The First 1,000 Days: Vulnerability and Opportunity in Early Child Education

*ISPPR: Early Education for At-Risk*

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The First 1,000 Days

Greatest Opportunity

- Fastest brain development
- Peak sensitivity for learning:
  - Sensory skills
  - Emotion control
  - Habits
  - Conceptualization
  - Language
  - Peer skills
  - Numbers
- Foundational skills > school readiness > long-term outcomes

Graph developed by Council for Early Child Development (ref: Nash, 1997; Early Years Study, 1999; Shonkoff, 2000.)
The First 1,000 Days

Greatest Vulnerability
- Trauma and toxic stress
  - 27% maltreatment victims < 3 years
- Disparate learning environments
  - Language environment
  - Home learning environment
  - Family conflict
  - Quality of early care & education
- Economic disparities in:
  - Language skills
  - Social-emotional skills
  - Cognitive skills

The First 1,000 Days

Greatest Opportunity

Greatest Vulnerability

'Sensitive periods' in early brain development

Graph developed by Council for Early Child Development (ref. Nash, 1997; Early Years Study, 1999; Shonkoff, 2000.)
Earliest investment > Biggest returns

- 13% RIO from effective, comprehensive Birth programs
- Better health
- Higher education
- Higher income
- Protection for vulnerable children
- Surveillance & prevention
- Boosting & buffering development


Figure 2. Simplified structural equation model: PreK skills and 5th grade learning environment fully mediated the longitudinal association between early learning environment and 5th grade academic skills. *p < .05. **p < .01. ***p < .001. + p < .10.*
Greatest Opportunity to Intervene: Early Care & Education Birth to Age 3

US Babies in Child Care & Education 2013

- **Home-Based Care, 3,757,000**
- **Center-Based Care, 2,001,000**
- **With Parents, 6,109,212**
- **MI: 341,589**

- 49% of US babies in ECE
- Estimated 167,379 Michigan babies currently in ECE
- Each educator works with 4-12 babies/year
- Ideally reaching families, too

KidsCount.org
NSECE Project Team (2014a, 2014b, 2015)
The Birth to 3 Workforce

Educators support children best when they are...

- Knowledgeable
- Skilled
- Patient
- Intentional
- Responsive
- Joyful

Working with infants & toddlers is....

- Joyful
- Rewarding
- Cognitively Complex
- Emotionally Demanding
- Physically Exhausting
- Stressful
- Undervalued

The infant/toddler workforce performs some of the most challenging and important - and *undervalued* - work in our society.
Greatest Vulnerability:
Under-Supported Birth-Age 3 Workforce

- Low Education
- No professional standards
- Few professional development opportunities
- No system for career development
- High turnover (> 28%)

NSECE Project Team (2013)
Greatest Vulnerability: Under-Supported Birth-Age 3 Workforce

United States

- Wages
  - $9.77/hr ($13.74 PK)

- Use of Public Income Supports:
  - 46% practitioners’ families using ≥ 1 income supports
  - $1.5 billion cost to public

Michigan

- Wages
  - $9.43/hr ($13.34 PK)

- Use of Public Income Supports:
  - 47% practitioners’ families using ≥ 1 income supports
  - $44.5 million cost to public

We are paying the price for low-quality early care and education, rather than paying the cost of high-quality care and education.
The First 1,000 Days

Greatest Opportunity
- Birth - 3 Workforce

Greatest Vulnerability
- Poor supports

### Diagram
- **Sensitive periods in early brain development**
- **National Average**
- **Average for EHS-eligible children**
- **Bar chart**: Child Care, Preschool, Kindergarten, Elementary
We Need Birth-3 Education to be a Strong Foundation in an Integrated System

- Build Foundational Skills for All Children
- Protect Children at Risk and Boost their Development
- Set the Stage for Success in Pre-K and K-12

High quality learning environment
Well-supported workforce
Integrated Systems of Child & Family Support in Early Years
Integrated Systems of Education Birth - Age 8
What Can We Do?
A lot!

- Michigan leads in initiatives to support babies in family context
  - Infant Mental Health
  - Birth Mandate
  - Trauma-informed care
- Current efforts for Birth-3 Workforce:
  - Infant/toddler Career Pathways Workgroup
  - T.E.A.C.H. fellowships for early child educators in higher education
- Lots more to do!
What Can We Do?
Families are part of the equation

- Educator-family partnerships are necessary in Birth - 3
- Family-support policies make ECE more affordable

<table>
<thead>
<tr>
<th>Family &amp; Income Support Policies</th>
<th></th>
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<tbody>
<tr>
<td><strong>Income supports and child care assistance</strong></td>
<td></td>
</tr>
<tr>
<td>Refundable Earned Income Tax Credit?</td>
<td>Yes</td>
</tr>
<tr>
<td>Higher than federal minimum wage, indexed for inflation?</td>
<td>Yes</td>
</tr>
<tr>
<td>Child care assistance income eligibility set at 85% of state median income or above?</td>
<td>No</td>
</tr>
<tr>
<td>Refundable child care tax credit?</td>
<td>No</td>
</tr>
<tr>
<td><strong>Supports for health and well-being</strong></td>
<td></td>
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<tr>
<td>Paid sick days law?</td>
<td>No</td>
</tr>
<tr>
<td>Paid family leave law?</td>
<td>No</td>
</tr>
<tr>
<td>Expanded Medicaid eligibility?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Early Childhood Workforce Index 2016 - MICHIGAN, Center for the Study of Child-Care Employment
Infant-Toddler Workforce Policy Resources

- The Heckman Equation: [https://heckmanequation.org/](https://heckmanequation.org/)
- Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation (2015): [https://www.nap.edu/catalog/19401/transforming-the-workforce-for-children-birth-through-age-8-a?gclid=EAIaIQobChMIldmXsud1gLVAhpChTjrQGHEAAYASAAEgKII_D_BwE](https://www.nap.edu/catalog/19401/transforming-the-workforce-for-children-birth-through-age-8-a?gclid=EAIaIQobChMIldmXsud1gLVAhpChTjrQGHEAAYASAAEgKII_D_BwE)
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