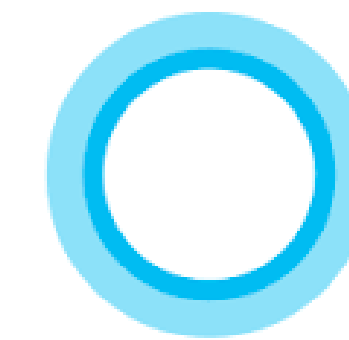# Personalized AI & Open Platforms

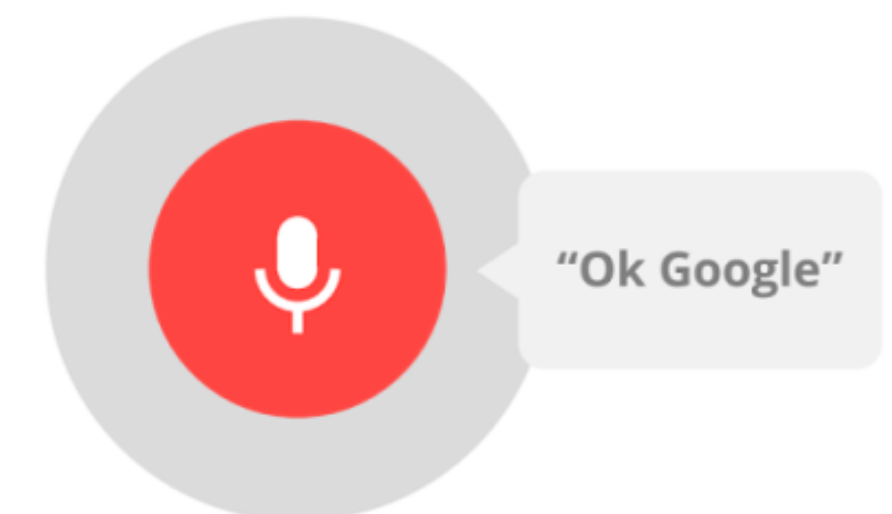A Transformative Technology for SDG #4: Quality Education for All

