



# MISSION: READINESS

## MILITARY LEADERS FOR KIDS

# Ensuring Our National Security

## High-Quality Early Education And Other School Reforms in Maine Can Help Build a Strong Country

**MISSION: READINESS** is the national security organization of more than 200 retired generals, admirals and other senior military leaders who support policies and investments that will help young Americans succeed in school and later in life, thus enabling more young adults to join the military if they choose to do so.

**SUMMARY:** Maine has an opportunity to make tremendous strides. More than one in five young people does not graduate from high school on time.<sup>1</sup> Even among the state's high school graduates, almost one in five of those seeking to enlist in the Army cannot join because of low scores on the military's basic exam for math, literacy and problem-solving, according to a new analysis by The Education Trust.<sup>2</sup>

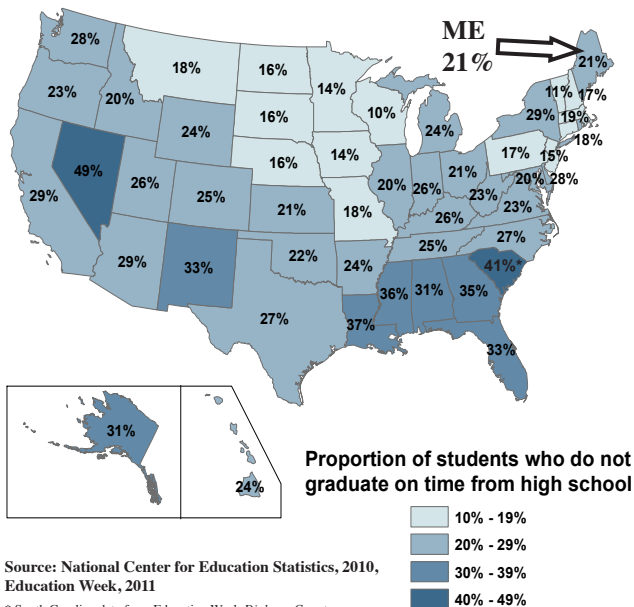
Poor education outcomes are probably the top reason why an estimated 75 percent of all young Americans are unable to join the military, followed by other disqualifying factors like being overweight or having a criminal record.<sup>3</sup>

These alarming figures raise a critical question: Will our national education crisis soon become a national security crisis? While the military services are currently meeting their recruitment goals due in part to the poor economy, Defense Department officials have expressed concerns to Congress that such factors as inadequate education, obesity, poor physical fitness and involvement in crime have severely limited the pool of young adults qualified for military service and ultimately could pose a threat to our national security.<sup>4</sup>

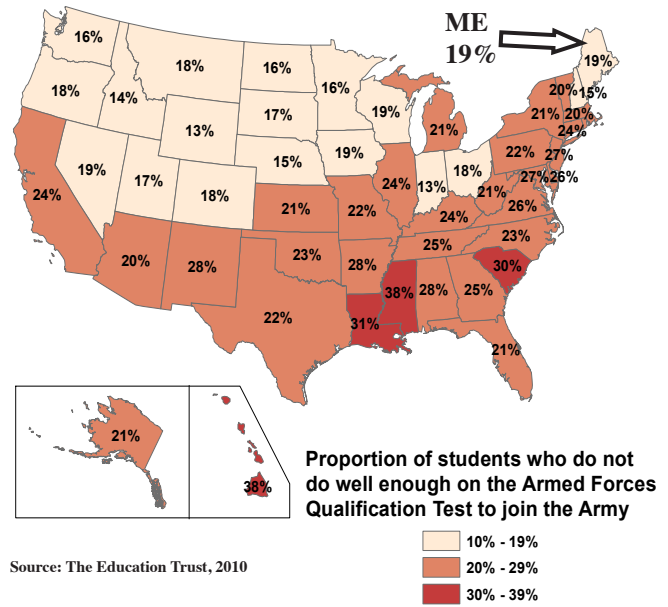
**Maine has a tremendous opportunity to help its children and the nation's security. We now know what works to help more children do well in school and in life.** Long-term studies of high-quality early childhood education programs show that at-risk children can benefit greatly. For example, participants in Michigan's Perry Preschool Project were 44 percent more likely to graduate high school than nonparticipants.<sup>5</sup> High-quality state pre-kindergarten programs are also beginning to show that they can increase literacy skills and reduce the number of children held back in school.<sup>6</sup>

### Too Uneducated to Join

**PROPORTION WHO DO NOT GRADUATE:** Nationwide, one in four young Americans does not graduate high school on time. In some states it is even worse:



