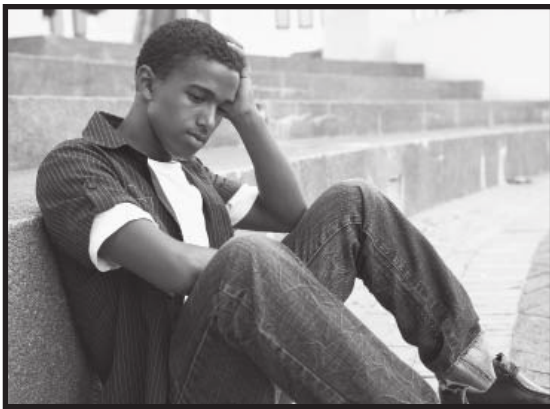


## Trickle Up: The Impact of Increasing Poverty on Educational Outcomes

*A Policy Brief from Public Citizens for Children and Youth*

*"It's no cop-out to acknowledge the effects of socioeconomic disparities on student learning. Rather, it's a vital step to closing the achievement gap."*

- Richard Rothstein<sup>1</sup>



According to the latest United States Census data, 48 percent of the population is struggling economically. In all, 146.4 million Americans are either low-income or living below the poverty line. Translated into real numbers, 49.1 million American families struggle to get by on just \$22,350 or less per year (the 2011 federal poverty threshold for a family of four), while 97.3 million more families must make ends meet with approximately \$45,000 per year (the commonly used low-income threshold defined as a family of four earning between 100 and 199 percent of the poverty level).<sup>2,3</sup>

Most troubling is that 57 percent of all children in the United States are low-income or living in poverty, which should ring alarm bells for all of us.<sup>4</sup> There is emerging evidence of a trend toward a shrinking middle class and growing communities of concentrated poverty.

Concentrated poverty is often defined as a community with a poverty rate of 30 percent or more, which is a commonly used threshold when the level of concentrated poverty begins to have negative effects on neighborhoods.<sup>5</sup> The negative impact of concentrated poverty on a community may include the absence of critical resources for healthy growth and development, such as high-performing schools, quality medical care and safe outdoor spaces.<sup>6</sup>

*Estimates from 2006 through 2010 suggest that nationwide almost eight million children lived in areas of concentrated poverty, representing a 25 percent increase over the past decade.<sup>7</sup>*

While income disparities are not new, the trend toward a shrinking middle class has resulted in communities polarized by income. As the areas of poverty that used to be hidden in urban and rural districts expand into once solidly middle class communities, the impact on our educational system will likely be profound.

Recent research indicates that family income has become more determinative than race in predicting student achievement, which evidences a departure away from the racial achievement gap as the primary determinant of educational success.<sup>10</sup>

### *Pennsylvania Poverty: Fast Facts*

- Pennsylvania's child poverty rate is 17.1%, which means that 466,638 Pennsylvania children are living in poverty.<sup>8</sup>
- In Pennsylvania, the number of children living in concentrated poverty increased 27% over the last 12 years.<sup>9</sup>
- Pennsylvania has many school districts with more than 50% of its students living in or close to poverty or low-income line.
- Philadelphia, Reading, Harrisburg, Chester and Erie are examples of communities where close to 75% of their students are living in or close to the poverty or low-income lines.

As the chart below demonstrates, the achievement gap between white and black students has narrowed over the past few decades while the gap between rich and poor students has grown substantially during the same time period.<sup>11</sup>