Dr. Cynthia Breazeal
MIT Media Lab, Personal Robotics Group
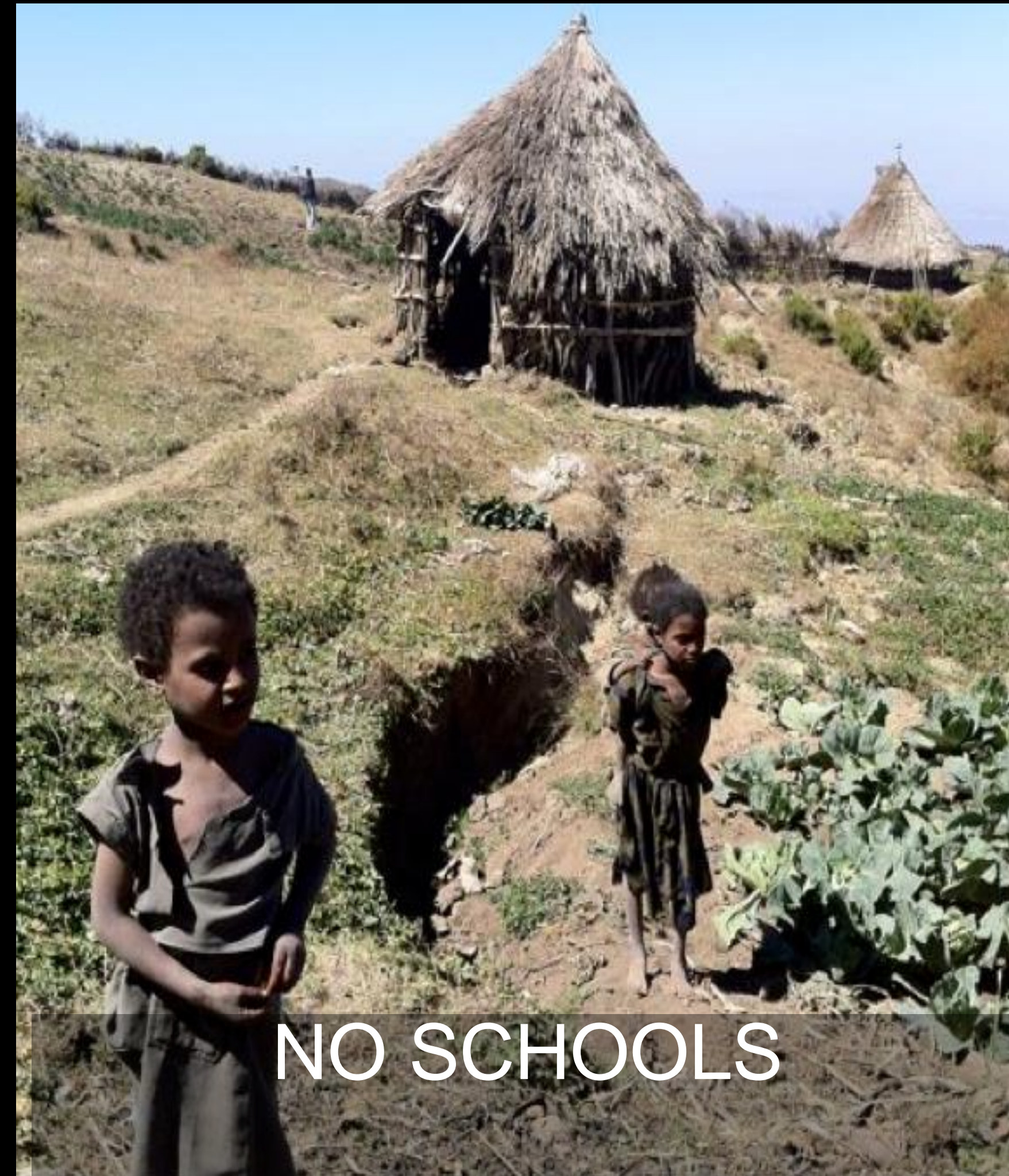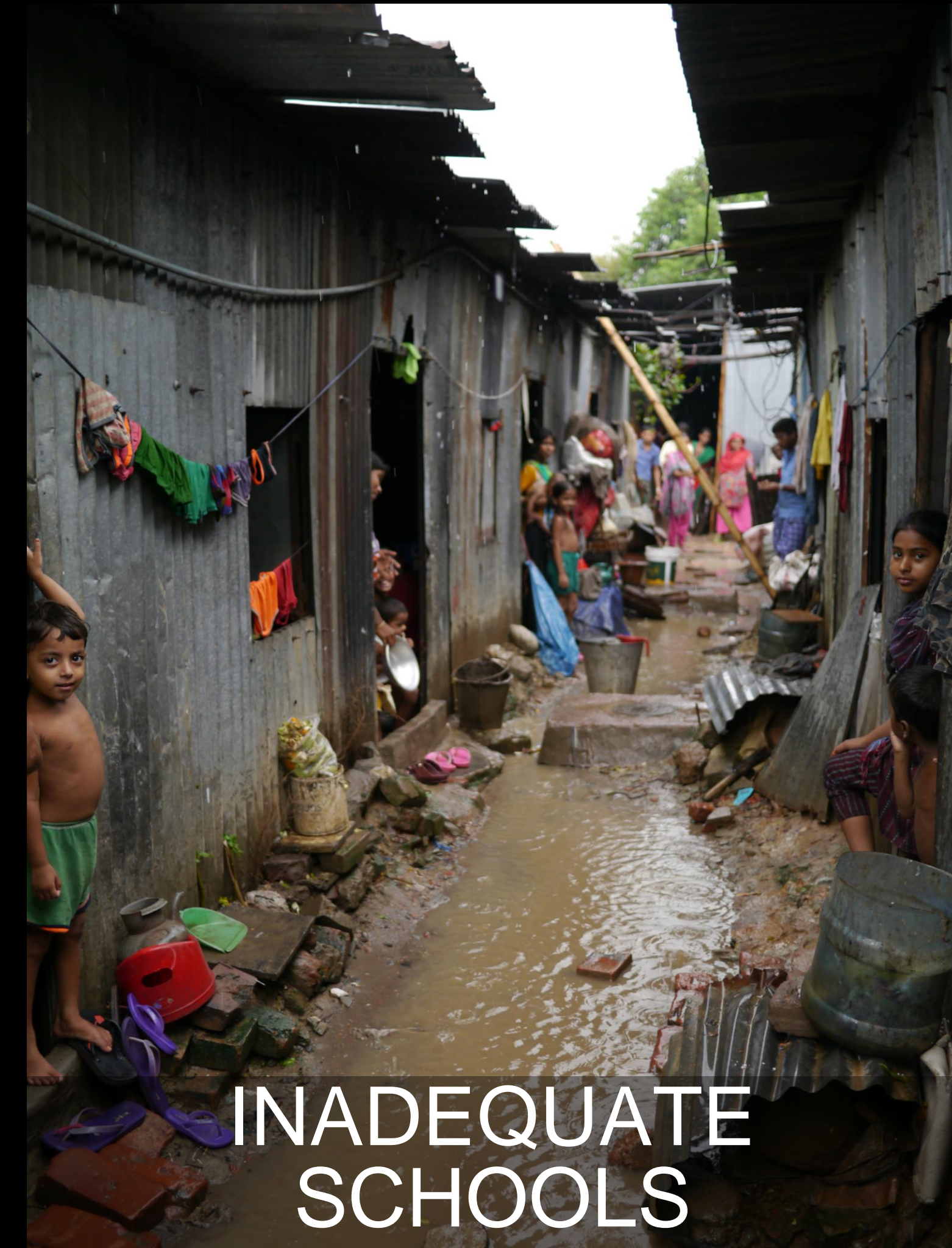Founder & Chief Scientist, Jibo Inc.

