



Bridging the Academic Achievement Gap Between Low-Income and Upper Middle-

Income Prekindergarten Children

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## Bridging the Academic Achievement Gap Between Low-Income and Upper Middle-Income Prekindergarten Children

For years there has existed a longstanding academic achievement gap between children from low-income and upper middle-income families. This gap was defined by Duncan & Murnane (2011) as the “income difference between a child from a family of the 90<sup>th</sup> percentile of the family income distribution and a child from a family of the 10<sup>th</sup> percentile,” (p.91). It has been observed to form before kindergarten and remain constant throughout a child’s academic career. In short, the socioeconomic standing of a child’s family can set them on a disadvantaged course that may negatively impact their future probability for success. This impact can be observed across the United States and in many cases, more prominently here in Oregon. It can be argued that as future adults and members of our society, it is not just the future success of these individual children that is at stake. Rather, it is the success of our communities as a whole. Therefore as individual communities we must shoulder the responsibility of closing the gap and ensuring equal opportunities at success for all children. In order to close the gap it is imperative for low-income families with prekindergarten children to have improved access to child-care and early literacy programs such as Head Start. Furthermore, these programs require better staffing, training, funding, and support in order to improve the level of care and education they offer.

### **Problem**

The income based academic achievement gap has grown measurably over the last few decades and continues to widen. Statistics show that among children born in 2001 the gap is 30-40% larger than it was among children born just 25 years prior (Duncan &

Murnane, 2011, p.93). Furthermore, where the education level of the parent(s) has always had an extremely strong correlation with which side of the gap a child falls onto, the family's income level now has an almost equally large influence. This constitutes a 30-60% greater difference in whether or not today's children achieve academic success than it did for children born in the 1970's (Duncan & Murnane, 2011 p.25).

There are a number of factors that contribute to the size of the gap itself, but it seems that in large they generally stem from the same source; the level of access to pre-kindergarten programs and the quality of programs that are available to low-income families. Since few states participate in universal preschool, unless a family can afford to pay tuition outright, options are very limited. In 2012 a survey conducted by NIEER (National Institute for Early Education Research) and Rutgers University found that, on average, of the national population of 4 year olds only 28% were enrolled in preschool (Barnett, Carolan, Fitzgerald, & Squires 2012). According to the same study as of 2012 here in Oregon, only 10% of the statewide population of 4 year olds were receiving a preschool education. This puts Oregon among the bottom half of all states concerning access to preschool. Of course, besides preschool there are other prekindergarten programs that are available to low-income families, Early Head Start (EHS) being the most popular. Others include Healthy Families America, and numerous smaller and more localized center and home-care facilities. However all of these options, preschool included, are struggling to meet national benchmarks concerning care-provider qualifications. As a whole only 58% of teachers in all pre-kindergarten programs have a Bachelors degree and only 29% of assistants in these programs have a Child Development Associates (CDA) certificate or higher (Barnett et al., 2012). This may not

be surprising however when taken into account the level of support and funding that these programs receive. Average state funding fell by \$548 million from 2011-2012, which equates to a \$3,841 per child yearly average; \$1,000 less than the per child average of only ten years ago (Barnett et al., 2012).

Aside from the achievement gap that has already been established, there also exists a support gap among care providers and early educators in low-income and upper middle-income schools and programs. As stated earlier, many of the teachers and assistants in these classrooms are under-credentialed according to national benchmarks. So where are all of the qualified teachers going? According to a 2004 study (Johnson, Kardos, Kauffman, Liu, & Donaldson) they are going to schools with more support. The study (Johnson et al., 2004) followed 50 new teachers through their first four years on the job and found that every teacher who transferred out of a low-income school left for a position at a higher income school (p.4). This surprisingly was not due to better pay or opportunity for advancement. Rather, the teachers in this study left because they felt inadequately supported and therefore experienced fewer feelings of success while serving their students. However, teachers in low-income schools that found mentors in fellow colleagues and a curriculum that was aligned with state and district standards, stayed in those low-income schools (Johnson et al., p.4).

The support gap also extends to care-providers. EHS targets low-income families that include expecting mothers and/or children ages zero to three. They offer center based care as well as home visits by child-care workers. The home visits are designed to help promote a healthy prenatal outcome for pregnant women and to aid in the early development of very young children. According to the U.S. Department of Health and

Human Services and the Administration for Children and Families, the home visitors undertake strenuous case loads. Responsible for approximately eight to ten families each, they must visit each family once a week for 90 minutes and include each family in a group socialization activity twice a month. However, the vast majority of these home visitors are ill equipped to handle that level of stress and report “increasing levels of exhaustion over time” (Denmark, Saul, & Harden, 2009, section 2.1), eventually burning out. Most EHS home visitors have only a High School diploma (very few have certificates, degrees, or any formal child development training) while employees at EHS centers typically have even less than that (Denmark et al., 2009). Home visits by these paraprofessionals still have a positive impact on the families they aim to assist, but it isn’t nearly on the same level that professional home visitors bring to the table (Denmark et al., 2009).

