The Economics of Human Development

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Center for Universal Education
Brookings Institution
Nobel Laureates

- Jan Tinbergen – (1903-1994)
- Robert W. Fogel – (1926 - …)
- Amartya Sen – (1933 - …)
Nobel Laureates

- Jan Tinbergen – (1903-1994)
- Robert W. Fogel – (1926 - …)
- Amartya Sen – (1933 - …)
- James Heckman – (1944 - …)
Jan Tinbergen

- Born: 1903, Den Haag, Netherlands
- Nobel Prize Economics ’69

Photo credit: Nobelprize.org
Theodore W. Schultz

- Born: 1902, South Dakota, USA
- Nobel Prize Economics ’79

Photo credit: Nobelprize.org
Robert W. Fogel

- Born: 1926, New York, USA
- Nobel Prize Economics ’93
Amartya Sen

- Born: 1933, Dhaka, Bangladesh
- Nobel Prize Economics ’98

Photo credit: Nobelprize.org
James Heckman

- Born: 1944, Chicago, USA
- Nobel Prize Economics 2000

Photo credit: Nobelprize.org
High Returns from Early Investments

INVEST STRONGLY IN EARLY CHILDHOOD PROGRAMS, EVEN IF PAYOFF IS ONLY 20+ YEARS FROM TODAY

PEOPLE

Education  Health  Social Capital  Equality

Economic growth

HUMAN DEVELOPMENT
Immediate benefits of investing in young children (0-5 yrs.)

Cognitive development

- Psychosocial stimulation
- Nutritional supplementation
- Health care
- Parental training

- Higher IQ
- Practical reasoning
- Eye and hand coordination
- Hearing and speech
- Reading readiness
Immediate benefits

Health outcomes

Psychosocial stimulation
Nutritional supplementation
Health care
Parental training

- Less morbidity
- Less mortality
- Less malnutrition and stunting
- Better personal hygiene and health care
- Less child abuse
Immediate benefits

Social development

Psychosocial stimulation
Nutritional supplementation
Health care
Parental training

• Higher self-concept
• Better non-cognitive skills
  • Less aggressive
  • More spontaneous
• More interactive play
• Better parent-child relationship
• Better peer relationship
• More socially adjusted
Adult outcomes ➔ Individual Prosperity

Returns to education

- Income
- Child care quality
- Own family health
- Social cohesion
- Poverty reduction
- Reduced fertility
- Crime reduction
- …

Photo credit: Scientific American.
Adult outcomes ➔ Individual Prosperity

Returns to better child health

- Better health
- Higher life expectancy
- Better weight and height
- Higher productivity
- Less absenteeism
- Higher income

Photo credit: Reuters/ Aly Song
Adult outcomes ➔ Individual Prosperity

Returns to better non-cognitive skills

- Social competence
- Social relations
- Norms and values
- Less delinquency

Photo credit: Reuters/ Anthony Njuguna
How to evaluate economic benefits of education

Age-Earnings profile without schooling
How to evaluate economic benefits of education

Age-Earnings profile with and without schooling

![Graph showing the relationship between age, earnings, costs, and benefits.](image)
How to evaluate economic benefits of education

Reduction in the cohort’s full productive potential
How to evaluate economic benefits of education

Regaining the lost productive potential

![Graph showing the comparison between benefits and costs over age]

- Benefits
- Costs
- Age

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<th>Costs</th>
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ECD Cost–Benefit Analysis

Brazil — Economics of ECD

Increased Future Earning Capacity for Children Whose Parents Are Illiterate

1 Year of Preschool

0.6 Years’ Gain in Education

↑ 6.5%

↑ 6.0%

= 12.5%

Potential Added Income
Brazil — Economics of ECD

Children of Parents with 4 Years of Education

1 Year of Preschool → 0.4 Years’ Gain in Education → ↑ 5.0% → 2.0% → Potential Added Income = ↑ 7.0%
Causes of Economic Growth

**Economic**
- Savings
- Physical Capital
- Natural Resources
- Trade Policy
- Price Stability
- Flexible Markets
- Low Government Exp.

**Social**
- Education
- Health
- Social Capital
- Equality
Equality

• Importance for
  » Poverty reduction
  » Health of society
  » Crime reduction
  » Economic growth
  » Social justice
Implications for Development Policy and Programs

- People are means and ultimate objective of development

- Fundamental reassessment of “investing in people”

- While growth in national production (GNP) is absolutely necessary to meet all essential human objectives, what is important is to study how this growth translates – or fails to translate – into human development in various societies.

- Human Development Report 1990
Advances in life sciences have deepened our understanding of the importance of dynamic interactions among:

- Environmental Influences
- Social experiences at home
- Social experiences in school
- Nutrition
- Genetic predisposition
Growing up in impoverished or unsafe conditions is associated with significant threats to:

- Long-term Physical and Mental Health
- Cognitive Development
- Educational Achievement
- Emotional Well-being
- Social Adjustment
Under-nutrition linked to poverty is estimated to contribute to:

- **35% of all child deaths** (due to measles, malaria, pneumonia, and diarrhea)
- **Stunted growth** for more than 200 million children worldwide

Photo credit: Reuters/Bazuki Muhammad
Effective early childhood policy calls for an integrated approach to both stimulating minds and protecting brains:

As *ministries* of:

- **HEALTH** prioritize child survival
- **EDUCATION** promote child development
- **WELFARE** promote social development &
- **FINANCE** promote economic development,

an integrated biology of adversity offers a compelling knowledge base that could inform a unifying strategy across policy sectors.
The Virtuous Cycle of Human Development:

Human Development → People

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