- **Intelligent digital assistants.** Multi-billion dollar strategic investment of high-tech companies.

- **Personalization.** Scalable individualized attention.

- **Cloud connected devices.** Enables AI assistants to engage people wherever & whenever.

- **Big data.** Necessary for AI assistants to learn, personalize, and improve.

- **Platforms + Developer Communities.** AI-powered assistance built into developer platforms to accelerate broad application + rapid proliferation.

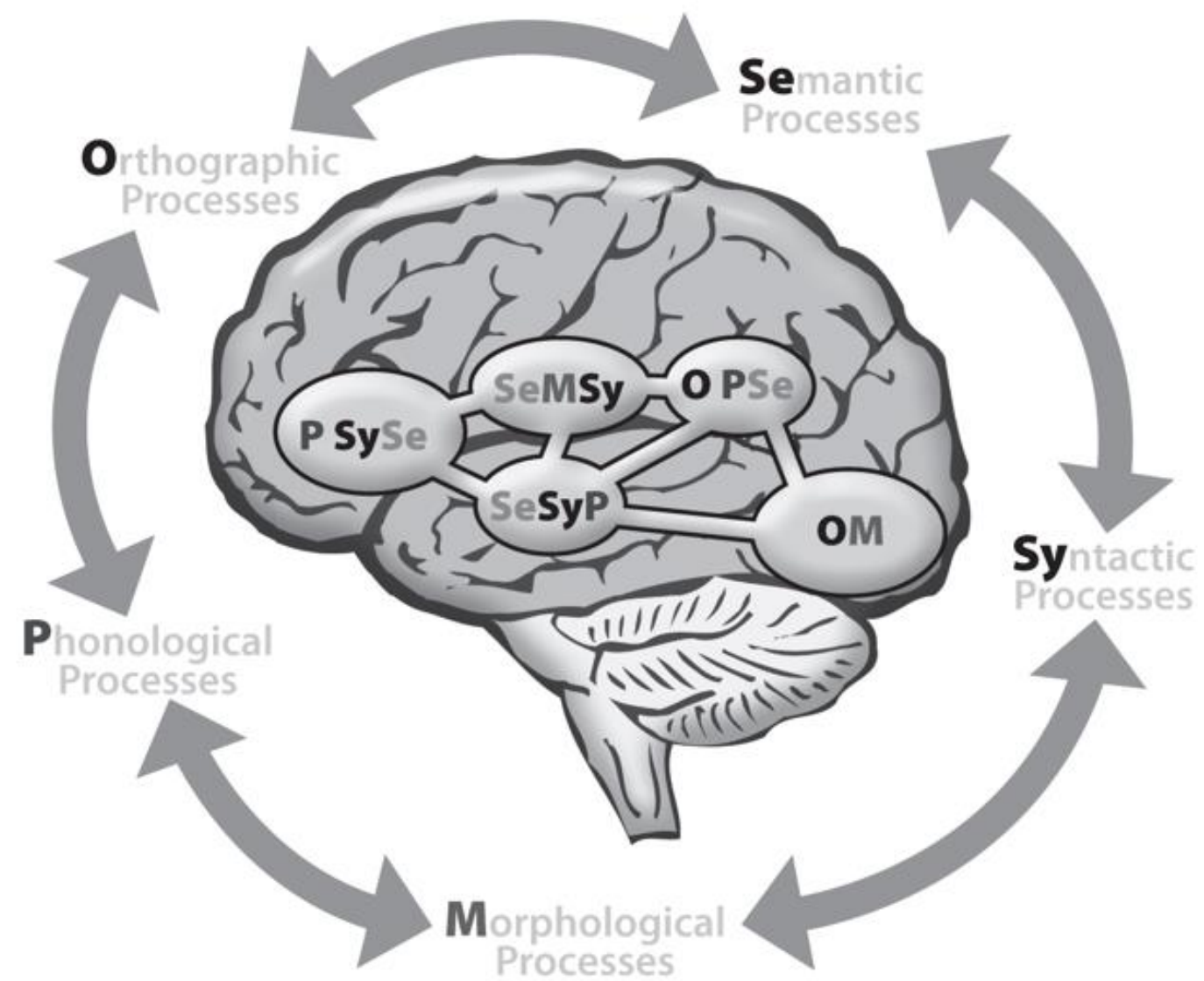http://www.bloomberg.com/news/articles/2016-05-18/google-shows-off-ai-to-keep-up-with-facebook-amazon-apple

