

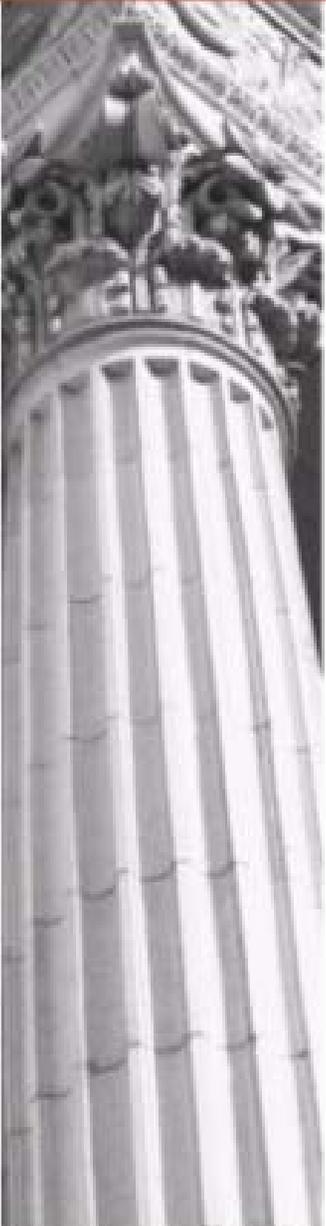


# Early Childhood Education

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## CRC's Education Project

CRC's education study is funded in part by:

- **The W. K. Kellogg Foundation**
- **The Frey Foundation**
- **The PNC Foundation**
- **ArivnMeritor**
- **The Richard C. and Barbara C. Van Dusen Family Fund**
- **A consortium of education groups including: the Tri-County Alliance for Public Education, Michigan Association of School Boards, Metropolitan Detroit Bureau of School Studies, Inc., Michigan Association of School Administrators, Michigan School Business Officials, Middle Cities Education Association, Michigan Association of Intermediate School Administrators, Michigan PTSA, Michigan Association of Secondary School Principals, and the Michigan Elementary and Middle School Principals Association.**



**Why is early childhood education important?**

**And what are the state's options?**



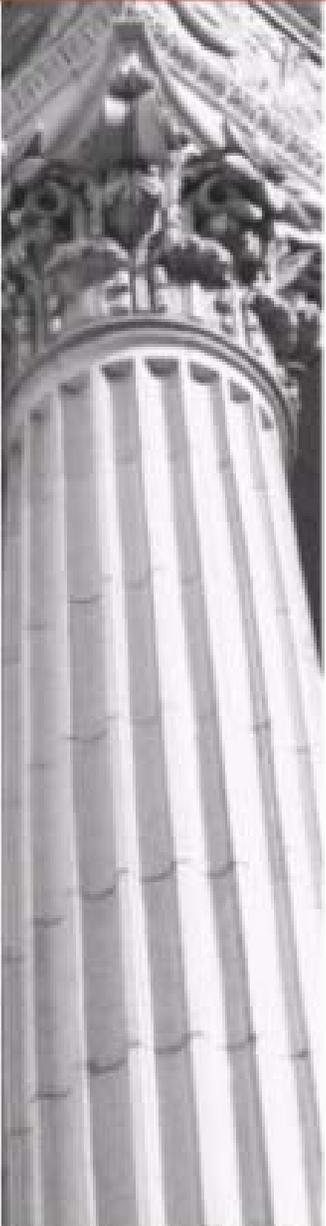
## The economic competitiveness argument

- The good jobs of the future will require highly educated workers.
- The U.S. ranks 12 in the percentage of adults with an associate's degree or higher.
- Michigan ranks 37<sup>th</sup> in the percentage of adults with a bachelor's degree.
- The state should invest in programs that increase educational attainment.



