IMPROVING EARLY LEARNING OUTCOMES THROUGH AN OUTCOMES-BASED FUNDING MODEL

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A small group of fifth graders performing at the top of their class sat around a table and discussed their life ambitions with a teacher. When asked who expected to go to college, each student raised his or her hand. The fifth graders shared what they would like to be when they grow up—an English teacher, a lawyer, an athlete. What is unusual about this conversation is that each child seated at the table is growing up in a high-poverty neighborhood with few family resources, and each tested significantly below his or her peers in language skills and cognitive development at preschool entry. The trajectory of children starting life so far behind is not very promising.[1] Indeed, 36 percent of children who spend half their childhood in poverty do not graduate from high school, compared with six percent of children who have never been poor.[2]

What changed the odds for these children was access to a free, high-quality preschool program. High-quality preschool can change the odds for low-income children by improving kindergarten readiness. But school readiness and longer-term outcomes for low-income children who attend preschool vary across programs.[3] The magnitude of the impact of early education programs on a child's learning and development and the persistence of early gains vary by type of program.[4] High-quality preschool programs produce the best and most lasting gains for low-income children, including improved academic achievement, less need for remedial services, increased high school graduation, reduced juvenile and adult crime, lower unemployment, and increased earnings.[5] However, even programs that have similar characteristics (such as credentialed teachers, evidence-based curricula, staff-child ratios) vary in the degree of impact and return on investment. Moreover, there is a need to promote innovation and leverage recent advances in the science of brain development to further improve outcomes for children.[6]

AN OUTCOMES-BASED FUNDING MODEL FOR EARLY EDUCATION

Typically, government funds upfront the activities of an intervention and that intervention may or may not achieve its desired outcomes for the participants. An outcomes-based funding model, rather than funding activities upfront, pays an agreed upon amount for the outcomes that the intervention seeks to achieve after they have been realized. An outcomes-based funding model for early education would direct investment to early education programs that best improve outcomes for children and, consequently, provide the greatest return (both monetary and non-monetary) on public investment. It could also foster innovation by focusing on and rewarding improved results, rather than prescribing specific program activities. By shifting the risk of program performance, government would be free to promote and reward experimentation and innovation. Early education providers would not be constrained to implement old program model characteristics but could innovate and expect compensation if they succeed.

In an outcomes-based funding model, government must identify valid, measurable outcomes that are indicative of future student and life success and meaningful for the community and government. Outcomes can be tied to direct fiscal savings or future cost avoidance, or government can

1 Betty Hart and Todd Risely, "The Early Catastrophe: The 30 Million Word Gap by Age 3," *American Educator* (Spring 2003), available at https://www.aft.org/sites/default/files/periodicals/TheEarlyCatastrophe.pdf.

2 Donald Hernandez, "Double Jeopardy: How Third Grade Reading Skills and Poverty Influence High School Graduation," Annie E. Casey Foundation (2012), available at http://www.aecf.org/m/resourcedoc/AECF-DoubleJeopardy-2012-Full.pdf.

3 Hirokazu Yoshikawa et al., "Investing in Our Future: The Evidence Base on Preschool Education," Foundation for Child Development (October 2013), available at https://www.fcd-us.org/assets/2013/10/Evidence20Base20on20Preschool20Education20FINAL.pdf.

4 W. Steven Barnett, "Preschool and Its Lasting Effects: Research and Policy Implications," National Institute for Early Education at Rutgers University (September 2008).

5 James J. Heckman, "Early Childhood Education: Quality and Access Pay Off," The Heckman Equation, available at https://www.heckmanequation.org.

6 Center on the Developing Child at Harvard University, "From Best Practices to Breakthrough Impacts: A Science-Based Approach to Building a More Promising Future for Young Children and Families" (2016), available at http://www.developingchild.harvard.edu.

pay for an outcome it values even if not directly linked to monetary or cashable savings. Yet, focusing only on a narrow set of short-term outcomes that may be easier to measure and quantify may lead to undervaluing the true benefit of effective early education. Similarly, excluding certain outcomes because they are more difficult to precisely measure or are too far in the future could undervalue early education and result in underinvestment. What government pays for specific outcomes should accurately reflect the full value of effective early education programs, especially for economically disadvantaged children.

One of the advantages of this approach, as mentioned, is a more efficient allocation of public resources and greater investment in what works best to improve early learning outcomes. Other advantages include a systemic change in government to invest in what works in real time, as well as a systemic change that fosters innovation. Funding outcomes, rather than activities, will also facilitate systemic change in government and the early education sector more broadly. In the government sector, a focus on funding improved outcomes in one issue area can have a "spillover" effect of focusing on the outcomes of public investment throughout government. Considering the full range of benefits, including those in health, justice, welfare, and workforce development, government can shift from its silo-centric approach to one that is more comprehensive and child-centered. In the early childhood sector, this will facilitate a greater focus on what is best for improving child outcomes. In turn, it will foster the greater use of data to inform instruction and practices that improve early learning outcomes, rather than activities that do not produce real and lasting impact.

