

Increasing Returns from Large Scale Investment in ECE

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“Paradox” of Early Care and Education Policy

Early experience has broad, persistent effects

- Learning, development, and health
- Educational, social, and economic success

ECE can produce high rates of return

- Lower remedial education, abuse/neglect, crime
- Higher earnings, better health, longer life
- Child care for parents: higher earnings, gender equity

Large scale public programs often fail to reproduce results

- Weaker, less persistent benefits
- Highly variable outcomes
- Lower rates of return, sometimes too low

What explains this paradox?

Small scale results not exactly reproducible

- Best case examples not fully generalizable
- Populations and contexts differ at scale

More importantly, *everyone* underinvests

- Parents underinvest due to externalities & uncertainty
- Governments also underinvest, favor quantity over quality

Underinvestment causes 2 major problems

- Design failure
- Implementation failure

Result is highly variable outcomes and returns

- Europe & Americas have positive returns but also failures

RETURNS ON INVESTMENT IN ECE

Program	Population	Cost per Child \$	Earnings Benefit	Full Benefits	Earnings B/C	Total B/C
ABC 0-5	VERY LOW SES	\$83 530	\$147 359	\$208 283	1.46	2.49
PERRY 3-5	VERY LOW SES	\$20,854	\$91,646	\$179 446	4.39	8.60
CPC 3-5	LOW SES	\$9,719	\$32,933	\$105,294	3.39	10.83
HEAD START 4-5 (Kay/Duncan)	LOW SES	\$7,982 \$9,173	\$20,022 \$14,459	\$22,392 ?	2.51 1.59	2.81 ?
HEAD START 3/4/5 (NHIS)	LOW SES	\$16.200	None	Negative	0	<1
TENN VPK 4-5		\$	Negative	?	<0	?
OK/GA (Cascio) 4-5	UNIVERSAL	\$4,086/ \$7,427	\$24,094	?	5.90 3.24	?
TULSA (Bartik) 4-5	UNIVERSAL	\$9,183	\$14, 415	17,378	1.57	1.89

What is Needed for High Returns?

- Big, persistent change in early experience
- Deep learning in unconstrained domains
 - Language
 - Mathematics
 - Character (also creativity, dispositions?)
- Universal programs have bigger impacts
- Modest long-term gains yield high returns
- Build on prior investments year by year

Example: Court Ordered Pre-K in NJ, USA

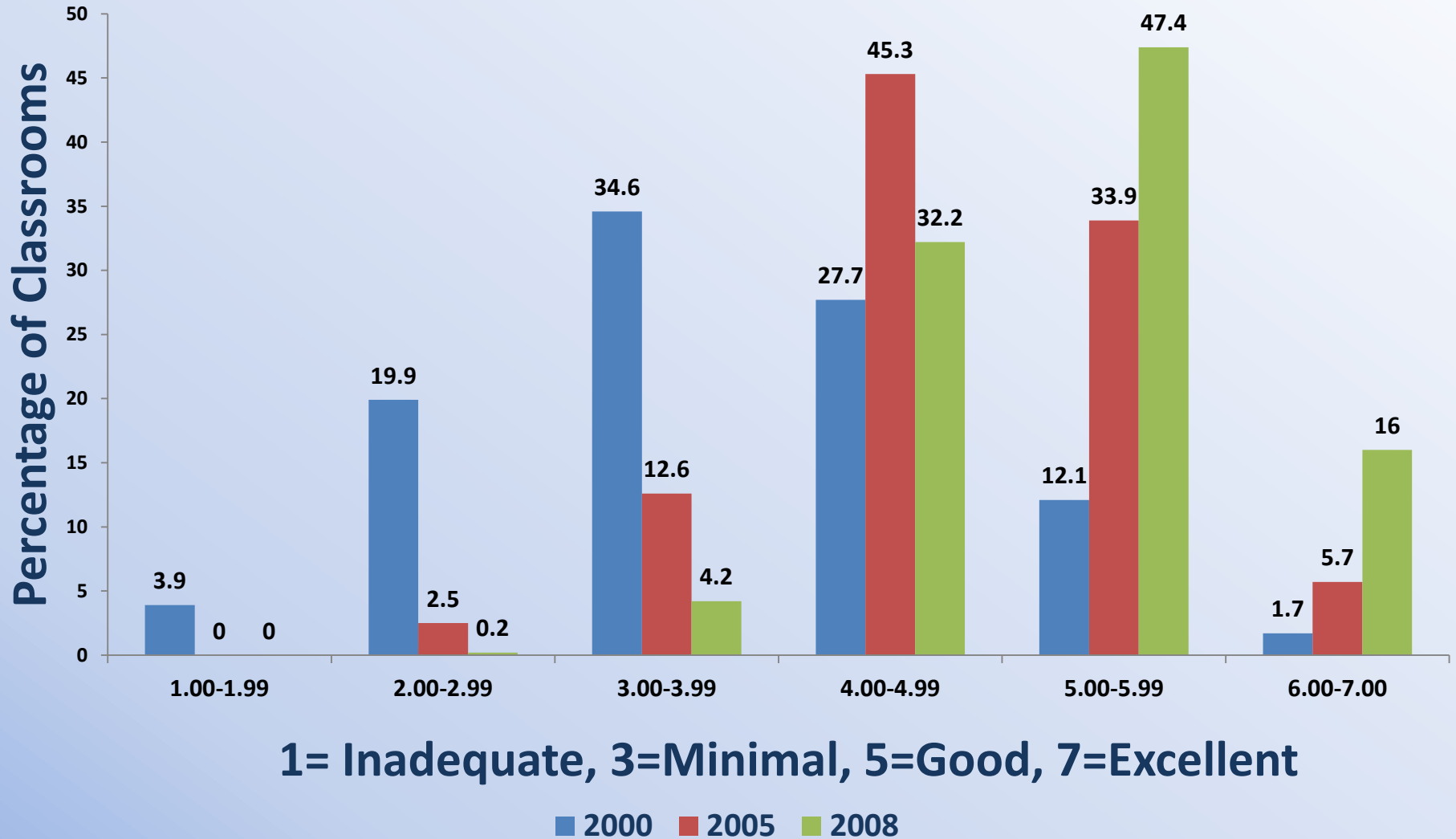
- Supreme Court asserts a child's right to ECE as necessary to be a fully participating citizen
- Design (and cost) based on children's needs
- 31 cities with high poverty
- 44,000 children ages 3 and 4
- Part of systemic education reform