**PROPORTION WHO SCORE TOO LOW:** Out of those who do graduate and then try to join the Army, nearly one in four cannot join because they score too low on the military's entrance exam:





## High-Quality Early Childhood Education Works

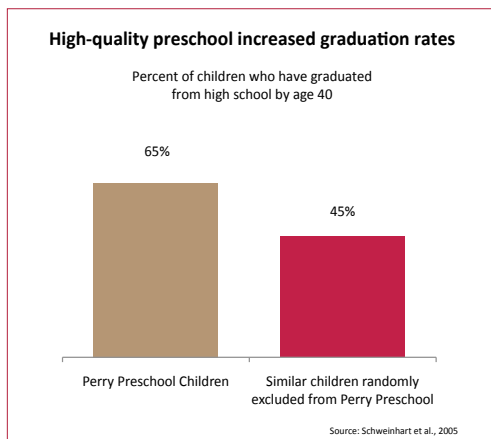
There are several approaches that education experts say can help improve our schools. We know, for example, that better and more current data on what is happening in our schools, more sophisticated analysis of that data, and more accountability for results in the classrooms are essential building blocks for success in schools, just as they have been in police departments, America’s top companies and certainly in the military.<sup>7</sup>

When we speak of school reform, we should be speaking of “early education to graduation” reform, not just K-12 reform. Research clearly shows that getting kids off to the right start in life can provide the crucial foundation for helping disadvantaged kids in particular to succeed in school and later in life.<sup>8</sup> While other reforms are also necessary, this report focuses on the impressive results that can be achieved with high-quality early childhood education. For example:

The **High/Scope Perry Preschool Project** in Ypsilanti, Michigan, randomly assigned disadvantaged 3- and 4-year-olds to a high-quality pre-kindergarten program or to a control group with no intervention, and followed them. The results:

- By age 14, almost half of the disadvantaged children in the project were performing at a basic achievement level or better in school compared to just 15 percent of the children in the control group.
- The children who participated in the project were 44 percent more likely to graduate from high school.
- By age 27, those who did *not* attend the Perry Preschool were five times more likely to have been chronic criminal offenders than the children who participated.
- By age 40, those who attended the Perry Preschool were earning more on average and were, for example, a third more likely to have a car than those who did not attend.<sup>9</sup>

The **Abecedarian** home visiting and preschool program randomly assigned disadvantaged children in North Carolina,



**The Modern Military Needs Well-Educated Recruits**

starting in infancy, to a high-quality early childhood education program or to no intervention. The results:

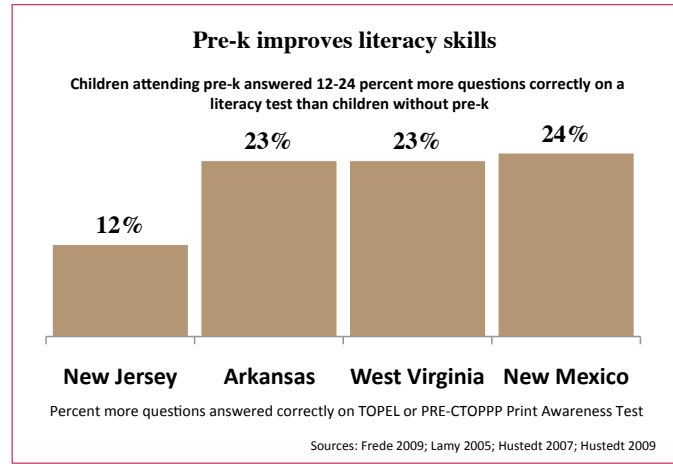
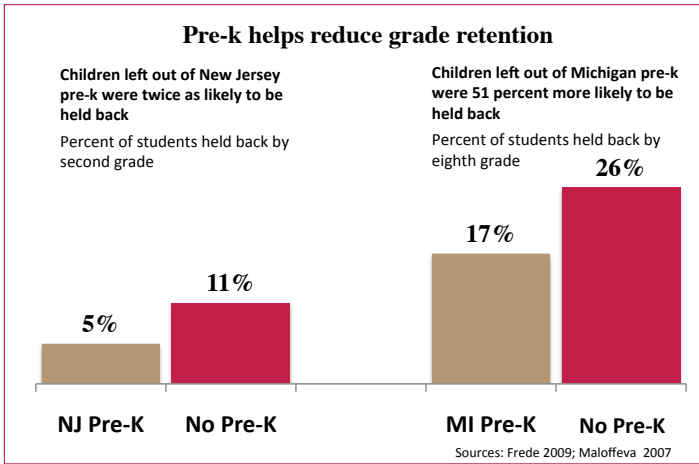
- The children *not* in Abecedarian were 75 percent more likely to be held back in school.
- The children served by Abecedarian were 2.5 times more likely to be attending a 4-year college at age 21.<sup>10</sup>

