



# What should policy makers know about effective preschool programs?

Joint Subcommittee on the Virginia Preschool Initiative  
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**RUTGERS**

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# Potential Gains from Pre-K Investments

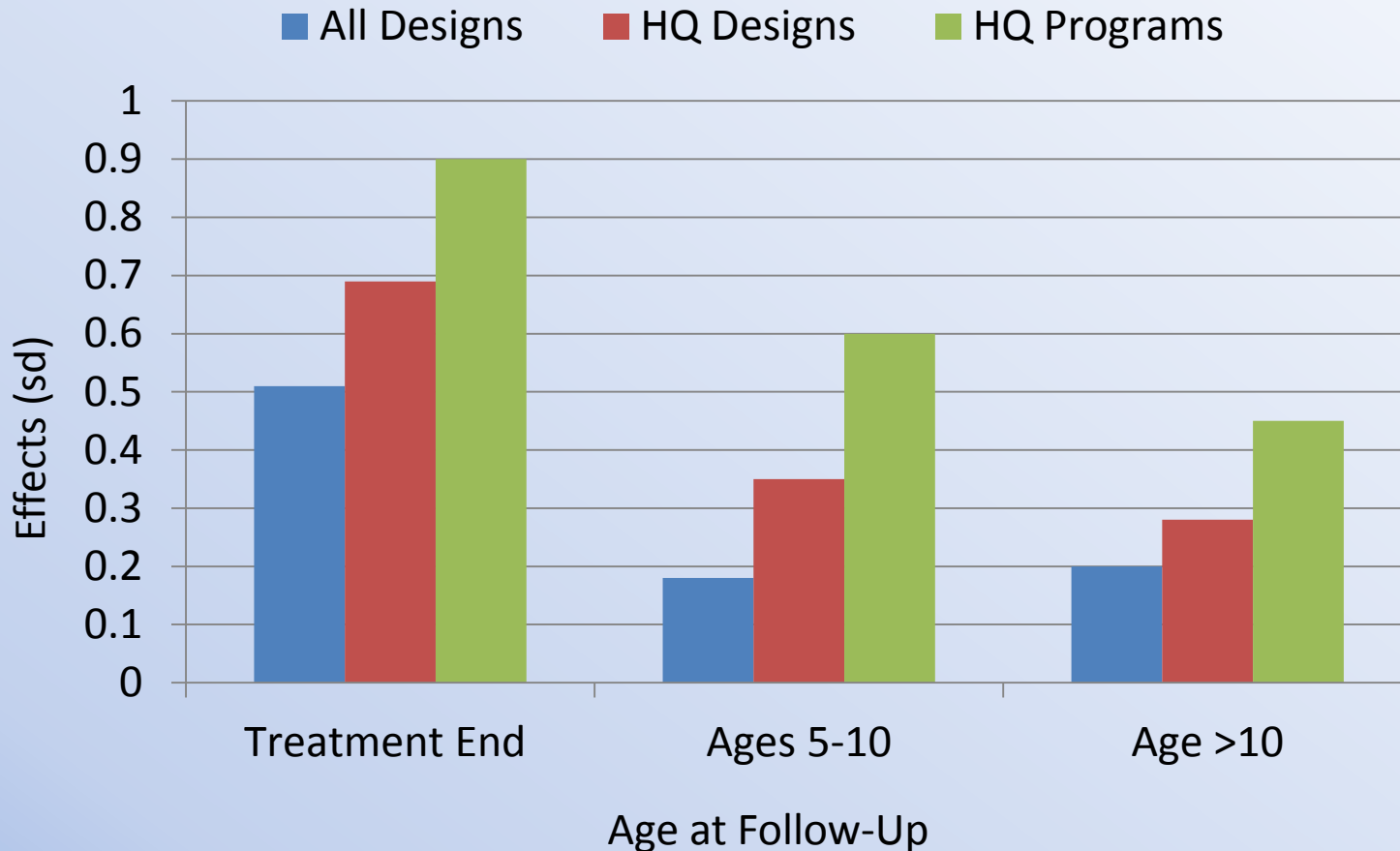
## *Educational , Social and Economic Success*