NJ Preschool Model

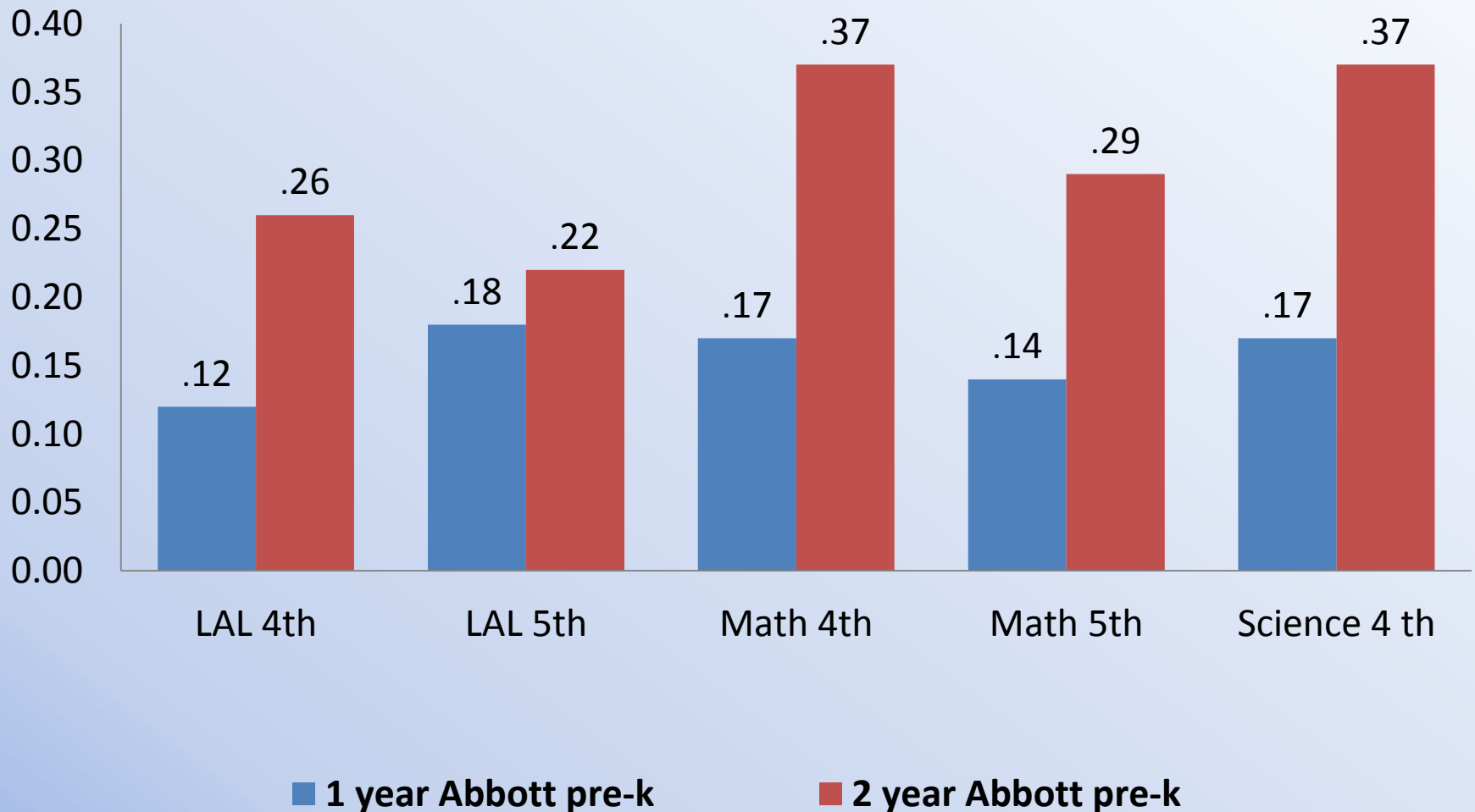
- Universal
- High expectations
- Adequate funding
- Strong teachers
- Small classes
- Ages 3 & 4 (2 years)
- Full day
- Public-private provider partnership
- Continuous improvement system (GPS)