Reimagine how we might educate children where traditional methods continue to fall short

INADEQUATE SCHOOLS

NO SCHOOLS

OVER-CROWDED SCHOOLS

Can we Achieve Universal Literacy by 2030?

Science of Learning

We understand how the brain learns to read
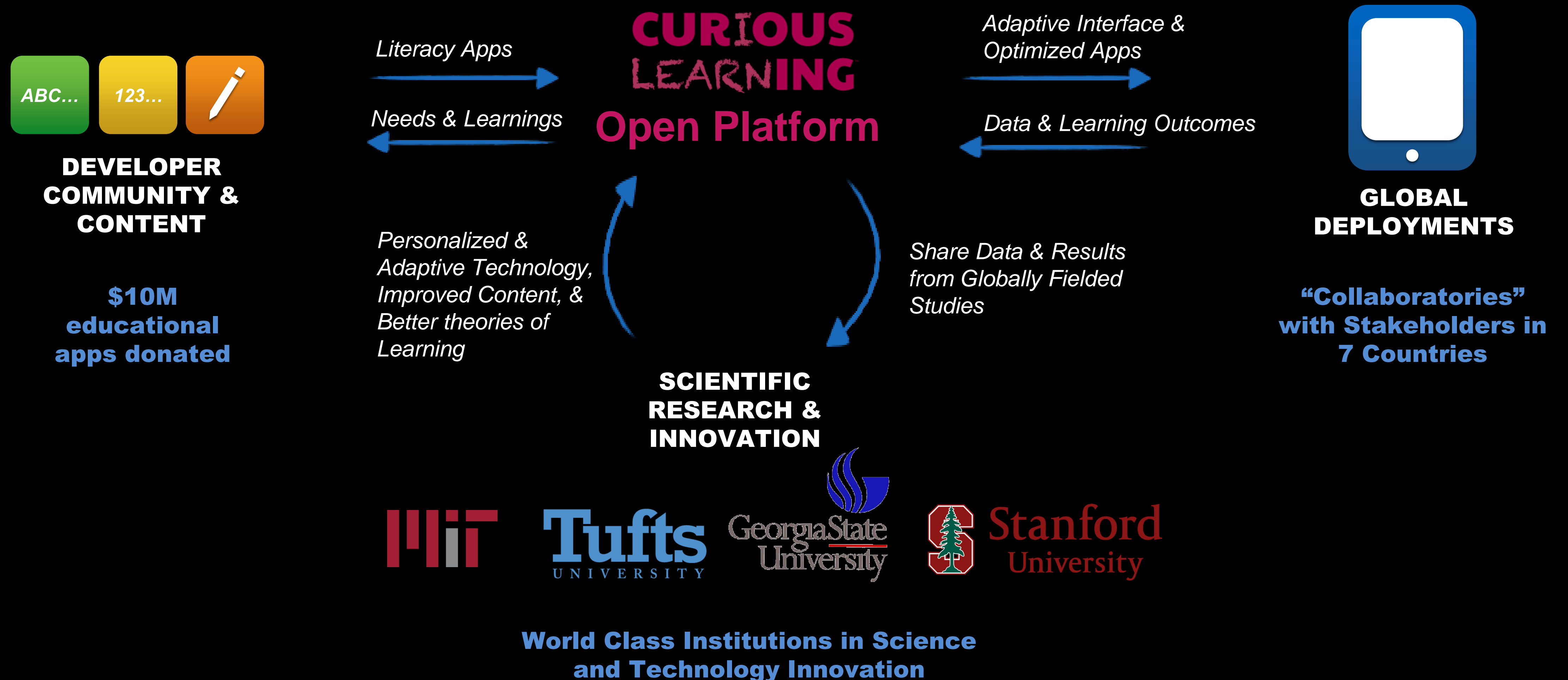
Data-Driven Innovation

