Wilder Research

Based on Dayton Public, Jefferson Township, Mad River, Northridge, and Trotwood-Madison school districts

School readiness in Montgomery County is worth \$68,000 per low-income child

Numerous research studies have demonstrated the economic value of investing in effective early childhood education (ECE) for low-income children at risk of school failure. Programs that cognitively, socially, and emotionally prepare such children for success in school create large benefits. School readiness prevents or reduces needless public spending on costly interventions and special education programs and in the social welfare and criminal justice systems.

This analysis considers the lifetime economic value of investing in the healthy development and school readiness of children in five high-poverty school districts in Montgomery County, Ohio: Northridge, Mad River, Trotwood-Madison, Dayton Public, and Jefferson Township. Wilder Research estimates that the potential lifetime value of school readiness per each of these children is \$68,306.

Estimated K-12 savings due to increased school readiness in Montgomery County	\$4,503
Savings in special education costs due to reduced incidence of non-cognitive disabilities ⁱ	\$2,194
Savings in K-12 expenditures due to fewer students repeating a grade ⁱⁱ	\$2,309
Estimated savings and revenues for Montgomery County taxpayers due to increased school readiness	\$16,580
Savings in law enforcement in Montgomery County	\$8,531
Savings in cash and medical assistance payments and savings from reduced administrative costs	\$7,533
Savings in child welfare costs	\$215
Increased tax revenues (due to higher income, county portion)	\$301
Estimated additional savings and benefits to individuals and society in Montgomery County	\$35,557
Reduced costs to crime victims in the County	\$14,433
Reduced costs of substance misuse treatment	\$3,306
Additional income from increased parents' productivity	\$1,659
Additional lifetime income (after taxes and netting out savings in cash transfers)	\$16,159
Additional savings for Ohio as a whole due to increased school readiness in Montgomery County	\$11,666
Reduced (marginal) costs of incarcerations and crime victimization	\$8,482
Increased tax revenues (state portion)	\$2,123
Savings in reduced use of unemployment insurance due to increased employment	\$1,061
Total lifetime value per low-income child achieving school readiness in Montgomery County	\$68,306

Without early education and support for healthy development, an at-risk child is more likely to start school at a disadvantage and ultimately more likely to drop out of school, earn lower wages, depend on public assistance, or commit crimes. Conversely, those who start school healthy and prepared are more likely, as adults, to be employed, earn higher incomes, and contribute more in taxes.

Most of that amount, \$56,640, includes returns and savings within Montgomery County. School readiness in Montgomery County also generates \$11,666 per child to the state as a whole through savings due to reduced incarcerations and unemployment insurance use plus increased state tax revenue.

About 26 percent of these total economic returns accrue to the children themselves and their families due to additional income. School districts (7%), county government (24%), the local public (26%), and Ohio as a whole (17%) gain the majority of the benefits. The details of where the benefits accrue are shown in the table on the next page.

The Montgomery County one-child school readiness dividend is the anticipated dollar return for a child who was not expected to be ready for kindergarten, but who gets a high-quality preschool experience and achieves school readiness. The anticipated dollar return was calculated using actual rates, spending, and census data from the five high-poverty school districts in Montgomery County and the likely impacts of effective early childhood education programs on outcomes in K-12 and adulthood. The likely impacts that generate the anticipated savings and benefits come from the most recent longitudinal studies and meta-analyses of the average impacts of several early childhood education programs.

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Wilder Research

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For more information

These estimates are present values, discounted at a 4 percent discount rate.

For more information about the research studies, probabilities, program effect sizes and parameters, and other assumptions used in this analysis, please contact: Gabriel Pina (gabriel.pina@wilder.org), Jose Diaz (jose.diaz@wilder.org), or Richard Chase (richard.chase@wilder.org)

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- Early childhood education has been shown to reduce the incidence of non-cognitive disabilities (e.g. emotional or speech and language disabilities) by 13% (Nores, Belfield, Barnett & Schweinhart, 2005). Therefore the cost savings for special education reflect a 13% reduction in special education expenditures for the five Montgomery County districts.
- Early childhood education has been shown to reduce the incidence of grade repetition within a range of 13-44%, with an average of 33%. Therefore the cost savings for grade retention reflect the 33% reduction times the probability of being retained in a school year for the five Montgomery County districts.