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

## *Decreased Costs to Government*

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

# What does all the evidence say? Cognitive gains from ECE in the US (123 studies since 1960)

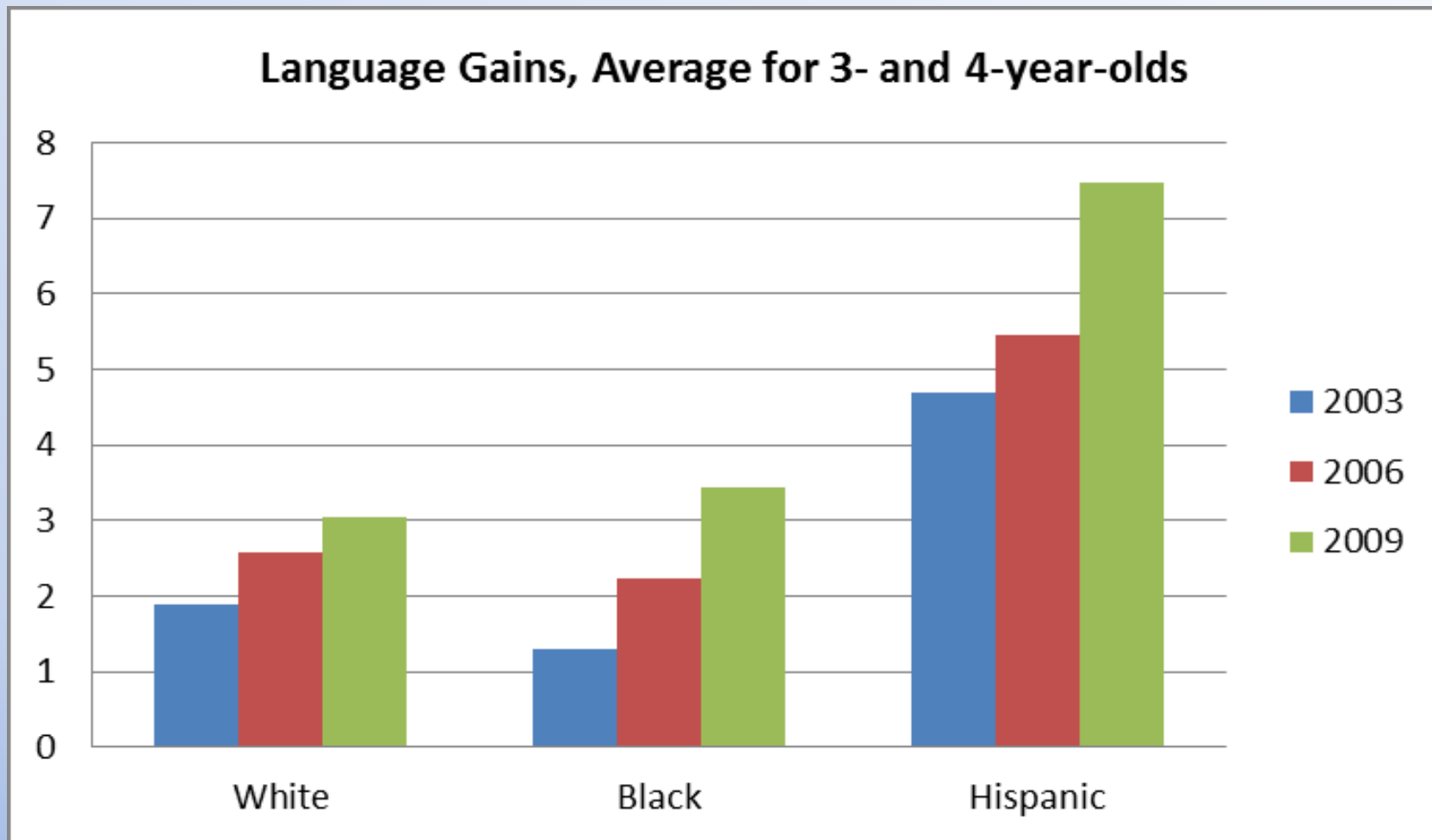


Note: 1 sd = achievement gap, so High Quality preschool closes nearly half the achievement gap

# National Head Start Impact Study (NIS)

- One year of Head Start had small positive impacts
- Lasting effects were very small or absent, but:
  - Study is for just one year of Head Start
  - Does account for cross-overs in actual treatment
  - Head Start had ***very small impacts from the start***

