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Whither early-childhood education?

By David Warsh February 18, 2013

At a lunch club talk the other day, the member of our group who almost always asks the smartest questions finally asked what seemed to me a dumb one. Massachusetts Gov. Deval Patrick wants to raise taxes and spend \$500 million on early-childhood education.

Why spend more on poor kids, this veteran bond buyer (and town selectman) wanted to know, when studies had shown that the effects of enrollment in Head Start pre-kindergarten program fade away pretty completely over time. Why not spend the money instead on graduate education for engineers, in the hope that they would create some new jobs?

I phoned my friend that afternoon to inquire about his understanding of the matter. He replied that was nothing more than what he was accustomed to reading in The New York Times and elsewhere.

Wherever it came from, his interpretation of the matter was so completely at odds with what I understood to be the case that I sent links to a couple of articles by the man I knew to be the nation's leading expert on the economics of very early-childhood education, James Heckman, of the University of Chicago, and forgot about it. I had other things to do.

But when President Obama went all in last week, proposing to make high-quality pre-school education available to all children by building out state-financed pre-school programs with federal money, as much as \$10 billion of it annually, I looked more closely at what the newspapers were saying about his proposal.

Sure enough, in "Few States Look to Extend Preschool to All 4-Year-Olds," The Times's new national education reporter Motoko Rich last week included this boilerplate:

Advocates for early education frequently cite research on the long-term benefits of preschool, by James J. Heckman at the University of Chicago and others, in terms of reduced crime rates, lower dropout rates and higher incomes among those who attend preschool.

Critics say the federal government has already tested a national preschool program with Head Start, which is intended to help prepare low-income children for school. A national study sponsored by the Department of Health and Human Services of 5,000 3- and 4-year-olds in 84 local programs found few lasting benefits by third grade.

Same thing in "White House Details Preschool Plan," Stephanie Banchemo and Peter Nicholas's story in The Wall Street Journal:

Nobel Prize laureate James Heckman, an economist at the University of Chicago, praised Mr. Obama's plan and said every \$1 invested in quality early-childhood education for low-income children provides a 7% to 10% annual return on investment per child in terms of better education, health and economic outcomes. He said high-quality programs might appear to be expensive, but the costs "are not high in terms of the opportunity costs of not doing the programs."

Maria Fitzpatrick, professor of policy analysis and management at Cornell University, in an emailed news release cautioned against any plan that would expand preschool to all 4-year-olds, saying that "results show that only some children gain--disadvantaged children, particularly those in rural areas--and that the effects fade out over time."

And the Times's account by Michael D. Shear, "Conservatives Skeptical of Expanding Preschool" included this:

"It just doesn't make any sense," said Andrew J. Coulson, the director of the center for educational freedom at the Cato Institute, a libertarian group. "Why would you want to very expensively expand the programs like this if the evidence of effectiveness is not really sound?"

Mr. Coulson said the president's preschool plan appeared to require highly paid preschool teachers and that Mr. Obama wanted to expand "a very strong, very consistently supportive constituency."

"He's boosting his own political base," he said.

Pleasing to me was the sly juxtaposition the WSJ reporters made between Nobel laureate Heckman, of whom more in a moment, and the "emailed news release"

Professor Fitzpatrick, of Cornell's Human Ecology College, who completed her PhD five years ago at the University of Virginia and then spent three years as a Searle Freedom Trust fellow at Stanford's Institute for Economic Policy Research. Beat reporters are obligated to find an expert on each side of the question.

But the best of reporters sometimes manage a wink or even a jab in the ribs, depending on the preponderance of the evidence.

In this case, the evidence is quite strong, thanks especially to Heckman, who in a series of increasingly influential papers since 2000, has systematically developed the case for intervening in the lives of disadvantaged children. Indeed, it is probably not too much to say that Heckman is the expert behind Obama's preschool initiative. He is therefore on the verge of becoming a much more familiar figure.

The next step will be taken by the feature writers. They'll find fistfuls of clips and interviews, and, of course, that welter of published research a timely interview with Heckman from NPR's Robert Siegel is here. A particularly wide-ranging conversation with Douglas Clement in *The Region*, a magazine published by the Federal Reserve Bank of Minneapolis, is here.

(Clement, for those who don't know him, has kept up a steady stream of good interviews with economists who have something important to say since he started 10 years ago. There is a certain selection bias - this is the Minneapolis Fed, after all - but he does an unusually good job of rendering his subjects.)

Heckman is a labor economist. A fortuitous high-school physics course with Frank Oppenheimer, a university physicist-turned-cattle-rancher-turned-high school physics teacher (and Robert's brother), inculcated enthusiasm for experimental science. After Colorado College, Heckman enrolled briefly at the University of Chicago, then transferred to Princeton, where he worked with William Bowen, Orley Ashenfelter and Richard Quandt and received his doctorate in 1970. After four years teaching at Columbia University, he moved to Chicago and, except for two years visiting Yale, has remained there ever since. He won the John Bates Clark Medal in 1983 and, with Daniel McFadden, was awarded the Nobel Prize in 2000.

Heckman told Clement that his interest in inequality of opportunity dates back to 1956, when his family moved from suburban Chicago to Lexington, Ky., and he encountered segregation for the first time, and again, when the family moved to Oklahoma City.

