NIEER

NATIONAL INSTITUTE FOR EARLY EDUCATION RESEARCH

Early Care and Education in America: Why Pre-K for All is Sound Economic Policy

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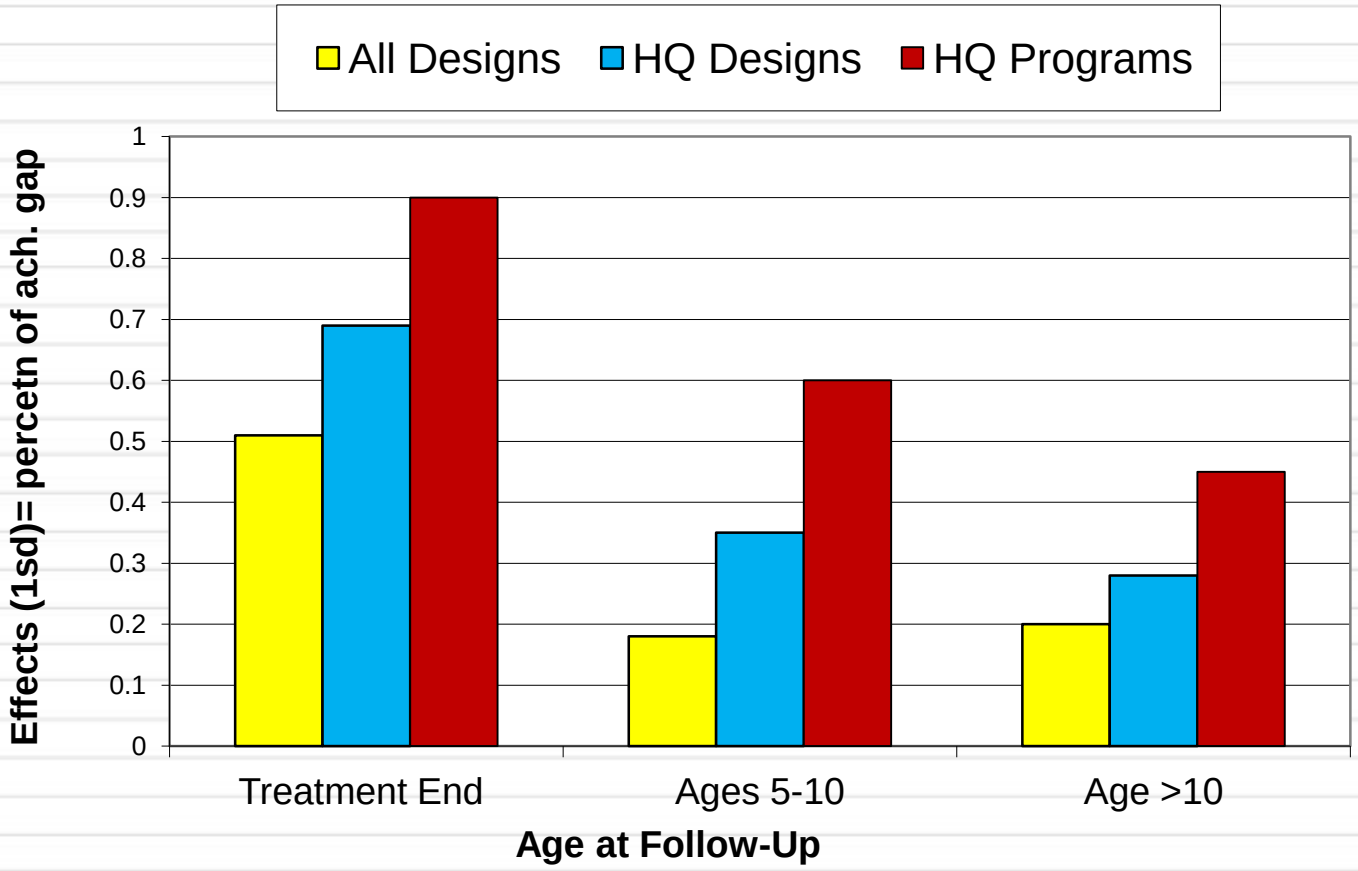
What do we know about Pre-K impacts over time?

- First 5 years are a time of rapid brain development and early experience has effects with life-long consequences
- Pre-K produces short- and long-term positive impacts
- These gains are not uniform but vary in important ways
- Schools largely build on abilities of students at entry, but can erase modest initial differences

American Schools Have Been Getting Better for Decades

- NAEP scores are up
  - Math 1990 to 2011
    - 4 grade math up 29 points for W & H, 36 points for Black students
    - 8th grade math up 23-35 points for all groups, most for Black students
  - Reading 1992 to 2011
    - 4th grade reading up 7 -13 points (Black students most)
    - 8th grade reading up 7 -12 points (Blacks students most)
- But, this does not mean we don't need to improve and close gaps