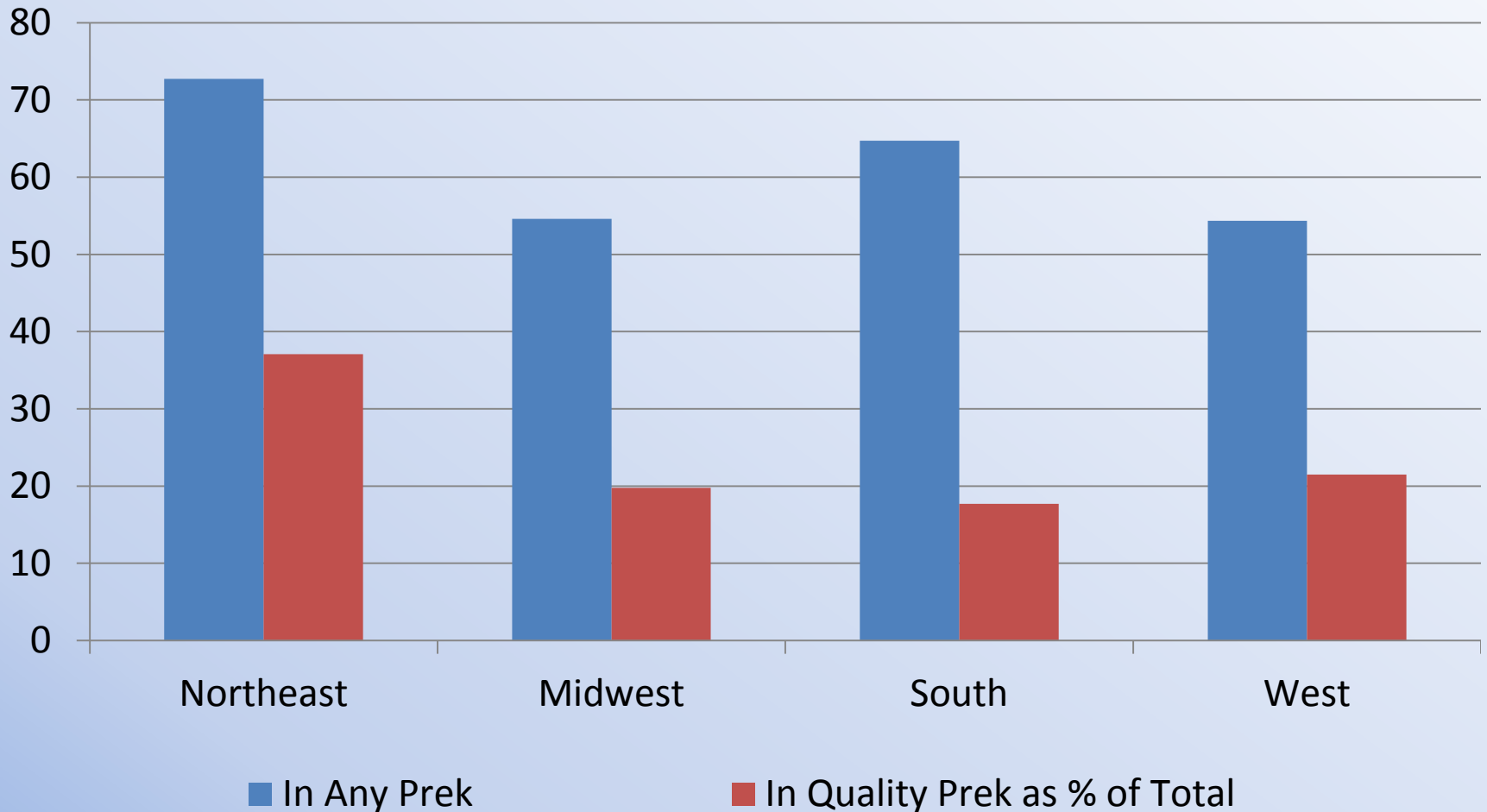
# Head Start Was Improved after the NIS



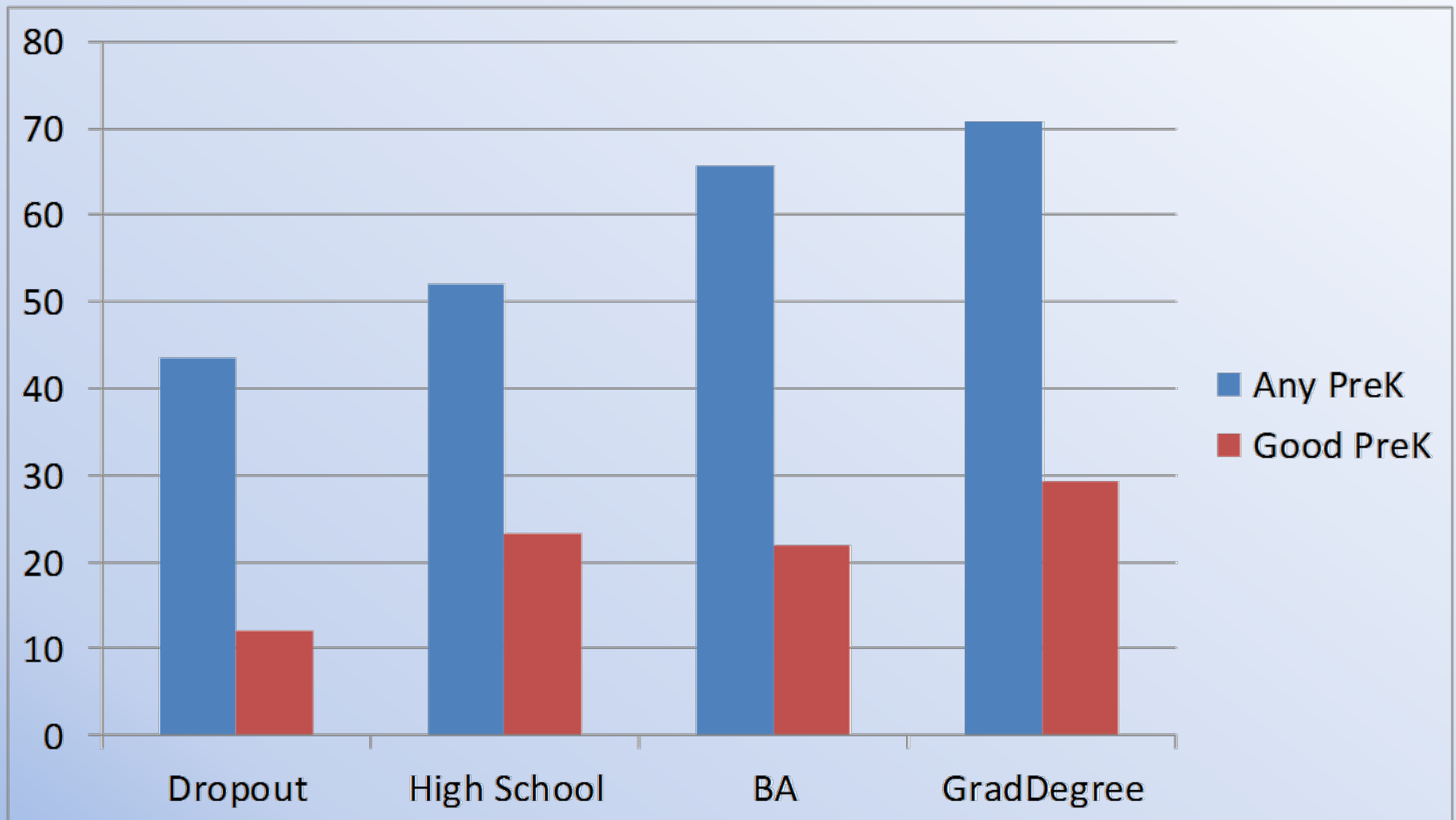
# What are the features of programs producing large lasting impacts?

1. A focus on intentional teaching that is individualized, 1:1 and small group
2. Well-educated teachers, adequately paid
3. Reasonably small classes and ratios
4. Strong curriculum well-implemented
5. Attention to the whole child (cognitive, social, and emotional) and family engagement
6. A continuous improvement system that focuses on teaching and learning

