



High-Quality Early Education: Cutting Crime and Saving Minnesota Up to \$300 Million a Year in Education Costs

The law enforcement leaders of FIGHT CRIME: INVEST IN KIDS are determined to see that dangerous criminals are put behind bars. But those on the front lines in the fight against crime know that America's anti-crime arsenal contains no weapons more powerful than proven programs that keep kids from committing crimes in the first place. High-quality early education, including pre-kindergarten programs, helps kids get the right start in life.

Summary

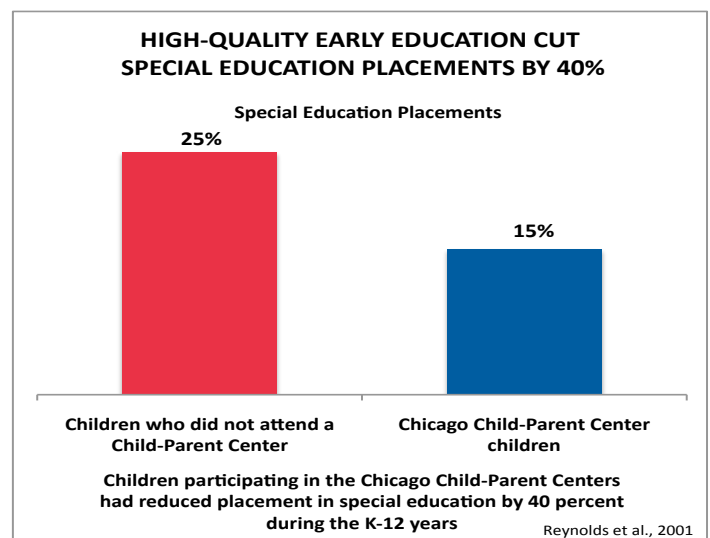
Law enforcement leaders have supported high-quality early education as one of the most cost-effective ways to cut crime and reduce state costs for correctional and other social services over the long term. The research is clear that at-risk children who attend high-quality early education are less likely to commit crimes as adults and more likely to complete high school and become competent adults who can support themselves and their families. Researchers have found that, in the long run, quality early education saves as much as \$16 for every dollar invested.¹

A new analysis by FIGHT CRIME: INVEST IN KIDS shows that quality early education investments, including pre-k, can also produce significant short-term savings for Minnesota's education budget, by reducing special education costs by ten percent.

Minnesota spends over \$1.5 billion a year on special education services, but invested only about \$30 million in state-funded half-day pre-k programs in Fiscal Year 2010. The new analysis shows that if and when a combination of funding from the federal government, the state government and individual families can fund high-quality pre-k for all Minnesota families that would want it, at a projected total cost of \$560 million, Minnesota could realize savings of as much as \$150 million in special education costs alone. Because high-quality pre-k can reduce grade retention and improve the learning environment, the total K-12 education savings could reach \$300 million a year.

Research shows that making quality early education programs available to all children can greatly reduce the need for special education -- with reductions in special education costs ranging from 6 percent to as much as 48 percent, depending on the programs and the students.²

Backed by these numbers, law enforcement leaders are urging state and federal policymakers to support investments that would give more children access to high-quality early education, including more at-risk children. Not only can early education cut crime, but it also can help reduce the costs of K-12 education.

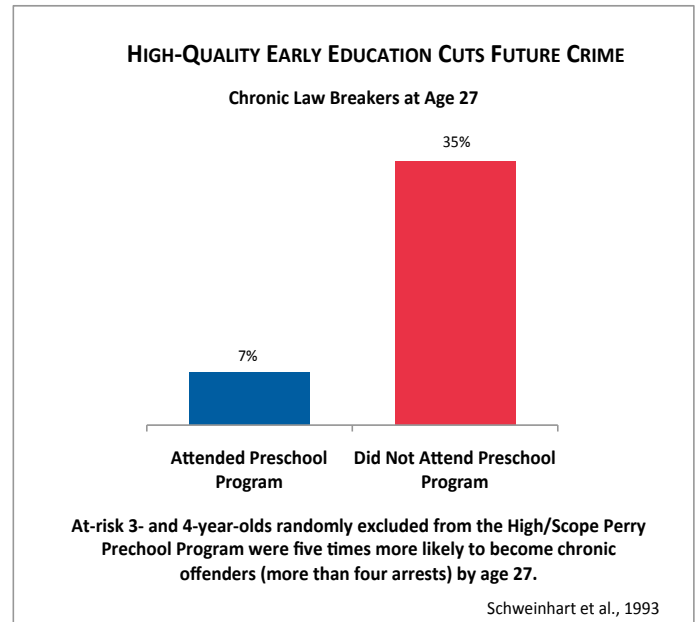


High-quality Early Education Cuts Crime and Reduces the Need for Special Education