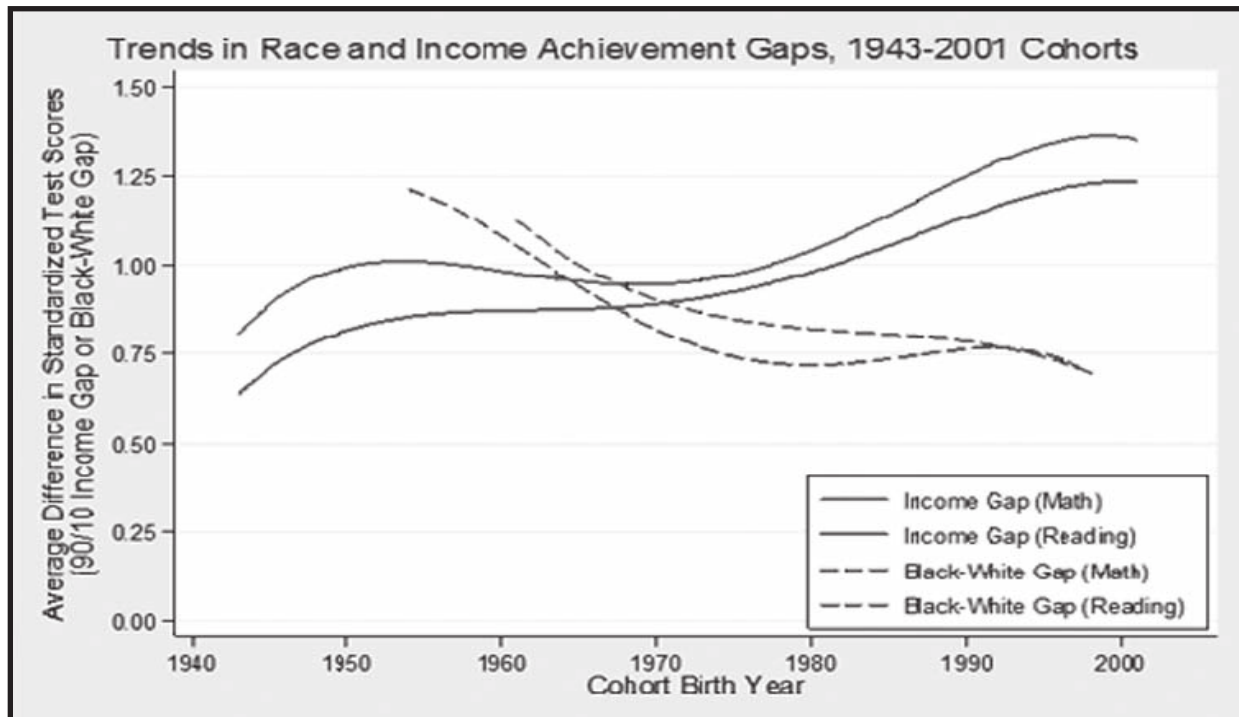
Children living in low-income communities tend to have less access to high-quality schools and early childhood education programs, often resulting in diminished educational outcomes.<sup>12</sup>

This is not surprising because students living in poverty often bring additional challenges with them when they come to school; many must deal with insecurity, homelessness, unsafe communities, domestic violence, health

problems and hunger. These issues often translate into academic, attention and behavioral challenges in the classroom.

On an individual student level, these academic, attention and behavioral challenges can be overcome with extra attention, support and services within a school. But the effect of poverty upon an individual student can make the challenges exponentially worse when poverty's impact is felt by the majority of students in a school or school district.<sup>13</sup>

As the number of families and children living closer to the poverty line increases, the need for new approaches to educating all our children expands. Any new ap-



proach must combine investing funds in our high needs schools and targeting those investments toward policies and programs that address the unique challenges that high-poverty schools encounter.

## ***Understanding the Impact of Concentrated Poverty on Educational Outcomes***



Proactive educational policies that address the impact of concentrated poverty will improve our national prosperity and competitiveness. The United States' mediocre performance on the 2009 Programme for International Student Assessment (PISA)-ranking

12th in reading, 17th in science, and 25th in mathematics - garnered a lot of media attention and was characterized as a wake-up call for America. When PISA scores were disaggregated by poverty concentration, the United States performed very well on the exam, ranking first in reading and science and third in math. This disaggregation underscores the relationship between educational outcomes and community wealth.

