



**MISSION: READINESS**  
MILITARY LEADERS FOR KIDS



## THE MILITARY GETS IT

High-quality pre-kindergarten is crucial for youth readiness and a centerpiece of the military's child development system.





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## Who We Are



Shown in the photo are (left to right): Major General David M. Edgington, US Air Force (Ret.), Admiral James M. Loy, US Coast Guard (Ret.) and General Richard E. Hawley, US Air Force (Ret.) on the deck of the *Battleship Wisconsin*, in Norfolk, VA. February 2012 at a news conference supporting high-quality early education.

MISSION: READINESS is the nonprofit, nonpartisan national security organization of more than 450 retired generals, admirals, and other senior retired military leaders who work to ensure continued American security and prosperity into the 21st century by calling for smart investments in the upcoming generation of American children. It operates under the umbrella of the nonprofit Council for a Strong America.

## Acknowledgments

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## Summary

Our current military involves complex technology and systems unimaginable in past generations. High-quality pre-kindergarten is central to one of those systems: the military's child development system. Parents in the military need to be sure their children are receiving caring, high-quality care and education for those parents to be able to do their jobs of protecting our country.

In the future, the military will increasingly have to compete for well-educated individuals to run ever more sophisticated systems. If America does not produce enough young people who can meet the needs of both the private sector and the military, our national security will suffer. So high-quality pre-kindergarten for all children is also essential for the future of our military.

It is therefore troubling that poor educational achievement is a leading reason why an estimated 72 percent of all young Pennsylvanians aged 17 to 24 are unable to join the military. In Pennsylvania, 16 percent of young people do not graduate from high school on time, and 22 percent of those who do graduate and seek to enlist in the Army cannot join because of low scores on the military's entrance exam.

The retired admirals and generals of Mission: Readiness recognize that there are many factors impacting educational achievement. But there is one factor that has been proven to have a crucial impact on children from all backgrounds, and that is high-quality pre-kindergarten. Data from across New Jersey confirm that pre-kindergarten can be brought to scale with strong and lasting results.

By the time they were beyond third grade, children who participated in New Jersey's high-quality program for two years were three-quarters of an academic year ahead in math and two-thirds of an academic year ahead in literacy compared to those who did not. Numerous studies of voluntary high-quality programs in states, including Pennsylvania, as well as Michigan, Arkansas, West Virginia and New Mexico, have also shown impressive gains in literacy and reductions in the number of children needing special education services or being held back in school.



Photo Credit: U.S. Army

These new and emerging research results are bolstered by long-term studies of participants from high-quality programs in Michigan and Illinois, which found they were more likely to graduate from high school and less likely to be involved in criminal activity in later years.

Unfortunately, access to high quality pre-kindergarten and other early learning programs is limited in Pennsylvania. Despite recent state funding advances, seventy percent - or more than 200,000 - three- and four-year-olds in the Commonwealth of Pennsylvania lack access to high-quality pre-kindergarten.

Recognizing the tremendous benefits of early education, the Department of Defense has developed and invested in exemplary pre-kindergarten programs. These high-quality pre-k programs emphasize school readiness and are part of a larger comprehensive early care and education system that all active-duty military families have voluntary access to. These pre-k and early learning programs are viewed as an essential part of military family readiness, so the Department of Defense has committed resources to ongoing quality enhancement and expansion of the system to better ensure universal access and positive outcomes for military children.

The children of military families who live on installations have access to pre-k and other early learning services on-base through military child development centers or schools. All military child development centers are documented as high-quality programs, having accreditation by the National Association for the Education of Young Children. The military subsidizes the cost of pre-k, with fees for on-base programs on a sliding scale, depending on family income.



Photo Credit from left: U.S. Marines, Sgt. David J. Hercher; U.S. Navy.

However, not all children of active-duty military families can be served by these on-base high-quality military programs, as demand for these services often exceeds the supply, and because many of these families, particularly Guard and Reserve families, do not live on or near bases. This is the case with most military children in Pennsylvania, as 70 percent are from Guard or Reserve families.

These military families access high-quality pre-k and other early learning services for their children through civilian community-based providers. They receive a stipend or “fee assistance” to cover a portion of their costs. The military requires that this stipend be spent on a high-quality program, as demonstrated by state licensure and inspection, as well as a credential of quality - often a national accreditation. The military can waive this requirement if a program is

determined to be high quality by a state’s quality rating system like the Keystone Stars program (Star 3 or 4 program).