The **Child-Parent Centers** pre-kindergarten programs in Chicago have served over 100,000 at-risk children with long-term results:

- By age 18, children left out of the program were 70 percent more likely than participants to have been arrested for a violent crime (and, if convicted, the individual would usually not be able to serve in the military).
- By age 20, the children left out were almost twice as likely to have been placed in foster care.
- By age 20, participants were 29 percent more likely to have graduated from high school.<sup>11</sup>

## Other Military Disqualifiers

An estimated 75 percent of young Americans nationwide are unable to join the military because of low educational achievement, problems with their weight, involvement in crime, or other medical and additional disqualifiers. For example, approximately four in ten young adults in Maine are overweight or obese. To be within a healthy weight range with a Body Mass Index under 25, these young adults would have to collectively lose almost 1.1 million pounds – the equivalent of 9 Abrams tanks.<sup>24</sup> Improving the quality of food served and sold in the schools and increasing the availability of active physical education can help young people to maintain healthier weight levels.



**State pre-kindergarten programs** now have evaluations proving that – if they are of high enough quality – they can deliver solid results:

- Children who did not attend high-quality pre-kindergarten in New Jersey were twice as likely to be held back by second grade.<sup>12</sup> Michigan’s evaluation showed that the children who did not participate in the state’s program were 51 percent more likely to be held back in school.<sup>13</sup>
- In Oklahoma, New Jersey, Arkansas, West Virginia and New Mexico, studies show clear gains in literacy if the children attended pre-kindergarten programs, and Pennsylvania has shown impressive gains in reducing the number of children needing special education.<sup>14</sup>

Combined, the longer-term studies and the more recent state studies of high-quality programs provide solid evidence that early childhood education programs can build a secure foundation upon which to construct meaningful school reform in America.

## Early Education in Maine

Maine’s state Public Preschool Program began in 1983 and in 2009-10 it served over 3,600 children at a cost of just under \$14 million. Most of the children are served through school-based centers.<sup>15</sup> While the preschool program meets all the teacher-quality benchmarks of the respected National Institute

for Early Education Research (NIEER), it falls short on some of NIEER’s other benchmarks such as recommended staff-to-child ratios and meals/snacks.<sup>16</sup> A well-designed evaluation would be helpful for the state to determine more accurately how the program is doing and where improvements are needed to realize its full potential to help Maine’s children become productive adults.

The federally-funded Head Start program is reaching 3,700 Maine children at a cost of \$28.5 million and another 2,600 children are receiving child care subsidies through \$17 million in state and federal funding for the Child Care and Development Block Grant (CCDBG).<sup>17</sup>

While Maine is facing severe budget constraints, early education is one area where, along with federal help, the state should do all it can to expand and improve services, not cut them.

## Savings from Early Education

The costs of failure can be very high. For example, each child who grows up to drop out, use drugs and become a career criminal costs society, on average, \$2.5 million.<sup>18</sup> So what works to help disadvantaged children succeed can produce substantial savings:

### Net Savings Per Student Over Their Lifetime from Early Education Investments

High/Scope Perry Preschool	\$244,812 <sup>19</sup>
Chicago Child-Parent Centers	\$92,220 <sup>20</sup>

As Nobel prize-winning economist James Heckman has explained his strong call for high-quality early childhood education, “Make no mistake, reducing spending in some areas is necessary and warranted [to reduce the deficit]. However, when one has dug themselves into a hole, the solution is not to stop digging as much as to start digging the hand and toe holds that facilitate climbing out.”<sup>21</sup>

## The current status of military recruiting

Due to the economic slowdown, military services are meeting their recruitment goals. However, Dr. Curtis Gilroy, Director of Accession Policy in the Office of the Under Secretary of Defense for Personnel and Readiness, has warned that when the economy gains strength, recruitment and retention challenges could return if America does not do a better job now of producing more young men and women qualified for service.<sup>22</sup>



## Conclusion

There are more than 200 retired admirals and generals who are members of MISSION: READINESS.<sup>23</sup> We wish to make clear that investing wisely now in education reform across America – especially improvements in early education – is a necessary investment in our national security. As an essential part of education reform, we support efforts to ensure that states improve and increase access to high-quality early learning, especially for their most disadvantaged children. Without enough skilled men and women available to serve in tomorrow’s armed services, we cannot maintain the strength of our military.