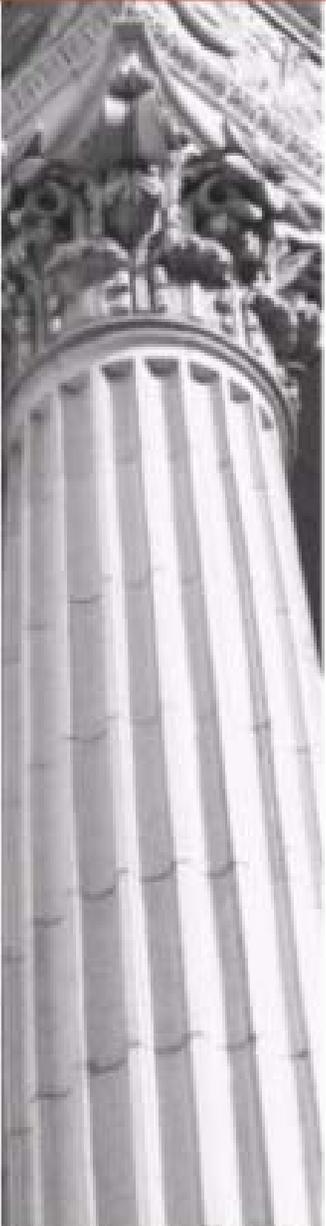
## The fiscal argument

- **The State of Michigan spent \$12.8 billion on K-12 public education in FY 2010.**
- **Michigan will spend about \$98 million for Great Start preschool for 4 years olds this year.**
- **We must ensure that programs are cost effective.**



## The effectiveness argument

- **Research on brain development had proven that early interventions are more effective than later interventions.**
- **Demonstration projects have proven that intensive programs have beneficial effects decades later.**
- **Scaling up effective demonstration projects has been challenging.**



## The moral argument

- **Some disadvantaged children enter kindergarten so far behind their peers that they never catch up. This is inherently unfair.**
- **The achievement gap between Black and White 4<sup>th</sup> graders in Michigan is among the largest in the nation.**



## Early Childhood Education report

- Kindergarten
- Brain Development, Poverty, and the Achievement Gap
- Demonstration Programs
- Head Start
- Great Start
- States' Fiscal Problems and Early Childhood Programs



## Kindergarten

- Michigan children must enter school at age 6.
- Public schools are required to offer kindergarten to 5 year olds.
- Schools may offer full and/or half day kindergarten; more learning occurs in full day classes.
- Public school kindergarten teachers must have a bachelor's degree and be credentialed.
- Kindergarten provides exposure to basic academic concepts and basic school behaviors.



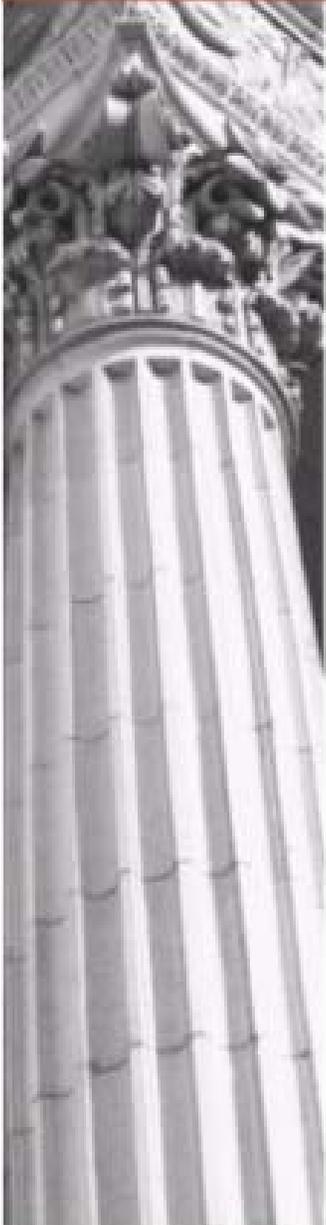
## According to the US Dept of Education..

- At kindergarten entry, most children can name all letters, count beyond 10, recognize single digit numbers, identify shapes and simple patterns.
- 34% cannot identify letters; 18% are not familiar with the conventions of reading; 42% cannot count 20 objects or recognize some single digit numbers; 6% cannot count 10 objects.