Overall, the military child development system, including on-base and off-base programs, has been recognized as a model for the nation, both in terms of quality and access.

High quality pre-kindergarten programs can help children succeed in school and avoid criminal involvement, opening the doors to college, careers and military service, if they choose to serve. Increasing access to high-quality pre-kindergarten is a key investment in the readiness of our next generation and our future national security. Pennsylvania policy makers should follow the military’s lead and expand access to high-quality pre-k to all of the Commonwealth’s children.

# The Military Gets It

## Access to High-Quality Pre-Kindergarten is Crucial For Military Readiness Now and in the Future

When a rehabilitation specialist is helping a recently injured soldier back from Afghanistan, or a helicopter pilot is risking her life overseas, they need to know that their children are all right. Central to that pact the military makes with its personnel is making sure their children have access to safe, caring, effective education in the earliest years. Without that assurance our military parents will not be able to do their jobs protecting America.

That speaks to mission readiness not only now, but in the future. We will need well-prepared young people who are ready, if they choose to serve, to take up the job of keeping America safe. Sadly, far too many young Americans are not ready.

### 71 Percent of Young Americans Are Not Eligible to Serve in the Military

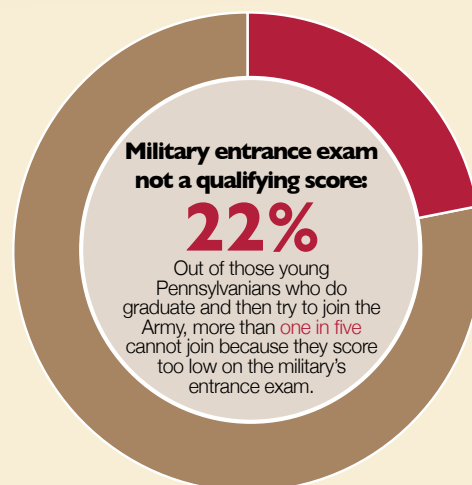
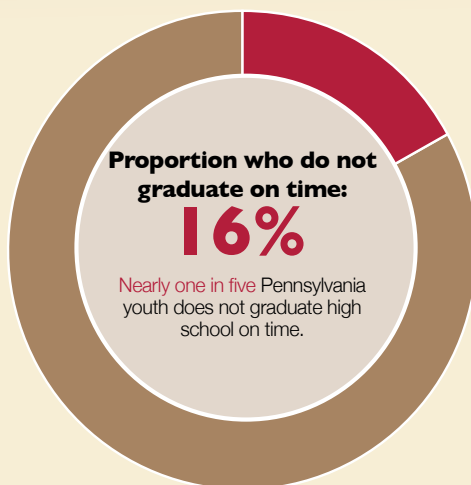
Military service is out of reach for an estimated 71 percent of all young Americans between the ages of 17 and 24; in Pennsylvania, the figure is 72 percent.<sup>1</sup> There are three primary reasons: they are too poorly educated, they have serious criminal records, or they are too overweight. Nationwide, 20 percent of young people do not graduate on time from high school; in Pennsylvania, 16 percent do not graduate on time.<sup>2</sup> The military rarely takes anyone

without a diploma anymore. Even among young adults who do finish high school, 23 percent who seek to enlist in the Army cannot score highly enough on the military's exam for math, literacy and problem-solving to be allowed to serve. In Pennsylvania, 22 percent do not have an adequate score.<sup>3</sup> One in 10 young adults cannot join because they have at least one prior conviction for a felony or serious misdemeanor.<sup>4</sup> In Pennsylvania, there were 67,659 arrests of juveniles under age 18 in 2011.<sup>5</sup> National surveys conducted for the military and by the Centers for Disease Control and Prevention (CDC) show that nearly one in four young adults is unable to serve because of excess body fat.<sup>6</sup> According to CDC criteria, which are broader than the military's, 41 percent of young adults in Pennsylvania are overweight or obese.<sup>7</sup> The limited pool of young people qualified for military service jeopardizes our military readiness and threatens future national security.

