

WISCONSIN FAMILY IMPACT SEMINARS JAN '14 SSUEBrief

The Science of Early Brain Development

Dr. Arthur Rolnick was one of the speakers at the 32nd Wisconsin Family Impact Seminar on The Science of Early Brain Development. He previously served as senior vice president at the Federal Reserve Bank of Minneapolis, and as an associate economist with the Federal Open Market Committee-the monetary policymaking body for the Federal Reserve System. This issue brief summarizes his seminar presentation.

ADDITIONAL INFO

Dr. Rolnick's Family Impact Seminar presentation is available on the web at wisfamilyimpact.org/fis32/. His chapter in the briefing report edited by Rothermel Bascom Professor of Human Ecology Karen Bogenschneider and Olivia Little is also available at this web address https://wisfamilyimpact.org /wpcontent/uploads/2014/09 /s_wifis32brief_ar.pdf

Investing in Early Childhood Development is Smart Economic Development

For the last 20 years, local and state governments have been deeply engaged in efforts to promote economic development. Unfortunately, many economic development strategies are at best a zero-sum game. For example, virtually every state in the union has tried to create jobs by using government subsidies to lure new companies. These bidding wars are shortsighted because jobs are not created, they are only relocated. When viewed from a national perspective, the public return is at most zero. Government has generally supported public funding for education because it breeds economic success for those being educated and also for the overall economy. For example, in 1993, the wages of a worker with an undergraduate degree exceeded a worker with a high school degree by roughly 40%. Recently, the wages of a worker with a graduate degree exceeded those of a worker with a high school degree by over 100%. Yet knowing we need a highly educated workforce does not tell policymakers where to invest limited public resources.

Investing in early childhood development is investing in economic development. The cost benefit of early childhood programs has been evaluated using our most rigorous research designs. The return on early childhood programs for at-risk families far exceeds the return on most economic investments. For every \$1 invested in high-quality early childhood programs, there is a return of \$4 to \$16 to program participants and to society as a whole. Annual internal rates of return (adjusted for inflation) range between 7% and 18%. This far exceeds the return on most economic investments, both public and private.

Society benefits the most from early childhood education programs. Program participants do benefit from higher after-tax earnings and fringe benefits. Yet 80% of the benefits go to society through higher worker productivity, lower education costs, reduced crime, and less government assistance. In fact, early childhood education is like a low-risk, blue chip stock that pays extraordinary dividends that are long-lasting.

Scaling up high-quality child care programs that are able to deliver on such high returns remains a challenge. To ensure that early childhood programs are effective, high-quality, scalable, and sustainable, requires several key features. None is more important than parent involvement and empowerment. In addition, it is important to intervene early, focus most on at-risk children, incorporate quality assurance, provide educational support, and evaluate the intended outcomes.

In Minnesota, \$20 million of private funding was raised to pilot research-based approaches for improving early childhood education in several communities. Two flagship programs were funded and evaluated: a market-based, 4-star rating system to improve the quality of early childhood programs, and a parent-choice scholarship program for low-income families that provides home visiting mentors and tuition for children to attend highly-rated, child care programs. Minnesota's two-pronged approach improved both the availability of high-quality child care and children's outcomes.

These programs increased low-income children's access to high-quality, early childhood programs by 55% in the targeted areas. Prior to the programs, 57% of children were in unlicensed care. After the programs, 100% of children were in highly-rated, early childhood programs. By kindergarten, children attending programs with high-quality ratings showed significant gains in language, early literacy, and social competence, all shown to predict later school success. Gains were especially high for lowincome children, many of whom went from very low performance when they entered kindergarten to performing at age-level.