Despite the shortcomings of all of these prekindergarten options, even the worst offenders still show positive gains in young children’s school readiness. Of these options, state funded preschools show the greatest improvement. In a study that spanned five states (Michigan, New Jersey, Oklahoma, South Carolina, and Virginia) with mixed demographics and a sample size of 5,071 children, there was a 44% growth in early math skills, 31% growth in average vocabulary scores, and an 85% growth in print awareness skills after one year enrollment in preschool (Barnett, Lamy, & Jung, 2005). Perhaps not so surprisingly, almost all of the teachers that participated in this study had four year degrees with specializations in early childhood development. Barnett et al. (2005) used a child’s qualification for the free school lunch program to determine income level, and found that the gains stated above were three times more correct among students who did

qualify for free lunch and two to three times as large as gains made by children in EHS (p.14). Although, on paper, the gains of Head Start children don't rival that of state funded preschool, it could be deduced that some gains are still better than none. As demonstrated by the "faucet theory" (Pianta, Cox, & National Center for Early Development & Learning, 1999 p. 19) children from both ends of the gap benefited equally, according to achievement tests, when the "resource faucet" was turned on during school session. However, over the three month summer break, without any enrollment in organized programs the low-income students tended to fall behind their higher-income counterparts (Pianta et al., 1999, p.20). It seems, even in the worst possible situation any program may be better than no program. So perhaps one of the largest challenges is simply reaching parents in low-income families and providing them with resources to utilize these programs, as well as stress the importance of their child's participation in them. The three main barriers to accomplishing this that low-income families cite are an inadequate amount of slots in infant-toddler care programs, the high cost of this care, and the inability to find proper arrangements to allow enrolment, such as transportation (Paulsell, Nogales, & Cohen, 2003, p.97).

### **Solution**

Although there is no single answer for closing the gap, one thing is clear; community participation is necessary in establishing effective solutions. Preschool programs have proven to be very effectual in preparing children for academic success. However, their downfall is that they are not readily available to low-income families. Programs like Head Start on the other hand have federal support and are more accessible to low-income families, but they lack the structure and support of preschools and offer an inferior

academic product. While these two avenues of prekindergarten education both have their strengths and weaknesses it seems that they complement each other. Some states have had great success in making this complimentary relationship work to their benefit and creating partnerships among community, state, and federally funded prekindergarten programs (Paulsell et al., 2003, p.107-111). By combining funds (school districts with EHS, also using state subsidies as well as funding from foundations and donors) it was possible to create strong relationships among community partners (Paulsell et al., 2003, p.107-111). This theory was tested in three separate communities and yielded strong results by allowing resource sharing, technical assistance, and better communication among all parties involved. State funded preschools were able to offer more slots to low-income families due to increased funding and EHS programs were able to use the resources from the school districts to offer better training and in some cases even scholarships or CDA certificate courses to their employees (Paulsell et al., 2003, p.114). To maintain communication among all of the different programs Paulsell et al. (2003) found it most beneficial that in each community there was a governing body of leadership, “key stakeholders” (p.107-111), that could offer support, monitor resources, and communicate on a local and state level while keeping local interests close in mind. The stakeholders would also work with the Department of Human Services (DHS) and other state bodies to make use of resources that would allow information about early child-care and preschool to be readily available to low-income families.

### **Conclusion**

In order to battle the widening of the income based achievement gap among our prekindergarten children, it is imperative to increase access and quality of preschool,

early child-care, and similar programs for low-income families. Although it is a daunting task, this can certainly become a reality through community participation and partnerships with state, federal, and local programs. By working together communities can set children on their individual paths to success. To achieve this on the local level, taskforces in each community should be appointed to begin linking these programs together. These taskforces can communicate on the local and state level to make the best use of financial and technical resources for the school districts, EHS and other local child-care facilities that receive government funding. The prekindergarten children of today will in the future be a reflection of the efforts that their community extended for them. So, what efforts are we willing to extend? The time to begin bridging the gap is now. After all, a brighter future for each individual child equates to a more illuminated society as a whole.



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