The PISA exam revealed that the United States is failing to adequately educate students who attend schools with high concentrations of children living in poverty. The United States has the 5th largest performance gap between low-income students and their more affluent classmates among the 34 countries participating in the PISA exam.<sup>14</sup> We also have higher levels of children living in poverty and larger numbers of schools with high-poverty concentrations than any other PISA participating country.

***The problem is not that individual children living in poverty cannot learn.*** The problem is that as the poverty concentration of a school increases, there is generally an increase in challenges and a concurrent decrease in resources, supports and effective teaching and learning in that school.

Targeted practices and policies can overcome the challenges low-income students may face. The "War on

Poverty," for example, led to a dramatic decrease in the socioeconomic achievement gap in the 1960s. There are also countless modern day examples of children from lower income households who are successful academically as well as schools with high poverty concentrations that beat the odds. These success stories underscore the fact that we can do better and that our educational system is leaving far too many children behind.

## ***Reducing the Socioeconomic Achievement Gap***

***The 1960s War on Poverty:*** In the 1960s, President Lyndon Johnson led an effort to declare a "War on Poverty" that focused on, among other things, reducing the inequalities in educational achievement between economically disadvantaged students and their more advantaged counterparts. Over the next decade, the federal government introduced the Economic Opportunity Act (EOA) of 1964, which established the Head Start program, and the Elementary and Secondary Education Act (ESEA) of 1965, which created Title I. Title I provides financial assistance to schools with high numbers or high percentages of children from low-income families to help children meet state academic standards.

Longitudinal studies of early childhood programs including Head Start have demonstrated sustained results in improving educational outcomes.<sup>15</sup> These programs and policies, in addition to investments in schools, teachers, teacher training and teacher distribution, led to closing the achievement gap by more than three quarters in 15 years.<sup>16</sup>

Some experts argue that had we continued to invest in those policies we could have eliminated the achievement gap by the year 2000.<sup>17</sup> Unfortunately, the performance gains of the 1970s and 1980s did not continue after 1988.

The performance regression during the 1990s has been correlated with decreases in per-pupil expenditures and growing enrollments.<sup>18</sup>

High-poverty concentration is not an excuse for under-performance, but a factor that must be considered and addressed as education policy is crafted.

## *The Impact of Concentrated Poverty on Pennsylvania School Districts*

In Pennsylvania, as in most states, the impact of poverty on educational outcomes is exacerbated by the fact that many families living below the poverty line live in close proximity to each other. Researchers have identified a poverty concentration of 50 percent as the tipping point when the impact of concentrated poverty becomes deeply ingrained, negatively impacting a school and seriously affecting student outcomes.

In schools that have reached the tipping point, the negative academic and behavioral impacts of poverty that may affect an individual student can become amplified in larger classrooms. Academic and behavioral issues that may be the exception to the rule in an affluent school can quickly become the norm in high-poverty schools, negatively impacting instruction, safety and classroom learning.

Recent research sheds light upon how a child's socioeconomic background can influence not only academic achievement, but other cognitive and non-cognitive skills, such as paying attention and socializing with classmates and teachers. The research demonstrated, among other things, the following:

**Examples of Pennsylvania Tipping Point School Districts - Table #1**

District	Poverty Concentration <sup>+</sup>
Duquesne City	94%
Reading	88%
Harrisburg	86%
Philadelphia	79%
Chester	77%
Erie	73%
Shenadoah Valley	72%

**Academic Achievement:** Achievement is defined as a student's concrete academic skills.<sup>19</sup> In preschool and the middle childhood years, achievement generally refers to reading and math-related skills. Recent research has confirmed that children coming from low-income households are more likely to enter school with lower reading and math skills than children from high socioeconomic households.<sup>20</sup>