### High-Quality Early Childhood Education Programs Work: Better Outcomes for Children

While trends in education reform come and go, research shows that we have a solution that is consistently proven over time. High-quality early childhood education can

## High School Graduation and Military Entrance Exam Qualifying Rates Among Young Pennsylvanians



Source: US Department of Education, 2014

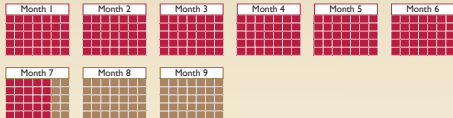
Source: The Education Trust, 2010



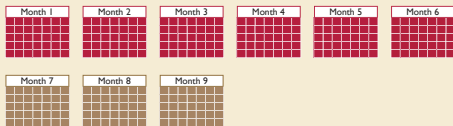
## Strong New Results from New Jersey

By the time pre-K children in New Jersey were past third grade, they were:

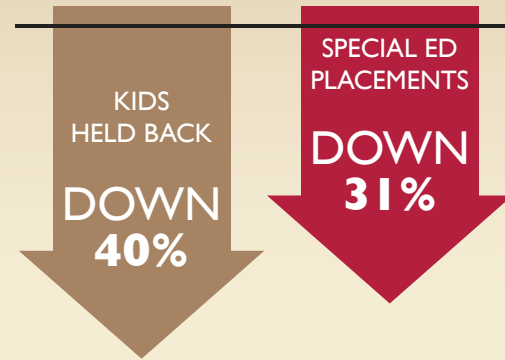
**Three-fourths of a Year** ahead in **math**.



**Two-thirds of a Year** ahead in **literacy**.



New Jersey pre-K reduces costly **grade retention** and **special education**.



Source: National Institute for Early Education Research, 2013

prepare children to start school ready to learn. It can improve student performance, boost high school graduation rates, deter youth from crime, and, by helping children develop healthy early exercise and good nutrition habits, even help reduce childhood obesity rates.

### Findings from New Jersey Prove Early Childhood Education Can Be Brought to Scale with Strong Results

By 4th or 5th grade, children who attended New Jersey's preschool program for two years were three-quarters of an academic year ahead in math and two-thirds of an academic year ahead in literacy compared to their peers who did not attend. Children who attended the preschools were also 40 percent less likely to be held back in school and 31 percent less likely to need special education services. There was no "fade out" of program effects: children who attended the New Jersey program significantly outperformed similar children who did not attend in kindergarten, in second grade, and now in 4th and 5th grades. The study is ongoing, so future impacts will also be tracked.<sup>8</sup>

Long-term studies of model programs had already shown that early education can transform the lives of disadvantaged children. For example, studies of the Perry Preschool program that followed the participants over 40 years have found they were 44 percent more likely to graduate from high school, while those who did not attend were five times more likely to be chronic criminal offenders by age 27.<sup>9</sup>

The Chicago Child-Parent Centers took this approach to scale, having served over 100,000 children, with long-term results: children left out of the program were 70 percent more likely to be arrested for a violent crime by age 18 and 24 percent more likely to have been incarcerated as young adults than similar children not served. Participants, on the other hand, were 40 percent less likely to be placed in special education and, by age 20, were 29 percent more likely to have graduated from high school.<sup>10</sup>

The researchers studying the New Jersey preschool program state that their results are on par with initial results for the Chicago Child-Parent Centers, so they expect, as the New Jersey children become adults, to see strong high school graduation and crime prevention results, as well as economic benefits exceeding program costs. Meanwhile, the New Jersey program is reducing the substantial costs associated with special education and children repeating a grade.<sup>11</sup>

### Studies in Other States and Cities

Studies of high-quality early childhood education programs in other states, including Pennsylvania, and localities also report benefits such as impressive gains on literacy, and reductions in the numbers of children needing special education services or being held back in school.

**Pennsylvania:** A recent evaluation of Pennsylvania's Pre-K Counts (PKC) program showed especially strong results for children who might otherwise be in special education during their K-12 years. For example, 21 percent of children were classified as developmentally delayed and qualified for early intervention services as they began PKC. By the end of PKC, only eight percent of children were classified as delayed. Similarly, the portion of three-year-old children at risk for problematic social and self-control behavior fell from 21.5 percent at the start of the program to 3.6 percent at the end of PKC.<sup>12</sup>