**Certain family factors are correlated with poorer cognitive performance, health, social development, and behavior in kindergarten.**

- **Mother has less than high school education; teenaged mother**
- **Family receiving food stamps or cash welfare**
- **Family history of child abuse or neglect**
- **Parent is incarcerated or addicted**
- **Single parent family**
- **Parents' primary language is not English**



## Brain development research

- **Synaptogenesis: “blooming” and “pruning” of brain cells in very young children.**
- **The brain is organized and functionally adapted based, in part, on environment and experience.**
- **Malnutrition, some viruses, and exposure to toxic chemicals can affect brain development.**
- **Extreme poverty, neglect, and abuse can also affect brain development.**



## Poverty affects urban, suburban, and rural children...

- 27% of Michigan children under 5 were living in poverty in 2009.
- 54% of female headed households with children under 5 were below the poverty level.
- 39% of all Michigan births in 2008 were to single women.
- 436,210 Michigan children under 7 received welfare in May, 2010.



**The differences in cognitive skills between poor and non-poor children appear early and are persistent.**

**There is also strong correlation between parents' education and children's performance on measures of cognitive knowledge and skills.**



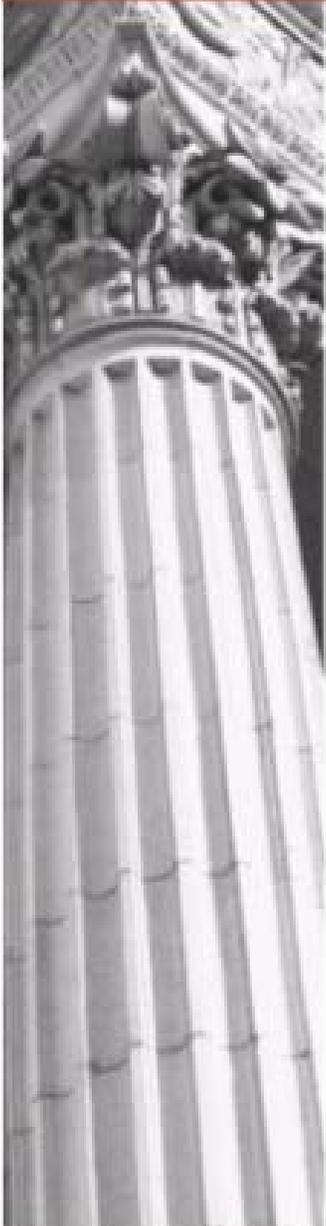
**The “achievement gap” measures differences between poor and non-poor, and between minority and white children.**

- **The achievement gap between Black and White 4<sup>th</sup> graders in Michigan is among the highest in the US.**
- **Among US public universities, Wayne State has the largest difference in graduation rates between Black and White students.**
- **Among US private colleges, Lawrence Tech has the largest gap in graduation rates.**



## Efforts to reduce the achievement gap include...

- Desegregation.
- Better tracking: NCLB requires disaggregating test scores.
- More rigorous courses.
- Smaller class size.
- Longer school days and extended school years.
- More “wrap around” services.
- School choice.
- Changing school governance: charter schools