Research shows that at-risk kids who attended high-quality early education programs were less likely to commit crimes as adults than similar children who did not. Further, these rigorous studies showed that participating in these programs also produced significant reductions in special education placements during the kindergarten through 12th grade (K-12) years, a significant cost-driver in local, state and federal education costs.

Law enforcement wholeheartedly supports providing children with appropriate special educational services that will help them learn and realize their full potential.

Many children have special educational needs such as a hearing impairment or a learning disability that would not be expected to change as a result of high-quality early education. However, for children with developmental delays or behavior problems, high-quality early education can make a meaningful difference in reducing future needs for special education during the K-12 years. Research shows that many children will not need special educational services if effective interventions are available to them early in life.



Program. By age 27, those who did not attend the program as children were five times more likely to become chronic offenders with five or more arrests compared to those who did attend.⁴ By age 40, those who did not attend the program were more than twice as likely to become career offenders with more than 10 arrests and twice as likely to be arrested for violent crimes.⁵

Reduced Special Education Placements: The study also found significant reductions in children’s placement in special education for children participating in the Perry Preschool Program compared to children who were left out of the program. The Perry study found that

High-Quality Early Education Programs Reduce the Need for Special Education	
High/Scope Perry Preschool Program	43 percent reduction in special education placements.
The Chicago Child-Parent Centers	40 percent reduction in special education placements.
The Abecedarian Project	48 percent reduction in special education placements.
Schweinhart et al., 2005, Reynolds et al., 2001, Campbell & Ramey, 1995.	

High/Scope Perry Preschool Program

The Perry Preschool Program in Ypsilanti, Michigan is a high-quality, one- to two-year-long educational program that is considered a model of early childhood education programs. The High/Scope Educational Research Foundation initiated a study of the program in 1962. Researchers randomly assigned one half of a population of at-risk, low-income 3- and 4-year-olds to attend the program and assigned the other half to a control group not receiving preschool, and then followed these children over time, to age 40.³

Reduced Crime: In 2005, the Foundation released the most recent findings of lifetime effects of the Perry Preschool

participating in early education reduced children’s placement in special education during the K-12 years by 43 percent.⁶

Child-Parent Centers

Chicago’s federally funded Child-Parent Centers (CPC) have served over 100,000 3- and 4-year-olds since 1967. The program is a center-based early intervention program that provides educational services to economically disadvantaged children along with parent coaching.

Reduced Crime: A study comparing 989 children in CPC to 550 similar children who were not in the program showed that children who did not participate were 70 percent more likely to be arrested for a violent crime by age 18.⁷ Children not

Minnesota K-12 education facts

- There are approximately 105,000 special education students enrolled in Minnesota’s public schools, comprising 13 percent of the total student enrollment.¹⁹
- Minnesota spends over \$1.5 billion on special education annually.²⁰
- Minnesota’s elementary and secondary education budget was \$8.4 billion for the 2007-2008 school year.²¹

Minnesota early education facts

- Minnesota served 16 percent of its 4-year-olds with publicly funded pre-k (2%), Head Start (8%), or early childhood special education (6%) during the 2008-2009 school year.
- Minnesota served only 11 percent of its 3-year-olds with publicly funded pre-k, Head Start, or early childhood special education during the 2008-2009 school year.²²
- Minnesota invested \$30.2 million in state funded pre-kindergarten programs for the 2010 fiscal year.²³

receiving CPC were also 24 percent more likely to have been incarcerated as young adults.⁸

Reduced Special Education Placements: CPC also dramatically cut special education placements for children who participated in the program compared to those not in the program. Children participating in the program were 40 percent less likely to be placed in special education during the K-12 years.⁹

Additional Studies – Early Education Cuts Special Education Placements

Other evaluations add to the evidence that early education can help reduce the need for special education and related services.