# Pre-K quality is too low across the country but is much higher in one region



# Good preschool is least available to families with the least education, but no one has much





# What do we learn from reviewing all the evidence?

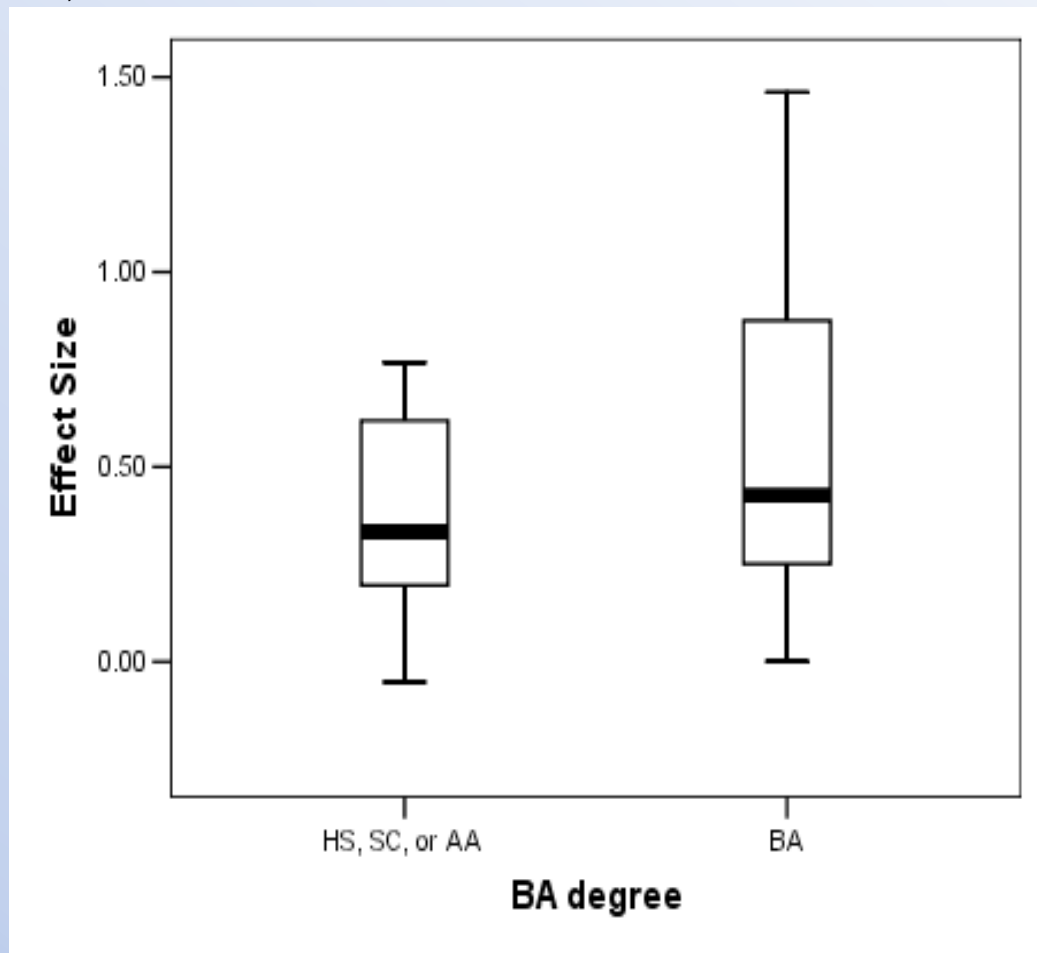
- Preschool has positive effects that diminish(converge) after children enter school but do not disappear
- Only high quality programs have large lasting effects
- Include self-regulation, socialization, & academics to influence life success
- Most private and public programs are not high quality
- Head Start and some state pre-K had weak lasting effects, though Head Start has been improved
- Some states & cities have scaled up high quality
  - Boston, NJ, and NC and AL in the south

# Why a BA Degree?

- Two Committees of the NRC (NAS and IOM) recommend BA as entry level qualification based on analyses of *what teachers must know and be able to do* to be highly effective:
  - How to integrate up-to-date knowledge on teaching, learning, and child development into practice—including cognitive development, specific content knowledge and skills, and social and emotional development
  - How to provide rich conceptual experiences that promote growth in specific content areas and such broad domains as executive function & socialization
  - Expected learning trajectories, appropriate content, & how children learn
  - How to create and manage effective learning environments
  - A repertoire of effective teaching strategies to be used intentionally
  - Assessment procedures to inform instruction that are individually and culturally appropriate and how to use data to inform individualized teaching
  - How to adapt teaching practices to children who do not speak English, come from different backgrounds, have disabilities and challenging behaviors
  - How to identify children who need referral for more intensive services
  - How to establish relationships with children and enhance social development
  - How to work with parents and other family members
  - AND MUCH MORE

## Impact of teacher education: little difference in average effects but *only BA teachers produce large effects*

Kelley, P., Camilli, G. (2007). *The impact of teacher education on outcomes in center-based early childhood education programs: A meta-analysis*. New Brunswick, NJ:NIEER



How do we increase  
program effectiveness?

# Good Teachers are Essential

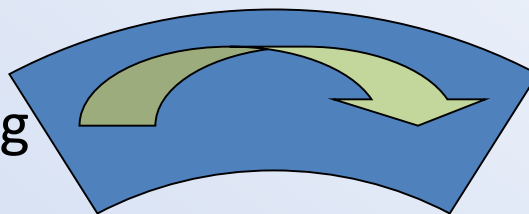
- **Strong Initial Teacher Pre-service Preparation**
  - Provide teachers with competencies to be highly effective
  - Enroll the teachers we already have at low cost to state
  - Higher education requirements for coordination and content
- **Adequate Pay**
  - Low pay attracts mostly low skills workers
  - Low pay provides no incentive for rigorous education and training
  - Low pay leads to low productivity and high turnover
  - Pay inequality with public schools produces teacher brain drain
- **Continuous Improvement**
  - Self-assessment
  - Mentoring and Coaching (guidance and feedback)
  - Accountability

## NJ Example: High Quality in 31 High Poverty Districts

- High standards for learning, teaching, curriculum
- Fully qualified teachers (BA and ECE certification)
- Maximum of 15 children per classroom
- 6 hour educational day, 180-days per year
- Continuous improvement system w/ SAVS & coaching
- Adequate funding with public school salaries
- Part of systemic reform P-3
- About 50,000 3 and 4 yr. olds in 31 school systems
- Public-private system with *60% private* providers
- A 5 to 10 year process (5 years to the BA requirement)

