Investing in the Well-Being of Montana’s Youngest Residents

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*The views expressed here are those of the author and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.
Human Brain Development
Synapse Formation Dependent on Early Experiences

Sensory Pathways (Vision, Hearing)
Language
Higher Cognitive Function

Human Brain at Birth

6 Years Old

14 Years Old

Source: Chugani, Phelps & Mazziotta (1987)
Barriers to Social Mobility Emerge at a Very Young Age

Risk Factors for Adult Heart Disease are Embedded in Adverse Childhood Experiences (ACEs)

Source: Dong et al, 2004
Perry Preschool Costs and Benefits Over 62 Years

Program Cost

K-12 Ed

Higher Participants' Earnings

Justice System

Crime Victims

Welfare Payments

Source: Schweinhart, et al. (2005)
Perry Preschool — Estimated Return on Investment

- Benefit-Cost Ratio = $16 to $1
- Annual Rate of Return = 18%
- Public Rate of Return = 16%
- Heckman Reanalysis = 10%

Sources: Schweinhart, et al. (2005); Author’s calculations; Heckman, Moon, Pinto, Savelyez, & Yavitz (2010)
Benefit-Cost Ratios for Other Longitudinal Studies

- Abecedarian Educational Child Care
  - $7 to $1

- Chicago-Child Parent
  - $10 to $1

- Elmira Prenatal/Early Infancy Project
  - $5 to $1

Lessons Learned from Research

- Invest in quality
- Involve parents
- Start early
- Reach vulnerable children and families
- Bring to scale
Montana Children Under Age 6 by Poverty Level

- Below 100% Poverty: 54%
- 100% to 185% Poverty: 22%
- Above 185% Poverty: 24%

Source: American Community Survey
Montana Children Under Age 5 by Race/Ethnicity

- White: 79%
- American Indian: 11%
- Hispanic: 5%
- Two or More Races: 4%
- Other: 2%

Source: American Community Survey
Percent of Children Under 6 Years Old With All Parents in the Labor Force, 2015

Source: American Community Survey
State and Community-based Early Childhood Development Investment Opportunities

- Access to high-quality early learning programs
- Home visiting programs for families with pregnant women and young children
- Intersection between child protection system and early childhood services, including mental health services
- Health and dental care
State and Community-based Early Childhood Development Investment Opportunities

- Connecting healthy and local food sources with early learning programs

- Programs for young children and families in Native American communities that incorporate language and culture

- Engaging business leaders in ECD through business mentoring, supporting parent employees, and leadership
Sources


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