Preschool programs 0-5 in the US: Impacts in 123 studies since 1960

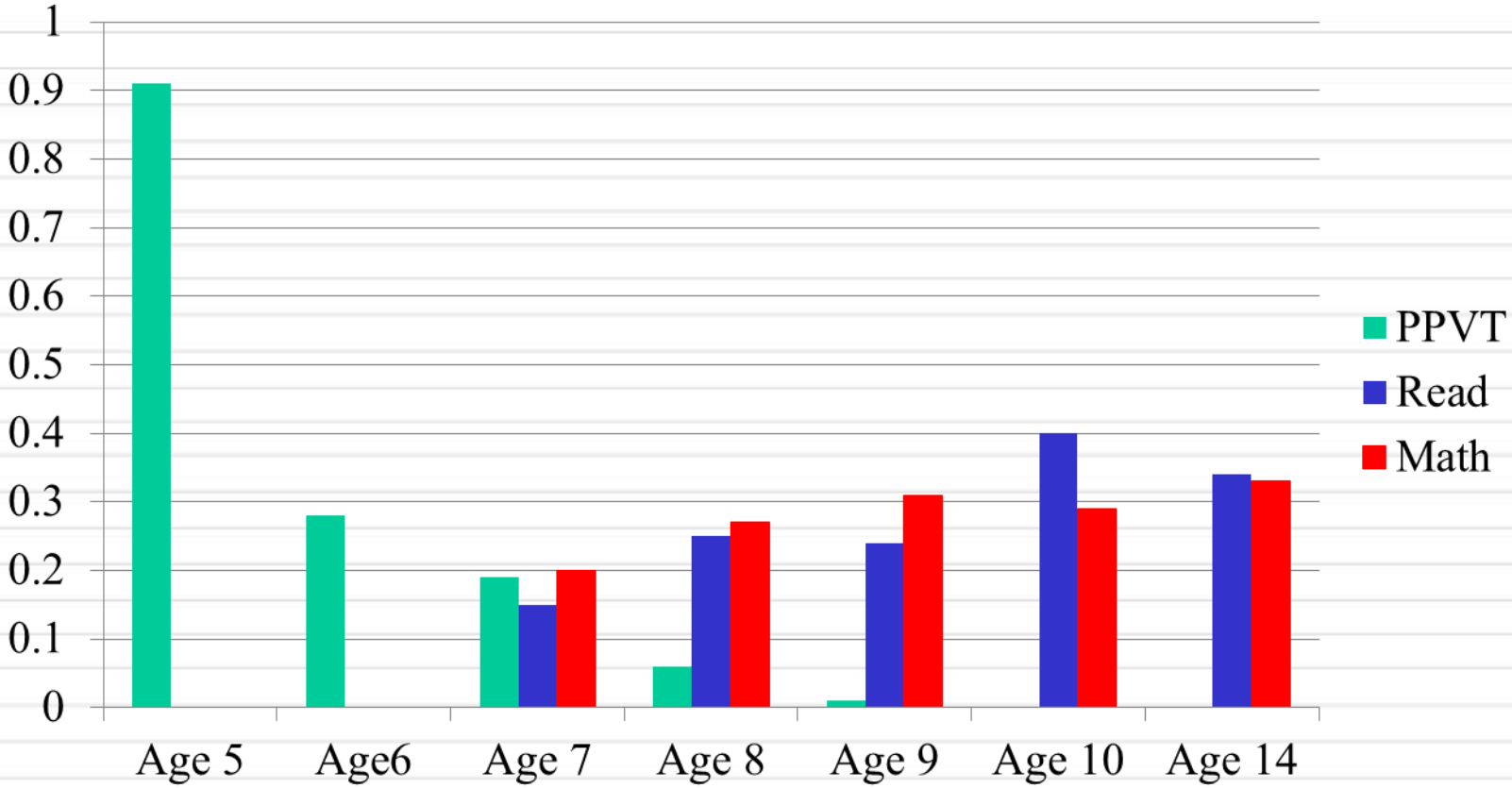


What determines cognitive gains?

Time of Follow-Up	**Negative**
Research Design Quality	**Positive**
Intentional Teaching	**Positive**
Individualization (small groups and 1 on 1)	**Positive**
Comprehensive Services	**Negative**

n= 123 Studies

Cognitive Effects Matter and Do Not *All* Fade Out Over Time



Potential Gains from Pre-K Investments

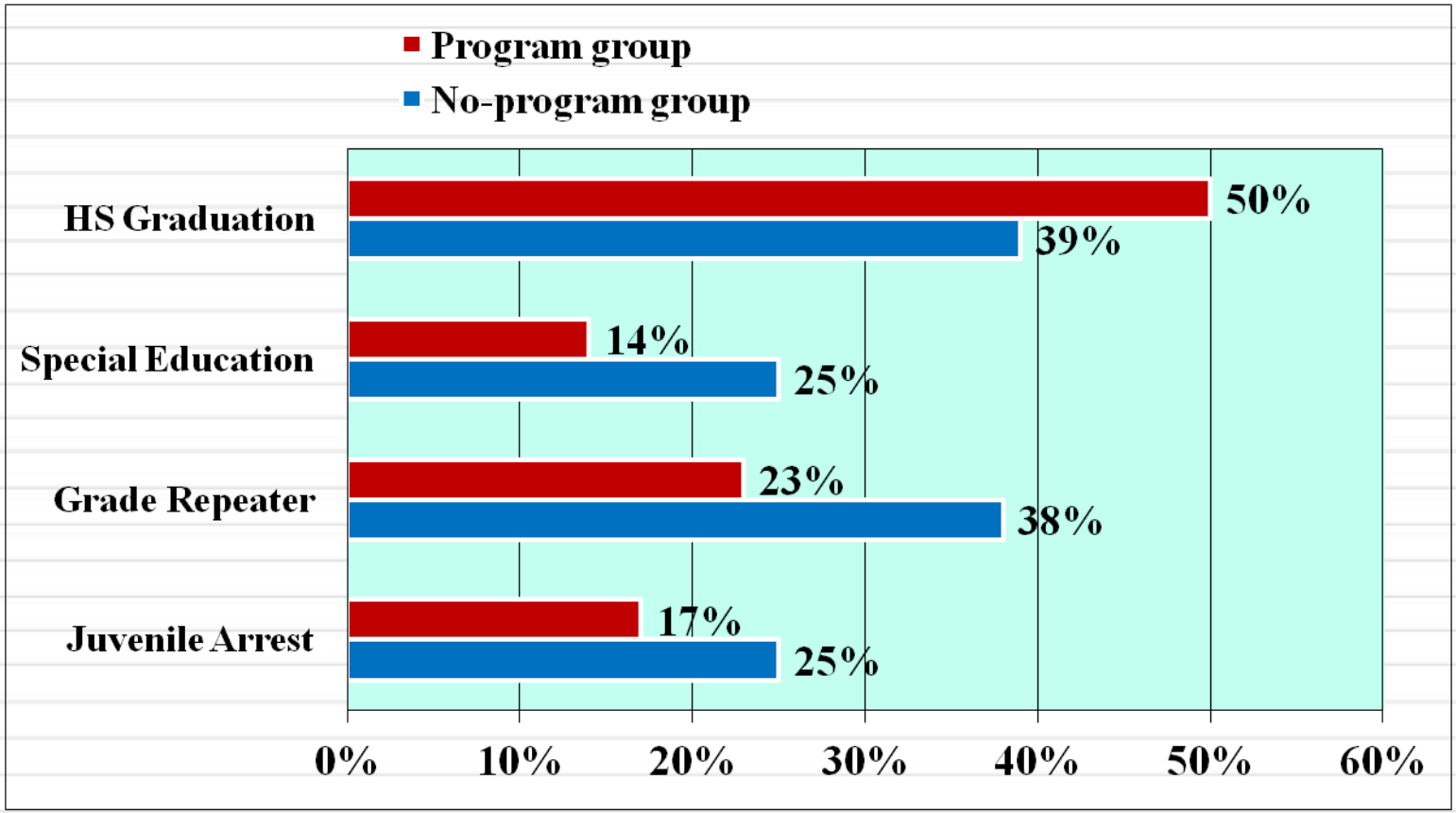
Educational Success and Economic Productivity