**Michigan:** While most state pre-K evaluations do not yet have results on children's school performance beyond the early elementary school years, an evaluation of Michigan's Great Start Readiness Program (GSRP) shows longer-term results. GSRP participation had a dramatic impact on reducing grade repetition: children who attended were 51 percent less likely to be held back a grade by 8th grade when compared to a similar group of children who did not attend the program.<sup>13</sup> And children who attended the GSRP were 35 percent more likely to graduate from high school on time than a comparison group of children not in the program.<sup>14</sup>

**Arkansas:** An evaluation of the Arkansas Better Chance program found that children who attended pre-K developed an extra four months' worth of vocabulary knowledge, beyond the gains that would be expected as a child naturally ages. Pre-K attendance also resulted in 23 percent more correct answers on a literacy test and improved math scores. Researchers are following children for five years to evaluate the longer-term effects of the program.<sup>15</sup>

**West Virginia:** Over half of West Virginia's four-year-olds are enrolled in the voluntary West Virginia Universal Pre-K System. An evaluation of the program found that children made an extra three months of progress on their vocabulary development, answered 23 percent more items correctly on an early literacy test, and increased their average math scores, when compared to the progress that would normally be expected over the course of a year.<sup>16</sup>

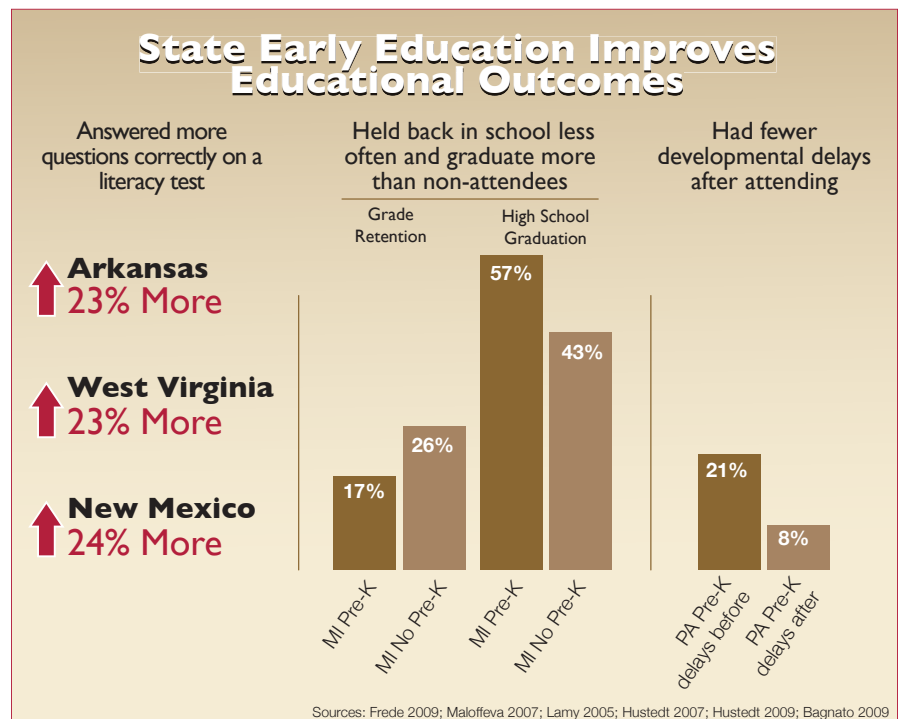
**New Mexico:** New Mexico launched a pre-K program in 2005 that is already seeing strong results. Across the first three years of the initiative, participating children answered an average of 24 percent more questions correctly on a literacy test. Significant

impacts were found in math for all three years and in vocabulary for two of the three initial years.<sup>17</sup> Promising local studies show that very high quality programs produce even larger effects. A recent study of a very high-quality, universal pre-kindergarten program in the Boston Public Schools found that children who participated in the program had improvements in mathematics, literacy and language skills equivalent to seven months of additional learning by the end of the program, compared to children who did not attend. Both disadvantaged children and their more advantaged peers benefited from the program.<sup>18</sup>

A study of disadvantaged children in the **San Francisco Bay Area** who received high-quality pre-kindergarten for two years showed that the children actually outperformed more well-off children in reading by second grade: 61 percent of those attending the program for two years were proficient in reading, compared to 55 percent of students who did not attend the program (most of whom attended private preschool programs).<sup>19</sup>

## Reducing Obesity

There is also emerging evidence that teaching young children healthier eating and exercise habits can contribute to reversing the epidemic of childhood obesity. A randomized controlled study in Chicago demonstrated that working with preschool-aged children and their parents can reduce weight gain: children not in the





**DECLINES IN CHILDHOOD OBESITY:** Data in Philadelphia, Mississippi and New York City indicate that innovative preschool efforts to improve early childhood nutrition and physical activity and to educate parents in each locality may be part of the solution to childhood obesity.