**Attention Skills:** Attention skills describe a student's ability to focus on tasks and encompasses a number of skills such as planning, sustaining action and task persistence. In a classroom, a student's attention level impacts his/her ability to sit still, concentrate on tasks, and persist despite minor setbacks, follow directions, work independently and a student's distractibility or forgetfulness. Recent research has indicated that children coming from low socioeconomic households are more likely to be identified as struggling with attention skills by their teachers.<sup>21</sup>

**Behavioral Issues:** Behavioral issues are defined as the ability to get along with others and are often divided into externalizing and internalizing dimensions. In the classroom, externalizing behavior issues may manifest through misbehaving or withdrawing from collaborative learning and can lead to student-teacher conflicts. Internalizing behaviors include a student's level of anxiety, depression or incidents of withdrawn behavior. Recent research has indicated that children coming from low socioeconomic households have a higher rate of exhibiting behavior problems in the classroom.<sup>22</sup>

Academic achievement, attention and behavioral issues are challenges in all schools, but especially in high-poverty schools. Many students in high-poverty schools struggle with issues that are daunting for most adults: financial instability, homelessness, unsafe communities, domestic violence, health problems and hunger. Despite these challenges, we know that countless students from lower socioeconomic backgrounds flourish academically.

But, high-poverty schools, classrooms, teachers and students are predisposed to negative academic and behavioral feedback loops. It is easy to see how negative feedback loops can be created in high-poverty schools. These schools have a high number of children struggling with the negative effects of poverty, impacting classroom dynamics and instruction. It is clear that high-poverty schools, like School B, are the schools that need our best teachers, financial resources and support to overcome these challenges.

Unfortunately, in Pennsylvania, our poorest schools are generally our most under-resourced schools. Many of our schools have reached the tipping point, with some schools having more than 75 percent of their students



coming from families living in poverty or near the low-income line. These schools and communities are at a distinct disadvantage when compared with wealthier school districts and communities.

Our poorest schools are generally marked by inadequate funding, larger class size, dilapidated buildings, limited access to school libraries and computers. Students

in these schools are often taught by teachers with the least experience; the schools often lack critical factors that enliven and strengthen a school, such as consistent leadership, and a safe climate. Our current financial, resource and staffing investments in our high-poverty schools is counterintuitive to reducing the socioeconomic achievement gap.

### School A

School A is an elementary school located in an affluent community. The median household income in the district is \$79,500. Approximately 8% of the students at School A qualify for free or reduced lunches. School A is surrounded by green grass, has a playground, library, provides extracurricular activities, arts and music programs and guidance counselors. A typical teacher in School A has at least 5 years teaching experience.



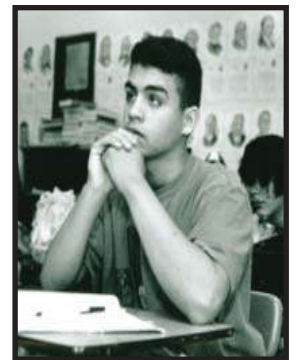
A typical classroom in School A has 17 students. Of those students, generally 1-2 will come from lower socioeconomic backgrounds; 1-2 will have behavior issues and act out once or twice a week and 1-2 students will enter the class below grade level. A typical day in a classroom in School A starts on time with the day's lesson. There is generally one disruption during the day, which the teacher is able to handle quickly and get back to the lesson. Students in School A are given time to play at recess, and enjoy art and music classes throughout the week. The students who are below level receive the assistance they need in the school's resource room and outside tutoring, allowing the teacher to prepare one lesson for the whole class.

After school, a teacher in School A will spend a few hours preparing the next day's lesson. A typical teacher in School A will spend at least 5 years with the school.

### School B

School B is located in a lower income neighborhood. The median household income is \$36,250. More than 75% of the students in School B qualify for free or reduced lunches.

