Investments in Early Childhood Development Yield High Public Returns

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Vermont Population Projections, Ages 15 to 64

Source: U.S. Census Bureau and Vermont Agency of Commerce and Community Development
Vermont Job Growth by Primary Source of Education or Training, 2012 to 2022

- Bachelor's degree or higher
- Associate degree
- Postsecondary vocational award
- High school diploma or equivalent
- Long-term OTJ training
- Moderate-term OTJ training
- Short-term OTJ training

Source: Vermont Department of Labor, Occupational Projections
Vermont Average Hourly Wage by Source of Education or Training, 2012

- Bachelor's degree or higher
- Associate degree
- Postsecondary vocational award
- High school diploma or equivalent
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Source: Vermont Department of Labor, Occupational Projections
Barriers to Social Mobility Emerge at a Very Young Age

Cumulative Vocabulary (Words)

Child’s Age (Months)

- College Educated Parents
- Very Low-Income Parents

Nurse-Family Partnership

Home visiting program by registered nurses for at-risk mothers, prenatal through first two years of child’s life.

- Elmira, NY (1977), low-income whites, semi-rural
- Memphis, TN (1987), low-income blacks, urban
- Denver, CO (1994), low-income mixed population, largely Hispanic
Effects Found in Two or More Trials

- Improved prenatal health
- Fewer subsequent pregnancies
- Increased intervals between births
- Fewer childhood injuries
- Improved school readiness
- Increased maternal employment
Elmira Prenatal/Early Infancy Project
High-Risk Families

Child Emergency Room Visits, Ages 25 to 50 Months

Child Arrests, Through Age 15

Months on Welfare

Percent Change, Program Group Compared with No-Program Group

Source: David Olds, et al.
High/Scope Study of Perry Preschool

• In early 1960s, 123 children from low-income families in Ypsilanti, Mich.

• Children randomly selected to attend Perry or control group.

• High-quality program with well-trained teachers, daily classroom sessions and weekly home visits.

• Tracked participants and control group through age 40.
Perry: Educational Effects

- Age 14 achievement at 10th percentile+
- Graduated from high school on time
- Didn't require special education

Source: Schweinhart, et al. (2005)
Perry: Economic Effects at Age 40

- Own home
- Earn $25,000+
- Have a savings account

Source: Schweinhart, et al. (2005)
Perry Preschool
Costs and Benefits Over 62 Years

Source: Schweinhart, et al. (2005)
Benefit-Cost Ratios for Longitudinal Studies

• Elmira Prenatal/Early Infancy Project
  – $5 to $1

• Perry Preschool
  – $16 to $1

• Abecedarian Educational Child Care
  – $4 to $1

• Chicago-Child Parent
  – $10 to $1

Sources: Karoly, et al (1998); Schweinhart, et al. (2005); Heckman, Moon, Pinto, Savelyez, & Yavitz (2010); Masse & Barnett (2002); Reynolds, Temple, White, Ou, & Robertson (2011)
Recent research findings

- State preschool program studies show positive gains in vocabulary and emerging math and literacy skills

- Evaluations of Head Start and Early Head Start show positive impact on development with mixed findings regarding persistence

- Analysis of program similar to Abecedarian for children ages 1 to 3 shows reduction in achievement gap

- Michigan’s state preschool program associated with stronger graduation rates
Short-Run Benefits

• Fewer low-weight and pre-term births

• Fewer emergency room visits

• Reduced child abuse and neglect

• Reduced grade retention and special education

• Reduced employee absenteeism and turnover
Percent of children under 6 years old with all parents in the labor force, 2013

Source: American Community Survey
Lessons Learned from Research

- Invest in quality
- Involve parents
- Start early
- Reach at-risk population
- Bring to scale
Key Investments

- Home visiting
- Preschool
- Quality child care
- Parent education
- Health care
Sources


Vermont Agency of Commerce and Community Development

Vermont Department of Labor, Occupational Projections
minneapolisdtype.org