- ❑ Achievement test scores
- ❑ Special education and grade repetition
- ❑ High school graduation
- ❑ Behavior problems, delinquency, and crime
- ❑ Employment, earnings, and welfare dependency
- ❑ Smoking, drug use, depression

Decreased Costs to Government

- ❑ Schooling costs
- ❑ Social services costs
- ❑ Crime costs
- ❑ Health care costs (teen pregnancy and smoking)

Chicago CPC: Academic and Social Benefits at School Exit



Temple, J. A., & Reynolds, A. J. (2007). Benefits and costs of investments in preschool education: Evidence from the Child-Parent Centers and related programs. *Economics of Education Review, 26(1),* 126-144

Economic Returns to Pre-K for Disadvantaged Children

(In 2006 dollars, 3% discount rate)

	Cost	Benefits	B/C
▪ Perry Pre-K	$17,599	$284,086	16
▪ Abecedarian	$70,697	$176,284	2.5
▪ Chicago	$ 8,224	$ 83,511	10

Barnett, W. S., & Masse, L. N. (2007). Early childhood program design and economic returns: Comparative benefit-cost analysis of the Abecedarian program and policy implications, *Economics of Education Review*, *26*, 113-125; Belfield, C., Nores, M., Barnett, W.S., & Schweinhart, L.J. (2006). The High/Scope Perry Preschool Program. *Journal of Human Resources*, *41*(1), 162-190; Temple, J. A., & Reynolds, A. J. (2007). Benefits and costs of investments in preschool education: Evidence from the Child-Parent Centers and related programs. *Economics of Education Review*, *26(1), 126-144.*

Results Depend on Quality

Large scale public programs sometimes fail to deliver the promised results and not just Head Start

These large scale public programs have not been designed to duplicate the models successful in research, but to be cheaper

Proper design, high standards, adequate funding, are a start but more is required to be “good”