School B is surrounded by sidewalks and cement, has no library, no playground and the school recently lost its arts and music programs. A typical classroom in School B has 30 students. Of those students, more than half will enter the class below grade level, at least ten students will have difficulty paying attention and there are 4-5 students who regularly disrupt class. A typical day in a classroom in School B begins with the school providing breakfast in the classroom because many students come to school hungry. Students often arrive late, making it difficult to start the day's lesson. There are generally 3-4 behavioral outbursts during the day, distracting other students and making it hard to get through lesson plans. There is no recess break for the kids. The majority of the day is spent preparing for state tests.



After school a teacher in School B will work late into the night to prepare the next day's lesson to meet the varied learning needs of all of her students. A typical teacher in School B burns out after 2 years and leaves the school.

## **Education Funding Matters**

Pennsylvania's current state funding investments are counterintuitive to achieving positive educational outcomes in all our schools. Pennsylvania provides one of the lowest shares of state education funding to its school districts in the nation. On average, other states contribute 48% of total public education funding, but Pennsylvania contributes only 36%. This low state share means that Pennsylvania's local school districts must pay the majority of public education costs, compared to the national average of 44% (ranking Pennsylvania 4th among the 50 states in our dependency on local taxes to support public education).<sup>23</sup>

Due to this smaller share of state funding, local communities must make up increasing amounts of funding for their schools. Communities with large numbers of low-income residents have difficulty raising adequate funds for many critical needs due to weak tax bases, therefore efforts often fall short of the need. The differences in current per-pupil expenditures in high-poverty and affluent districts in Pennsylvania range from \$8,029 to \$20,253, which translates to a difference of ap-



proximately \$306,000 per year in a classroom of 25 students.<sup>24</sup>

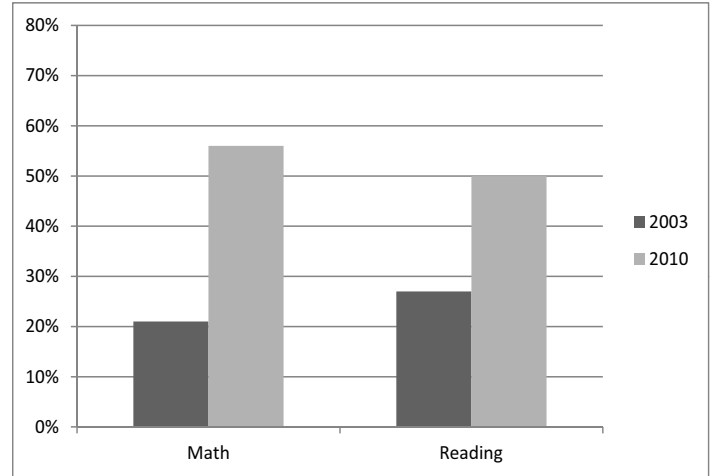
Over the last decade, there has been an effort to adopt

a state education funding formula in Pennsylvania that would more equitably fund our poorer school districts. This effort demonstrated that increased student achievement would result, in part, from increased state education funding focused on proven programs. With increased funding and targeted resources, student achievement increased in many of Pennsylvania's high-poverty schools and prevented many districts from raising local property taxes.

But, proposals to decrease state funding investments in Pennsylvania's schools have surfaced. They are particularly troubling considering the high costs associated with not educating all our students. Failure to educate children in poor schools translates into a lifetime of negative economic consequences in terms of dropout rates, health, crime and welfare expenditures.

