

A photograph of four young children sitting on the floor in a classroom. They are all raising their hands, suggesting an interactive activity or a question-and-answer session. The children are diverse in appearance and are dressed in casual clothing. The background shows a typical classroom setting with shelves and educational materials.

# Wyoming's Needs and Opportunities for High Quality Pre-K

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# Wyoming: Context and Challenges for Education

- **Wyoming has a decreasing school age population—2022 birth rate was 21% below that in 2015** this creates diseconomies of scale that raise cost per child and/or lead to school closures
- **Reading and math scores are good compared to other states, but...** have been on a downward trend for past 5 years, just 38% proficient in reading at grade 4, reading slips to national average by grade 8, and scores are far below China our biggest competitor in the global economy
- **Future labor markets will demand greater knowledge and skills**  
AI and other technologies increase demands, increased returns to higher educational attainment, Wyoming needs to attract and grow high education/high pay industries
- **Economic mobility depends on community-wide features**  
trending downward employment, marriage, health and longevity
- **Investments in early education can address all four challenges**

# ECE Links to Broad Lifelong Outcomes

## Birth-5 Environment

- Home Learning
- Early Learning Programs
- Broader Society

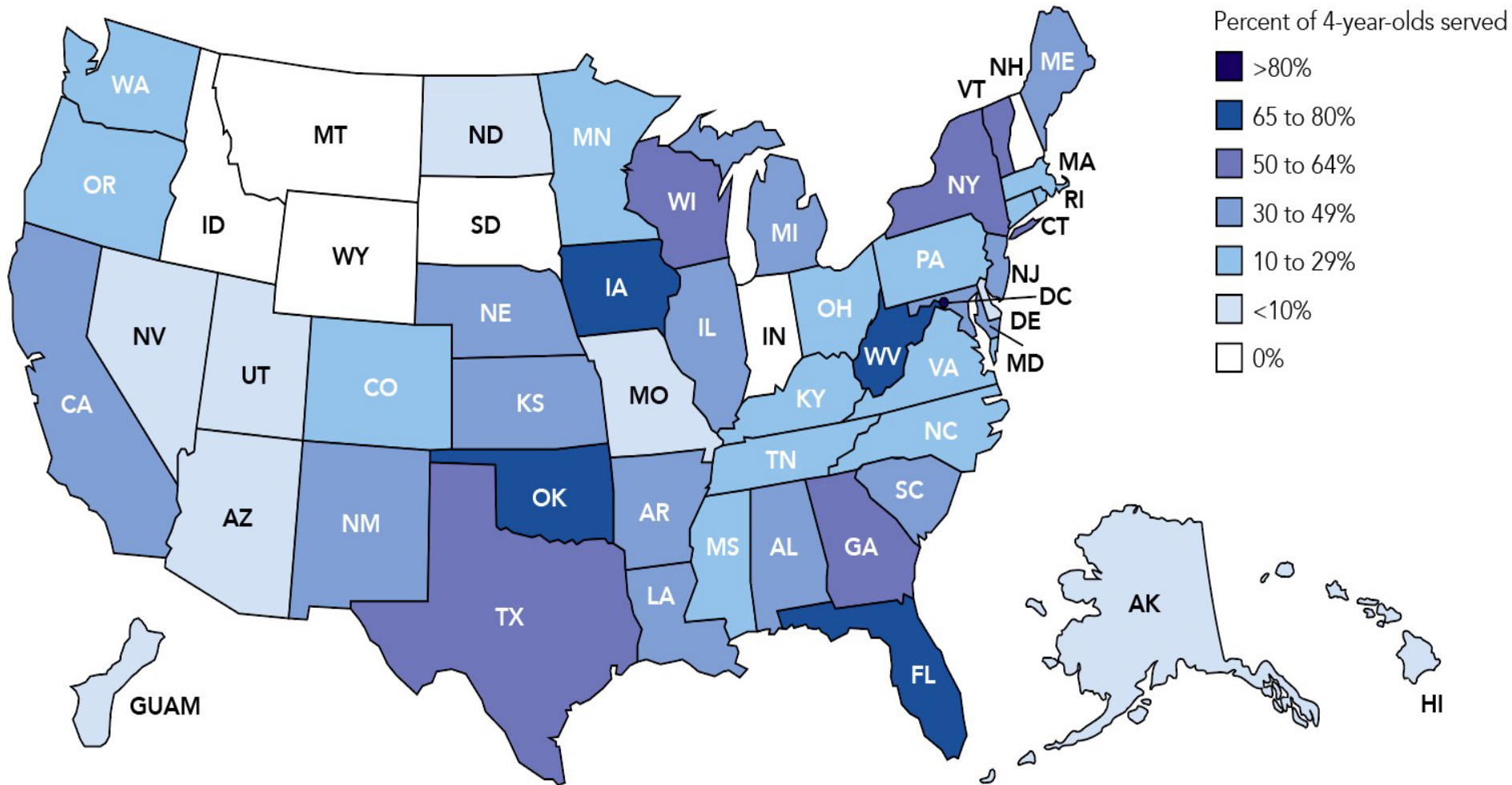
## Early Learning & Development

- Language
- Literacy
- Math & Science
- Self-regulation
- Social & Emotional
- Habits & Dispositions
- Creativity
- Physical Health