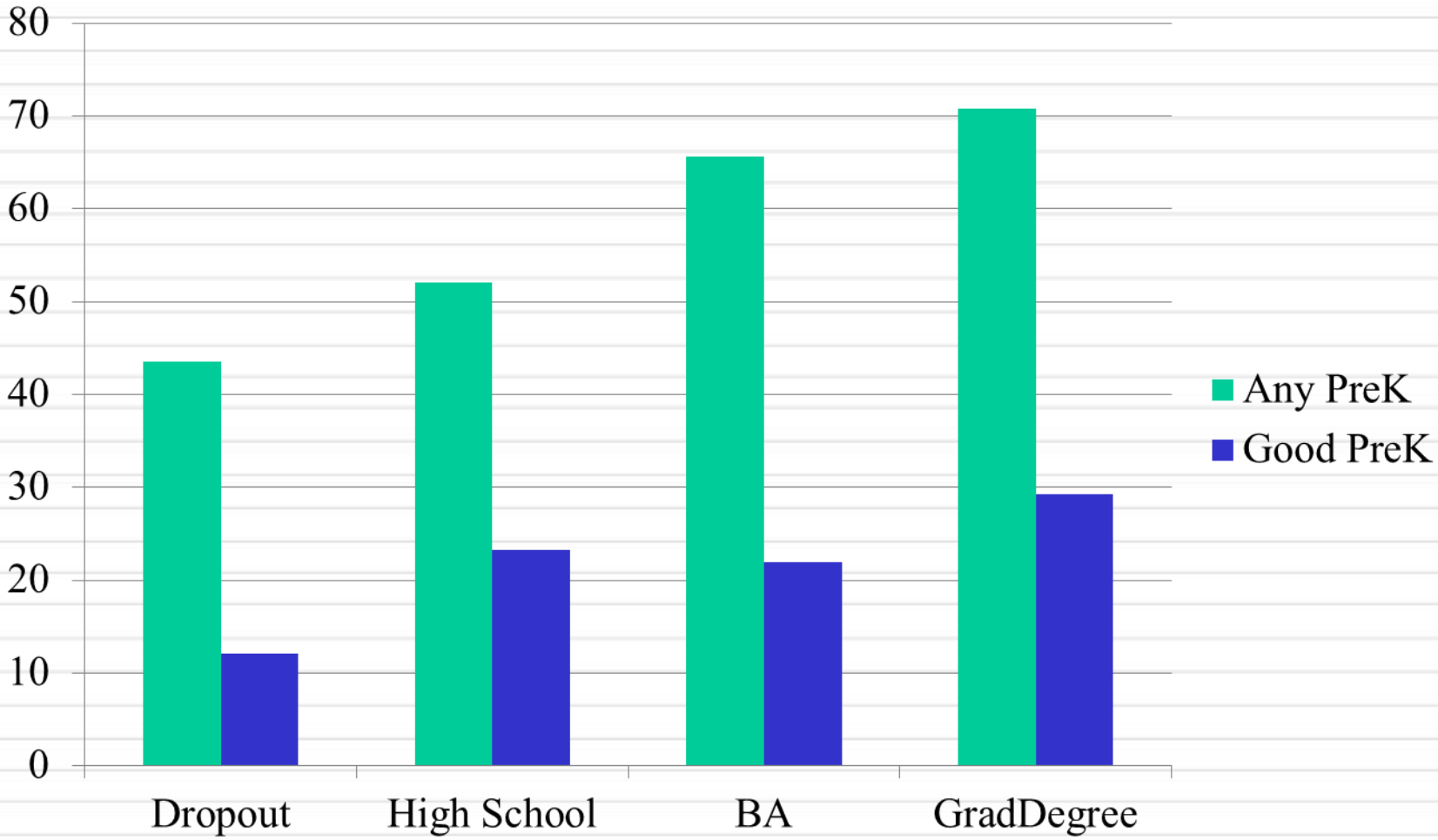
Few children have access to good pre-K

Initial Effects of 1 Year at Age 4: NJ and Other Programs

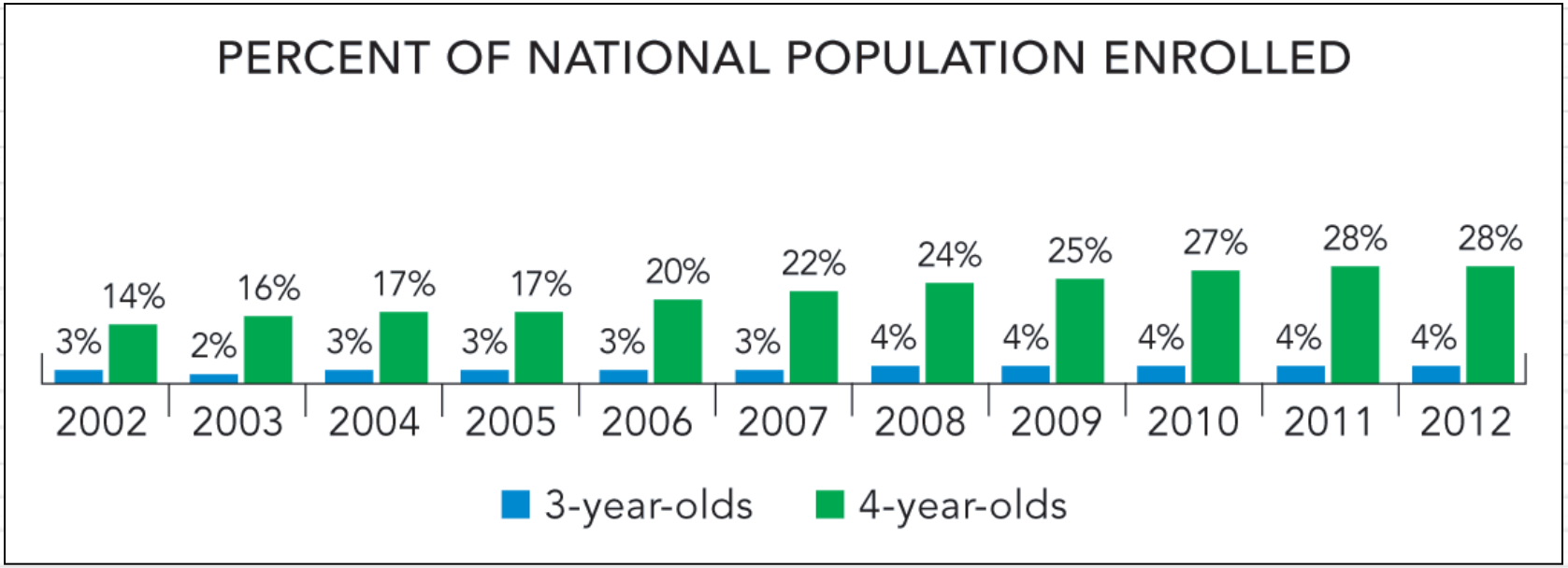
	CPC	Tulsa	NJ	8 St	Head St
PPVT	NA	NA	.28	.26	.13
Math	.33	.36	.36	.32	.18
Literacy	NA	.99	.56	.80	.34

Effects in standard deviations. Head Start adjusted for crossovers in randomized trial.

Good Preschool is the Exception Regardless of Parental Education (ECLS-B)

