

# Whizz Education in collaboration with Bahati Primary, Kenya



## Introduction

The partnership between Bahati Primary in Kenya and Whizz Education has proven to be a special one in many ways; this case study provides more detail on the transformative collaboration with Bahati, where the goal is to provide personalised online tutoring to achieve measurable learning outcomes for students at the school.

Outlining the approach to how we work in diverse settings globally, the case study details how we adapted our implementation locally to meet the needs of the learning environment and the unique insight gained from combining learning data with the qualitative input from the local team in territory.

It's this approach that has made the collaboration with Bahati so successful, and lead us to win the BETT Award 2019 in the Collaboration with a School category, an award we are jointly particularly proud of.

## Project Context

The iMlango project was established in 2012 as part of the DFID-funded Girls Education Challenge (GEC) initiative. The project targets 180,000 girls across 4 counties in Kenya, with a specific focus on supporting girls' learning and aspirations in marginalised communities.

As part of this implementation, schools are equipped with a computer lab consisting of 25 wifi-enabled computers as well as whole-class learning equipment (laptop and projector) to deliver our award-winning online maths programme, Maths-Whizz. After the first phase of GEC, iMlango received further funding for the GEC Transition phase (GEC-T). Despite having been part of the iMlango project implementation from the beginning, this case study relates specifically to the GEC-T phase, operational since 2017.



One of the core requirements for GEC-T projects is to be able to deliver innovative solutions to those who are educationally disadvantaged. With this in mind, and a requirement to raise standards in numeracy through Whizz Education's personalised learning platform, Maths-Whizz, the following three components of the programme became core to achieving success:

**Maths-Whizz Tutor:** Provides curriculum-aligned interactive and animated online maths lessons matched to each student's unique strengths and areas for improvement. The Maths-Whizz Tutor acts like a human tutor by initially assessing each child's unique strengths and areas for improvement and subsequently targeting weaker topics by adapting in real-time in order to address knowledge gaps in mathematics.

**Teachers' Resource:** Provides digital interactive resources in each topic which allow teachers to plan quickly, differentiate and deliver high-quality maths lessons in a fun and engaging way.

**Assessment and Reporting:** Allows teachers to see every student's maths ability through easy-to-use online reports which are generated on a point-of-need basis. The reports instantly show strengths, weaknesses and progress in different topics for individual students and the class as a whole.

## The Challenge - Bahati Primary

Bahati Primary is situated along a dusty country road two hours drive from Kilifi Town in one of the most rural and remote regions of Kenya.

The school has made a name for itself in recent months as the most successful school in the Department for International Development (DFID)-funded iMlango project.

Despite its remote location and limited resources, the iMlango project has successfully leveraged a range of strategies combined with Whizz Education's learning resources to deliver individualised learning for students in marginalised communities and effectively combat the challenges that schools in Kenya, like Bahati, typically experience.

These challenges include large class sizes, limited teacher capacity, frequent power outages and limited resources.

Bahati's progress despite these challenges, exemplifies the impact of innovative EdTech in raising standards in teaching and learning in the most remote and challenging of circumstances. Bahati's progress despite these challenges, exemplifies the impact of innovative EdTech in raising standards in teaching and learning in the most remote and challenging of circumstances.

## The Solution

What led to the success at Bahati? Mr. Nyiro, the Headteacher at Bahati Primary says:

"The difference is that [now] we are more involved, the teachers have started embracing the project and understand its importance in reducing our workload. The thing that motivates us most are the pupils. Through individualised learning they are able to learn at their pace."

In addition to this, a range of strategies and approaches have been adopted within the school, which include:

- Highly involved Leadership Team driving usage in schools
- Regular teacher capacity building sessions on how to integrate Maths-Whizz into teaching & learning
- Integration of Maths-Whizz into the school's main "block" timetable
- Weekly target-setting and regular review of Maths-Whizz data to monitor usage and progressions

Looking at each of these solutions in more detail, provides the key to the success seen by Bahati.

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Out of more than 800 schools using Maths-Whizz globally in 2018, Bahati shone as the school with the highest usage and progressions.

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## Highly Involved Leadership Team Driving Usage in Schools

Whizz Education field officers work closely with the school headmaster to develop Maths-Whizz targets and monitor usage, thereby ensuring that teachers are held accountable and that Maths-Whizz is integrated into the school's weekly meetings and progress reviews. The school headmaster Mr. Nyiro is a strong advocate for Maths-Whizz at Bahati, affirming that:

"The exposure of learners to Maths-Whizz has greatly improved their individual problem-solving skills as they tackle mathematical problems. This is reflected in their improved performance in Maths. The availability of a variety of learning/teaching materials for lesson presentations that teachers can use (videos, pictures, etc.) motivates learners and arouses their interest in learning. The Bahati teacher has become that 21st century teacher who is supposed to embrace Technology."



Mr. Nyiro is proactive in supporting his teachers, often assisting in the lab, visiting classrooms to observe lessons and ensuring that all teachers are trained and feel confident delivering lessons using Whizz Education's digital resources. Bahati's headmaster is therefore something of a visionary, understanding where education in the modern era is going and anticipating changes to the education landscape by supporting his staff and local community to engage, support and drive the project.

## Regular Capacity Building Sessions on how to Integrate Maths-Whizz into Teaching and Learning

One of the key challenges in Kenyan schools has been overcoming teachers' attitudes towards ICT integration into education. Many teachers have "ICT phobia" and feel that learning new skills and adopting new teaching practices is too challenging.

However, ICT integration and innovation in education are an integral aspect of the new Kenyan competency-based curriculum. The iMlango project has adopted a Teacher Champion model for upskilling teachers and supporting the project in schools. In April 2018, two teachers were selected from each of the 205 iMlango schools and trained in a centralised location.