## Adult outcomes

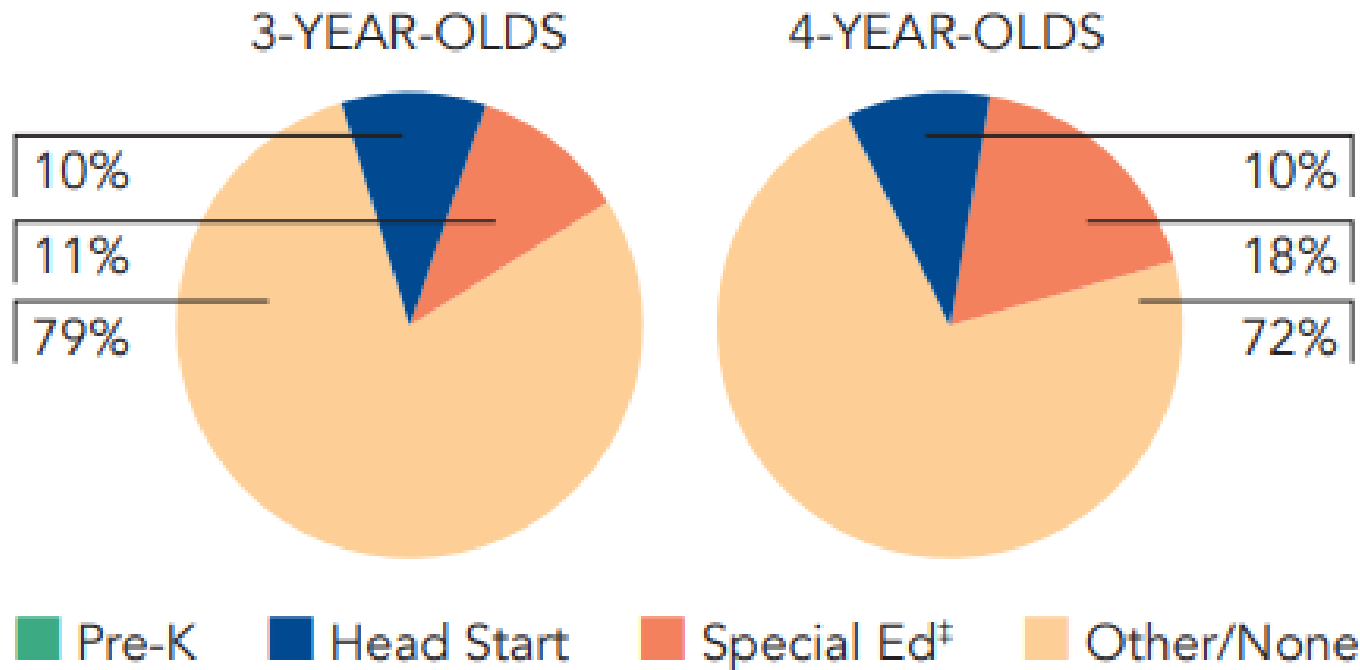
- Physical & mental health
- Educational Success
- Socialization
- Citizenship
- Employment & income
- Parenting & family life