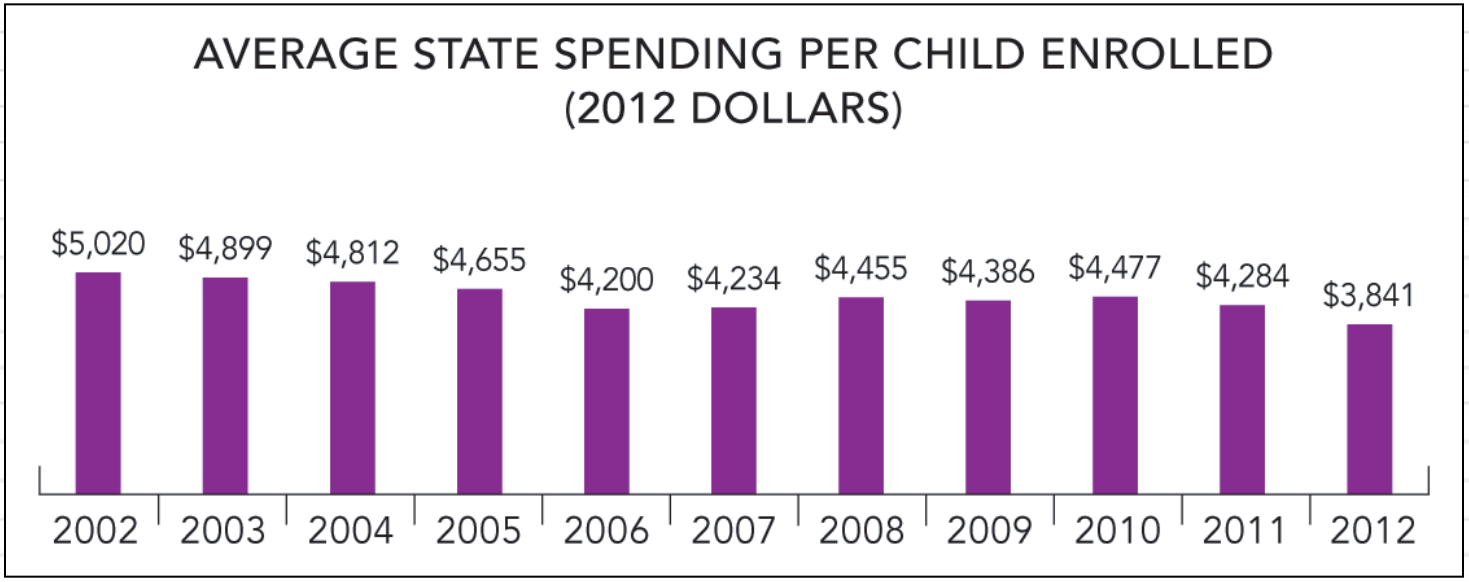


State Pre-K Enrollment Pause



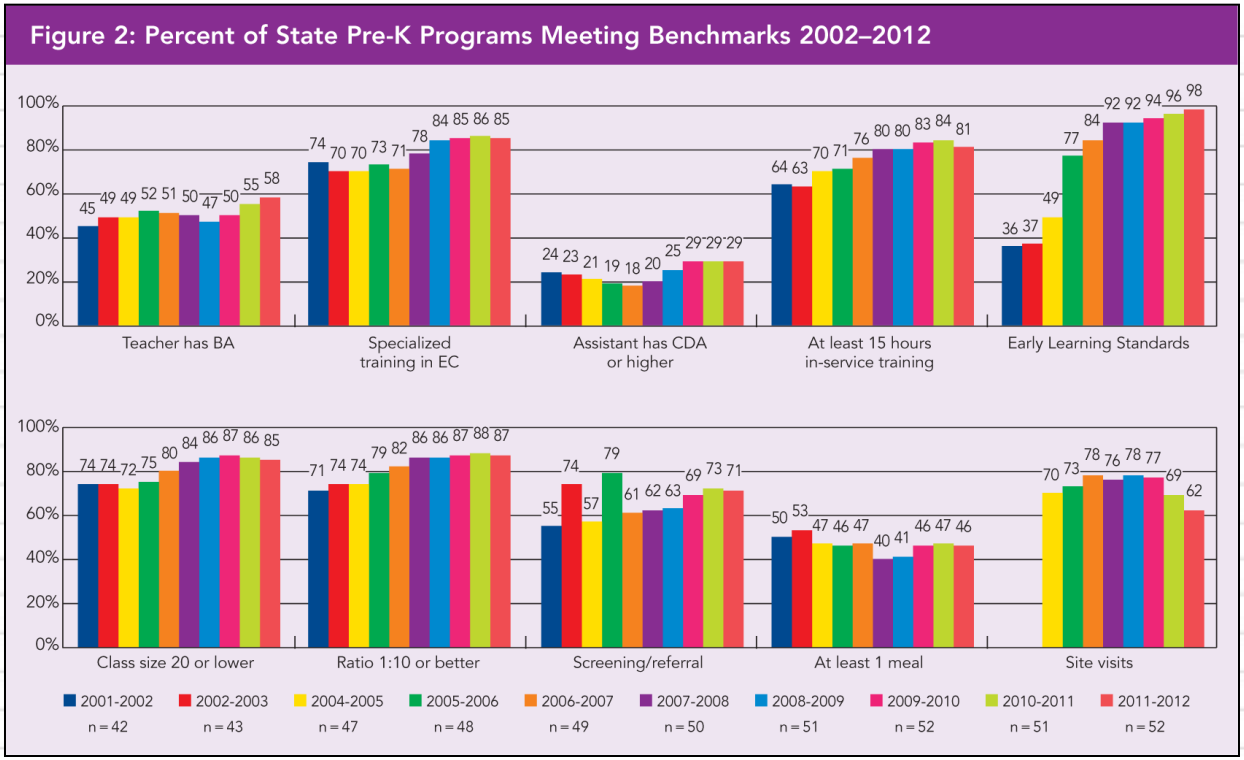
- Enrollment growth stopped well short of the goal
- 23 states enrollment declined or remained unchanged
- 17 states increased enrollment

State Pre-K Funding Decline



- Total pre-K funding by states fell $548 million (adjusted for inflation)
- State funding per child fell $442 to just $3,841
- Funding per child is now $1,000 below its level a decade ago
- State funding per child declined in 27 of 40 states with programs
- In 13 states per-child spending fell by 10 percent or more

Quality Standards



- 4 states met all 10 benchmarks
- 7 states lost ground on 9 benchmarks, 5 for site visits
- 42 percent of children in programs that met fewer than 5

