Human Development is Economic Development

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THE UNIVERSITY OF CHICAGO

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The challenges: economic inequality, a divided society and polarized leadership.
Cumulative Growth in Average Inflation-Adjusted After-Tax Income, by Before-Tax Income Group, 1979 to 2011

Source: Congressional Budget Office.

Notes: After-tax income is before-tax income minus federal taxes.

Before-tax income is market income plus government transfers. Market income consists of labor income, business income, capital gains (profits realized from the sale of assets), capital income excluding capital gains, income received in retirement for past services, and other sources of income. Government transfers are cash payments and in-kind benefits from social insurance and other government assistance programs. Those transfers include payments and benefits from federal, state, and local governments.

Federal taxes include individual income taxes, payroll taxes, corporate income taxes, and excise taxes.

Income is converted to 2011 dollars using the personal consumption expenditures price index.

Income groups are created by ranking households by before-tax income, adjusted for household size. Quintiles (fifths) contain equal numbers of people; percentiles (hundredths) contain equal numbers of people as well.

For more detailed definitions of income, see the appendix.
We can reduce inequality and promote social mobility by solving the skills problem.
Changes in real wage levels of full-time U.S. workers by sex and education, 1963-2012

Source: Autor (2014).
High School Graduation Rates at Age 35: U.S. Males and Females Born 1930-1975

Source: Autor & Wasserman (2013).
Percent of Adults with Some College Education by Age 35

Source: Autor & Wasserman (2013).
Percent of Adults with Four-Year College Degree by Age 35

Source: Autor & Wasserman (2013).
A comprehensive approach to skills development makes dollars and sense.
Fragmented solutions don’t work—the problems and their causes are interrelated.
Invest in prevention, not remediation.
Success depends on having the right skills and abilities.
We must help troubled American families develop skills required for their children’s success.
The importance of the early years: skills beget skills.
Develop cognition and character from conception to birth to school, college and career training.
Developing skills and abilities is the best way to solve the problems of economic and social inequality.
Mean Achievement Test Scores by Age by Maternal Education

Each score standardized within observed sample. Using all observations and assuming data missing at random. Source: Brook-Gunn et al. (2006).
Children Under 18 Living in Single Parent Households by Marital Status of Parent

![Graph showing the proportion of children in single parent households by marital status from 1976 to 2012.](image)

- **Divorced**
- **Married, Spouse Absent/Separated**
- **Widowed**
- **Never Married/Single**

Source: IPUMS March CPS 1976-2012

Note: Parents are defined as the head of the household. Children are defined as individuals under 18, living in the household, and the child of the head of household. Children who have been married or are not living with their parents are excluded from the calculation. Separated parents are included in “Married, Spouse Absent” Category.
Parental Investment over Childhood Among Whites by Family Type

Girls: Cognitive Stimulation  
Boys: Cognitive Stimulation

Data: A balanced panel from the National Longitudinal Survey of Youth 1979. 
Source: Moon (2014).
Hart & Risley, 1995

Children enter school with “meaningful differences“ in vocabulary knowledge.

1. Emergence of the Problem
In a typical hour, the average child hears:

<table>
<thead>
<tr>
<th>Family Status</th>
<th>Actual Differences in Quantity of Words Heard</th>
<th>Actual Differences in Quality of Words Heard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welfare</td>
<td>616 Words</td>
<td>5 affirmatives, 11 prohibitions</td>
</tr>
<tr>
<td>Working Class</td>
<td>1,251 Words</td>
<td>12 affirmatives, 7 prohibitions</td>
</tr>
<tr>
<td>Professional</td>
<td>2,153 Words</td>
<td>32 affirmatives, 5 prohibitions</td>
</tr>
</tbody>
</table>

2. Cumulative Vocabulary at Age 3

<table>
<thead>
<tr>
<th>Cumulative Vocabulary at Age 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children from welfare families: 500 words</td>
</tr>
<tr>
<td>Children from working class families: 700 words</td>
</tr>
<tr>
<td>Children from professional families: 1,100 words</td>
</tr>
</tbody>
</table>
Parental Investment Over Childhood Across Ethnic Groups

Girls & Boys: Material Resource

Source: Moon, 2014
Parental Investment Over Childhood Across Ethnic Groups

Girls & Boys: Cognitive Stimulation

Source: Moon, 2014
Early childhood programs can prevent achievement gaps and produce better outcomes.
Perry Preschool Program: IQ, by age and treatment group

Source: Perry Preschool Program. IQ measured on the Stanford-Binet Intelligence Scale (Terman & Merrill, 1960). Test was administered at program entry and each of the ages indicated.
Abecedarian shows healthy benefits from a comprehensive approach.
## Abecedarian Project, Health Effects at Age 35 (Males)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment Mean</th>
<th>Control Mean</th>
<th>Treatment p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systolic Blood Pressure</td>
<td>125.79</td>
<td>143.33</td>
<td>0.018</td>
</tr>
<tr>
<td>Diastolic Blood Pressure</td>
<td>78.53</td>
<td>92.00</td>
<td>0.024</td>
</tr>
<tr>
<td>Pre-Hypertension</td>
<td>0.68</td>
<td>0.78</td>
<td>0.235</td>
</tr>
<tr>
<td>Hypertension</td>
<td>0.10</td>
<td>0.44</td>
<td>0.011</td>
</tr>
<tr>
<td>HDL Cholesterol</td>
<td>53.21</td>
<td>42.00</td>
<td>0.067</td>
</tr>
<tr>
<td>Cholesterol/HDL-C</td>
<td>3.89</td>
<td>4.69</td>
<td>0.057</td>
</tr>
<tr>
<td>Abdominal Obesity</td>
<td>0.065</td>
<td>0.87</td>
<td>0.136</td>
</tr>
<tr>
<td>Metabolic Syndrome</td>
<td>0.00</td>
<td>0.25</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Source: Campbell, Conti, Heckman, Moon, Pinto, Pungello and Pan (2014).
## The Importance of the Early Years: Skills Beget Skills

<table>
<thead>
<tr>
<th>Social-emotional Skills</th>
<th>Cognitive Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>(sit still; pay attention; engage in learning; open to experience)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health</th>
<th>Cognitive Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>(fewer lost school days; ability to concentrate)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cognitive Skills</th>
<th>Produce better health practices; produce more motivation; greater perception of rewards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(child better understands and controls its environment)</td>
<td></td>
</tr>
</tbody>
</table>

**Outcomes:** increased productivity, higher income, better health, more family investment, upward mobility, reduced social costs
Later remediation is costly and as currently configured is usually ineffective.
Early development is as important as education in promoting wages, employment and health.
Disparities by Education (Post-compulsory Education)

Note: Conti and Heckman (2010). Author's calculations using BCS70.
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Disparities by Education (Post-compulsory Education)

Note: Conti and Heckman (2010). Author's calculations using BCS70.
The solution: Predistribution, not just redistribution or remediation.
Returns to a Unit Dollar Invested

Source: Heckman (2008)
Returns to a Unit Dollar Invested

Programs targeted toward the earliest years

Source: Heckman (2008)
Returns to a Unit Dollar Invested

Source: Heckman (2008)
Returns to a Unit Dollar Invested

Programs targeted toward the earliest years
Preschool programs
Schooling

Source: Heckman (2008)
Returns to a Unit Dollar Invested

Source: Heckman (2008)
Smart investments start by addressing a major root cause of inequality—disadvantaged early childhoods.