Innovate Africa - Tech teaching (The Elimu Project 0:50 to 08:20)

https://www.youtube.com/watch?v=mxeInxW2A2E

Transcript of video

(Tapfuma Makina - narrator) One of the UN's 8 Millennium development goals is to achieve universal primary education, however with massive inequalities between rich and poor, it's a tough challenge in Africa but innovative thinkers are coming up with fresh solutions. Nairobi's iHub is a place designed for Kenyan innovators, a space where smart young thinkers can share their ideas. Marie Githinji and Nivi Mukherjee met here and soon began to explore their shared passion for technology and education. They are the creators of Kenya's most successful e-learning teaching aid - it's called Elimu.

(Tapfuma) "So, tell me about the project that you have started it's called Elimu that much I know. What does Elimu mean?"

(Nivi Mukherjee) "So Elimu in Swahili means education and Elimu is our play on that word."

(Tapfuma) Elimu is an integrated learning system designed specifically for Kenyan students

(Nivi) "Ok, so this is the main dashboard page once the students log in, they come here and these are the six main subjects in our curriculum."

(Tapfuma) The app includes condensed content from prescribed text books brought to life with the inclusion of animations, video clips, pictures and music. Part of the Elimu package are the specially designed low cost and easy to use tablets that also offer controlled access to the internet.

(Nivi) "What do you want to learn about? Do you want to learn about Kenya.... social Studies.. social studies, so once we go in it's just like a text book these are all the chapters in the text book and as you can see it really tries to visually highlight a lot of the key things that will come up in exams."

(Tapfuma) "Do they have the help of teachers to figure out what you need to put in there?"

(Nivi) "Yes, so I guess what we would call our Pedagogy experts, they sit in our team and they are teachers by profession they know the curriculum and they know what's going to come up in exams and what they need to focus on but then we also have our content focussed with leading text book publishes that have seen kids read their text books and go through the exams and so they also know which areas to focus and highlight."

(Tapfuma) Interactivity in the classroom is a new concept for Kenyan children under the colonial and mission-based education system children were not encouraged to speak up or question a teacher.

(Tapfuma to students) "What are you guys up too? What are you watching?"

(Tapfuma) Promoting interactivity is an important part of the Elimu concept, now tablets are available in libraries like this one. Children are encouraged to explore the technology and the interactivity on their own.

(Nivi) "We have done a few really interesting studies where we have shown students animations explaining a complex concept and other students have just read about it or have seen pictures and definitely the students that have seen the animation are better able to really understand and evaluate what that subject or topic is teaching. Every 2 weeks we are pushing new content and every day one of the teachers is seeing something new that would enhance the learning opportunities."

(Tapfuma to students) "You like both? Yes, what do you like about the tablet?" (Student) "It explains things better..."

(Nivi) "I guess when we thought about Vision 2030 and we realised that the people who are going to be running the economies in 2030, the people who are going to be leading and participating, they are sitting in the classrooms right now. We are seeing that children are schooling but they are not learning, the learning outcomes are not proving that children are understanding concepts and we tried to launch what's called the one laptop per child programme, so the government is keen to see other disruptive interventions in the space and learn from it."

(Teacher to students) "I want to start to go through Elimu... social studies, struggle for independence, are you there?"

(Nivi) They actually made digital literacy mandatory for all teachers so that's an important step that the government's aim, so that in order to be a teacher you have got to know how to deal with a digital device.

(Tapfuma) A small school in the [name] district was the perfect testing ground, Nivi and the Elimu team chose this school to pilot the programme. "So why did you choose that particular school as the home of your pilot project?"

(Nivi) "It was a school that was struggling and the kids could really have benefitted from education technology and they were definitely underserved academically and financially."

(Tapfuma) "And I suppose that it helps that the headmaster is extremely passionate about education and he seems to be passionate about technology as well."

(Nivi) "Yes he is a great person to run a school like that and run an initiative where a disruptive intervention is what we're doing."

(Peter Lalo Outa, Principal Amaf School, to students) "Who can remember the last topic we were speaking about? jog your memories, yes...agree...the Mau Mau movement...very good..."

(Peter Lalo Outa) In the beginning it was challenging when we started it because like children or students, some of them even from their homes they have never seen such kind of devices, some would not even have phones but with time they enjoy using the tablets they enjoy using because of things like videos, photos, so it makes it attractive to the children.

(Peter to students) "And I want you to get the video, Mau Mau video... you have got it... thank you very much... can you put it on?..."

(Peter) Video is easier to understand you see, as you know some children learn in different ways, some like watching and when they watch the exact thing it becomes easier for them to understand.

(Tapfuma to Nivi) "Have you seen a difference if you are looking at the results the kids are getting before using the tablet and using Elimu, so after?"

(Nivi) First of all their exam results shot through the roof and we saw that they were doing so much better but also their social environmental consciousness, the way that they looked at the world and the people around them, we saw that that changed.

(Peter) The first subject which we saw a very big improvement was science, initially when we started our mean score was at 56 to 60 around that, well today we are beyond 70, at times we reach 80 which is very good. We are targeting 90 and this has really made the children feel like we can make it and we are going to make it.