Summary of Early Childhood Research

Preschool Education and Its Lasting Effects: Research and Policy Implications (Barnett, 2008) Conclusions:

- Many different preschool programs have been shown to produce positive effects on children's learning and development, but those effects vary in size and persistency by type of program.
- Well-designed preschool education programs produce long-term improvements in school success, including higher achievement test scores, lower rates of grade retention and special education, and higher educational attainment. Some preschool programs are also associated with reduced delinquency and crime in childhood and adulthood.
- Strongest evidence suggests that economically disadvantaged children reap long-term benefits from preschool. All other socioeconomic backgrounds showed benefits as well.
- Current policies for childcare, Head Start, and state pre-K do not ensure children will attend highly
 effective preschool programs. Children from middle-income families have the least access to
 preschool. Many children do not attend preschools or attend educationally weak programs.
- Increasing public investment in effective preschool education programs for all children can produce substantial educational, social, and economic benefits. State and local pre-K programs with high standards have been the most effective. Public schools, Head Start, and private child care programs have similar results when operating with the same resources and standards as the state pre-K program.
- Publicly funded pre-K for all might produce an inconsistent, yet worthwhile effect in terms of educational gains. Disadvantaged children and advantaged children in the same program may both benefit from a publicly funded pre-K program, thus leaving a larger achievement gap.

Recommendations:

- Policy makers should stay with preschool education models that are proven highly effective.
 These models typically have small class sizes and well-educated teachers with adequate pay.
- Teachers in preschool programs should receive intensive supervision and coaching, and be involved in a continuous improvement process for teaching and learning.
- Preschool programs should be designed to develop the whole child, including social and emotional development and self-regulation in order to produce positive effects on children's behavior and later reductions in crime and delinquency.
- Policies expanding access to children under 4 should prioritize disadvantaged children who are likely to benefit most.

Meta-Analysis of the Effects of Early Education Interventions on Cognitive and Social Development (Camilli, Vargas, Ryan, & Barnett, 2010)

Summary:

- This meta-analysis is a quantitative summary of research from 1960-2000.
- Confirms that preschool programs have statistically significant and practical long-term preventive impact.
- Preschool intervention programs provide a real and lasting benefit to children.
- Research shows significant effect sizes in the cognitive domain for children attending a preschool program prior to entering kindergarten.
- Even though the largest effect sizes were observed for cognitive outcomes, positive results of preschool education were also found for children's social skills and school progress.
- Teacher directed instruction and small group instruction had a positive impact on cognitive and school outcomes.
- Smaller groups enable teachers to assess children's development and enact learning opportunities that help children engage with content and practice skills.

- Provision of additional services tended to be associated with negative gains. Because early childhood education has always had a commitment to the development of the whole child, it is important that policy makers consider carefully what additional services, (health, nutrition, parent engagement, speech, educational needs) will be provided for students. If additional services are provided, they need to be delivered in a way that does not dilute the intensity of the preschool experience. These decisions will require consideration of who will provide additional services (teachers or others), target of services, and what proportion of the instructional day and week will services be received.
- It is up to policy makers to make decisions regarding the intended population, duration and intensity of programming, type of instruction and curriculum, and structural characteristics such as class size and teacher qualifications.
- Implementing a new segment of public education requires significant funding.

Early Childhood Development: the Promise, the Problem, and the Path Forward. (Brookings, Atinc and Gustafsson-Wright, 2013)

Summary:

- There is now an expanding body of literature on the determining influence of early development on the chances of success later in life.
- Research shows that there are large gains to be had from investing in early childhood development.
- Poor and neglected children benefit disproportionately from early childhood development programs, making these interventions among the more compelling policy tools for fighting poverty and reducing inequality.
- ECD programs have a powerful equalizing potential for societies and ensuring equitable
 investment in such programs is likely to be far more cost-effective than compensating for the
 difference in outcomes later in life. Expanding access to quality early childhood development
 (ECD) services so that they include children from poor and disadvantaged families is an
 investment in the future of not only those children but also their communities and societies.

Programme for International Student Assessment (PISA) Results, OECD Education, 2012. Key Finding:

 On average across countries, students who had attended pre-primary education tend to perform better at the age of 15 than those who had not attended pre-primary education.

Do We Invest in Preschools or Prisons? (New York Times, Kristof, 2013) Key Findings:

- Growing mountains of research suggest that the best way to address American economic inequality, poverty and crime is - you guessed it! - early education programs, including coaching of parents who want help.
- The massive evidence based for early education grew a bit more with a major new study from Stanford University noting that achievement gaps begin as early as 18 months. Then at 2 years old, there's a six-month achievement gap. By age 5, it can be a two-year gap. Poor kids start so far behind when school begins that they never catch up especially because they regress each summer
- A rigorous study by David Deming of Harvard, for example, found that Head Start graduates were less likely to repeat grades or be diagnosed with a learning disability, and more likely to graduate from high school and attend college.

Why Is Kindergarten Still Half Day? (Scholastic Administrator, Shein, 2013) Key Findings:

- Given a scarcity of resources, children from low-income homes should receive priority to attend a high-quality prekindergarten program...cited by the New America Foundation's Early Education Initiative. The public policy institute champions the notion that programs should be universal but should start as targeted initiatives. "We're realists, and we recognize that you need to start with those in need."
- There is debate over whether PreK benefits children of all socioeconomic backgrounds. There are prominent scholars who have publicly expressed doubts that PreK programs benefit middle-class kids.