from EVIDENCE to POLICY



Learning what works, from the Human Development Network

Is Preschool Good for Kids?

How can we help kids reach their full potential? Experts know that the first years of life are crucial to healthy development. And that's just the start. Children need regular



mental and physical stimulation—along with healthcare and proper nutrition—to keep their development on track. Preschool programs are a great way to give kids the educational building blocks to help them learn and prepare

for primary school. But in low-income countries, parents don't always have the opportunity: governments haven't invested in preschools; private sector offerings may be too pricey or not close by; and parents may not understand the benefits. For policymakers and education experts, the questions are clear: Does it make sense to invest in preschool education and, if preschools are available, will parents use them and do children truly benefit from such programs?

At the World Bank, we are committed to working with governments to help them meet the United Nations Millennium Development Goals, including universal primary school education. We also recognize that getting kids to school is just a start-they need to be prepared physically, cognitively and socially for the challenges of learning. To test the effectiveness of preschool programs on children's enrollment in and readiness for primary school, the World Bank supported a study of an early childhood development preschool program in Mozambique run by Save the Children. The evaluation showed that children enrolled in preschool were better prepared for the demands of schooling than children who did not attend preschool and that they were more likely to start primary school by age 6. This study, which we believe is the first randomized evaluation of a preschool program in a rural African setting, shows that preschool education can be an inexpensive and highly effective means for helping children overcome the developmental blocks that come from poverty. Based on the results, Mozambique's Ministry of Education has begun work to expand the community-based preschool model to 600 communities in the 2013-2015 period.

Case Study

Save the Children set up a pilot preschool program in 12 communities in a rural part of Mozambique in 2006 and expanded the program to 30 new communities in 2008. As part of the expansion, plans were made for World Bank research-

Did You Know...

Only 4 percent of children in Mozambique are in preschool, but.... it costs less than \$3/month to send a child to preschool in Mozambique. ers to simultaneously carry out an evaluation of the impact of the program on children's development and readiness for school. The 30 communities were picked randomly from 76 eligible communities—the remainder became the control group—and researchers conducted a detailed baseline survey of 2000 households with preschool-aged children. They also surveyed community leaders and first grade students in all 76 communities. The survey included measures of child development, standard socio- economic questions and health questions. The endline survey was conducted in 2010 and had a 95 percent re-contact rate.

Background

Mozambique's primary school enrollment more than doubled between 1998 and 2010, reaching close to 95 percent. Nonetheless, close to one-third of children are not enrolled in primary school by age 6, and when they do enroll, they are not always prepared for the demands of school. Children from poor, rural communities in particular often show signs of developmental delays. This isn't a surprise: an estimated 61 percent of children in sub-Saharan Africa don't reach developmental milestones because of poverty. Brought up in homes where parents themselves may be illiterate, children in such poor communities don't always have access to the toys, books and verbal interactions that help stimulate physical, cognitive, linguistic, and socio-emotional development. As a result, they may arrive at school ill-prepared for learning in a group environment. While preschool programs are generally viewed as an effective way to boost children's development and better prepare them for school, only four percent of children in Mozambique go to preschool, and these tend to be from wealthier families and in urban areas. Save the Children's early childhood development program was designed to help bridge this gap and give poor children the right start in life so they have a better chance of reaching their full potential. The cost of running the program was U.S. \$2.47 per child per month, which included paying the teachers a \$10/month stipend.

The Findings

Many parents want to send their children to preschool.

In communities where Save the Children preschools were available, 55 percent of eligible children aged 3 to 5 years old were enrolled in the program, compared with 11.7 percent of children in control group communities. On average, children attended school five days a week, for nearly four hours a day.

Three-quarters of families in the treatment group said they had access to a preschool, compared with 22 percent of those in the control group. Among those in the treatment group who did not enroll their preschool-aged children, the most commonly given reasons were that the child was too young (suggesting misinformation about the appropriate enrollment age), that the primary caregiver objected or that the school was too far. Children who attended preschool were more likely to enroll in primary school and more likely to start at the right age. Once in school, they also spent more time on homework and other school-related activities.

Primary school enrollment rates among children in the treatment group were 24 percent higher than those in the control group two years after the evaluation was launched. Children who had been enrolled in preschool also were 10.2 percentage points more likely to start primary school at the right age—6 years old for first grade —an increase of 21.7 percent over the control group.