## Endnotes

1 Chapman, C., Laird, J. & KewalRamani, A. (2010). *Trends in high school dropout and completion rates in the United States: 1972-2008 compendium report*. Washington, DC: US Department of Education. Retrieved on February 22, 2011 from <http://nces.ed.gov/pubst2011/2011012.pdf>

2 Theokas, C. (2010). *Shut out of the military: Today's high school education doesn't mean you're ready for today's Army*. Washington, DC: The Education Trust. Retrieved on February 22, 2011 from [http://www.edtrust.org/sites/edtrust.org/files/publications/files/ASVAB\\_4.pdf](http://www.edtrust.org/sites/edtrust.org/files/publications/files/ASVAB_4.pdf). Nationally, 22.6 percent of individuals seeking enlistment did not achieve a qualifying score on the Army's entrance exam. In Maine, 19 percent of individuals seeking enlistment did not achieve a qualifying score on the Army's entrance exam.

3 Gilroy, C. (March 3, 2009). *Prepared statement of Dr. Curtis Gilroy, Director of Accession Policy in the Office of the Under Secretary of Defense for Personnel & Readiness*. Before the House Armed Services Personnel Subcommittee "Recruiting, Retention and End of Strength Overview."

4 Gilroy, C. (March 3, 2009). *Prepared statement of Dr. Curtis Gilroy, Director of Accession Policy in the Office of the Under Secretary of Defense for Personnel & Readiness*. Before the House Armed Services Personnel Subcommittee "Recruiting, Retention and End of Strength Overview."

5 Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool study through age 40*. Ypsilanti, MI: High/Scope Press.

6 To access a selection of state pre-kindergarten evaluations with evidence of effectiveness, see: Fight Crime: Invest in Kids. (2010). *Research shows state pre-k works*. Washington, DC: Fight Crime: Invest in Kids. Retrieved on March 10, 2011 from [www.fightcrime.org](http://www.fightcrime.org)

7 For an example of how to implement a better data collection, analysis and accountability system and the possible results, see: Tucker, B. (2010). *Putting data into practice: Lessons from New York City*. Washington, DC: Education Sector.

8 Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool study through age 40*. Ypsilanti, MI: High/Scope Press; Reynolds, A. J., Temple, J. A., Ou, S.R., Arteaga, I.A., & White, B.A.B. (2011). School-based early childhood education and age-28 well-being: Effects by timing, dosage, and subgroups. *Science*, DOI:10.1126/science.1203618. Published June 9, 2011 online at <http://www.sciencemag.org/content/early/2011/06/08/science.1203618>; Campbell, F.A., Ramey, C.T., Pungello, E., Sparling, J., & Miller-Johnson, S. (2002). Early childhood education: Young adult outcomes from the Abecedarian Project. *Applied Developmental Science*, 6(1), 42-57.

9 Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). *Significant benefits: The High/Scope Perry Pre-kindergarten study through age 27*. Ypsilanti, MI: High/Scope Press; Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool study through age 40*. Ypsilanti, MI: High/Scope Press.

10 Campbell, F.A., Ramey, C.T., Pungello, E., Sparling, J., & Miller-Johnson, S. (2002). Early childhood education: Young adult outcomes from the Abecedarian Project. *Applied Developmental Science*, 6(1), 42-57.

11 Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest. *Journal of the American Medical Association*, 285(12), 2339-2380; Reynolds, A.J., Temple, J.A., Ou, S.R., Robertson, D.L. Mersky, J.P., Topitzes, J.W., et al. (2007). Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of low-income families. *Archives of Pediatric and Adolescent Medicine*, 161(8), 730-739.

12 Frede, E., Jung, K., Barnett, W.S., & Figueras, A. (2009). *The APPLIES Blossom: Abbott Preschool*

We strongly support state policymakers’ efforts to protect Maine’s Public Preschool Program and federal efforts to fund Head Start and CCDBG. We also support the federal Early Learning Challenge, an effort to encourage states to more aggressively pursue high-quality early learning. Combined, these wise state and federal efforts can produce the strong results America needs.

*Program Longitudinal Effects Study (APPLES): Preliminary Results through 2<sup>nd</sup> Grade / Interim Report*. New Brunswick, NJ: National Institute for Early Education Research.