We build intelligent & personalized technologies

Reach of Mobile Computing

We capture big data to understand behavior and adapt interventions

The Power of Platform: A Global "Living Lab" Process

ENGAGE, MEASURE, ASSESS

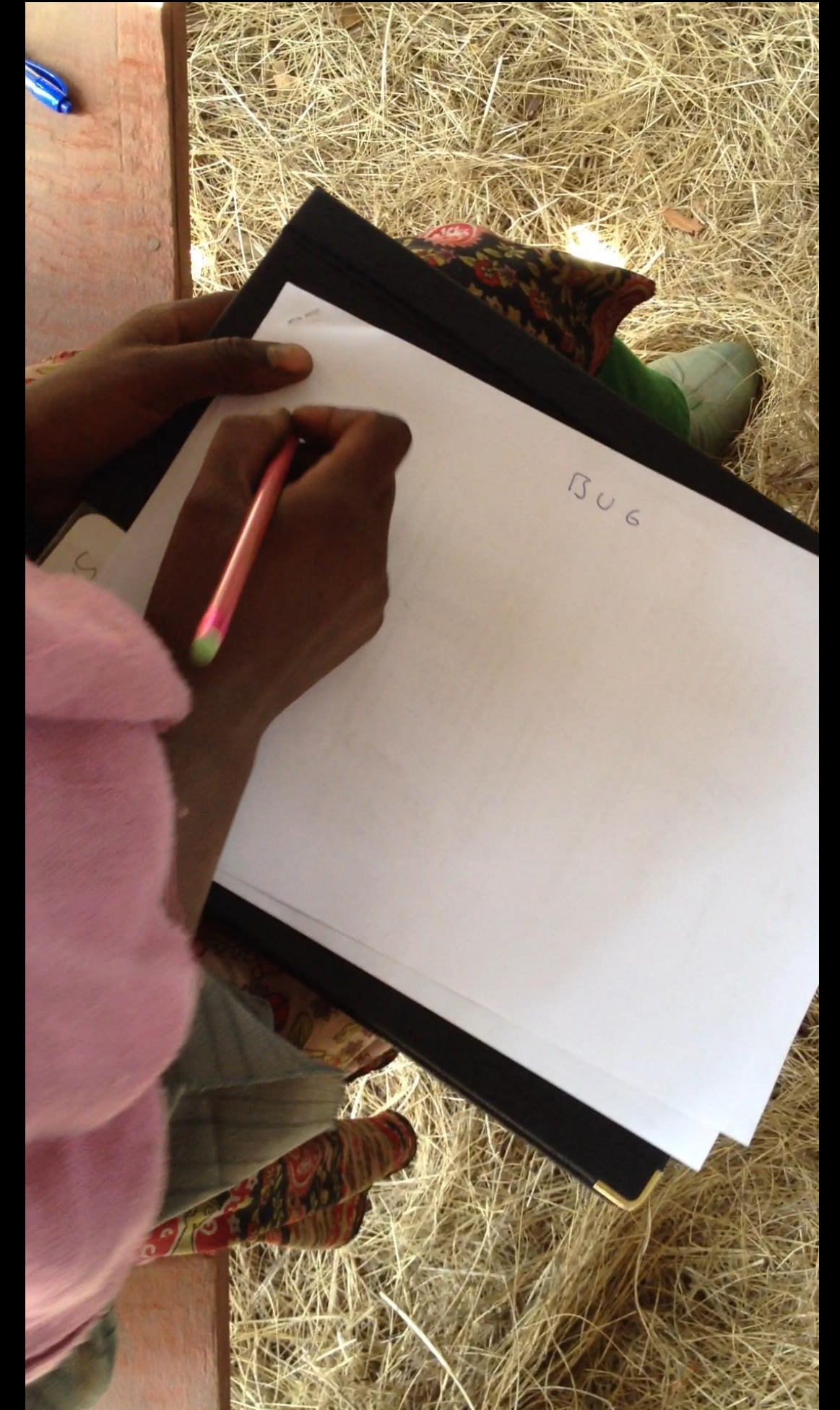SOCIAL & COLLABORATIVE

REMOTE VILLAGE ETHIOPIA

DAYCARE UGANDA SLUM

Children in remote villages with no access to school.
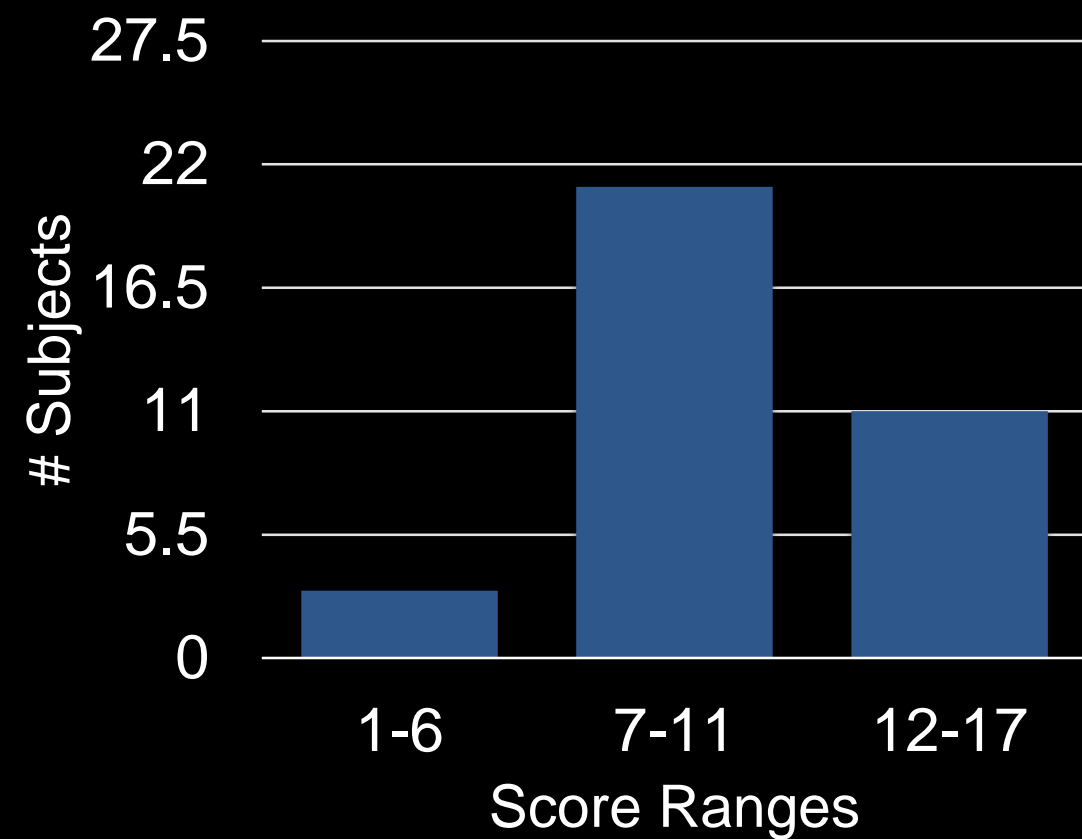
After 1-year deployment.
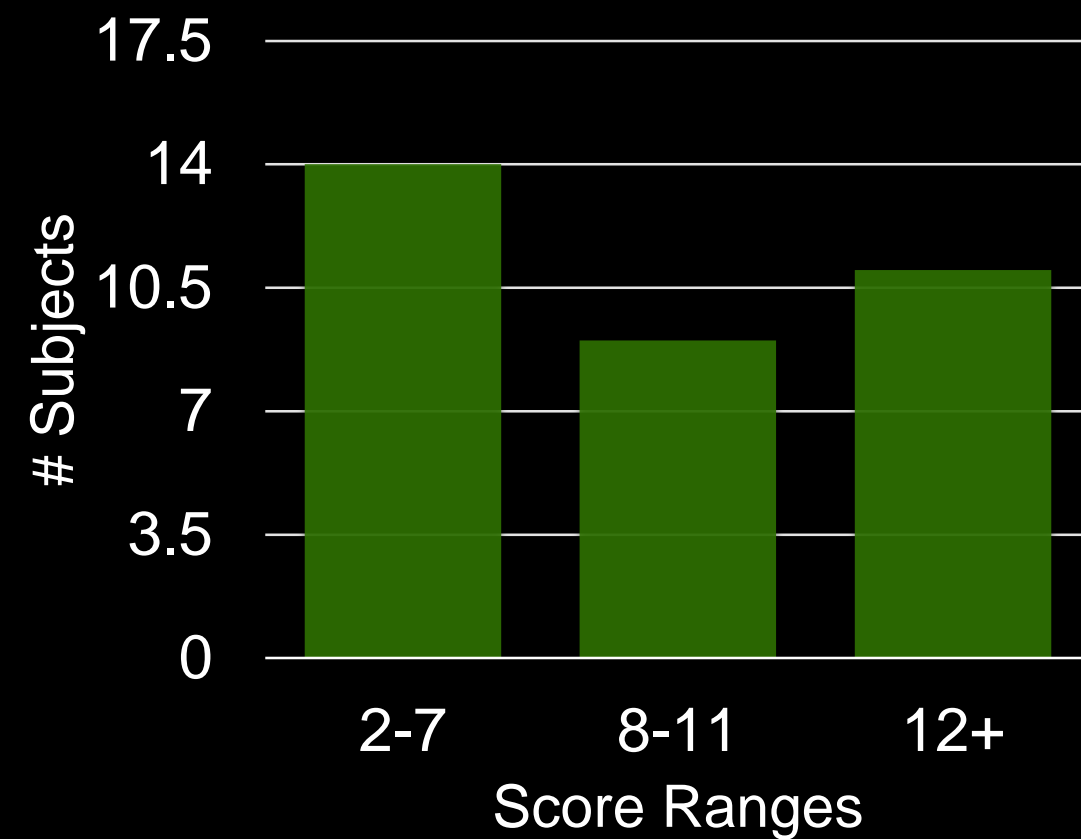
Ethiopia