# Wyoming is one of just 6 states without state-funded preschool at age 4



# Public Pre-K in Wyoming reaches few children

## PERCENT OF POPULATION ENROLLED IN PUBLIC ECE



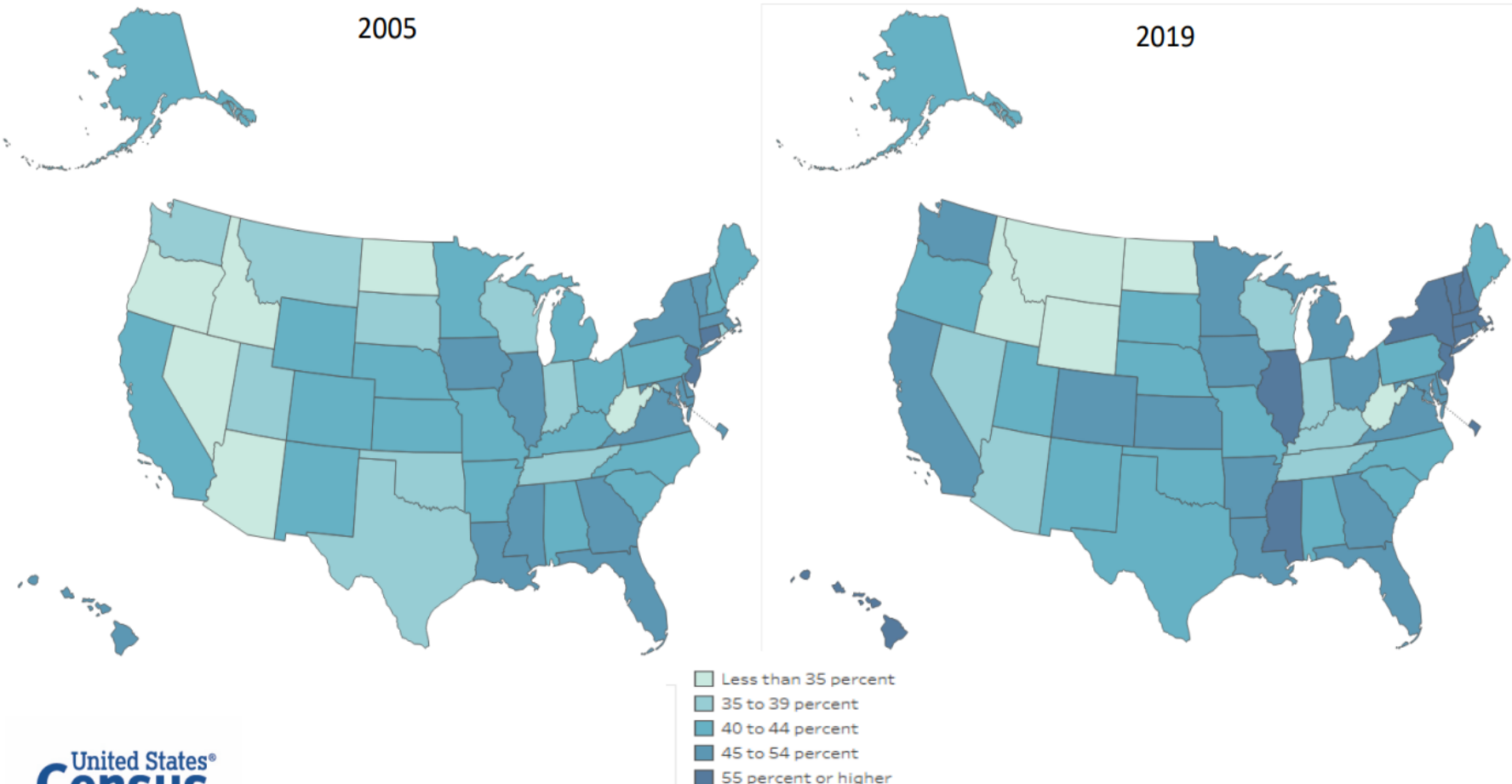
<sup>‡</sup> Estimates children in special education not also enrolled in Head Start.