13 Maloffeva, E., Daniel-Echols, M., & Xiang, Z. (2007). *Findings from the Michigan School Readiness program 6 to 8 follow up study*. Ypsilanti, MI: High/Scope Educational Research Foundation.

14 To access a selection of state pre-kindergarten evaluations with evidence of effectiveness, see Fight Crime: Invest in Kids. (2010). *Research shows state pre-k works*. Washington, DC: Fight Crime: Invest in Kids. Retrieved on March 10, 2011 from [www.fightcrime.org](http://www.fightcrime.org)

15 Janine Blatt, Early Childhood Specialist, Maine Department of Education. Personal communication on March 30, 2011. FY 2010 basic count allocation, state (\$5,857,831) and local (\$6,711,664) share, plus the portion of target funds for K-2 allocation allocated to 4 year olds (\$585,783 state and \$671,166 local). Number of kids from Maine Department of Education spreadsheet, "Public Four Year Old Program Attending Counts" for 2009-2010 school year.

16 Barnett, W.S., Epstein, D.J. Carolan, M.E., Fitzgerald, J., Ackerman, D.J. & Friedman, A.H. (2010). *The state of preschool 2010 – State preschool yearbook*. New Brunswick, NJ: Rutgers University, National Institute for Early Education Research.

17 Head Start Bureau. (2010). *Head Start Program Fact Sheet, Fiscal Year 2009 state data*. Washington, DC: US Department of Health and Human Services. Retrieved on March 15, 2011 from <http://www.acf.hhs.gov/programs/ohs/about/fy2010.html>. Does not include tribal or migrant Head Start programs; Administration for Children and Families, Office of Child Care. (2011). *FFY 2009 CCDF Data Tables, Table 1 and 2009 CCDF State Expenditure Data*. Washington, DC: US Department of Health and Human Services. Retrieved on March 15, 2011 from [http://www.acf.hhs.gov/programs/ccb/data/ccdf\\_data/09ac800\\_preliminary/table1.htm](http://www.acf.hhs.gov/programs/ccb/data/ccdf_data/09ac800_preliminary/table1.htm) and [http://www.acf.hhs.gov/programs/ccb/data/expenditures/09ac696/exp\\_categorical.htm](http://www.acf.hhs.gov/programs/ccb/data/expenditures/09ac696/exp_categorical.htm)

18 Cohen, M.A., & Piquero, A.R. (2008). New evidence on the monetary value of saving a high risk youth. *Journal of Quantitative Criminology*, 25, 25-49.

19 Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool study through age 40*. Ypsilanti, MI: High/Scope Press.

20 Reynolds, A.J., Temple, J.A., White, B.A.B., Ou, S.R., & Robertson, D.L. (2011). Age 26 cost-benefit analysis of the Child-Parent Center early education program. *Child Development*, 82(1), 379-404.

21 Letter from James J. Heckman to the National Commission on Fiscal Responsibility and Budget Reform. (September 2010). Retrieved on December 16, 2010 from: [http://www.heckmanequation.org/system/files/Federal-Commission\\_9-1-2010FINAL%203\\_3\\_.pdf](http://www.heckmanequation.org/system/files/Federal-Commission_9-1-2010FINAL%203_3_.pdf)

22 Personal communication with Dr. Curtis Gilroy, Director, Accession Policy (Military Personnel Policy), US Department of Defense, February 7, 2011.

23 For an up-to-date list, see our website [www.missionreadiness.org/](http://www.missionreadiness.org/)

24 This calculation of the excess pounds 18- to 24-year-old American women and men would have had to lose to be of healthy weight (below a BMI of 25) in each state and nationally was calculated by the CDC’s epidemiologist who processes BRFSS data, Liping Pan, and was provided in a table to MISSION: READINESS in a personal communication, March 18, 2010 and was originally reported in our national *Too Fat to Fight* report. Other findings for this survey can be found at: National Center for Chronic Disease Prevention & Health Promotion. (2011). Prevalence and trends data – Overweight and obesity. *Behavioral Risk Factor and Surveillance System*. Washington, D.C.: U.S. Department of Health and Human Services. Retrieved on August 22, 2011 from <http://apps.nccd.cdc.gov/BRFSS/>. The tank estimate is from: *M1 Abrams main battle tank*. Retrieved on March 29, 2011 from <http://www.globalsecurity.org/military/systems/ground/m1-specs.htm> One tank equals 60 tons, or 120,000 lbs. 1.068 million pounds that must be lost equals approximately 9 tanks.

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