







EDUCATION RESEARCH

New Knowledge for Improved Outcomes





The Challenge

The Uzbekistan Education for Excellence Program led the development of a groundbreaking curriculum based on international best practices and contributions from local experts. The approach was rooted in a theory of change that identified long-term goals (outcomes) and the interconnecting outputs and conditions to achieve them.

In collaboration with the Uzbekistan Ministry of Preschool and School Education (MoPSE), the Program developed standards, education scope and sequences, new textbooks and teacher guides, and continuous professional development training for educators in pilot schools among other activities and products. Throughout this process, the Program sought to test the theory of change, fill critical gaps in knowledge about the Uzbek educational system, and determine what kind of research would be most responsive to this breadth of interventions and the complex nature of classroom dynamics.



"By taking part in the research, I improved my teaching skills, learned about the experiences of my colleagues at the national level, and learned different teaching methods from them, and expanded my network of professionals in the field."

Kholkuziyeva Zaynura,
Primary school Teacher, Sirdaryo Region

The Process

The starting point of the research was a theory of change that maps out Program outputs and outcomes and how they are connected to the Program goal of improved learning for students. Research questions directly related to the theory of change included Are teachers practicing new knowledge and skills in the classroom? and What are the levels of mathematics and reading achievement among students before and after the Program intervention? Other questions reflected gaps in knowledge about the education system, such as What education supports are available for children with disabilities? What are community, family, school, and classroom-level barriers and drivers to inclusive education?

The Program developed a multipronged research approach to thoroughly investigate these questions. The series of studies and assessments included:

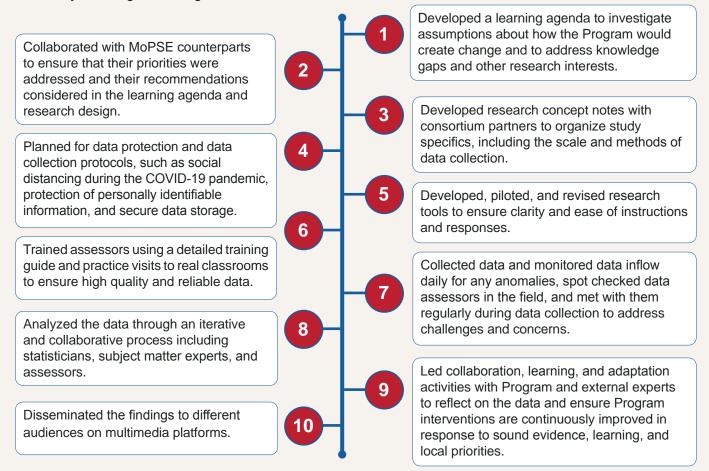
- ✓ Teacher Professional Development Effectiveness Study
- ✓ Teaching and Learning Materials Uptake Study
- Learning Outcome Assessment
- ✓ Status of Instruction Study
- ✓ Teacher Support System Study
- Assessments to measure student performance in early grade reading and mathematics and information and communication technology.



"After working with the Program, I realized that its research... led to the growth of teaching professionals and that we shouldn't be afraid of innovation. The Program can offer great [learnings] for the younger generation of teachers."

Kadirova Mastura, Field Assistant, Namangan Region Research was undertaken by a comprehensive team of local and international professionals, including an Uzbekistan-based monitoring, evaluation, and learning unit, statisticians, subject matter experts, assessors, and field assistants, with input from government partners.

The research team led a robust process to create meaningful knowledge for use by the Program, the MoPSE, and future implementers of similar education initiatives in Uzbekistan and beyond. While each study was developed and carried out according to unique goals, the overarching process was similar among them. After establishing the theory of change, the Program:



Process Highlights

COLLABORATION – Each step of research involved collaboration among those responsible for each output and consultations with assessors, local and international subject matter experts, and government counterparts to get 360-degree perspective on aims, processes, and outcomes of research.

ITERATION – Data analysis by statisticians relied on multiple rounds of review and input from Program staff, subject matter experts, and assessors who collected information in the field to explain anomalies or unexpected findings, contextualize the data, and better understand and communicate implications for the education system and Program goals. The Program regularly incorporated research findings into Program implementation through adjustments that made the approach and materials more useful, efficient, and effective for educators and students.

LEARNINGS FROM GRADUATE STUDENTS TO GOVERNMENT COUNTERPARTS – The research process was a valuable learning experience at multiple levels. The Program used new data to adapt implementation, and both high-level and detailed findings about the education system were shared with the MoPSE. Through their participation in the pilot and by providing feedback to Program researchers, educators also benefited from a greater understanding of the process of curriculum and learning materials development. At the field level, assessors and field assistants gained experience in educational research, including through participating in data analysis. Field assistants were hired from a pool of master's degree students of primary education at regional pedagogical universities to support local capacity building among those who would find the Program's research activities professionally appealing. Khudoyberdiyeva Nargiza, a field assistant in Sirdaryo Region, said, "For me, the overall process of data collection was very unique and interesting. As a master's degree student, I learned a lot."

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