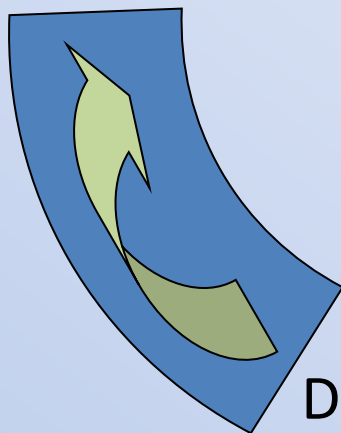
# Continuous Improvement Cycle

First set expectations  
for learning and teaching

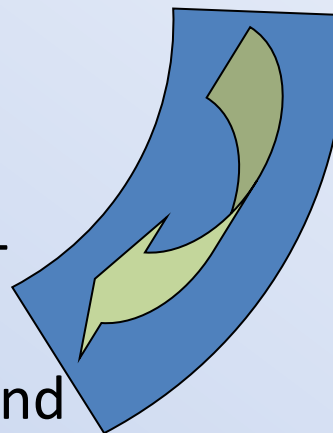


Measure and  
Assess Progress

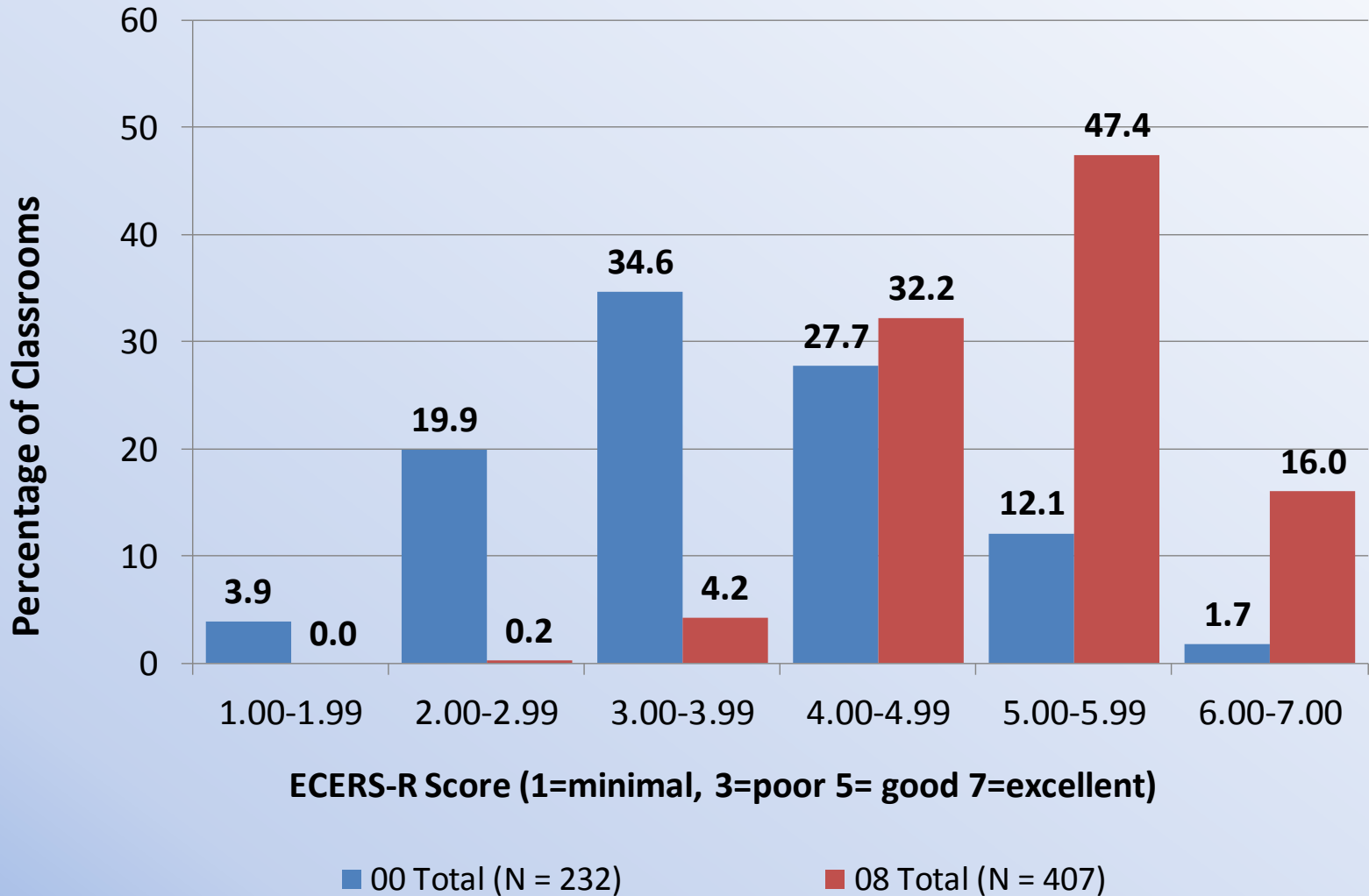
Analyze and Plan



Implement –  
Professional  
Development and  