# Less than 35% of 3&4-year-olds attend preschool in Wyoming

**Wyoming is far below national average of about 50%**

**Wyoming's percentage in preschool declined since 2005**

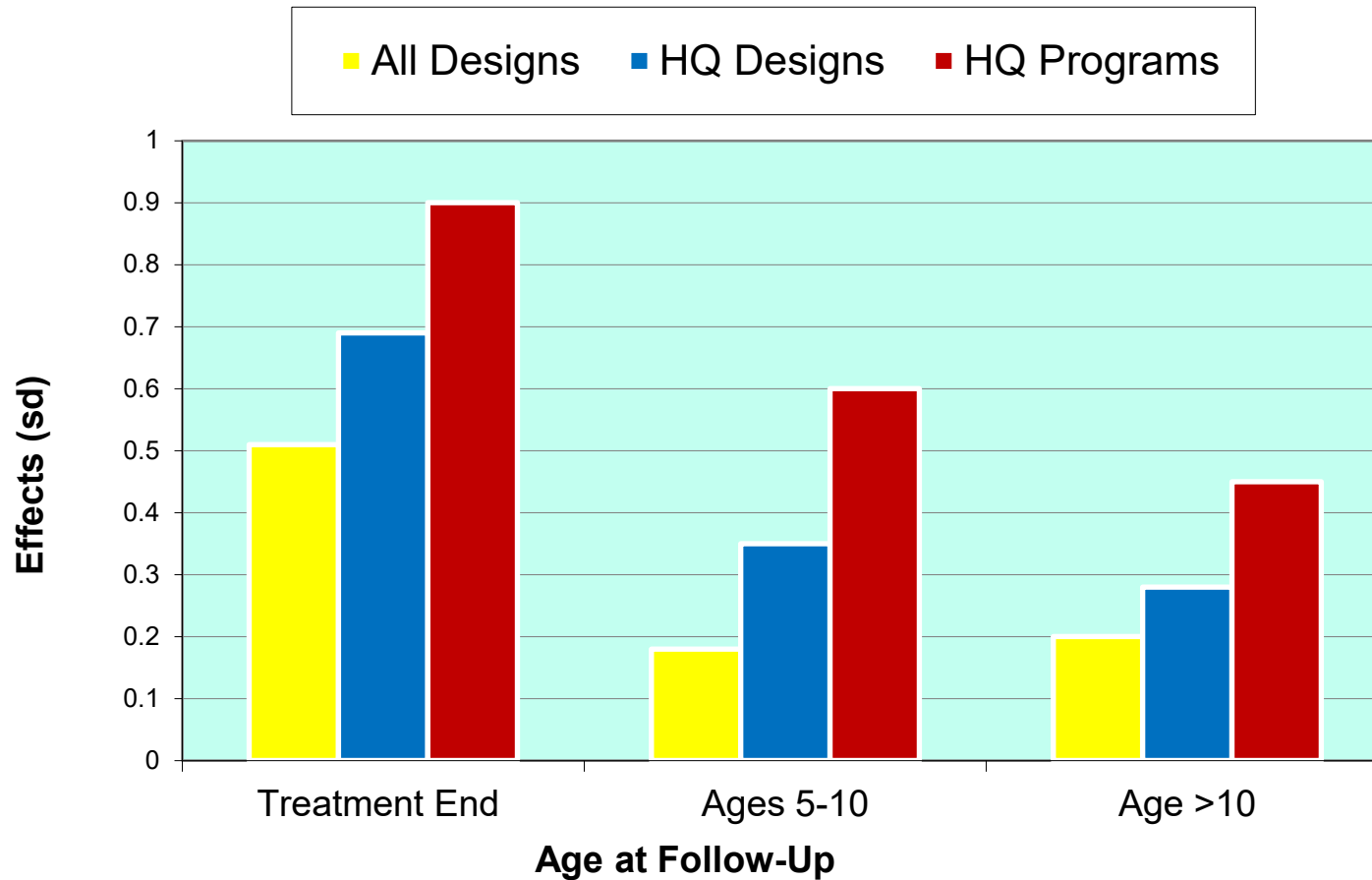
Percentage of 3- and 4-Year-Olds Enrolled in Preschool by State: 2005 and 2019



# Positive Outcomes of HQ Pre-K

- Increased achievement on grade 4 NAEP in **states with quality** programs (Bartik & Hershbein, 2018)
- **Tulsa, OK UPK**
  - Increased 3<sup>rd</sup> grade reading comprehension & numeracy (Johnson et al. 2024)
  - Better attendance, less grade repetition in high school (Amadon et al. 2022)
  - Increased HS graduation, college attendance, B/C = 2.65 (Bartik et al., 2023)
  - Increased civic participation/voting (Kitchens & Gormley, 2023)
- **Alabama First Class Pre-K**
  - Increased reading and math achievement grades 3 to 7 (Preskitt et al. 2020)
- **NJ Pre-K**
  - Increased reading and math achievement through grade 10
  - Decreased special education and grade retention (Barnett & Jung, 2021)
- **Recent lottery-based (randomized) studies of Pre-K**
  - Increased college attendance (Gray-Lobe et al., 2023)
  - Increased earnings (Akee & Clark, 2024)