The Abecedarian Project, a long-term study of poor rural children in North Carolina who participated in the program from infancy through age five, supports these results. Participating in this early care and education program reduced children’s placement in special education by 48 percent compared to children left out of the program.¹⁰

A recent evaluation of Pennsylvania’s Pre-K Counts (PKC) program showed especially strong positive results for children who might otherwise be in special education during their K-12 years. Among the major findings:

- “At the beginning of Pre-K Counts, 21 percent of children ... were classified as developmentally delayed and qualifying for early intervention services from the county. At the end of PKC, only 8 percent of children were still delayed.”
- “At the start of Pre-K Counts, 21.5 percent of 3-year-old children were at-risk for problematic social and

self-control behavior [meaning they scored low on those measures]; at the end of PKC, only 3.6 percent of 3-year-old children were still at-risk.”¹¹

How High-quality Early Education Reduces Special Education Placements While Helping All Kids

Early education can reduce children’s need for special education services when they arrive at school by reducing developmental delays, and by helping children learn social skills and self-control that reduce behavior problems.

Reducing behavior problems is important for improving the classroom environment so all children can learn. Most children receiving special education services do not grow up to become involved in serious crime, just as with children who are not in special education. But whether children have special educational needs or not, learning positive social skills and becoming more capable students can help all kids do better in school and avoid involvement in future crime.

Reducing Special Education Costs Yields Substantial Savings

Reducing the need for special education services not only helps children reach their potential as students, it also produces significant cost savings. National estimates indicate that the average per-student cost of special education is nearly twice (1.9 times) the cost for general education students.¹²

Children who have special needs should have, and schools are legally required to provide, appropriate special educational services to meet their needs. However, providing high-quality early education, including pre-k, can reduce the need for

High-quality Early Education is Essential

Early education programs can provide young children essential academic and social skills that are critical for later success. At-risk children who attend high-quality early education programs are less likely to be held back a grade, less likely to need special education, less likely to commit crimes, and more likely to graduate high school and go on to college.²⁷ The research shows that early education programs must be of high quality to have a real impact on children, especially high-risk children.²⁸

Researchers agree that high-quality early education programs share several common characteristics, including:

- Highly qualified teachers with appropriate compensation;²⁹
- Comprehensive and age-appropriate curricula;³⁰
- Strong family involvement;³¹
- Small staff-to-child ratios to ensure each child gets sufficient attention;³²
- Small, age-appropriate class sizes;³³ and
- Screening and referral services for developmental, health or behavior problems.³⁴

Programs that incorporate these elements are more likely to have positive effects on children that increase school success, cut crime and save money.

special education later, leading to significant cost savings to Minnesota's Department of Education budget.

These cost savings from early education begin to be realized within a child's first year in the primary school system. These savings accrue as fewer young children enter kindergarten in need of special education services, young children with developmental delays catch up to their peers, and children with behavior problems learn to behave more appropriately with their teachers and peers.

Further, the special education cost savings gained from reducing the number of children needing special education placements could be used by Minnesota to more effectively serve other children with special needs.

In these tough budget times, the short-term benefits of early education are important for their cost savings, in addition to their ability to help more children be prepared to succeed in school and reduce the need for special education services and placements.

Saving \$300 Million a Year in Minnesota's Education Budget

Based on economist Clive Belfield's analysis of early education's cost savings to school systems, and based on the evidence from rigorous studies of high-quality early education that followed children into adulthood, FIGHT CRIME: INVEST IN KIDS projects that high-quality early education will cut ten percent off the costs of special education in Minnesota. Cutting ten percent of the over \$1.5 billion dollars spent by the

Minnesota Department of Education could eventually save up to \$150 million a year.¹³

This projected annual savings is based on \$150 million in special education savings alone. If we also include the reductions in grade repetition and the improved learning environment that Belfield also identified as school system savings, those additional savings would roughly double the savings from special education, to total approximately \$300 million.¹⁴

For Minnesota to achieve these savings from reduced school system costs, the combination of funding from the federal government, the state, and individual families would eventually need to increase substantially for pre-k to serve all Minnesota families who would want it for their 4-year-olds. FIGHT CRIME: INVEST IN KIDS projects a total investment of \$560 million to provide high-quality, full-day pre-k for 80 percent of Minnesota's 4-year-olds (a standard approximation of universal voluntary pre-k, recognizing that some families will not participate).¹⁵ For Fiscal Year 2010, Minnesota has invested only \$30.2 million in its state-funded half-day pre-k programs, so additional investments would be needed to eventually reach the total projected \$560 million investment in high-quality, full-day pre-k.¹⁶

