

New study shows substantial returns from Kalamazoo County Ready 4s' pre-kindergarten program

Pre-K learning increases by more than 50 percent; predicted increases in future earnings are many multiples of program costs

KALAMAZOO, MI—A new study of Kalamazoo County Ready 4s, by Upjohn Institute economist Tim Bartik, finds large effects of the program on participants' test scores. KC Ready 4s provides tuition assistance for 4-year-olds in Kalamazoo County to attend high-quality pre-K programs.

The new study estimates that children participating in KC Ready 4s increase their average academic test scores at kindergarten entrance by over 19 percentile points. This test score gain increases learning in the pre-kindergarten year by over 50 percent compared to what would have otherwise occurred.

According to Bartik, these estimated effects are greater than average for many pre-K programs that have been studied, although the estimates are within the bounds of likely effects suggested by previous studies.



Bartik points out that "Based on studies of how kindergarten test scores increase future adult earnings, these test score gains would be predicted to increase future adult earnings by about 10 percent. Adult earnings over an entire career can in many cases exceed a million dollars. Therefore, the implied dollar increase in future earnings due to the program is many tens of thousands of dollars, even if we apply some interest rate to discount these future earnings gains. Because the tuition assistance provided by KC Ready 4s averages less than \$4,500 per child, these future earnings gains are many times the program's costs."

Bartik's results appear in a new study from the Upjohn Institute titled "Effects of the Pre-K Program of Kalamazoo County Ready 4s on Kindergarten Entry Test Scores: Estimates Based on Data from the fall of 2011 and the fall of 2012." Download the study at http://research.upjohn.org/up_workingpapers/198/.

The estimated effects are based on test scores and other characteristics of up to 220 children participating in KC Ready 4s. Tests were administered to KC Ready 4s' participants both at entrance to pre-K, and at entrance to kindergarten. Data comes from both 2011–12 and 2012–13 participants in the program. Well-established statistical procedures were used to identify the effects of the program versus the effects of learning that occur naturally as children grow and develop.

KC Ready 4s is a nonprofit organization seeking to ensure universal access to high-quality pre-K education for all 4-year-olds in Kalamazoo County, Michigan. KC Ready 4s slots only go to private or public providers that are rated as being at four or five stars on a quality scale. In addition to providing tuition assistance based on a sliding fee scale to eligible children, KC Ready 4s provides training and assistance for pre-K providers to meet quality standards. For more on KC Ready 4s see <http://www.kcready4s.org/>.

Tim Bartik is a senior economist with the W.E. Upjohn Institute for Employment Research. He is the author of *Investing in Kids: Early Childhood Programs and Local Economic Development* (Upjohn Institute Press, 2011). Bartik also serves on the Board of KC Ready 4s. More on Bartik is available at <http://www.upjohn.org/AboutUs/Staff/Bartik>. Read his "Investing in Kids" blog at <http://investinginkids.net/>.