# Quality is Needed for Long-Term Gains in Learning and Cognitive Development





# Quality Begins with High Standards

**Comprehensive Early Learning Standards**

**Curriculum Supports**

**Lead Teacher Degree (BA)**

**Lead Teacher Specialized Training**

**Assistant Teacher Degree (CDA)**

**Staff Professional Development**

**Maximum Class Size (20)**

**Staff to Child Ratio (1:10)**

**Health Screenings and Referrals**

**Continuous Quality Improvement System**

# Quality Requires Adequate Funding

## Spending per Child in Exemplar States

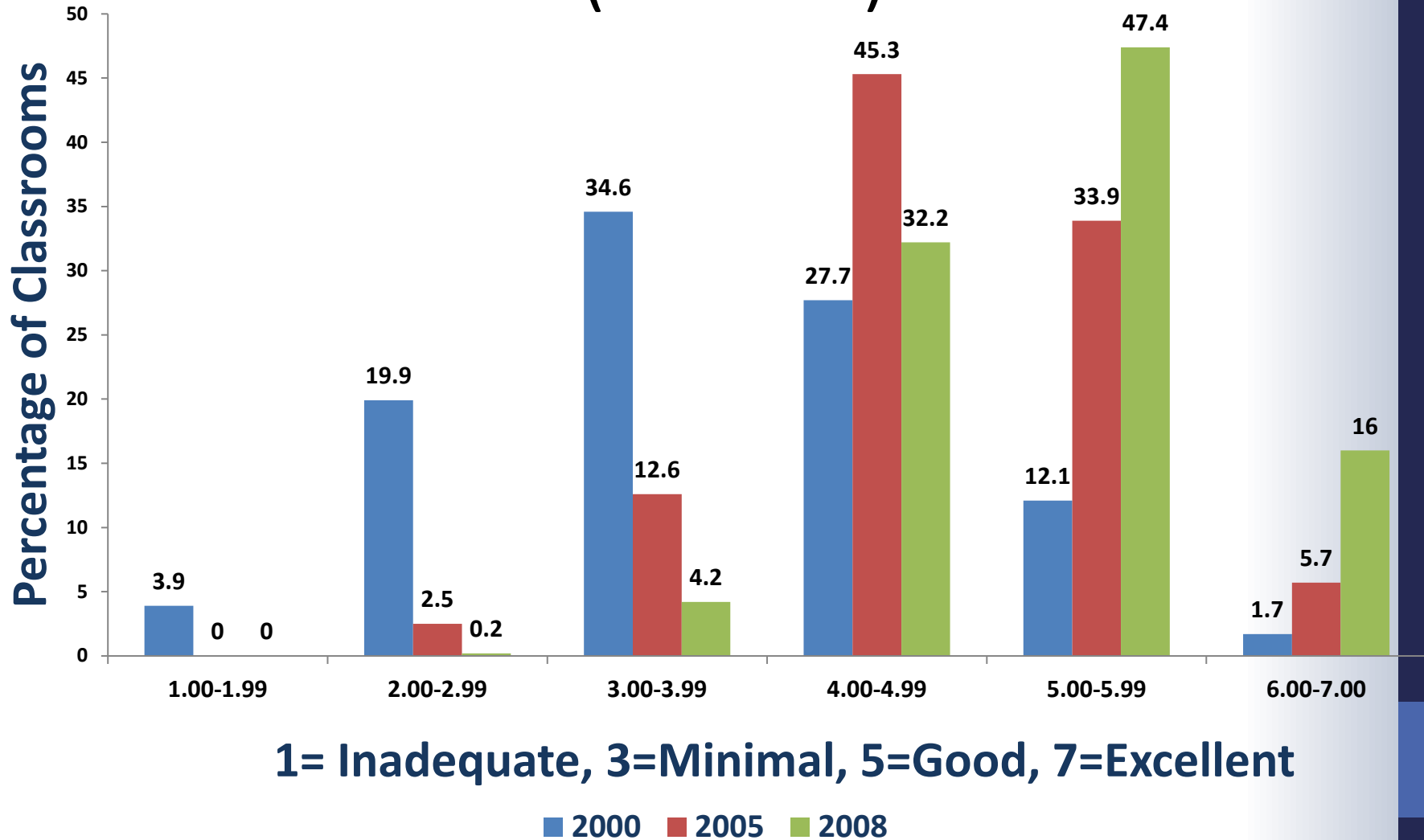
<b>STATES ADEQUATELY FUNDING QUALITY</b>	
STATE	Spending per child in 2023
Alabama	\$10,881
Arkansas	\$13,117
California	\$15,554
DC	\$22,207
New Jersey	\$16,302
Oklahoma	\$11,046
Oregon	\$16,132
<b>WY (NIEER est.)</b>	<b>\$15,640</b>

