



Board of Directors Meeting

February 10, 2011

Child Care and Academic Performance

Item IV.C.

Issue:	Early Childhood Education
Program:	Child Care Programs
Strategic Plan Goal:	School Readiness, School Success

Background:

Research and Evaluation staff conducted an exploratory analysis of children who participated in JWB funded child care services between 1991 and 2010 in an attempt to gain a better general understanding of the current academic performance of this population. To be eligible for inclusion in the sample, subjects had to have received child care services for a minimum of six months and be enrolled in a Pinellas County school during Fall 2010. The resulting group used for this analysis contained a total of 16,545 children. Some of the characteristics of this population and early findings include:

- The population was equally distributed between males and females and participants were primarily white (48%) or African-American (47%) with a smaller percentage of other races (5%).
- The average age at the time of entry into JWB funded child care was approximately two years of age and the average age at time of exiting the program was six years.
- The current age of this group of children was 11 years old (age reported at the beginning of the 2010 school year).
- The average number of days open in JWB funded child care programming was 1,518.
- The mean grade point average for this population was 2.7.
- 83% of the participants reported they received free/reduced lunch and 84% indicated that their family income was less than \$19,999.
- 87% reported their household arrangement was either single parent or kinship.
- Preliminary results found that length of time in child care did not appear to be related to participants' current GPA.
- When current academic performance was viewed by the current age of the participants, a weak association was revealed which indicated a decrease in GPA as the subjects' age increased.
- Additional analyses which looked at any potential impact of race and gender found very little difference between white and African-American students in their current academic performance (as evidenced via GPA). Gender was found to have had more of an impact in that female participants had significantly higher reported GPAs than males.

These results are preliminary and have some significant limitations, one of which is the lack of a similar comparison group of children who did not participate in JWB funded child care programming. It is proposed that any additional research on this population include a comparison group in order to be better able to accurately pinpoint the potential impacts of participation in JWB funded child care on academic performance.

A review of the literature addressing the continuum of early learning and before and after-school services for at-risk children frequently looks at outcomes in the following areas: a) the impact of quality early education and socialization on school success; b) the effects of consistent quality programming from preschool extending into later childhood to reinforce early learning and promote success through the third grade and; c) the potential for increased public safety and minimization of risk behavior for at-risk children and adolescents who are engaged in supervised and structured after school opportunities. The following points represent a summary of the predominant findings in each of these areas derived from studies conducted by respected research and policy institutes. While this selection is not exhaustive, these findings are generally consistent with many of the studies that have been reviewed by research staff:

The Social Policy Report: PK-3: An aligned and coordinated approach to education for children 3-8 years old, Society for Research in Child Development, (2005) which advocates for an approach to education which includes universal access to Pre-k for 3 and 4-year-olds, followed by a mandatory full-school-day kindergarten.

- Quality programs can reduce grade retention and special education placement while increasing school achievement and social skills.
- This article cites the groundbreaking work done by Heckman and Masterov (2004) which cautions against investments made only in Pre-k programs and contends that these investments must be complemented by investments during the elementary school years to maximize successful outcomes for children.
- From a policy perspective, a Pre-K through 3rd grade approach focuses on children 3 to 8 years old because, in the current wave of education reform, children face their first major academic reckoning in the third grade. Schools are organized so that third grade children typically take their first standardized tests in reading and math, the results of which are likely to have serious consequences, including grade retention or special education placement, both of which influence future academic opportunities.
- Review of the longitudinal literature revealed the following:
 - The timing of early educational experiences is important, especially given research that finds there is inequality in levels of school readiness among children as they enter kindergarten.
 - The dosage of programming across school years, and with regard to length of the school day, is integral to both maximizing the potential learning opportunities during the school year and maintaining gains from one grade level to the next.
 - There is evidence of added benefits of extended early intervention for at-risk students from Pre-k through third grade, in contrast to just Pre-k alone, leading to lower school remediation and drop-out rates, as well as higher reading and math achievement.
 - Program quality, as measured by the match between teacher practices and children's developmental needs for positive interactions, leads to better achievement and emotional and behavioral outcomes.
 - Teacher certification and bachelor's degrees were related to fewer behavioral problems and higher school readiness scores for 3-year-olds attending Head Start. Additionally, it has been found that teachers who have some graduate school education or specialized training in early

childhood were more likely to have their classrooms rated as high quality than teachers with no graduate school education.

Findings from **A meta-analysis of the effects of early developmental prevention programs in at-risk populations on non-health outcomes in adolescence, Children and Youth Services Review, (2009)** offered continued support for the efficacy of quality early childhood programs as well as follow-up opportunities after these early interventions.

- Evidence from a series of interventions indicated that becoming involved with a child and family early in the developmental pathway can minimize future health, educational, behavioral and crime-related problems.
- This meta-analysis found a significant difference with respect to educational success in programs that were longer than three years and those whose duration was greater than one year, but less than three years.
- This analysis also found that programs with a follow through component (e.g., post-intervention or supplementary programs to further support the family and child) tended to produce better results than programs that did not have this additional component.

In addition to contributing to the greater probability of entering school ready to learn and succeed, as well as having profound impacts on maintaining early achievements, offering a quality continuum of services also has a number of well documented social impacts.

Findings from **Unsupervised Time: Family and child factors associated with self-care, Urban Institute (2003)**:

- Family income was associated with the use of supervised activities in that children from lower income families were more likely than children from high income families to be placed in some form of supervised activities; indicating the high use of before- and after-school care by children from low income families.
- Among 10-12-year-olds, those with parents employed full-time are over two-and-a-half times more likely than those with non-employed parents to spend time unsupervised. Six to 9-year-olds were about twice as likely to use self-care if their parents were employed.
- However, even though use of supervised care was greater for low-income families in this study, it was found families experiencing high levels of parent aggravation and stress results in a greater likelihood of children being in a self-care situation.
- Children who spend time on their own at younger ages may be setting the stage for increased time spent with other unsupervised children and involvement in risky behaviors as they get older.
- For low-income children the risks associated with self-care may be elevated if they live in low-income neighborhoods or miss out on the academic and social enrichment provided by before- and after-school programs. While time spent unsupervised may be risky for all school-age children, it may be useful to focus especially on filling the gaps in supervision for these vulnerable children.

A meta-analysis of existing studies conducted by the **Collaborative for Academic, Social, and Emotional Learning (CASEL), (2007)** found significant positive improvements across measures of self-perception, attachment to school, positive social behaviors and academic performance.

- These findings were produced by programs which consistently used evidence-based skill training approaches, while those programs not using these approaches were not successful in any outcome area. This finding lends support to the idea that effective after school opportunities are a worthwhile investment.