Results of Universal Pre-K in the US

- Rhode Island Randomized Trial
  - Positive gains for all, larger gains for low income children
- Boston RDD
  - Gains in language, literacy, math, executive function
- Oklahoma (multiple studies)
  - Gains for all, larger gains for the lowest income children
  - Grade 3 gains on attention and academic achievement, BUT caution because comparison group is not comparable long term
- Also Georgia, West Virginia, New Jersey have studies
  - GA and NJ, long-term positive effects
  - BCA in GA, earnings gains alone may exceed cost

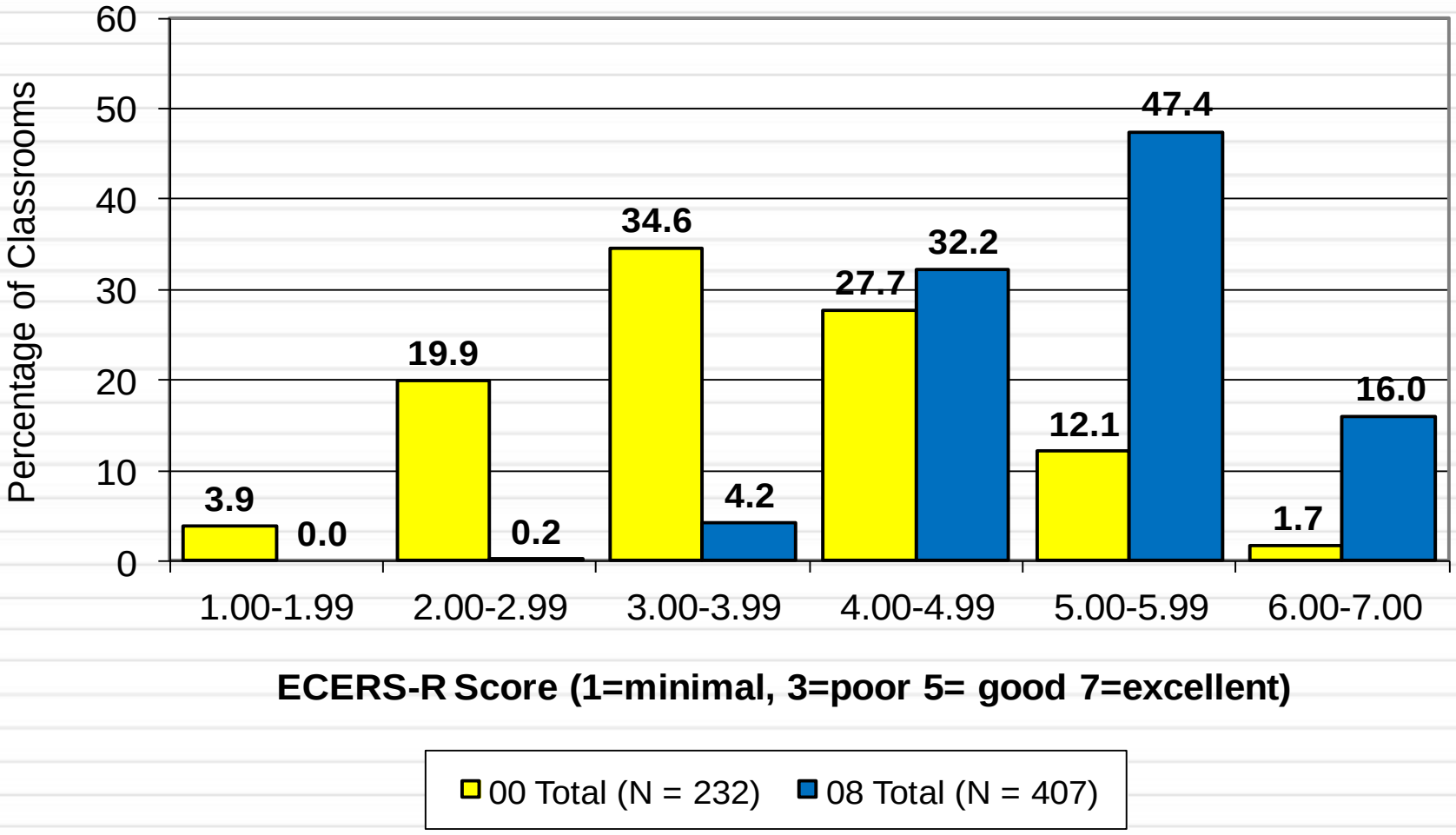
Effects of Pre-K for All Globally

- OECD test scores higher and more equal as access approaches 100%
- France: Ecole Maternelle increased income
- Norway: universal child care increased earnings and employment
- Arg. Uru. and UK: universal pre-K raised long-term achievement
- Denmark, Quebec: universal child care null or negative effects on children--quality matters