Technical  
Assistance

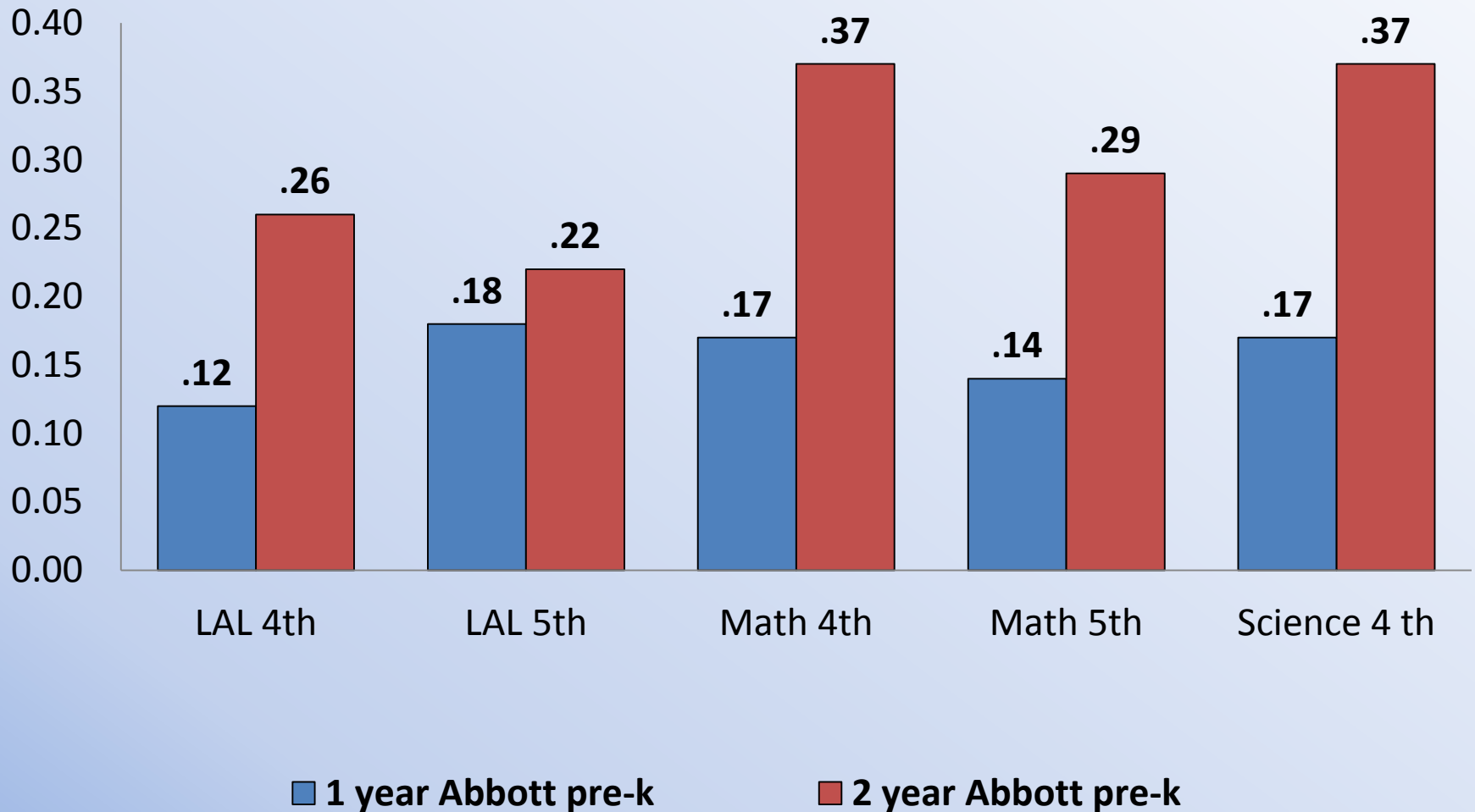


# NJ Raised Quality in Public and Private

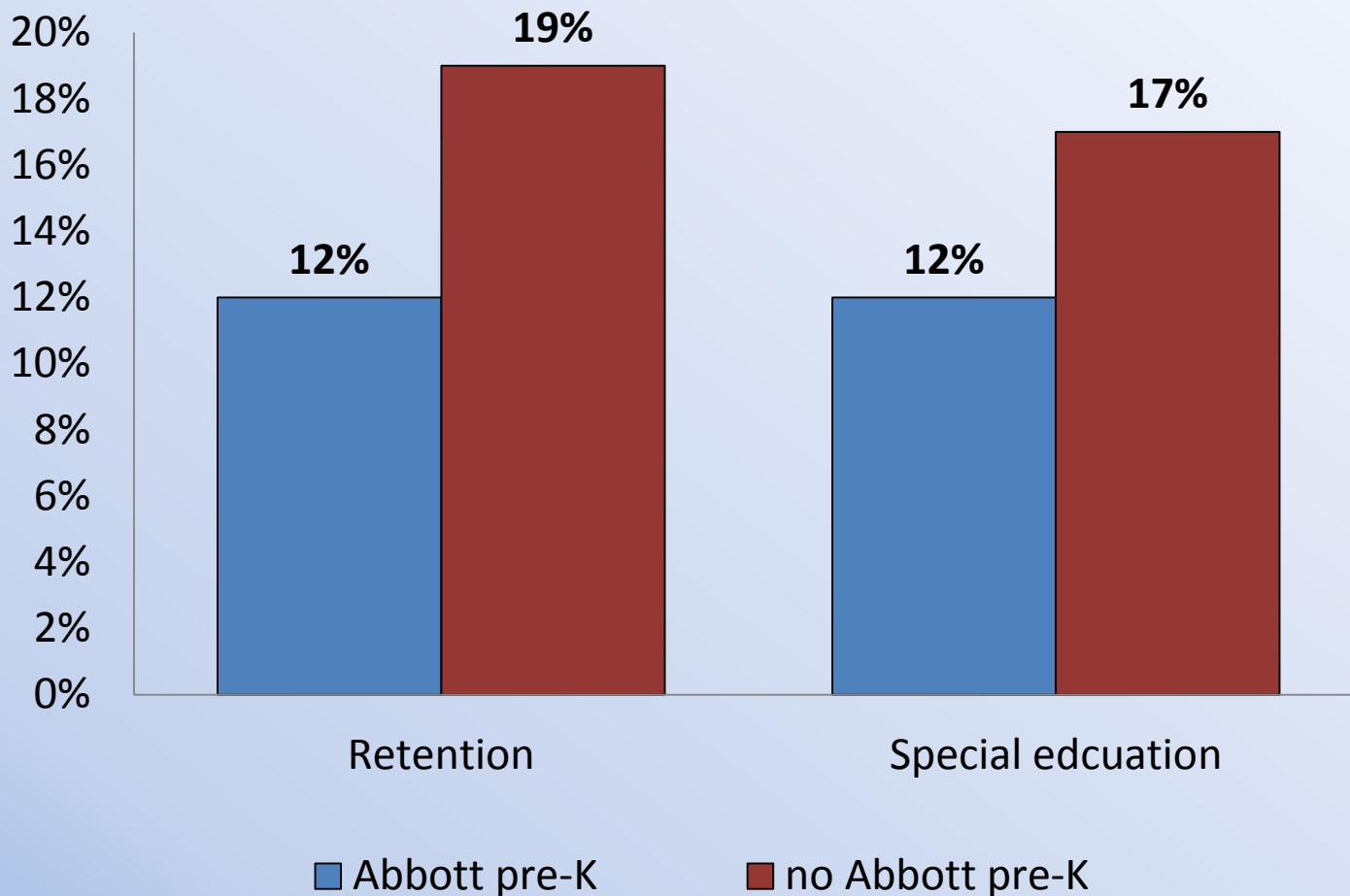




# NJ Effects on Achievement Grades 4 and 5



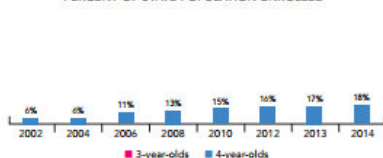
# NJ Effects on Retention & Special Education at Grade 5