One case study of how an outcomes-based funding model can foster systemic change occurred in Salt Lake County and the state of Utah. In 2013, the United Way of Salt Lake and Voices for Utah Children partnered with Salt Lake County, Goldman Sachs Urban Investment Group, and J.B. Pritzker to launch the country's first early childhood education Pay for Success project. The project's policy goal was to provide access to preschool in the Granite School District, Park City School District, and three community-based providers to children who were on the waiting list. Through its participation in the project, Salt Lake County has changed how it evaluates its budget and funding decisions, focusing more broadly on outcomes rather than the activities of programs. In

2014, the Utah State Legislature passed the Utah School Readiness Act, which appropriated funds to continue the High-Quality Preschool Pay for Success Project. Similarly, participation in the project subsequently led to a more explicit focus on outcomes and return on investment by the Utah Governor's Office of Management and Budget (GOMB). In January 2017, the Pew-MacArthur Results First initiative ranked Utah number two in evidence-based policymaking, citing GOMB's requirement that state agencies show the need for the service, the expected outcomes, and whether the program is evidenced-based and supported by research, data and evaluation.

As a result of the five-year High-Quality Preschool Pay for Success Project, 3,500 children who otherwise would not have had the opportunity to attend preschool will be given access. The High-Quality Preschool Pay for Success Project also made the case for investing in preschool for economically disadvantaged children; in 2016, the Utah Legislature appropriated $33 million (in addition to the Pay for Success funding) over three years to scale up preschool for economically disadvantaged children statewide through direct funding.

The outcome measure chosen in the Utah project was the reduction in the need for future special education. This measure was chosen because the research supported it, reliable data existed, and it was easy to measure and quantify. While the evaluation methodology has come under criticism (there is no control group), neither Salt Lake County nor the state of Utah are paying for any of the other short- and long-term benefits from this intervention. There are many additional benefits to both government and society that are likely to transpire, including increased kindergarten readiness, improved reading and math proficiency, future increases in high school graduation, and reduced interaction with juvenile and adult criminal justice. One reason these measures were not included in the project was the lack of data to either measure or quantify these benefits. In other words, because of a lack of data and credible methods to measure and quantify the broader impact of high quality preschool, the project focused on just one measure of success.

Data availability is critical to fully estimate the value of the range of outcomes associated with high-quality preschool. This is true at the

program level, within the education system more broadly, and across government. Increased investments in data capacity and analysis, which are needed to implement an outcomes-based funding model, will improve overall information and services and shift government toward broadly promoting data-driven policies and investments and evidence-based policy.

Clearly, one limitation of this approach is the constraints regarding the availability of reliable data. What are kindergarten readiness and reading and math proficiency truly worth? What is the value of improved social and emotional benefit and high school graduation? How do you scientifically extrapolate with validity the longer-term impact based on shorter-term outcomes within a specific time horizon? These are not simple questions, and the answers can vary across jurisdictions and for different demographic characteristics of the children served. It is important to note, however, that approaches developed to answer these questions and help determine what government should pay for improvements in early learning outcomes need not be perfect. But these approaches should be based on reliable data and rigorous research; they should also be reasonable and practical. Over time, data capacity and analytical methods will improve through the implementation of this type of funding model precisely because of the need to answer these questions as accurately as possible.

Caution is needed to ensure that paying for outcomes does not create perverse incentives. This is particularly important if one of the outcome metrics is the reduced need for remedial services. Systems must be in place to ensure that the funding model does not influence program-level decisions about whether a child is eligible for these services. The risk of creating perverse incentives can be successfully mitigated by putting processes in place to ensure that the funding model does not impact eligibility determination.

Similarly, particularly in early education, the funding model should not incentivize "teaching to the test." This can be avoided by considering the full range of benefits across development domains as outcomes, including the "softer skills" of social-emotional growth, executive functioning skills, and impact on health. This can also be mitigated by making sure that the outcomes associated with the funding model are consistent with historical outcomes for the specific program being funded, achieved without the presence of an outcomes-based funding model. Further, including longer-term benefits—such as attendance, high school graduation, reductions in juvenile crime, and employment—as outcome measures can mitigate this risk. The evaluation methodology can also lessen the risk of perverse incentives. For instance, random assignment to a treatment and control group, whereby the independent evaluator is the only entity that knows which children are in each group, can mitigate perverse incentives. When this is not possible, a well-planned, quasi-experimental evaluation design can serve the same function.

Although an outcomes-based funding model presents an opportunity to build data capacity, the current lack of data availability presents a barrier to implementation. Lack of political leadership and will can be another barrier. Change can be difficult, and the increased transparency and accountability inherent in an outcomes-based funding approach for both government and providers can be daunting. Another obstacle is the added time and costs of implementing, at least initially, this type of funding model, including ongoing, rigorous program evaluation. Political opposition from some in the early childhood advocacy sector presents another barrier.

CONCLUSION

High-quality preschool programs can improve short- and long-term outcomes for economically disadvantaged children, but the degree of impact and return on public investment varies by program. An outcomes-based funding model for early education promises to direct public investment to effective early childhood programs that best improve child outcomes, incentivize data use for continuous program improvement, foster systemic change, and promote innovation. What government pays for each outcome and the range of outcomes it measures and values is critical to fully realizing the value of a successful early education program. Inadequate compensation has historically been a problem in the early education sector. Thus, by accurately measuring the true value of an effective early education program, government can allocate more resources to adequately compensate providers for the impact they achieve. This can be one approach to ensuring that compensation is commensurate with the value provided, attracting talented professionals to the field, and improving retention of good teachers. The first step, however, is to promote the measurement of and funding for meaningful outcomes. Only

in this way will public-sector dollars be used as efficiently as possible to improve the academic and life success of our most vulnerable children.

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