South Africa
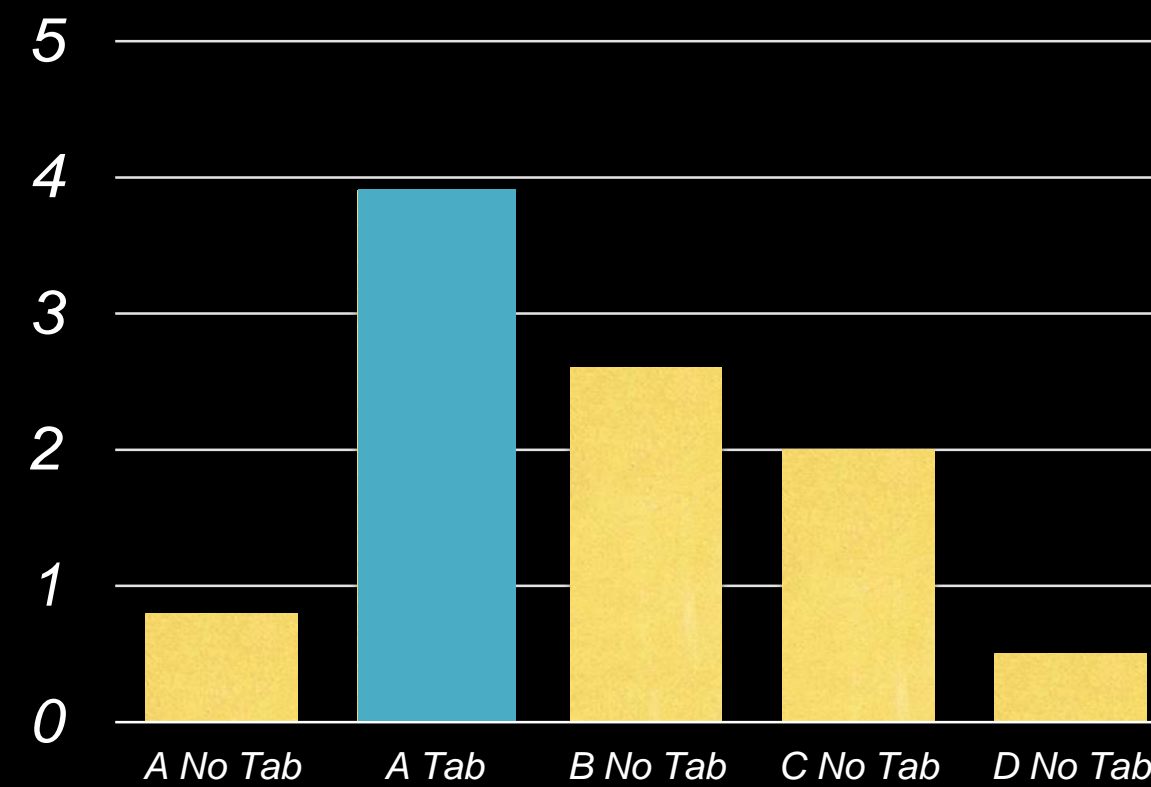

NO SCHOOL results

UNDER-RESOURCED SCHOOL results

VOCABULARY

Score Ranges: 1-6, 7-11, 12-17
Subjects (y-axis): 0, 5.5, 11, 16.5, 22, 27.5

LETTERS

Score Ranges: 2-7, 8-11, 12+
Subjects (y-axis): 0, 3.5, 7, 10.5, 14, 17.5

No. Words Decoded 1st Grade

Categories: A No Tab, A Tab, B No Tab, C No Tab, D No Tab
y-axis: 0, 1, 2, 3, 4, 5