Mr. Safari and Mr. Rimba - the iMlango Champions for Bahati - now deliver regular capacity building sessions for their colleagues on topics ranging from ICT basics to advancing positive pedagogical practices for delivering digital content in the classroom.

This has significantly boosted teacher confidence, knowledge and skills on how to incorporate iMlango resources into teaching and learning.

## Integrating Maths-Whizz into the School's "Block" Timetable

Bahati strictly follow a lab timetable so that all students receive their allocated time with the Tutor each week. Where students are not making enough progressions, teachers take the time to support them individually, ensuring that they catch up on any missed lab time.

One student says: "I love going to the lab to use Maths-Whizz because it has helped me to improve my knowledge in Maths. I like the way the formulas are explained and it is easy for me to remember them during exams. The Tutor also helps me when I get a wrong answer by showing me how it's supposed to be done."

By integrating Maths-Whizz into the school's main 'block' timetable, Bahati also ensure that time in the lab on the Maths-Whizz Tutor and the use of Teachers' Resource for whole class learning become a regular part of each students' learning experience.

## Weekly Target Setting and Regular Review of Maths-Whizz Data to Monitor Usage and Progressions

As part of our ongoing support to schools, field officers share school and county-level data on a weekly basis. Bahati uses this data to monitor usage and progress week-on-week.

Where usage drops or average weekly progressions are low, the school uses the data to instantly address the issue and set new targets for the forthcoming week. In addition to this, Bahati have also instituted their own systems around the compilation and analysis of Maths-Whizz data.

Data is an agenda item within the school's weekly staff meetings and if a teacher/class is underperforming, this is immediately addressed, new targets put in place and additional support provided where needed. Data sharing is therefore not only project-driven, but also part of the school's own internal processes of monitoring and accountability.

In addition to this Bahati has now become a model school in the area. By sharing weekly usage and progressions on a teacher WhatsApp group, Bahati is generating a community of practice whereby local teachers support one another by sharing experiences and strategies for ICT integration.

## The Results

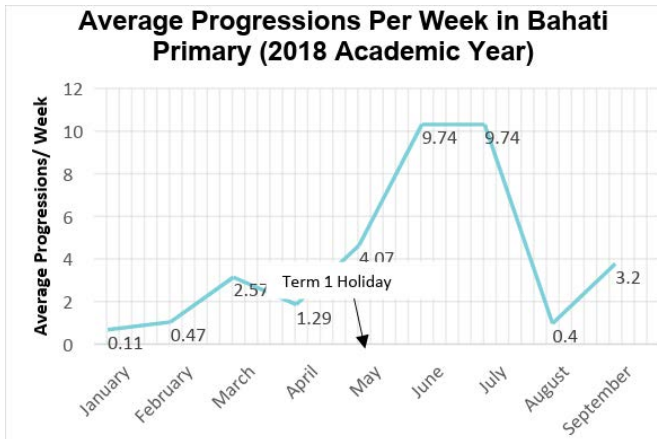
Progress for Maths-Whizz is measured based on two broad indicators of success: usage and progressions. The rationale is as follows: higher usage (more time spent on the Maths-Whizz Tutor) leads to more progressions.

A progression is achieved when a student completes a new learning objective within the Tutor. Per week, 3+ progressions broadly indicates that a student is learning at an accelerated rate.

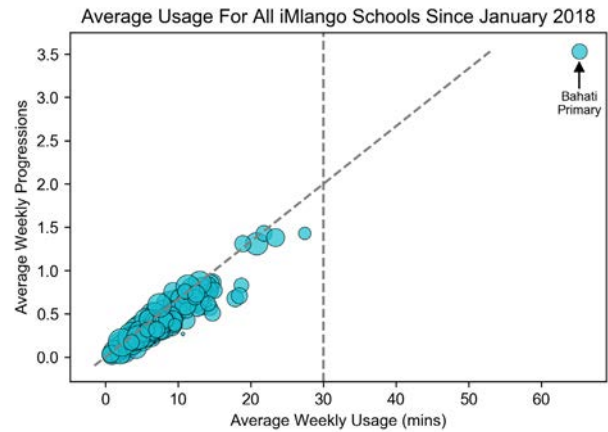
Towards the start of Term 1 2018, Bahati had an average of only 2 mins usage/week for the entire school. By Term 2 they were achieving an average of 158 mins/week in the month of July. That's 79 times more usage than at the start of the year. In June and July, students at Bahati were achieving on average 9.74 learning progressions a week each!

When compared to other schools within the iMlango project, Bahati has been in a league of its own, achieving on average 736% more progressions than schools operating in similar contexts in Kenya. Yet Bahati excels not only by Kenyan standards.

Whizz Education is a global company operating in 8 territories including the UK, USA, UAE and New Zealand. Out of more than 800 schools using Maths-Whizz globally in 2018, Bahati shone as the school with the highest usage and progressions.



Bahati Maths-Whizz average usage and progressions for the 2018 academic year.



Bahati usage compared to other iMlango schools.

## What's Next for Bahati?

“Our school vision is to be an institution of excellence. The extensive use of Maths-Whizz provides an avenue for achieving excellence in maths performance, providing the learner with an opportunity to learn at their own pace, hence closing the learning gaps,” says Mr. Nyiro.

Through their collaboration with Whizz Education, Bahati has not only advanced the confidence and ability of its students in mathematics, it has also been transformational for the wider teaching community through championing the value of ICT-integration.

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## Contact us

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**+44 (0) 203 328 6564**

[info@whizz.com](mailto:info@whizz.com)

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