# Example from another high achieving state: New Jersey's State Preschool

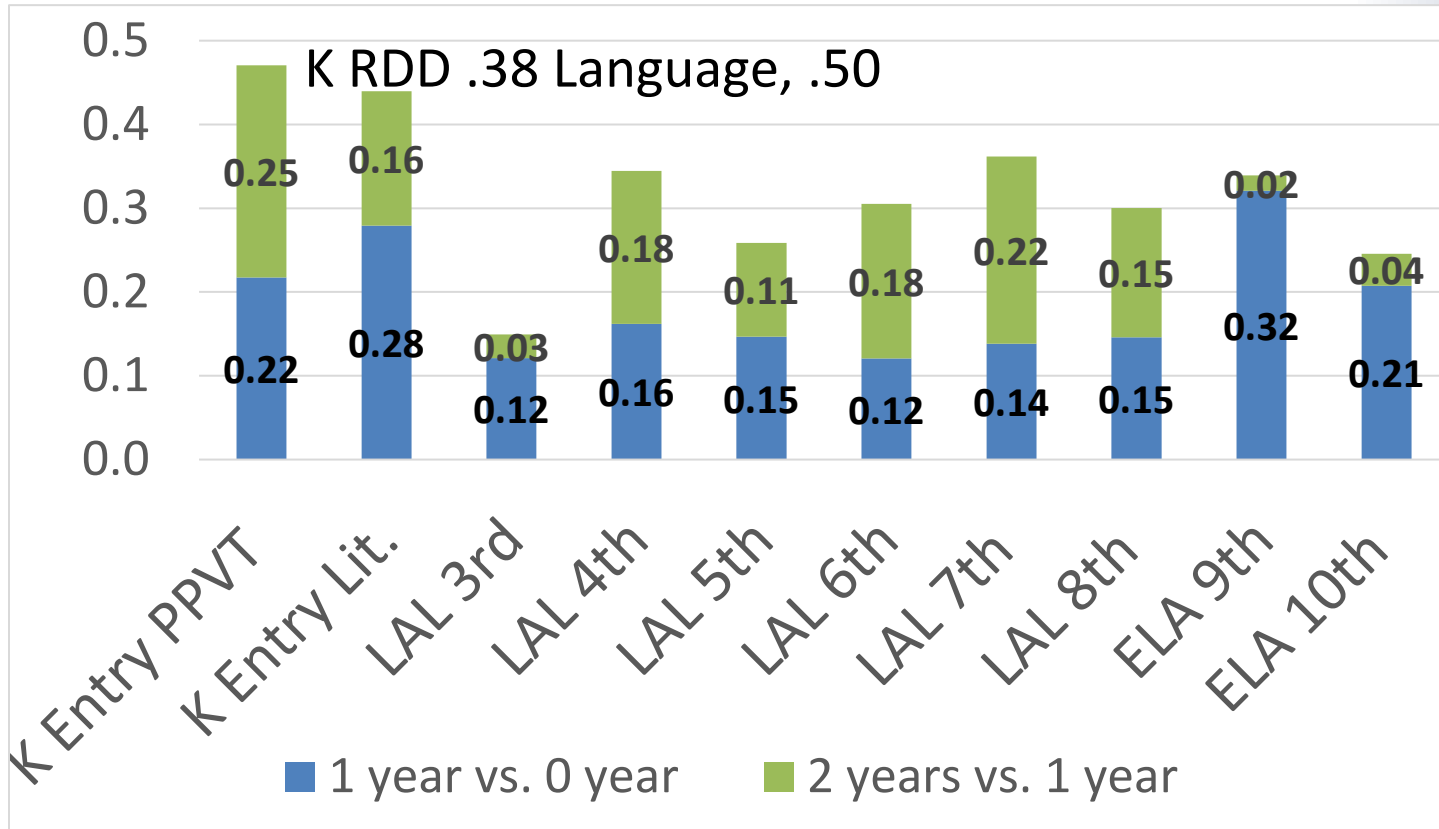
- Began with all children in 31 high poverty cities
- High expectations
- Adequate funding
- Skillful teachers
- Small classes
- Integrated curriculum
- Other supports for children & parents
- Supports for teachers