In the summer of 1963, he traveled with his college roommate, a Nigerian, through Alabama and the Mississippi Delta. And he subsequently helped fill in the economic history of Southern discrimination with a handful of studies. (The surprising conclusion of that story has just been written by Stanford economic historian Gavin Wright in "Sharing the Prize: The Economics of the Civil Rights Revolution in the American South," namely that the significant economic gains that black made did not come at the expense of whites.)

What stirred Heckman's interest in early-childhood education was the appearance in 1994 of "The Bell Curve: Intelligence and Class Structure in American Life," by Charles Murray and Richard Herrnstein. That book argued that nature far outweighed nurture; that perhaps ability was mostly genetically determined, and was very difficult, even impossible, to change, Heckman thought otherwise. Here is his 1995 review.

"The topic of ability had become off-limits to 'right-minded' people" until The Bell Curve broached the subject, Heckman told Clement. "[The book]] forced scholars to confront important facts about differences among people. I think that was the contribution of the book. So, actually, I am a bigger fan of it than you might think."

Once Heckman launched into the subject, he discovered that enriched early-childhood intervention programs have their biggest effect not on test scores but on non-cognitive skills: motivation, self-control, and ability to work toward long-term goals. He demonstrated in one skein of work after another that social and emotional skills were essential to producing successful people - that intervention had to be early, very early, if it was to work at all. That has meant a guerilla campaign against the central dogma of the day, as embodied in the No Child Left Behind Act - the idea that education reform is simply about improving test scores. And if it all sounds obvious, it is - to anyone who hasn't been heavily influenced by the standard model of human capital development.

What distinguishes Heckman from many others in the field of early-childhood education is his preferred theater of operations. With his Nobel Prize and his 20-year membership in the National Academy of Science and his aptitude for interdisciplinary work with physicians, brain scientists, psychologists and sociologists, he has ready access to the highest policy circles. He doesn't mind irritating the conservatives among his University of Chicago colleagues by insisting that government must play a major role in providing preschool programs.

True, he's Jekyll-and-Hyde irascible, feuds with colleagues, lets vanity get in the way (what kind of guy, other than one who is jealous of The Taylor Rule, would seek to trademark himself as The Heckman Equation?). But when he is doing what he considers science, Heckman is not only civil but gracious.

What the Heckman story really wants is a talented and tireless portraitist - someone like Tracy Kidder or John McPhee. I hope eventually we will have such a book, difficult though it may be to write. For with all due respect for those excited at the moment about gun control, the trouble all starts here, in the first three years of life. There is no more important story than inequality in public policy for Americans these days - including the response to climate change.

All I can do this week is to offer readers Heckman's own careful 15-point summary from "The Case for Investing in Disadvantaged Young Children". This much, I think, he has rendered inarguable. This much should be incorporated into beat reporters' boilerplate.

1. Many major economic and social problems such as crime, teenage pregnancy, dropping out of high school, and adverse health conditions are linked to low levels of skill and ability in society.
2. In analyzing policies that foster skills and abilities, society should recognize the multiplicity of human abilities.
3. Currently, public policy in the United States and many other countries focuses on promoting and measuring cognitive ability through IQ and achievement tests. A focus on achievement test scores ignores important non-cognitive factors that promote success in school and life.
4. Cognitive abilities are important determinants of socio-economic success.
5. So are socio-emotional skills, physical and mental health, perseverance, attention, motivation, and self-confidence. They contribute to performance in society at large and even help determine scores on the very tests that are commonly used to measure cognitive achievement.
6. Ability gaps between the advantaged and disadvantaged open up early in the lives of children.
7. Family environments of young children are major predictors of cognitive and socio-emotional abilities, as well as of a variety of outcomes such as crime and health.
8. Family environments in the United States and many other countries around the world have deteriorated over the past 40 years. A greater proportion of children is being born into disadvantaged families, including minorities and immigrant groups.

9. Experimental evidence on the positive effects of early interventions on

children in disadvantaged families is consistent with a large body of non-experimental evidence showing that the absence of supportive family

environments harms child outcomes.

10. If society intervenes early enough, it can improve cognitive and

socio-emotional abilities, and the health of disadvantaged children.

11. Early interventions promote schooling, reduce crime, foster workforce

productivity, and reduce teenage pregnancy.

12. These interventions are estimated to have high benefit-cost ratios and

rates of return.

13. As programs are currently configured, interventions early in the life cycle of disadvantaged children have much higher economic returns than later interventions such as reduced pupil-teacher ratios, public job training, convict rehabilitation programs, adult literacy programs, tuition subsidies, or expenditure on police. The returns are much higher than those found in most active labor market programs in Europe (See Heckman, LaLonde, and Smith (1999) and Martin and Grubb (2001)).

14. Life-cycle skill formation is dynamic. Skill begets skill; motivation begets motivation. Motivation cross-fosters skill, and skill cross-fosters motivation. If a child is not motivated to learn and engage early on in life, the more likely it is that when the child becomes an adult, he or she will fail in social and economic life. The longer society waits to intervene in the life cycle of a disadvantaged child, the more costly it is to remediate disadvantage.

15. A major refocus of policy is required to capitalize on knowledge about the importance of the early years in creating inequality and in producing skills for the workforce.

How did my friend respond to the material that I sent? I don't know; I haven't asked. I'm sure he, too, had other things to do. But going forward, I expect I'll use him as a litmus test. In the matter of making high-

quality state-based early-childhood programs available to all children, I will be interested to see when he turns blue.