LOCALITY	CHILDHOOD OBESITY MEASURED	DECLINE IN OBESITY
<b>Philadelphia</b>	Over a 4-year period, <b>K-12</b> children, overall obesity measured	<b>5% decline</b>
<b>Mississippi</b>	Over a 6-year period, <b>K-5</b> children, overweight & obesity measured	<b>13% decline</b>
<b>New York City</b>	Over a 4-year period, <b>5- to 6-year olds</b> , obesity measured for all public-school children	
Black		<b>7% decline</b>
Hispanic		<b>6% decline</b>
White		<b>24% decline</b>

Source(s): Pennsylvania School District, 2012; Journal of the Mississippi State Medical Association, 2012; Centers for Disease Control and Prevention, 2012; New York City of Health and Mental Hygiene, 2012; Robert Wood Johnson Foundation, 2012.

program gained 16 percent more weight over the next two years than those receiving the program.<sup>20</sup>

In **New York City, Philadelphia** and **Mississippi**, schools improved the nutritional quality of the food served to children, increased their physical activity, and coached their parents on children's healthy nutrition and physical activity needs. As a result of these efforts, along with other broader reforms, rates of childhood obesity dropped 5 to 24 percent.<sup>21</sup>

**In sum, research demonstrates that high-quality early learning programs can help solve the serious problems—poor educational achievement, criminal behavior and obesity—that cause the majority of our young people to be ineligible for military service.** Solving these problems will have additional positive social and economic consequences because succeeding in school and avoiding criminal involvement also opens the doors to success in college and careers, whether young people choose to serve in the military or not.

### **Access to High-quality Pre-kindergarten in Pennsylvania Remains Problematic**

Pennsylvania has four state-funded preschool programs. The Kindergarten for Four-Year-Olds (K4) and School Based Pre-K (SBPK) programs both target four-year-olds. Services are provided in public schools and programs are partially funded through the state's regular school subsidy formula. The Head Start Supplemental Assistance Program (HSSAP) was established in 2004 to provide extended-day services for children in Head Start and to provide additional Head

Start slots. Pennsylvania has also provided preschool services through the Education Accountability Block Grant (EABG) since 2004. This funding targets children who are two years from kindergarten eligibility and who meet other, district-determined eligibility requirements. The funds are flexible and districts determine how to spend them (e.g., pre-kindergarten, kindergarten, etc.). The Pennsylvania Pre-K Counts Program was established in 2007 to serve children who are two years from kindergarten eligibility and who come from families with incomes at or below 300 percent of the federal poverty level. Funds are distributed to school districts and community providers (Head Start, nursery schools and high-quality child care centers) through a competitive award process.<sup>22</sup>

Nationwide, access to public preschool has expanded over the past decade. However, 2013 marked the first year that enrollment dropped. Further, even with the expansion, only nine states served more than half of their four-year-olds in 2013, while ten states served 10 percent or fewer, and another ten states had no public preschool program at all. Access to public preschool is clearly limited in most states.<sup>23</sup>

Access to high quality pre-k and other early learning programs is limited in Pennsylvania, creating lost opportunities for children. Despite recent state funding advances, seventy percent - or more than 200,000 - three- and four-year-olds in the Commonwealth of Pennsylvania lack access to high-quality pre-kindergarten.<sup>24</sup>



## The Military's Investment in Pre-Kindergarten

Recognizing the tremendous benefits of early education, the military has developed and invested in exemplary pre-kindergarten programs. For example, the Army's Strong Beginnings pre-kindergarten program prepares children for kindergarten with a curriculum that focuses on cognitive, social, emotional and physical development. The program has high standards that meet or exceed state standards, and is half-day.<sup>25</sup>

The Department of Defense's Domestic Dependent Elementary and Secondary Schools (DDESS) offer a high-quality, part-day pre-kindergarten program that is open to children whose families live on bases in the U.S. The Department of Defense Dependents Schools (DoDDS) offer the Sure Start pre-kindergarten program to children whose families serve in Europe and the Pacific. The military also offers preschool services to military children with disabilities, through both the DDESS and DoDDS programs.<sup>26</sup>