Once enrolled in primary school, they spent an average of 7.2 hours extra a week on homework and other school-related activities, including classroom time. This translates into an increase of almost 50 percent over the

This policy note reviews research presented in "The Promise of Preschool in Africa: A Randomized Impact Evaluation of Early Childhood Development in Rural Mozambique," by Sebastian Martinez, Sophie Naudeau and Victor Pereira. The evaluation was funded in part by the Spanish Impact Evaluation Fund.

control group, who spent on average 15.5 hours per week on homework and classroom time.

The increase in time spent in school and on homework came in part from a reduction in time spent working on the family's farm and accompanying their caregivers to attend community meetings. The time children usually spent playing, sleeping or doing chores was not affected.

Children who attended preschool showed gains on overall school readiness, as measured through tests of cognitive, socio-emotional, and fine motor development.

Compared with the control group, children in the treatment group showed a 5.3 percent increase in communications skills; a 6.4 percent increase in problem solving skills and an increase of 6.3 percent in a test measuring fine motor development.

Results were particularly strong in the area of cognitive development, as measured in a survey of first-grade primary school teachers. Children in the treatment group showed a 12.1 percentage point increase—or 87 percent—over those in the control group. Areas in which children did better included memory, interest in mathematics, ability to sort and classify objects and being able to count to 20. Children in the treatment group also showed improved emotional maturity, including self-regulation.

Preschool didn't only help targeted children—other household members benefitted as well.

Sending children to preschool freed up time for caregivers and seems to have given their older siblings more time to go to school themselves. In households where a younger child attended preschool, older children aged 10 to 15 years old were 5 percent more likely to have gone to school—perhaps because they did

About the preschools:

93 percent of teachers were female Their average age was 33 Their average education was 6.2 years More than half had a child enrolled in the preschool not have to watch their younger siblings during the day. Caregivers, who were basically freed from 15 hours a week of childcare because of the preschool program (depending on the ages of their other children), were 26 percent more likely to have worked in the previous 30 days than those whose children stayed home. At the same time, caregivers in the treatment group were less likely than those in the control group to see physical punishment as appropriate to use on a child. They were also more likely to practice daily routines with the child, although there was no significant increase in playing games or reading books with the child.



Communities did not shy away from involvement in the project.

Communities had to agree to provide space, labor and, where possible, materials, to build preschool classrooms (up to three per community, each with capacity for 35 children), and they had to form committees to manage and supervise the preschools. Save the Children also gave communities materials for playgrounds, child-sized latrines and a washing station with safe water for drinking and hand washing.

Each class had two volunteer teachers – who had to meet certain minimum requirements and were each paid about \$10 a month by Save the Children—picked by the community management committee. At the outset, teachers received training from Save the Children on learning techniques to stimulate children's learning, and later had refresher courses; facilitators visited the schools monthly to coach and mentor; and every month teachers in the same district would meet to share tips and prepare for the next month.

At the same time, Save the Children sponsored monthly parenting meetings with the involvement of community health activists and the preschool teachers. Discussions focused on nutrition, health and literacy. After two years of seed funding from Save the Children, communities had to agree on the monthly fee that each household would contribute to maintain the preschools. The fee ended up being between U.S. 0.50 cents and U.S. 0.80 cents per month, or about a third of what families in the control group paid to send their children to a preschool.

Conclusion Making policy from evidence

Policymakers and development experts know that educating children is key to alleviating poverty and helping people build better lives. And that's why helping countries achieve universal primary education is a United Nations Millennium Development Goal. But it's also important to make sure children are ready for primary school when they start. As this evaluation showed, preschools are an effective way to help children prepare for school – and children who attend preschool are more likely to enroll in primary school and start at the right age.

Having children in preschool can also be a boon for their caregivers—including older siblings. In this Mozambique eval-

uation, caregivers were more likely to work and older siblings were more likely to go to school. And at \$2.47 per child per month—which included the \$10 monthly stipend to teachers—preschool programs can be affordable.

The importance of evidence for governments seeking to craft effective policies is clear: In this case, the Mozambique Ministry of Education is now planning to extend community-based preschools to 600 communities. While there remain other areas to study, for example, constraints that held back families from enrolling their kids in preschool, the value of early childhood education is clear.

The Human Development Network, part of the World Bank Group, supports and disseminates research evaluating the impact of development projects to help alleviate poverty. The goal is to collect and build empirical evidence that can help governments and development organizations design and implement the most appropriate and effective policies for better educational, health and job opportunities for people in developing countries. For more information about who we are and what we do, go to: http://www.worldbank.org/sief.

The Evidence to Policy note series is produced by SIEF with generous support from the British government's Department for International Development.



Produced by Office of the Chief Economist, Human Development Network, Communications/Aliza Marcus