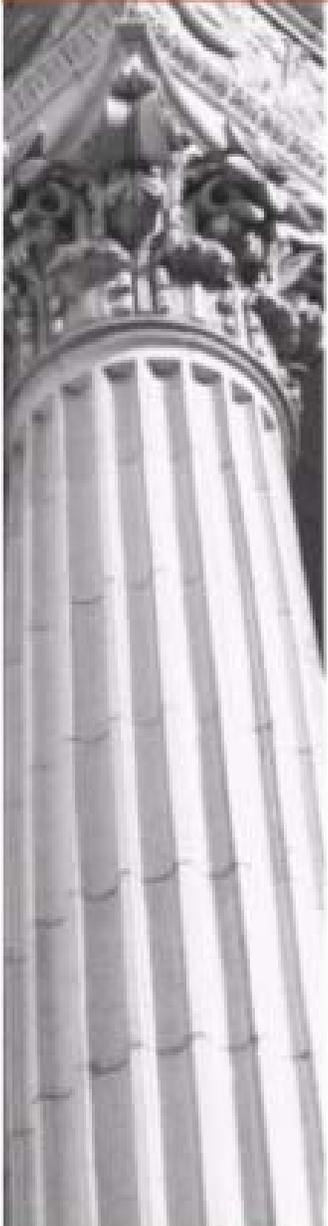


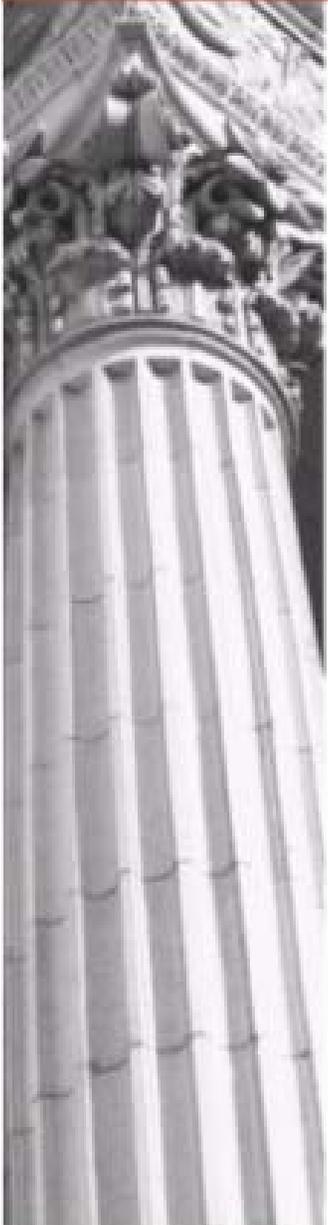
**The obvious problem: According to brain research, early intervention, while the brain retains more flexibility, is more effective. But parents in Michigan do not have to send their child to school until age 6, by which time young brains have been organized and adapted, and by which time there is already a significant achievement gap.**



## Development of healthy young brains requires...

- **Abundant, safe opportunities to learn**
- **Active, reciprocal relationships with adults**





**Programs have been designed to supplement the role of the family in early childhood nurturing and education.**

- **Demonstration programs in the 1960s and 1970s provided the design basis for federal and state programs for disadvantaged preschoolers.**



**Demonstration programs with sound research designs, control groups, and extensive follow-up...**

- **High/Scope Perry Preschool Project (1962-67; Ypsilanti, MI; 123 children ages 3 and 4)**
- **Carolina Abecedarian Project (1972-77; Chapel Hill, NC; 111 infants)**
- **Chicago's Parent/Child Centers (study in 1986 of 1,150 children born in 1980)**



## Attributes of high quality demonstration programs...

- The populations studied were small.
- Programs began when children were very young, lasted more than 1 year, and had many hours of teacher-child contact.
- Teachers were well educated and well paid. Turnover was low.
- Curricula was well planned and adjusted to improve effectiveness.
- Classes were small; child to teacher ratios were low.
- There were efforts to involve parents.
- There were “wrap around” services.



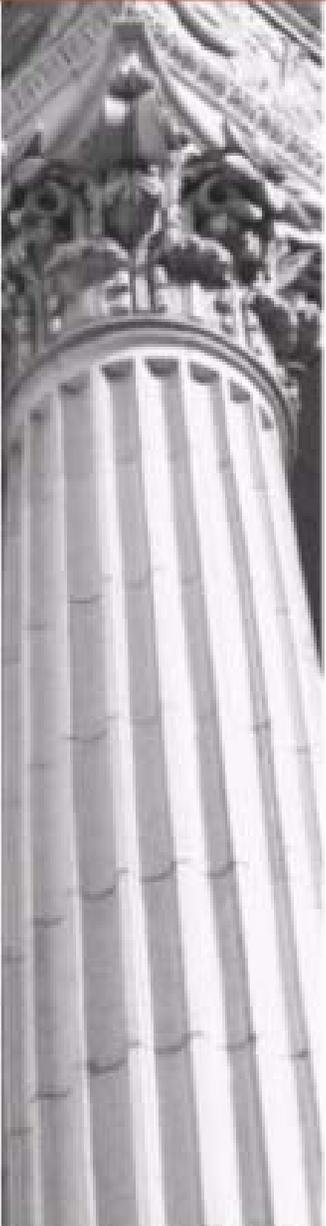
## Measured effects...