## Universal Access to High-Quality Pre-K: The Military's Model System of Early Care and Education

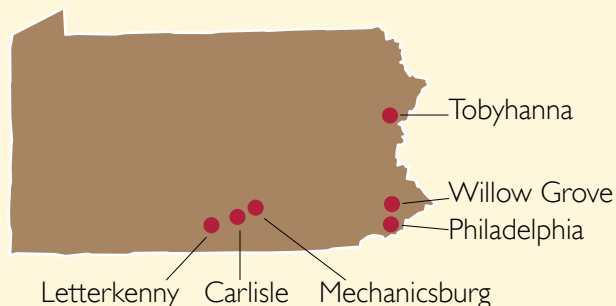
The military has a long history of involvement in early care and education.<sup>27</sup> To better help service men and women function optimally in their jobs protecting the nation, the Department of Defense has ensured that their children are being cared for in safe, nurturing settings that facilitate their development.

Most of the military's pre-kindergarten programs in the U. S. are offered through the Military Child Development Program, which has been cited by experts as a model of high-quality early care and education.<sup>28</sup> Voluntary access to early education is universal, open to any active duty military family who chooses it for their child (although demand often exceeds supply). Programs are comprehensive, focusing on children's cognitive, physical, social, and emotional development. Pre-k programs emphasize school readiness.<sup>29</sup>

Military children participate in early education programs in a variety of settings:

- *Child development centers* on military installations;
- *Family child care homes*, primarily in government housing, often with military spouses providing care;
- *Civilian communities*, including both centers and family child care homes, serving primarily children of Guard

### The Department of Defense's Child Development Centers in Pennsylvania



and Reserve members who do not live near installations, as well as families who cannot access on-base programs due to lack of capacity.<sup>30</sup>

Military families receive support, both practical and financial, in accessing pre-kindergarten and other early care and education for their children.<sup>31</sup> Parents who live on base access care through resource and referral offices on the installation. For parents who do not live on base, the military has partnered with Child Care Aware of America, a national resource and referral agency that helps families locate local early learning programs. The military also subsidizes the cost of early learning programs. Fees for on-base programs are on a sliding scale, determined by family income. On average, subsidies cover 64 percent of the cost. Families using programs in civilian communities receive a stipend to cover a portion of their costs as well. Overall, on average, the military matches parent fees dollar for dollar, making a substantial financial commitment to assisting families with the costs of early education for their children. For fiscal year 2014, the Pentagon's commitment to child and youth programs amounted to \$1.3 billion.

The Military Child Development Program is renowned for its high quality, attained through its standards and strict monitoring for compliance.<sup>32</sup> Child Care Aware of America ranks military child development centers as number one in the nation, ahead of all 50 states and the District of Columbia. In comparison, Pennsylvania ranks 22nd in the nation for its centers.<sup>33</sup> Virtually all military centers are accredited by the National Association for the Education of Young Children (NAEYC), compared to 10 percent of centers nationwide and seven percent of centers in Pennsylvania.<sup>34</sup> (NAEYC is a national nonprofit that sets



Photo Credit: U.S. Army

criteria for quality in early childhood programs. Programs must meet rigorous standards to receive accreditation.)

The Department of Defense also mandates quality in civilian programs receiving military fee assistance. They require civilian programs to demonstrate that they are high quality through:

- state licensure,
- having completed a state licensing inspection in the last 12 months,
- and attaining a high-quality credential or accreditation – such as NAEYC accreditation or an accepted state credential of quality.<sup>35</sup>

Through a waiver process, the U.S. Army has acknowledged certain state quality rating systems as appropriate indicators of quality.<sup>36</sup>

## Conclusion

America's military is the most professional and technologically advanced in the world. But sophisticated weapons and the multiple systems that comprise an effective military require highly educated personnel.

High-quality pre-kindergarten plays a critical role in ensuring that our next generation is academically fit and citizen ready. Pennsylvania policymakers should follow the military's lead and ensure that all of Pennsylvania's children have access to high-quality pre-kindergarten programs.

This is not just an essential investment in a 21st century education system. It is an essential investment in our national security.



## Endnotes

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