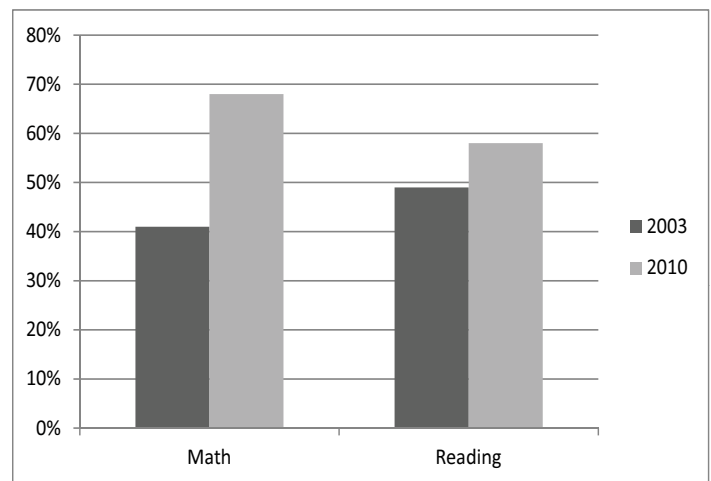
## **Philadelphia School District**

### **Percentage of Students Scoring Grade Level or Above in Math and Reading**



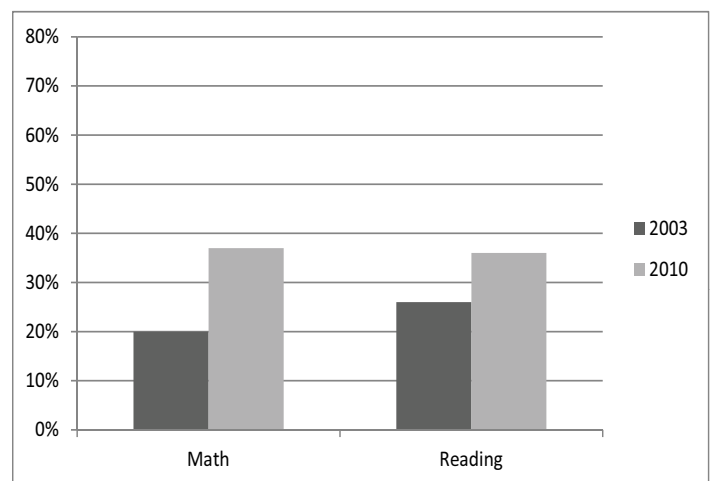
## **Erie School District**

### **Percentage of Students Scoring Grade Level or Above in Math and Reading**



## **Chester/Upland School District**

### **Percentage of Students Scoring Grade Level or Above in Math and Reading**



We know that we can close the achievement gap. The successes seen in the past in which achievement gaps began to close combined with recent successes in our beat-the-odds schools should guide us as we recognize that concentrated poverty exacerbates income and achievement gaps.

### **All Children Can Learn**

***Beat-the-Odds Schools:*** In 2008 PCCY collaborated with other educators and researchers to find common denominators in high-achieving schools with high-poverty levels. High-poverty schools were defined as K-5/K-8 schools with poverty rates between 85 percent and 95 percent. High-achieving schools were defined as schools that had significantly improved Pennsylvania System of School Assessment (PSSA) test scores over several years and/or had demonstrated significantly high-achievement levels on recent PSSA tests. PCCY looked closely at seven successful schools and found the following characteristics at these schools:<sup>25</sup>

***Strong Leadership:*** Sustained, long term, success-oriented leadership. The school's leadership team was in place for more than four years.

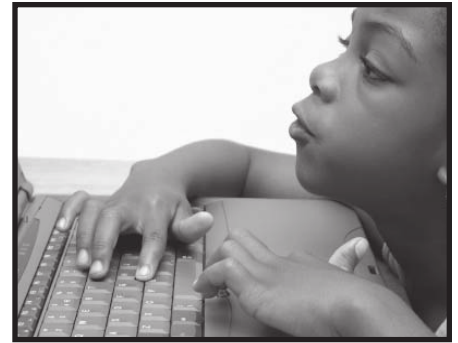
***Strong Instructional Programs:*** Strong core instructional programs, especially in reading/language arts and mathematics. Students in these schools were generally engaged and often took part in small group work.

***Smaller Class Size:*** A concerted effort to maintain relatively small numbers of students in each class. All schools used their budgets and any extra funding to buy extra positions for the school in order to reduce class sizes and eliminate split grade level classes.

***Professional Development:*** Relevant and meaningful professional development support tied to their ongoing curricular and instructional programs.