Minnesota is likely already realizing part of these special education and other school system savings, since the state provided public pre-k to 2 percent of its 4-year-olds during the 2008 – 2009 school year.¹⁷ While full investment in pre-k for all Minnesota's 4-year-olds is not expected to be achieved

in the near future, such investments would yield meaningful benefits for Minnesota's citizens: If Minnesota, individual families and the federal government were to make high-quality pre-k available to all families who would want it, Minnesota's school systems could capture the full cost savings of \$300 million a year from reduced special education costs, reduced grade repetition, and an improved learning environment.

Unfortunately, the opposite is also true: If pre-k funding is cut, Minnesota will soon have to spend more on special education services and other K-12 costs. The basic point is that investing early in young children yields important short-term school system savings, in addition to longer-term cost savings from reduced crime and other benefits.

School System Savings Contribute To Long-term Savings

The Perry Preschool Program cut crime as well as reduced costs for special education so much that it saved more than \$16 for every \$1 invested. The vast majority of the cost savings from the Perry Preschool Program come from reductions in crime, with smaller portions of this long-term savings generated by reduced education and welfare costs.¹⁸

Early Education Denied to Minnesota's Kids

Despite the evidence on the benefits of high-quality early education, inadequate funding denies thousands of Minnesota children access to quality early care and education programs. Forty states, including Minnesota, provide some publicly funded voluntary pre-k. The federally funded Head Start program for children in poverty serves only half of the eligible children nationwide due to inadequate funding. And the youngest children, from birth to age 3, are even more dramatically underserved. For example, Early Head Start serves about three percent of eligible infants and toddlers nationally.²⁴

In Minnesota, Head Start, the state-funded pre-k program, and a program for young children with special needs together served approximately 22,000 children during the 2008-2009 school year. However, the data also demonstrate that in Minnesota, only 11 percent of all 3-year olds and 16 percent of all 4-year-olds were served by these publicly funded programs.²⁵

To move Minnesota in the right direction, the Minnesota's Future campaign wants the state to double the number of at-risk children participating in high-quality early learning programs like pre-k or Head Start by 2015. At least another 18,000 at-risk children would be offered services.²⁶

Since most states now provide publicly funded pre-k, more

states, are reshaping their "K through 12" public education systems, broadening the frame for state and local education systems to include pre-k. In this way, states are creating "pre-k through 12" education systems.

State early education investments must be continued, and federal education funding through the Elementary and Secondary Education Act (ESEA) now needs to be brought up to date to reflect this new reality. That is why law enforcement leaders are calling on Minnesota's federal policymakers to support provisions in ESEA reauthorization that provide incentives to states and local school systems to complete the transition from "K through 12" to "pre-k through 12." These provisions would authorize dedicated pre-k funding and integrate pre-k into every aspect of federal education funding and policy under ESEA (such as including 3- and 4-year-olds in federal funding formulas, and including pre-k teachers in professional development provisions). Federal policymakers should also encourage this expanded framework of pre-k through 12 in other new ESEA programs such as "Race to the Top" and "Investing in Innovation."

Conclusion

Minnesota's law enforcement leaders have been voicing their support for high-quality early education for years because of its proven impact on reducing later crime. In today's lean budget times, lawmakers now face tough decisions about which programs should receive public funding. Research has demonstrated long-term cost savings from early education, saving as much as \$16 for every \$1 invested. The research also shows that, even before those long-term cost savings occur, high-quality early childhood programs can produce significant cost savings for Minnesota's education budget, by reducing special education costs by ten percent. Cutting crime and reducing the need for special education services makes high-quality pre-k a wise investment for Minnesota.

The law enforcement leaders of FIGHT CRIME: INVEST IN KIDS in Minnesota call on state policymakers to continue their investments in early education, and call on Minnesota's Congressional delegation to support increased investments in high-quality pre-k by supporting provisions in federal Elementary and Secondary Education Act (ESEA) reauthorization that provide incentives to states and local school systems to complete the transition from "K through 12" to "pre-k through 12." These provisions would authorize dedicated pre-k funding and integrate pre-k into every aspect of federal education funding and policy under ESEA.