# Where Does Virginia Stand?

## Virginia

PERCENT OF STATE POPULATION ENROLLED\*



STATE SPENDING PER CHILD ENROLLED\* (2014 DOLLARS)



The Virginia Preschool Initiative (VPI) has served at-risk 4-year-olds who are not enrolled in existing preschool programs since 1995. The VPI program served 18,021 4-year-olds in the 2013-2014 school year, increasing for the third consecutive year by 4 percent. Eighty-eight percent of the school districts operate VPI classrooms, and the majority of children participate in public school settings. Funding allocations to local school divisions are based on the number of students eligible for free lunch, but criteria for student eligibility are based on locally determined risk factors including, but not limited to: poverty, family unemployment, limited English proficiency, homelessness, parent with limited education, and parent incarceration. VPI programs may provide services on either a part- or school-day schedule throughout the school year.

Public school districts and local departments of social services receive VPI funding, but these agencies may subcontract with Head Start programs or private child care centers to provide prekindergarten education services. A local composite index of district resources mandated that communities should contribute matching funds. During the 2013-2014 school year, the state contributed at least half of the \$6,000 per-pupil rate, capping the required local match at one-half the per-pupil amount, regardless of local composite index. More than 35 percent of total costs statewide accounted for local matching funds. Programs operating on a part-day schedule receive half of the full-day funding allocation.

State funding for VPI rose for the second consecutive in 2013-2014 as it increased \$2.5 million. The VPI formula for the 2012-14 biennium was re-benchmarked 2011-2012, resulting in additional funding generated for as many as 24,500 openings each year. Lottery revenues continued to account for all state funding for VPI.

VPI curricula are aligned with Virginia's Foundation Blocks of Early Learning Standards: Comprehensive Standards for Four-Year-Olds, which were expanded in the 2012-2013 school year to include music and the visual arts.

In 2011, the Virginia Preschool Initiative was evaluated for both program quality and child outcomes by the Curry School of Education at the University of Virginia. Program monitoring by state education staff and consultants was conducted through biennial site visits, prior to 2011-2012, to review program facilities, on-site safety procedures, and program record checks. Site visits were eliminated due to budget constraints in 2011-2012. Desk monitoring of local plans and results of child assessments continue as methods to conduct an annual review of program-level outcomes.

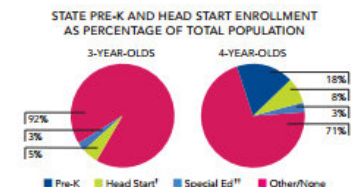
In 2014, Virginia was awarded a competitive federal Preschool Development Grant for \$17.5 million.



## VIRGINIA PRESCHOOL INITIATIVE

### ACCESS

Total state program enrollment	18,021
School districts that offer state program	88%
Income requirement	No income requirement
Hours of operation	3 to 5.5 hours/day, 5 days/week <sup>1</sup>
Operating schedule	Academic year
Special education enrollment, ages 3 and 4	9,333
Federally funded Head Start enrollment, ages 3 and 4	12,526
State-funded Head Start enrollment, ages 3 and 4	0



<sup>1</sup> Some Head Start children may also be counted in state pre-K.  
<sup>\*\*</sup> Estimates children in special education not also enrolled in state pre-K or Head Start.

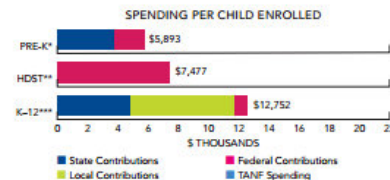
### QUALITY STANDARDS CHECKLIST

POLICY	STATE PRE-K REQUIREMENT	BENCHMARK	DOES REQUIREMENT MEET BENCHMARK?
Early learning standards	Comprehensive	Comprehensive	<input checked="" type="checkbox"/>
Teacher degree	BA (public); HSD (nonpublic) <sup>2</sup>	BA	<input type="checkbox"/>
Teacher specialized training	Early Primary, Elem Ed, <sup>3</sup>	Specializing in pre-K	<input checked="" type="checkbox"/>
Assistant teacher degree	HSD or equivalent (public); No minimum degree (nonpublic)	CDIA or equivalent at least 1 support service	<input type="checkbox"/>
Teacher in-service	15 clock hours/years	At least 15 hours/year	<input checked="" type="checkbox"/>
Maximum class size		20 or lower	<input checked="" type="checkbox"/>
3-year-olds	NA		
4-year-olds	18		
Staff-child ratio		1:10 or better	<input checked="" type="checkbox"/>
3-year-olds	NA		
4-year-olds	1:9		
Screening/referral	Vision, hearing, immunizations <sup>4</sup>	Vision, hearing, health; and at least 1 support service	<input checked="" type="checkbox"/>
Meals	No meal required <sup>4</sup>	At least 1/day	<input type="checkbox"/>
Monitoring	Other monitoring	Site visits	<input type="checkbox"/>

TOTAL BENCHMARKS MET  
6

### RESOURCES

Total state pre-K spending	\$85,807,267
Local match required?	Yes
State spending per child enrolled	\$3,741
All reported spending per child enrolled*	\$5,893



\* Pre-K programs may receive additional funds from federal or local sources that are not included in the figure.  
\*\* Head Start per-child spending for the 2013-2014 year includes funding only for 3- and 4-year-olds served. Past years figured have unintentionally included funds for Early Head Start.  
\*\*\* K-12 expenditures include capital spending as well as current operating expenditures. Data are for the '13-14 school year, unless otherwise noted.

