



**AVANTI'S
COMMITMENT TO
MAKE A DIFFERENCE
IN CHILDREN'S
EDUCATION**



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In 2014, Avanti began leading the consortium that delivers improved numeracy and literacy educational outcomes to learners in hard-to-reach areas in Kenya through the FCDO-funded Project iMlango. This project is unique as, not only does it focus on bringing satellite broadband internet to rural schools, but it also incorporates a whole school programme tailored for marginalised learners. Eight years on and the results are impressive: the project has been implemented in 205 primary and 40 secondary schools across 4 regions in Kenya, reaching over 180,000 learners in hard-to-reach areas and has shown exceptional learning outcomes for these children, doubling their numeracy learning rates.

What is unique about this Edtech project?

The programme incorporates satellite broadband based individualised learning which is supported by in-field technical support and by real-time monitoring based on sophisticated machine-to-machine learning and artificial intelligence technologies.

The project has successfully demonstrated the technical viability of satellite based educational projects to achieve learning outcomes.



How does it work?

Through Avanti's strategic partnerships with education content providers, iMlango provides educational content to remote Kenyan schools through Ka-band satellite connectivity. In addition, ICT equipment and capability is deployed at each school through the setting up of computer labs.

These schools are located in rural and hard-to-reach areas where satellite is the only option for internet connectivity, and therefore they have historically been excluded from the digital economy that connectivity provides. The iMlango primary schools are spread across four counties in Kenya (Kilifi, Kajiado, Makueni and Uasin Gishu), selected based on marginalisation factors (poverty rates, attendance statistics and learning achievements for girls) as well as availability of electricity, safety and accessibility.

Key to the project is the satellite connectivity and individualised tutoring the online platform provides. The content enables machine learning and artificial intelligence to tailor each session per child. This means that no two children have the same profile or session, enabling each child to learn based on their own needs and learning levels.



1

Individualised Online Tuition

One to one tuition in maths using content tailored to the Kenyan curriculum.



2

Internet Connectivity

High-speed broadband connectivity via satellite for rural and remote schools.



3

Resources

Provision of hardware, e-learning labs and ICT training & support for teachers.



4

Monitoring

Remote monitoring and tracking of student progress.

Additional Key Interventions that enable learning outcomes

In order to achieve success, a number of Additional Key Interventions have been implemented across each school, including:

Teacher Training: In order to improve quality of education, teacher capacity building and school support is mandatory.

Girls Clubs: Participation in these clubs allows girls to gain self-confidence and awareness of future prospects. Additionally, issues around early pregnancies and marriage are discussed to educate girls and boys.

Gender Specialist: To educate the teachers on how to recognise and deal effectively with the difficulties and challenges a girl faces when attending school.

Safeguarding Officer: A safeguarding officer is imperative when dealing with children to ensure the safety and security of each child at school.

Revision sessions: Participation in Standard 8 revision sessions in preparation for the national exams.

Results achieved to date

iMlango has been able to prove the ability of the programme to accelerate educational outcomes through satellite-enabled individualised learning on the digital portal.

Students who have access to the satellite-enabled individualised learning platform for 60 minutes per week improve their “math age” by, on average, 18 months in their first year of access. In marginalised communities, we have seen the underlying quality of learning being significantly inferior to international rates of progress and we are able to double their learning progress rates, narrowing the divide between the haves and have nots, at just 45 minutes per week.

Over time the progress rates, for students using the platform for 30-90 minutes per week has consistently improved reaching a rate of 1.27 in November 2018 and has always been above the Kenya baseline rate. Additionally, to the improved learning outcomes for the students, the students themselves have indicated an increased appetite for school attendance and enjoyment of school and learning.

**To find out more,
scan the QR code
with your phone.**



Contact

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