Law enforcement leaders are convinced that high-quality early education is a wise investment for Minnesota that will save money and make our communities safer.

Endnotes

1 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.

2 Belfield reviewed 19 published studies of early care and education programs, and the reductions in special education placements found in those studies ranged from 6 percent to 48 percent, with the most rigorous longitudinal studies finding reductions in special education placements in the 40 percent to 48 percent range. Belfield, C.R. (2004). *Early childhood education: How important are the cost savings to the school system?* New York: Columbia University, Teachers College. Retrieved on May 17, 2010 from <http://www.plan4preschool.org/documents/ny-cost-saving.pdf>.

3 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.

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6 Barnett, W.S. (1985). Benefit-cost analysis of the Perry Preschool Program and its policy implications. *Educational Evaluation and Policy Analysis*, 7(4), 333-342.

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8 Reynolds, A. J., Temple, J. A., Ou, S., Robertson, D. L., Mersky, J. P., Topitzes, J. W., & Niles, M. D. (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 Pediatrics & Adolescent Medicine*, 161(8), pp. 730-739.

9 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 arrests. *Journal of the American Medical Association*, 285(18), 2339-2346.

10 Campbell, F.A., & Ramey, C.T. (1995). Cognitive and school outcomes for high-risk African-American students at middle adolescence: Positive effects of early intervention. *American Educational Research Journal*, 32(4), 743-772.

11 Bagnato, S.J., Salaway, J., & Suen, H. (2009). *Pre-K counts in Pennsylvania for youngsters' early school success: Authentic outcomes for an innovative prevention and promotion initiative*. Pittsburgh, PA: University of Pittsburgh, Early Childhood Partnerships.

12 Chambers, J.G., Shkolnik, J., & Perez, M. (2003). *Total expenditures for students with disabilities, 1999-2000: Spending variation by disability*. Washington, DC: American Institute for Research. Retrieved on May 10, 2010 from http://csef.air.org/publications/seep/national/final_seep_report_5.pdf

13 Minnesota's Department of Education spends more than \$1.5 billion (\$1.57 billion) on special education, consisting of federal, state and local expenditures. Carol Hokenson, Minnesota Department of Special Education. Personal communication on August 11, 2010; Minnesota Department of Education. (2010). *Special education cross subsidies fiscal year 2009*. Roseville, MN: Author. Retrieved on August 12, 2010 from <http://archive.leg.state.mn.us/docs/2010/mandated/100547.pdf>

If Minnesota provided high-quality pre-kindergarten to serve 80% of the state's young children, FIGHT CRIME: INVEST IN KIDS projects that Minnesota would see a \$150 million reduction in spending on special education during the K-12 years. Based on the research evidence on early education cost savings, and on economist Clive Belfield's analysis of these savings for school systems, it is reasonable to expect that providing high-quality pre-kindergarten will yield a 10 percent reduction in special education spending. This figure is a conservative estimate, based on the far higher figures from rigorous studies, and moderating the size of these effects based on serving nearly all children, rather than serving at-risk children. Belfield reviewed 19 published studies of early care and education programs, and the reductions in special education placements found in those studies ranged from 6 percent to 48 percent, with the most rigorous longitudinal studies finding reductions in special education placements in the 40 percent to 48 percent range. Belfield then identified a more representative estimate of the likely impact of early education, at 8.5 percent to 12 percent, based on moderating the impact to adjust for providing universal access to pre-kindergarten (expected to serve 80% of all children) rather than only the most at-risk kids. FIGHT CRIME: INVEST IN KIDS averaged and rounded this 8.5 to 12 percent range of likely effects to arrive at 10 percent, a conservative estimate of the reductions in special education spending produced by universal pre-kindergarten programs. Belfield, C.R. (2004). *Early childhood education:*

How important are the cost savings to the school system? New York: Columbia University, Teachers College. Retrieved on May 17, 2010 from <http://www.plan4preschool.org/documents/ny-cost-saving.pdf>.