<sup>1</sup> Localities may choose to offer part-day programs for 3 hours per day or school-day programs for 5.5 hours per day. Most programs operate on a school-day schedule. All programs operate 5 days per week.  
<sup>2</sup> For program sites where public funds are paying for nonpublic personnel, localities report the highest degree and/or credential for only the teacher who is the instructional lead. The instructional lead, who must hold a BA and appropriate specialized training, supervises the classroom teachers and is responsible for management and oversight of the program's curriculum and instructional practices, including on-site presence for a substantial portion of the instructional time. The policy does not meet NIEER's benchmark requirement.

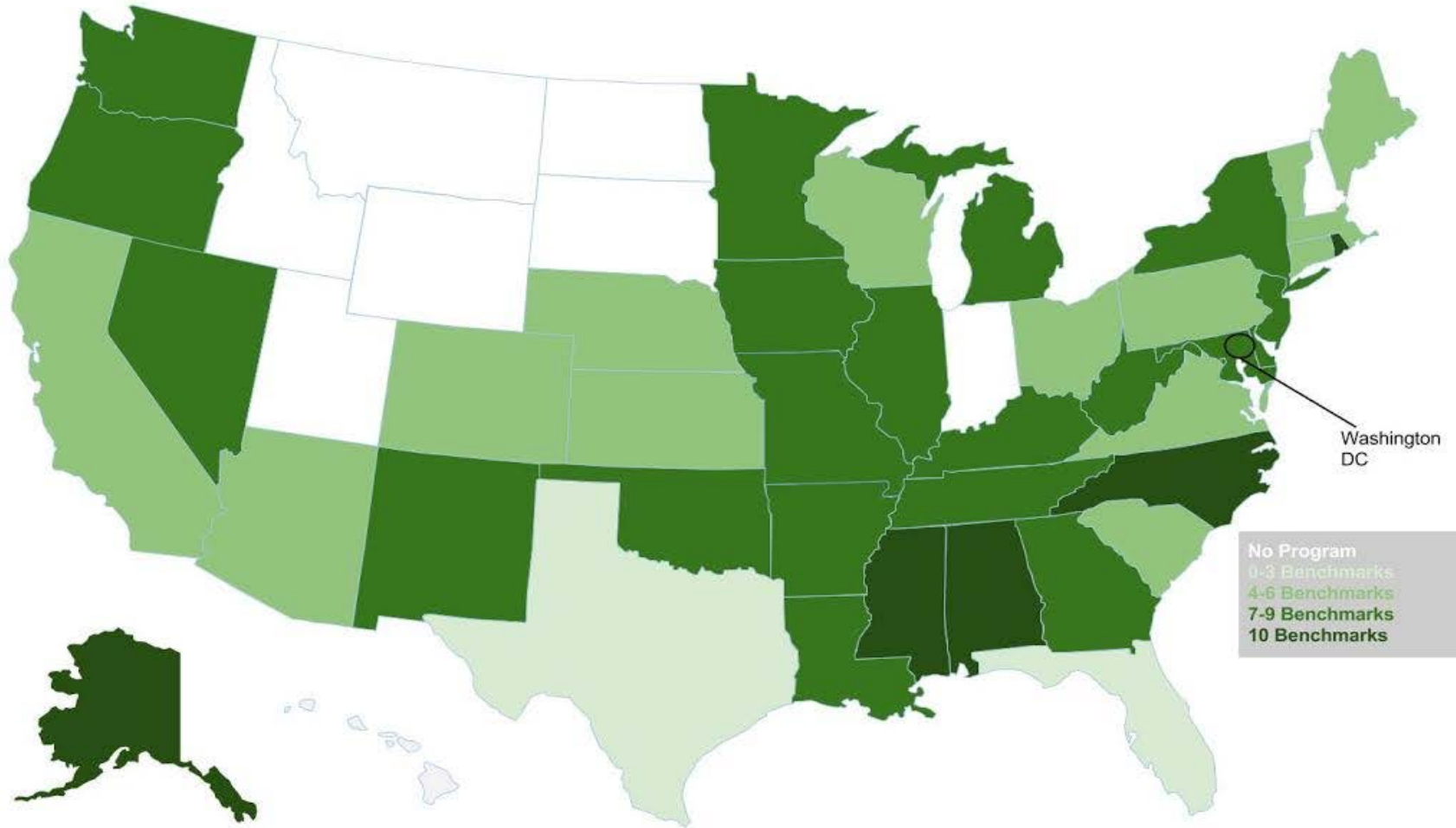
<sup>3</sup> Support services include parent involvement activities, health services for children, and referral to social services. Other comprehensive services, including developmental and dental screenings and referrals, and the annual number of required parent conferences or home visits, are determined locally.

<sup>4</sup> Currently, the state offers the opportunity for all programs to provide meals, but programs are not required to do so. The number of programs providing at least one meal is not known.

# Quality Standards Checklist

Policy	Benchmark	53 pre-K initiatives, number meeting benchmark
Early learning standards	Comprehensive	53
Teacher degree	BA	31, <b>Not VA</b>
Teacher specialized training	Specializing in pre-K	45
Assistant teacher degree	CDA or equivalent	18, <b>Not VA</b>
Teacher in-service	At least 15 hours/year	43
Maximum class size	20 or lower	45
Staff-child ratio	1:10 or better	46
Screening/referral and support services	Vision, hearing, health; at least 1 support service	35
Meals	At least 1/day	25, <b>Not VA</b>
Monitoring	Site visits at least every five years	33, <b>Not VA</b>

# Pre-K Quality Standards



# Takeaway Lessons



1. Pre-K gains decline: Expect some convergence or catch up, but recognize that you are paying for it
2. Meaningful lasting gains only occur when the pre-K program produces big gains from the start
3. Big gains depend on high quality: good teaching with a strong curriculum
4. Good teaching system wide also requires:
  - Well-educated teachers
  - Adequate compensation regardless of setting
  - A continuous improvement system