Challenges and Opportunities in Early Childhood Education
Early childhood education has gained increased attention in recent years.

During the same time period, some states have increased early childhood investments (e.g. Michigan, Alabama, New York), while others have made cuts or remained stagnant.
Increased public interest in early childhood education is based on research

- Early childhood **brain development** lays critical foundations for later learning
- **Gaps** emerge as early as 9 months; up to half the achievement gap is already in place by first grade

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- **Model programs** improved long-term adult outcomes
- Growing evidence that high-quality **state pre-k programs** produce learning gains at scale that last into early elementary grades (8+ states)

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- High-quality adult-child **interactions**
- Targeted **curricula** focused on content that predicts school readiness
- Emergence of **proven models**

Evidence
A growing body of evidence demonstrates that high-quality state pre-k programs can produce lasting impact at scale

<table>
<thead>
<tr>
<th>Program</th>
<th>Description and impact</th>
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</table>
| New Jersey’s Abbott Pre-k Program| • State-funded pre-k program provides full-day, universal pre-k to 3- and 4-year-olds in 31 high-poverty districts  
• Children who participated in Abbott Pre-K program experience gains in language, literacy, and early math skills that are evident at the end of the pre-k year and persist through at least 5th grade (Barnett, et. al., 2013) |
| Boston Preschool Program        | • Boston Public Schools offer district-funded pre-k to more than 2,000 4-year-olds from a variety of income levels  
• Children participating in the program made large gains in vocabulary, early reading, and numeracy skills that were sustained into 3rd grade, as well as modest gains in memory and impulse control (Weiland and Yoskikawa, 2013) |
| Tulsa Pre-K                     | • Children who participated in Universal Pre-K in Tulsa, Oklahoma achieved gains of 9 months in reading, 7 months in writing, and 5 months in math, as well as social-emotional impacts  
• Children who completed pre-k in 2005-06 made gains that lasted into 3rd grade (Gormley, et al)                                                                 |
The most effective programs share several common elements

<table>
<thead>
<tr>
<th>Feature</th>
<th>New Jersey Abbott Pre-k</th>
<th>Boston Preschool</th>
<th>Tulsa Pre-K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers have BA + ECE training</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td>Teacher pay comparable to K-12 schools</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td>Adult:child ratio &lt;2:22</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td>6+ hours/day</td>
<td>√</td>
<td>√</td>
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<tr>
<td>High-quality, evidence-based curriculum</td>
<td>√</td>
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<td>√</td>
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<tr>
<td>Regular, job-embedded PD &amp; coaching</td>
<td>√</td>
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<td>√</td>
</tr>
<tr>
<td>Use of data to inform instruction and</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>continuous improvement</td>
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</tr>
<tr>
<td>School-based settings</td>
<td>√</td>
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<td>√</td>
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<tr>
<td>Community-based settings</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>$12,000-$14,000</td>
<td>$12,000</td>
<td>$5,000</td>
</tr>
</tbody>
</table>
What do we mean by “quality” in pre-k?

Structural Quality
- Includes teacher qualifications, class size, classroom furnishings
- Structural quality factors provide the foundation for quality but do not ensure quality learning experiences
- Public policy tends to focus on structural quality

Process Quality
- Children’s actual experiences in ECE settings
- Adult practices that support learning
- More predictive of learning, but harder to measure

Child Outcomes
- Quality should lead to outcomes
- Complex to measure

Quality
Effective teaching practice is the most important factor in preschool quality

Several factors characterize effective teaching in early childhood settings...

- Responsiveness to children’s needs & views
- Rich language
- Content that predicts school readiness
- Planning and organization
- Varied instructional formats and groupings
- Effective behavior management
- Use of data to inform instruction and continuous improvement

...implementing these practices require teachers to have key knowledge and skills

- Knowledge of children’s cognitive, language, emotional and social development
- Subject-matter content knowledge
  - General knowledge and vocabulary enable teachers to create rich language experiences
  - Literacy and language are a particularly important domain for school readiness
  - Math, science, social studies and the arts are also important!
- Practical knowledge and instructional strategies
- Ability to work with diverse children and families
Program features and structural elements also support quality instruction

- Teacher qualifications and training
- Class size and adult:child ratios
- Evidence-based, content-rich curriculum
- Ongoing, job-embedded professional development that is aligned to curriculum and focused on behaviors that support children’s learning and development
- Effective supervision and support for teachers
- Use of data to drive continuous improvement at the program level

Unfortunately, most early childhood programs do not reflect these practices and features
The majority of American children have some type of pre-k experience, but quality and access vary considerably.

- Federal Head Start program serves poor children
- 40 states have state-funded pre-k
- Parents also buy pre-k themselves

US children enrolled in pre-k (%)

- 3-year olds:
  - No pre-k: 4%
  - Some pre-k: 31%
  - Other pre-k: 57%
  - State pre-k: 8%
  - Head Start: 4%

- 4-year olds:
  - No pre-k: 30%
  - Some pre-k: 31%
  - Other pre-k: 28%
  - State pre-k: 11%
  - Head Start: 4%
Low- and moderate-income children are less likely to attend pre-k than more affluent children.

Among families making $75K+, nearly nine out of ten 4-year olds participate in pre-k—compared to less than two-thirds of families who make under $60K.

Source: NHES, 2005
American children are less likely to attend preschool than children in other developed countries.

Source: OECD database, 2004

Enrollment of 3-6 year olds in early education
Trends to keep an eye on

1. State Pre-K Programs
2. Preschool Development Grants
3. Federal funding for early childhood education
4. Head Start
   - Designation renewal
   - Use of CLASS
   - Revision of Head Start Performance Standards
   - Future reauthorization (2016 or later)
5. Child Care and Development Block Grant Implementation