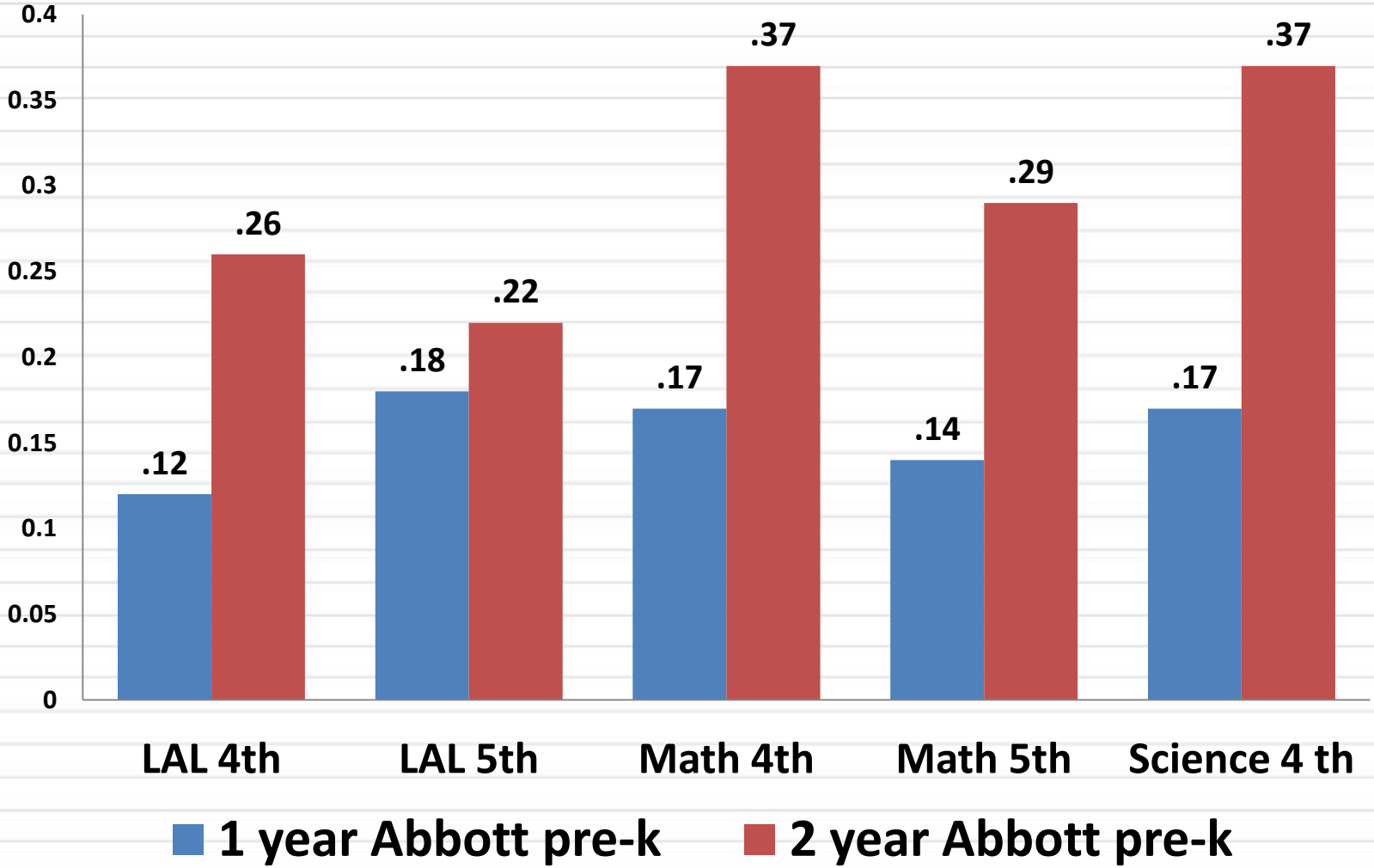
NJ's Urban ECE Transformation

- Teacher with BA & Cert. + asst. in each class;
- Full-day (6 hour educational day), 180-day program, plus extended day/full year;
- Access to all 3 and 4 yr. olds in 31 school systems
- Maximum class size of 15 students;
- Evidence-based curricula;
- Early learning standards and program guidelines;
- Support for potential learning difficulties;
- Professional development for key staff;
- Part of systemic reform P-12

