

# Early childhood education pays off: 21st-century skills must start to be instilled in the first years of school

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Imagine two children meeting for the first time in kindergarten. One comes out of a high-quality preschool and from an affluent home where tools such as iPads have been a part of daily life. The other comes from a family that couldn't afford quality child care or prekindergarten, let alone the latest technological toys.

Would those two children start school on the same footing, ready to learn at grade level or above from Day One? Obviously not.

More importantly, would both of those children emerge from high school equipped with the mental agility and technological capabilities needed to progress through higher education or job training and into the workforce?

Sadly, the answer is probably no. The gap between children starting school who are ready to learn and those who are not has always been wide. Just ask any kindergarten teacher about the educational disparities they see among their students, from the child who doesn't know the alphabet to the one who's reading like a third-grader.

With the ubiquitous nature of technology and its emergence as an essential element in all aspects of modern-day life, the gap is about to widen into a chasm.

Too few children have access to quality early childhood education. Quality is a function, in part, of teachers who are well-trained in child development. Attracting top talent to the profession requires competitive salaries, but today's pay scales are inadequate.

Many dedicated people make the sacrifice, but many others -- well equipped to guide children through these critical learning years and help introduce them to the power of technology -- take their talents to higher-paying fields.

As a consequence, not only children and families suffer, but so do businesses and our economy. Through age 5, children's brains develop 90 percent of their capabilities for communication, critical thinking, problem-solving and teamwork. These are the skills that employers need.

We stand at the intersection of ever-evolving devices and an onslaught of data. Even today, our workforce is unprepared, but as the early-learning gap widens, the workforce will grow bone dry of the skills needed to leverage technology to its fullest potential.

Research shows that children who lack literacy and language skills by third grade will not catch up. Children who enjoy quality early childhood education are likelier to graduate from high school, pursue higher education and earn higher lifetime salaries and benefits. They're also less likely to abuse alcohol and drugs, commit crimes or rely on public assistance. As a result, long-term savings on crime, welfare and remedial education amount to \$16 for every \$1 invested in early childhood education.

An \$8,000 investment at birth returns nearly \$800,000 over a child's life. Even in the short term, \$1 invested in quality early childhood education returns \$2.16 to the community in employment and consumer spending.

Assuring quality early learning for every child requires a tremendous commitment, but it's an imperative. No matter how big any business gets or how efficient it is in leveraging technology and optimizing processes, it still needs people who can deal with complicated issues and solve complicated problems. The simple tasks are getting automated. That's how humankind has evolved. Increasingly, the jobs that are available require complex skills that can only be instilled at a young age.

Pennsylvania is fortunate to have a state system of standards that helps many early education programs meet meaningful measures of quality in teaching and facilities. Many families qualify for subsidies, but these programs don't reach nearly as many as they should.

For instance, in Allegheny County 54 percent of children under age 5 live in families considered economically at risk -- up to 300 percent of poverty level -- but only 39 percent have access to quality early childhood programs. The gap is even wider outside Allegheny County -- 65 percent at risk but only 36 percent with access in Beaver County and 56 percent at risk but only 30 percent with access in Westmoreland County.

Even in times of economic hardship, Pennsylvania should support early childhood education and plan for growth. This is the time to close gaps in early learning to save money in the long term and assure businesses a steady stream of employees ready to meet the increasingly complex demands of the 21st-century workplace.

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