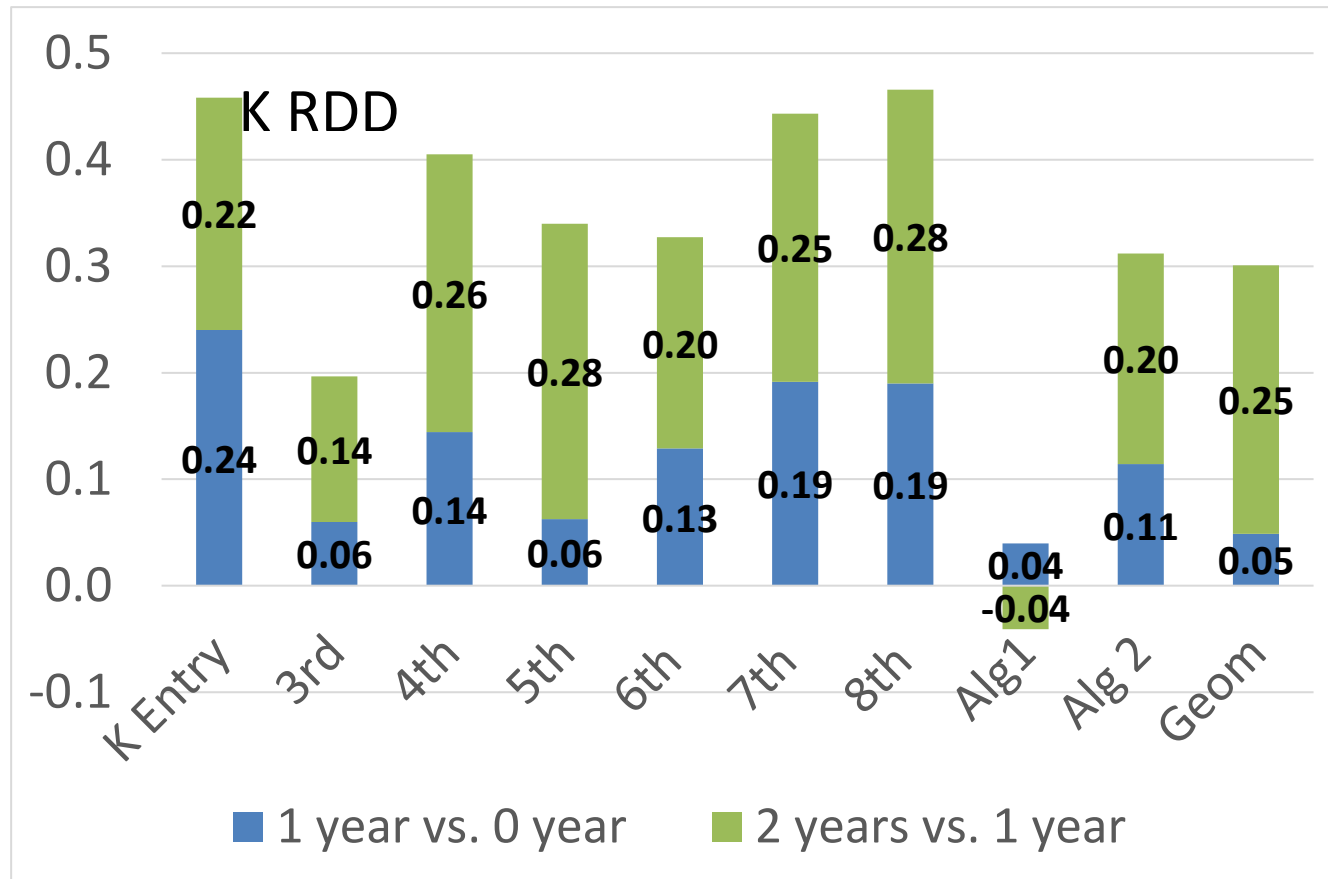
# Transformation of NJ Pre-K Quality (ECERS-R)