Letter ID - Random Order 1st Grade

Categories: A No Tab, A Tab, B No Tab, C No Tab, D No Tab
y-axis: 0, 3.75, 7.5, 11.25, 15, 18.75
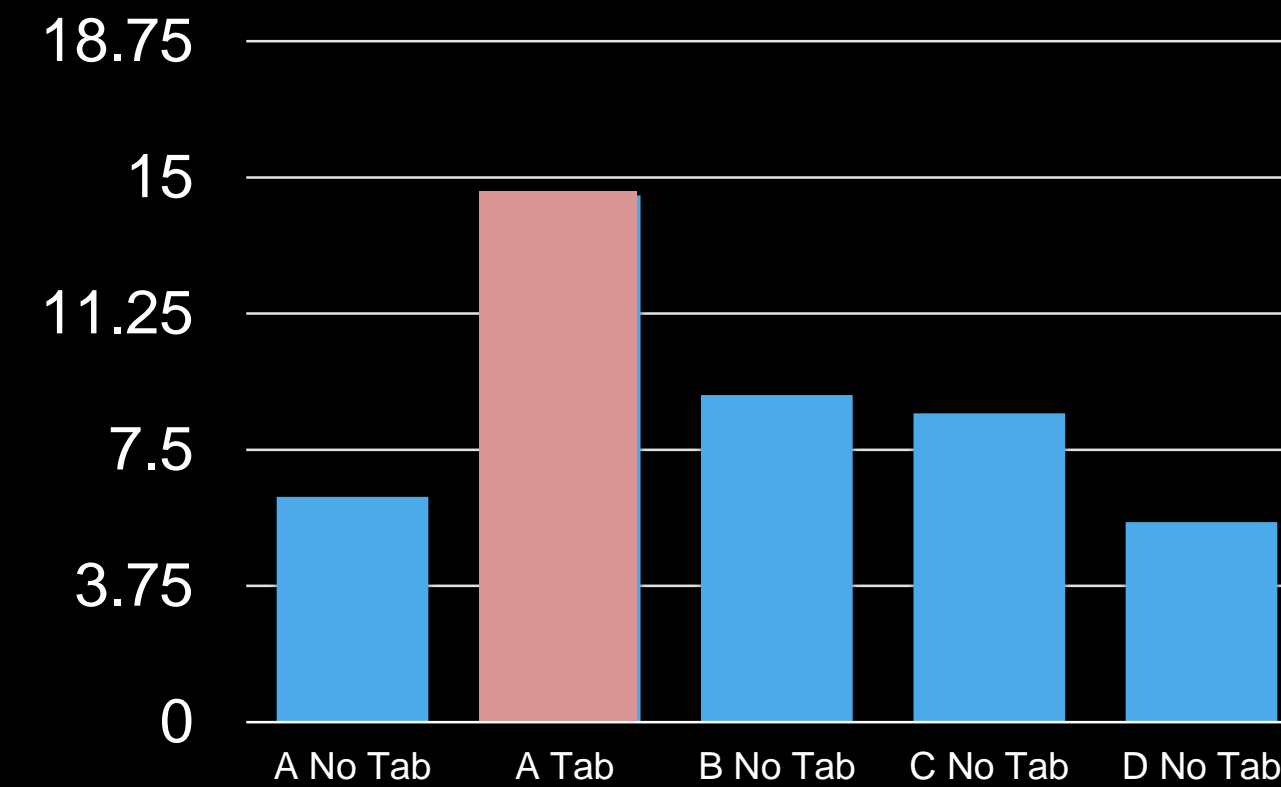
Recommendations

Invest in and galvanize global efforts to create an Open Digital Education Platform. Leverage the global community of scientists, innovators, technologists, stakeholders to help solve SDG #4.

Embrace the iterative, data-driven process of digital innovation for effective interventions that are scalable, affordable, rapidly deployable.

Derive solutions and best-practices in the context of "living labs" with stakeholders around the world.

Empower children with no access to school to learn. Boost learning gains for those in school and beyond school.