- Less grade retention, fewer placements in special education.
- Higher high school grade point averages and lower dropout rates.
- More likely to attend college.
- More likely to be economically self sufficient adults; lower rates of welfare.
- Lower arrest rates.
- As adults, more likely to have a skilled job.
- As adults, higher average earnings.
- As adults, higher rates of home ownership.



## **Benefit-cost analyses of demonstration programs**

- **Follow-up studies have measured different effects, in different environments, for different periods of time.**
- **Various studies have found benefits of up to \$17.10 for every \$1 invested.**



**Federal and state programs have attempted to “scale up” the demonstration projects...**

- **But, fiscal constraints have limited the effectiveness of large programs.**



## Head Start

- Part of Lyndon Johnson's 1964 War on Poverty.
- Now a \$7 billion federal program.
- Serves 1 million children under the poverty level (half of those who qualify).
- Serves about 37,000 MI 3 and 4 year olds.
- Teachers must have a CDA (by 2013, half must have a bachelor's degree).
- Average annual teacher salary is \$21,000.
- Most recent study: cognitive effects fade quickly.



## Michigan's Great Start School Readiness Program

- Serves about 22,000 eligible 4 year olds.
- Offered by school districts and other providers that operate a Head Start program.
- Full or part day, may be coordinated with Head Start.
- 75% of enrolled children must be from families under 300% of the poverty level.
- Lead teachers must be certified teachers with specialized training; Paraprofessionals must have a CDA or associate's degree.
- Maximum adult-child ratio of 1-8.



## **Eligibility is based on income and risk factors...**

- **Extremely low family income.**
- **Low family income.**
- **Diagnosed disability or identified developmental disability.**
- **Severe or challenging behavior.**
- **Primary home language other than English.**
- **Parent/guardian with low educational attainment.**
- **Abuse/neglect of child or parent.**
- **Environmental risk.**



## State funding...

- **Formula based distributions to school districts are funded through the School Aid Fund (\$89.4 million in 2010-2011)**
- **Competitive grants to other providers are funded through the General Fund (\$8,875,000 in 2010-2011)**



## NIEER ranking of Great Start

- **Uses 10 quality benchmarks to compare states' programs.**
- **2 states met all benchmarks; 10 state programs met 0 benchmarks.**
- **Great Start met or exceeded 7 benchmarks.**



## Effectiveness of Great Start at kindergarten entry...

- Higher overall development; more ready to learn.
- Higher vocabulary and math scores.
- Better understanding of print concepts.



## Effectiveness of Great Start in primary school...

- Lower rates of grade retention.
- Higher rates of satisfactory MEAP scores.
- Parents were more involved in school activities.
- No effects on reducing special services.



## Effectiveness of Great Start at middle school...

- Lower rates of grade retention.
- No significant differences in MEAP scores.
- No difference in school attendance rates.



## Cost Savings Analysis of School Readiness Programs in Michigan

- Prepared for the Early Childhood Investment Corporation, an advocacy group.
- Estimated \$1.15 billion in 2009 cost savings and revenues from 25 years of investment in school readiness.
- Savings accrued to:
  - K-12 schools (\$221 million)
  - Reduced government spending and increased tax revenue (\$584 million)
  - Reduced social costs to the public (\$347 million)