14 Belfield's analysis of the K-12 school system savings identified three major areas of cost savings: reductions in special education placement, reductions in grade repetition (also referred to as grade retention, or being held back a grade in school), and learning productivity savings (in which students perform more capably, leading to less class disruptions and vandalism, and more efficient teaching, thus producing an improved learning environment and cost savings from the education efficiencies it yields). Belfield estimated the impact of reductions in grade repetition to be 9.25 – 21 percent (that is, grade repetition rates in the state will be reduced between 9.25 and 21 percent). Belfield estimated the impact of improvements in learning productivity to be a 1 – 1.5 percent cost savings of the total state educational budget (see Belfield's analysis, cited below for a full explanation of these calculations). In applying these estimates of reductions in grade repetition and an improved learning environment for New York, Belfield calculated the cost savings of these two areas combined to range between 56 and 59 percent of the total school system savings projected for the state. Extrapolating from Belfield's estimates for New York, and rounding downward to use a more conservative estimate of their impacts, FIGHT CRIME: INVEST IN KIDS estimates that the impact of grade repetition and an improved learning environment together yielded another 50 percent of the total K-12 system cost savings projected, roughly doubling the cost savings accrued from special education reductions alone. Using this more conservative estimate of these savings is appropriate since the relative ratio of these three areas of school system savings may vary more broadly from state to state, since they are each based on different components of K-12 budgets and outcomes. Belfield, C.R. (2004). *Early childhood education: How important are the cost savings to the school system?* New York: Columbia University, Teachers College. Retrieved on May 17, 2010 from <http://www.plan4preschool.org/documents/ny-cost-saving.pdf>; Belfield, C.R. (2004). *Research briefing: The pre-K payback*. New York: Columbia University, Teachers College. Retrieved on May 17, 2010 from http://www.winningbeginningny.org/publications/documents/belfield_execsummary.pdf

15 FIGHT CRIME: INVEST IN KIDS estimated the cost of providing high-quality, full-day pre-kindergarten for 80 percent of Minnesota's 4-year-olds at \$560 million annually. This figure was calculated by taking 80 percent of Minnesota's 70,613 4-year-olds, yielding 56,490 children, and multiplying that by \$9,900 per year estimated cost of providing high-quality, full-day pre-kindergarten, which yields \$559 million, rounded to \$560 million. This cost figure is based on Minnesota's average general fund per pupil expenditures for K-12 education, \$9,945 per pupil, rounded to \$9,900, provided by National Center for Education Statistics. The number of 4-year-olds in Minnesota is provided by National Institute for Early Education Research. National Center for Education Statistics. (2009). *Digest of education statistics – Table 185: Current expenditures per pupil in fall enrollment in public elementary and secondary schools, by state or jurisdiction: Selected years, 1969-70 through 2006-07*. Washington, DC: U.S. Department of Education. Retrieved on August 4, 2010 from http://nces.ed.gov/ipeds/data/digest/d09/tables/dt09_185.asp; Barnett, W.S., Epstein, D.J., Friedman, A.H., Sansanelli, R., & Hustedt, J.T. (2009). *The state of preschool 2009 – State preschool yearbook*. New Brunswick, NJ: Rutgers University, National Institute for Early Education Research.

16 Pre-K Now. (2010). *Leadership matters: Governors' pre-k budget proposals fiscal year 2011*. Washington, DC: Author. Retrieved on August 4, 2010 from <http://www.preknow.org/leadershipmatters/>; Barnett, W.S., Epstein, D.J., Friedman, A.H., Sansanelli, R., & Hustedt, J.T. (2009). *The state of preschool 2009 – State preschool yearbook*. New Brunswick, NJ: Rutgers University, National Institute for Early Education Research.

17 Barnett, W.S., Epstein, D.J., Friedman, A.H., Sansanelli, R., & Hustedt, J.T. (2009). *The state of preschool 2009 – State preschool yearbook*. New Brunswick, NJ: Rutgers University, National Institute for Early Education Research.

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nesota Department of Special Education. Personal communication on August 11, 2010; Minnesota Department of Education. (2010). *Special education cross subsidies fiscal year 2009*. Roseville, MN: Author. Retrieved on August 12, 2010 from <http://archive.leg.state.mn.us/docs/2010/mandated/100547.pdf>

21 This figure includes only current expenditures on elementary/secondary education. Zhou, L. & Johnson, F. (2010). *Revenues and expenditures for public elementary and secondary education: School year 2007-08 (Fiscal Year 2008)*. Washington, DC: U.S. Department of Education. Retrieved on August 18, 2010 from <http://nces.ed.gov/pubs2010/2010326.pdf>

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