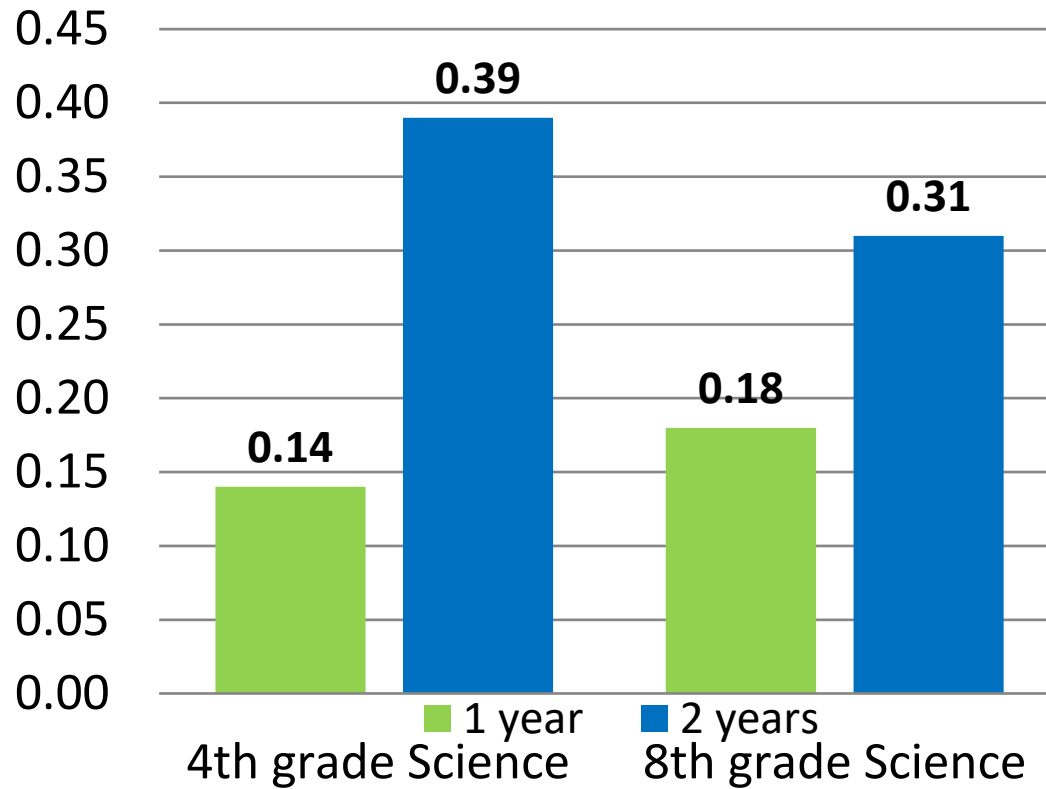
# Impacts on Language & Literacy



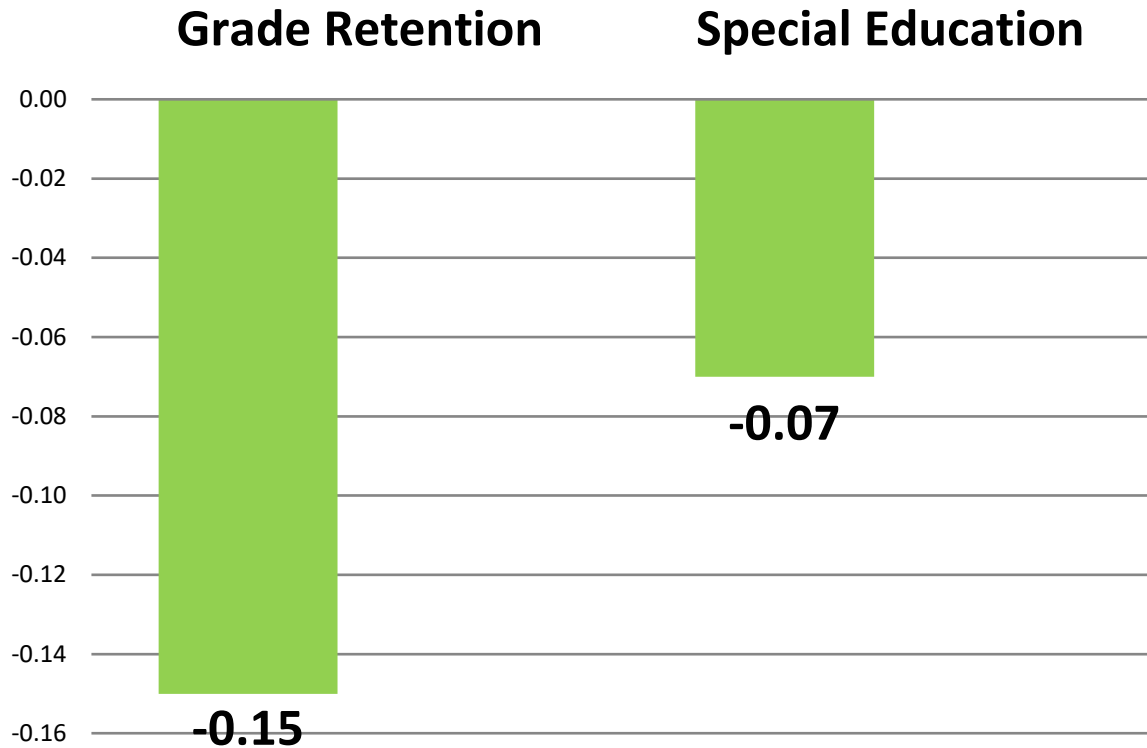
# Impacts on Math



# Impacts on Science



## Impacts on Grade Retention and Special Education





# Take Aways

- **Wyoming faces important challenges pre-K can address**
- **The foundations for later success are built in the first 5 years, the pre-K years are especially important for language and literacy**
- **Relatively few children attend pre-K in Wyoming—parents can't afford high quality, lowest income families are most likely left behind**
- **Declining birth rates increase the importance of investing in human capital and decrease the total cost to the state budget**
- **High expectations and standards are essential for success**
- **Achieving them requires strong teachers and adequate infrastructure including a continuous improvement system**
- **Other states have developed high quality preschool programs that produce long-term outcomes, look to them as guides**

# Sources

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