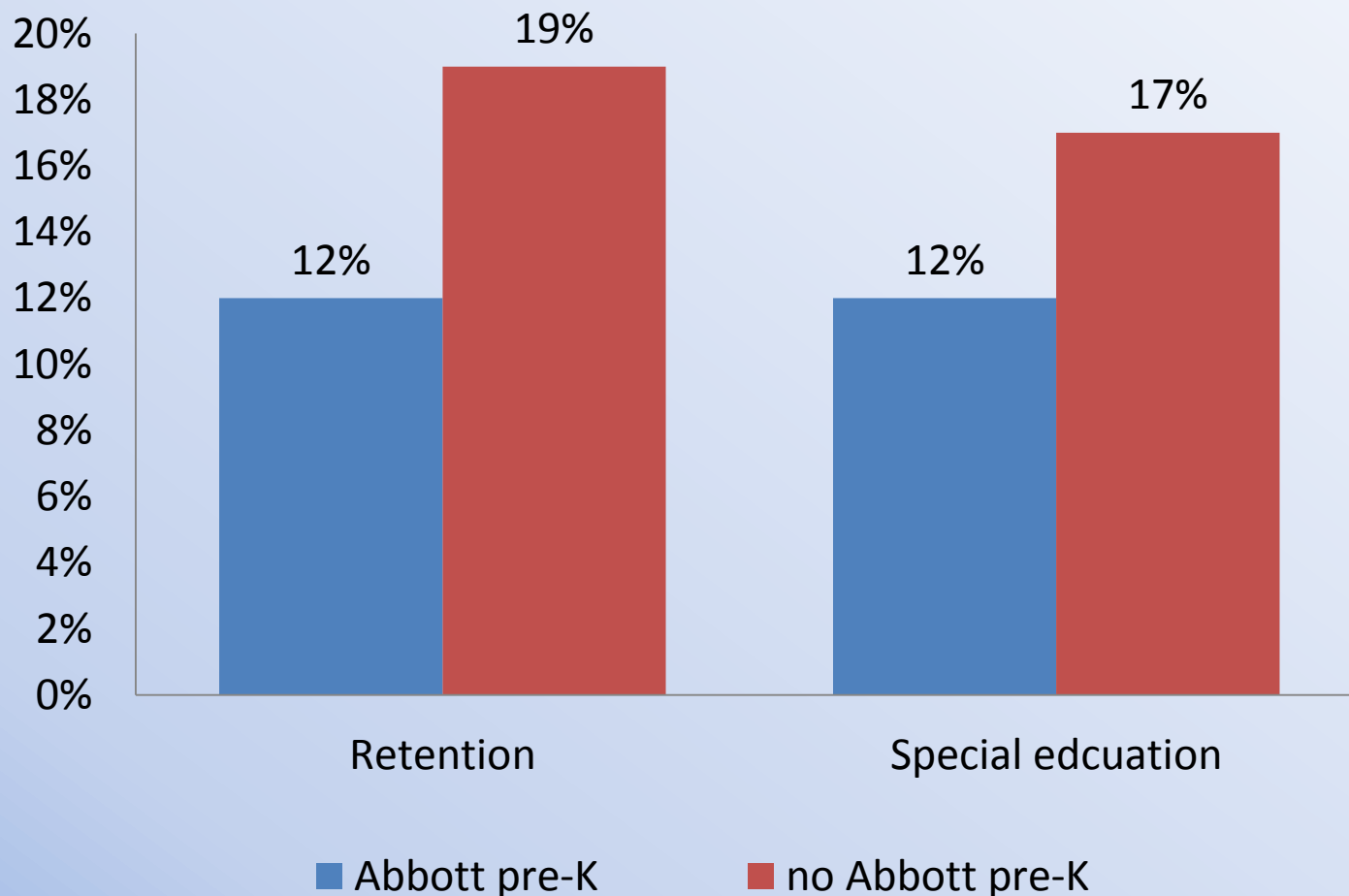
Transformation of Quality in NJ UPK (ECERS-R)



NJ UPK Effects on Achievement Grades 4 and 5



NJ Effects on Retention & Special Education at Grade 5



Conclusion:

Invest in High Quality ECE for High Returns

- Set high goals for all children and teachers
- Design for goals guided by proven examples
- Set spending from design, not *vice versa*
- Universal but individualized, deep learning
- Public ECE agencies must support strong implementation not just set policy
- A GPS at every level--continuous measurement & adjustment –from classroom level up—no one right way for every place and time