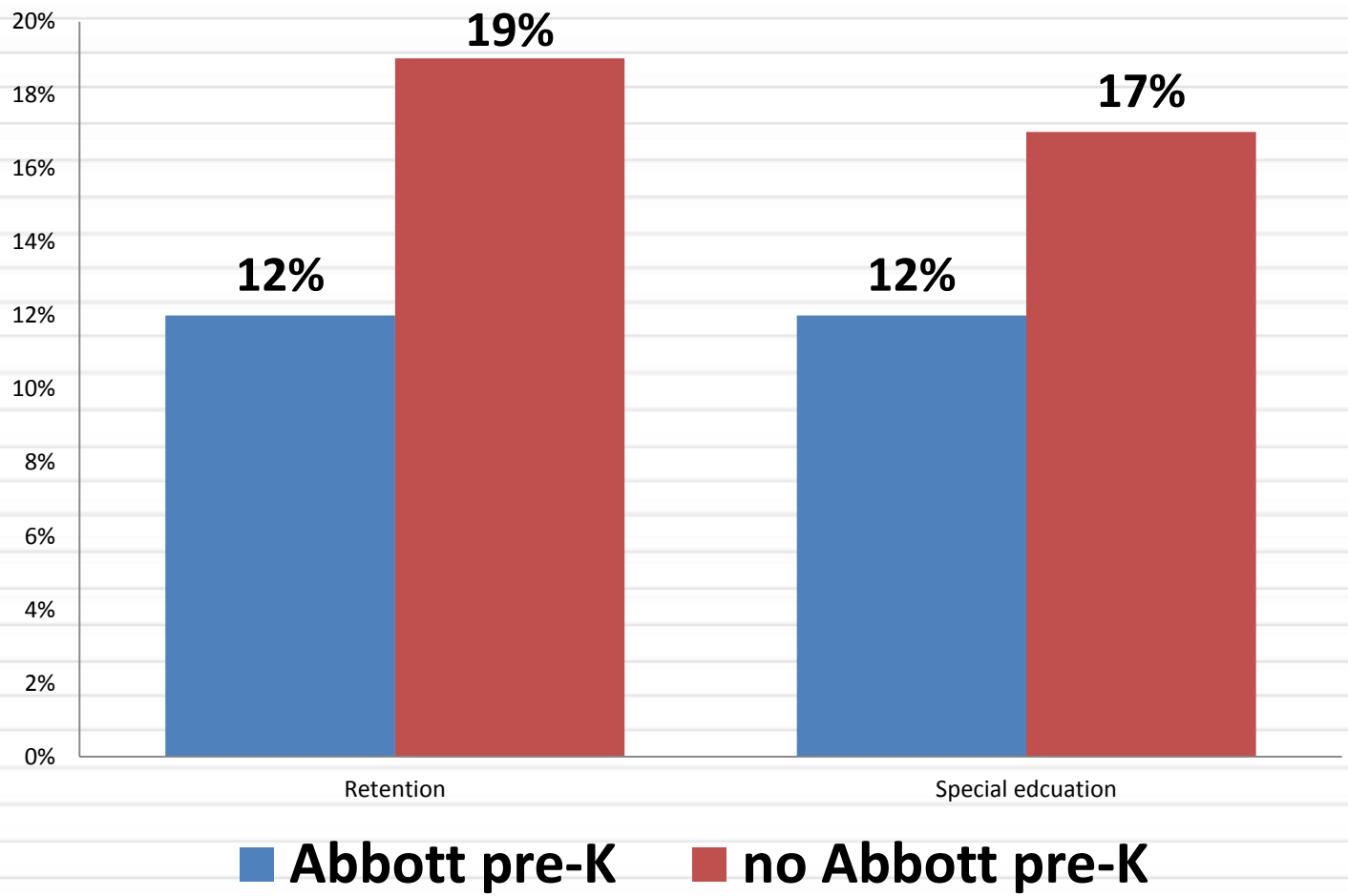
NJ Raised Quality in Public and Private



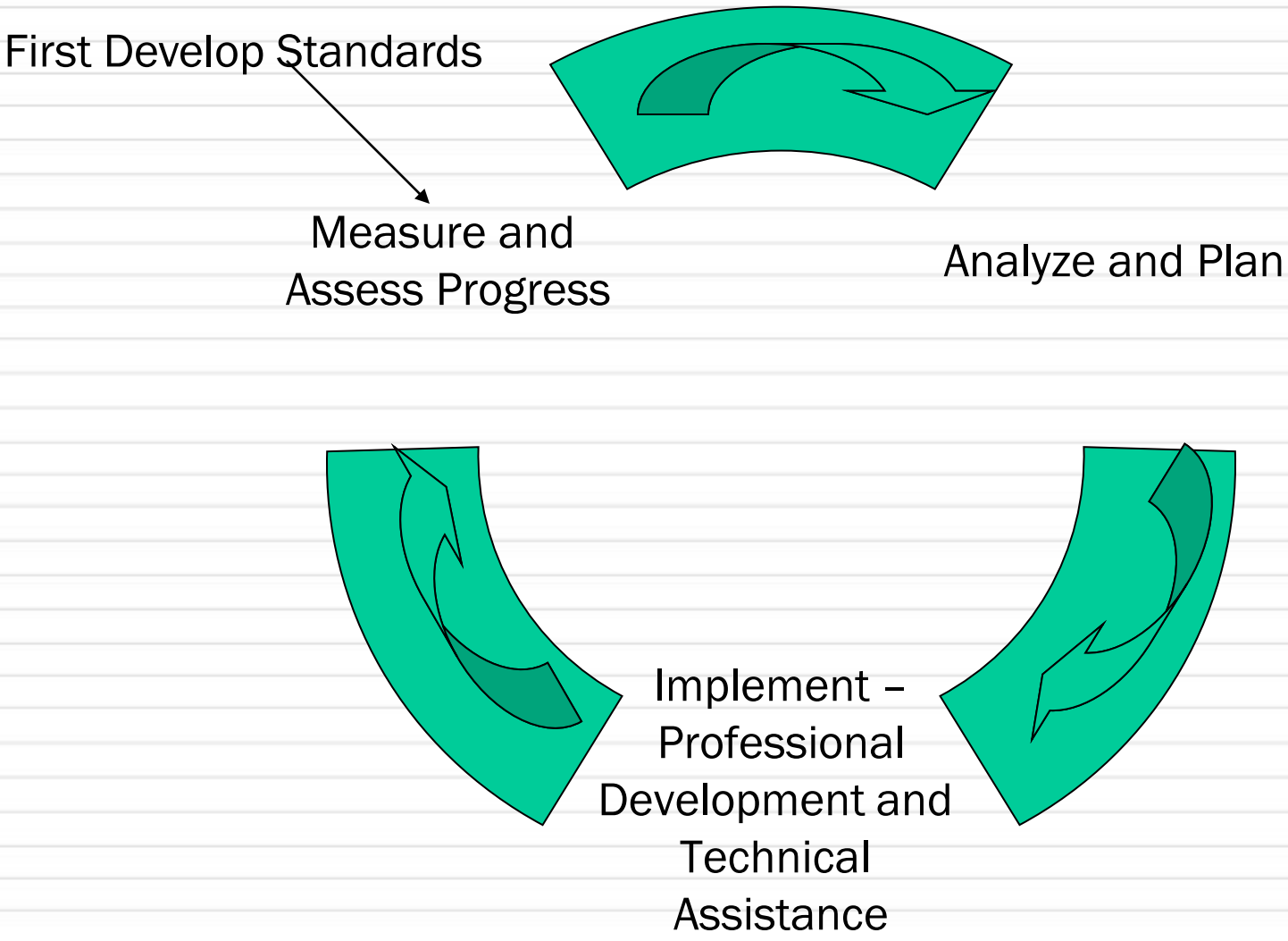
Abbott Pre-K Effects on NJASK by Years of Participation



Abbott Pre-K Effects on Retention and Special Education



Continuous Improvement Cycle



Why Offer *Universal* High-Quality Public Pre-K?

- All children gain from high quality pre-K
- Targeting is ineffective and inefficient
- Disadvantaged children benefit more
  - Higher coverage
  - Peer effects
  - Scale effects
- Pre-K for all has a larger net benefit
- Can't afford to leave the middle class behind

Conclusions

- Overall, pre-k produces long-term gains in cognitive and other domains
- Substantive persistent gains require large initial effects
- Stronger public programs do have long-term gains
- Few preschool programs are strong enough
- Universal programs produce gains for all children and stronger gains for disadvantaged children
- High standards, adequate funding, and continuous improvement system needed to produce results