compare states.
- The College Board, the organization that sponsors the SATs, says it is invalid to use the SAT to compare states.
- Statisticians from Education Testing Service (ETS), the organization that produces the SATs, have written extensively about why the SAT is an invalid measure for ranking states that cannot be statistically rehabilitated.

*Both the SAT and the NAEP tests are produced by Education Testing Services (ETS). ETS specifically warns against using the SAT to compare states and has developed the NAEP tests expressly for the purpose of comparing states.*



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