There are also many examples of beat-the-odds charter schools throughout the state where students are thriving despite a high-poverty concentration. Indeed, some charter schools are experiencing remarkable success in having schools turn around from failing to successful under charter management. Like the beat-the-odd schools identified in PCCY's study, these charter schools have strong leadership, successful curriculum, accountability, and the promise of high expectations.

We need more beat-the-odds schools. We need more schools that are accountable and equitable. Our lack of leadership and fiscal investment in all of our schools has resulted in too many poor schools with large classes, scaled down academic programs, little creative opportunity and inadequate leadership.



### ***Policy Recommendations:***

We cannot fully address the achievement gap if our school reform initiatives continue to neglect the specific conditions in the lives of low-income students that contribute to inadequate school performance.<sup>26</sup>

As citizens of the commonwealth, and builders of the future, we must take steps to ensure that Pennsylvania's schools provide the best conditions for success for ***all of our students*** regardless of their socioeconomic background.

***Recognizing the role that concentrated poverty plays in school success, we must invest in policies and principles that work:***

1) ***Invest in early childhood education:*** We know that learning and achievement trajectories are steepest in early childhood, when children can rapidly absorb new skills and information.<sup>27</sup> In one study, children from low-income households who participated in a preschool intervention program providing one to two years of high-quality educational services and home visits improved their IQ score by an average of 15 points upon completion of the program. Moreover, programs such as Head Start and Pre-K Counts save the public \$8-17 on the dollar in future grade retention, special education, criminal justice and welfare costs.<sup>28</sup> We must invest in high-quality early childhood education.

**2) Invest in quality teachers, school leaders and teacher training:** In most of the high-performing PISA countries, teaching is a highly valued and rewarded profession.

Unlike the United States, many of the high-performing countries on the PISA place their most effective teachers in their schools with high-poverty concentrations.<sup>29</sup>

We must create policies that support investing in and developing quality teachers and providing incentives and support for effective teachers in our high-poverty schools.

**3) Invest in additional funds and resources in our high-poverty schools to support good schools for all children:** We must ensure that all schools supported by public dollars are accountable and good choices for Pennsylvania's students. We can hold our struggling schools accountable and support them at the same time.

Most of the high-performing countries on the PISA pour additional funding and resources into schools with high-poverty concentrations. By placing the responsibility for school funding primarily on the local school districts, Pennsylvania exacerbates the lack of educational funding available in low-income communities<sup>30</sup> We must invest funds and resources in our high-poverty schools.

The challenges faced by Pennsylvania's high-poverty schools are part of a larger national problem. Our continued failure to address to the impact of concentrated poverty will likely limit the impact of any education reform efforts.

At a time marked by scarce resources and results-driven reform, we need to make smart investments in proven programs that work for all of our children. The worst thing that we could do is accept socioeconomic inequality as the new normal in education and in our children's lives.





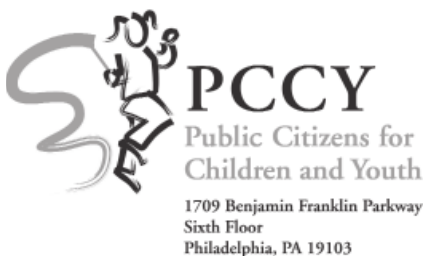
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About PCCY: Founded in 1980, Public Citizens for Children and Youth (PCCY) serves as the region's leading child advocacy organization and works to improve the lives and life chances of its children. Through thoughtful and informed advocacy, community education, targeted service projects and budget analysis, PCCY seeks to watch out and speak out for children and families.



PCCY undertakes specific and focused projects in areas affecting the healthy growth and development of children, including child care, public education, child health, juvenile justice and child welfare.

Project Staff: Shelly D. Yanoff, Executive Director; Taimarie Adams, Co-Director, Education Policy; Steven E. Fynes, Design and Layout.

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