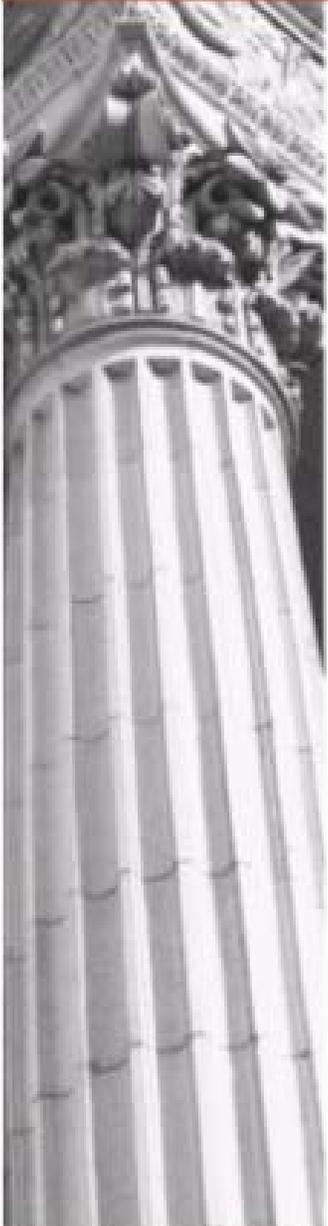
## Arguments for state-funded preschool

- All children should enter kindergarten ready for success.
- It is a good investment that saves money in the long run.
- It is more effective than later interventions.
- The state workforce will benefit now (parents can work or retrain) and in the future (children will be better educated).
- Head Start reaches only half of eligible children.
- The state program has higher standards than Head Start.
- It enables child and family referrals to other necessary services.



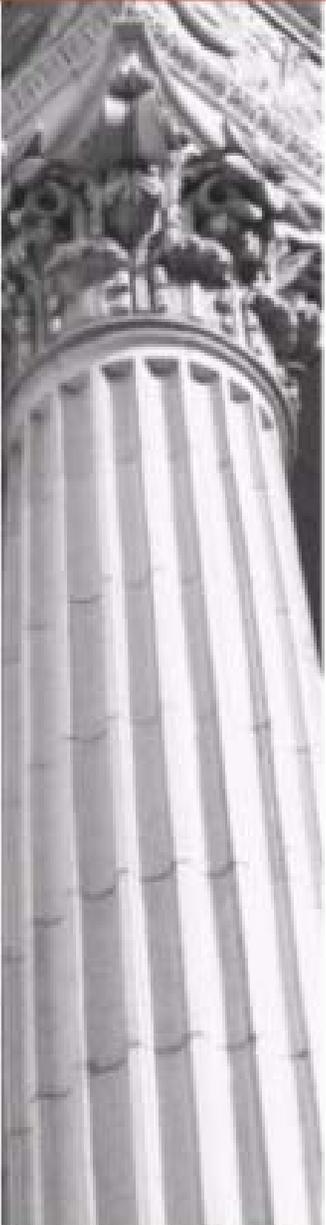
## Program expansion options...

- **Ensure access for all eligible disadvantaged 4 year olds.**
- **Universal preschool: voluntary public preschool for all 4 year olds.**
- **Provide preschool for disadvantaged 3 year olds.**



## Universal preschool

- The numerical majority of children placed in special ed, retained in grade, or who drop out are from middle income families.
- The achievement gap between middle income-highest income children is equal to the poorest – middle income gap.
- Children from middle income families also benefit from preschool.
- High quality, private preschool is expensive.
- Oklahoma, Florida, Georgia, Iowa offer universal preschool.



## Programming for 3 year olds

- Earlier intervention is more effective.
- Two years of preschool would be more effective than one year.



## Arguments against state-funded preschool for the disadvantaged...

- High quality programs are expensive, and we cannot afford them.
- Costs are immediate, benefits are long term.
- It takes money away from K-12.
- The money should be redirected to programs for ages 0 through 3.
- Intervention does not eliminate problems.
- Long term effects are insufficient, hard to measure, imputed from other programs, etc.
- Children go from this program into some of the lowest performing K-12 systems in the state, negating any beneficial effects.
- Head Start addresses the really needy.
- Risk factors do not identify many who drop out.
- Child care is the parents' responsibility.



## Other state options...

- **Fiscal constraints are forcing all states to evaluate and prioritized programs.**
- **A number of states have, or are contemplating, reducing or eliminating preschool programs.**



## Funding strategies for early childhood programs...

Some states have dedicated or private sources of funding:

- Georgia, North Carolina, and Tennessee use state lottery revenues.
- Missouri uses non-lottery gaming revenues
- California uses cigarette tax revenues.
- Kansas and Louisiana use tobacco settlement funds.
- Nebraska established an endowment fund with state and private money.
- Oklahoma uses general funds and private donations.



## Our recommendation...

- **High quality pre-K programs targeted at disadvantaged 4 and 3 year olds, and high quality, all day kindergarten, may be the best long-term investment in the state's human capital.**



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