

On Net Learning Solution for Inclusive Content Delivery to Basic Level Learners in Kenya

Following the closure of schools as a measure to mitigate the spread of COVID 19, over 1.5 billion learners across the globe found themselves locked out of their learning institutions. Among these are 18 million learners in Kenya (UNESCO, 2020, MoE, 2020) with 15 million of them being basic level learners in early childhood, primary and secondary level. Also affected are 150,000 children in refugee camps and 300,000 teachers. As an alternative to the classroom, the MoE commenced lessons on radio, TV and the cloud through the Kenya Institute of Curriculum Development (KICD), in addition to other numerous online solutions from private providers. However for millions of learners, especially those in remote and isolated areas, the poor and marginalized and those living with disabilities, learning stopped indefinitely due to the challenges posed by these alternatives among them electricity, internet access, cost of smart phones and TV's among others.

With the right to education enshrined in the Kenyan Constitution 2010, the Ministry of Education constituted a committee to look into modalities of reopening schools in Kenya. However without a viable all-inclusive solution, the government opted to pushing the school opening date to January 2021, with a possibility of learners repeating classes and candidates missing out on the 2020 KCPE and KCSE National exams. This needs not be the case.

Banking on Telkom's extensive voice coverage coupled with the recently launched loon balloon technology that targets inclusivity of previously isolated areas, our simple affordable innovative voice solution was conceived.

Objective

To demonstrate use of an all-inclusive simple affordable innovative voice solution that ensures that learning continues in Kenya, unlocking the stalemate of syllabus completion and sitting of the 2020 national exams; and as a long term solution to equity in learning

Specific Objectives

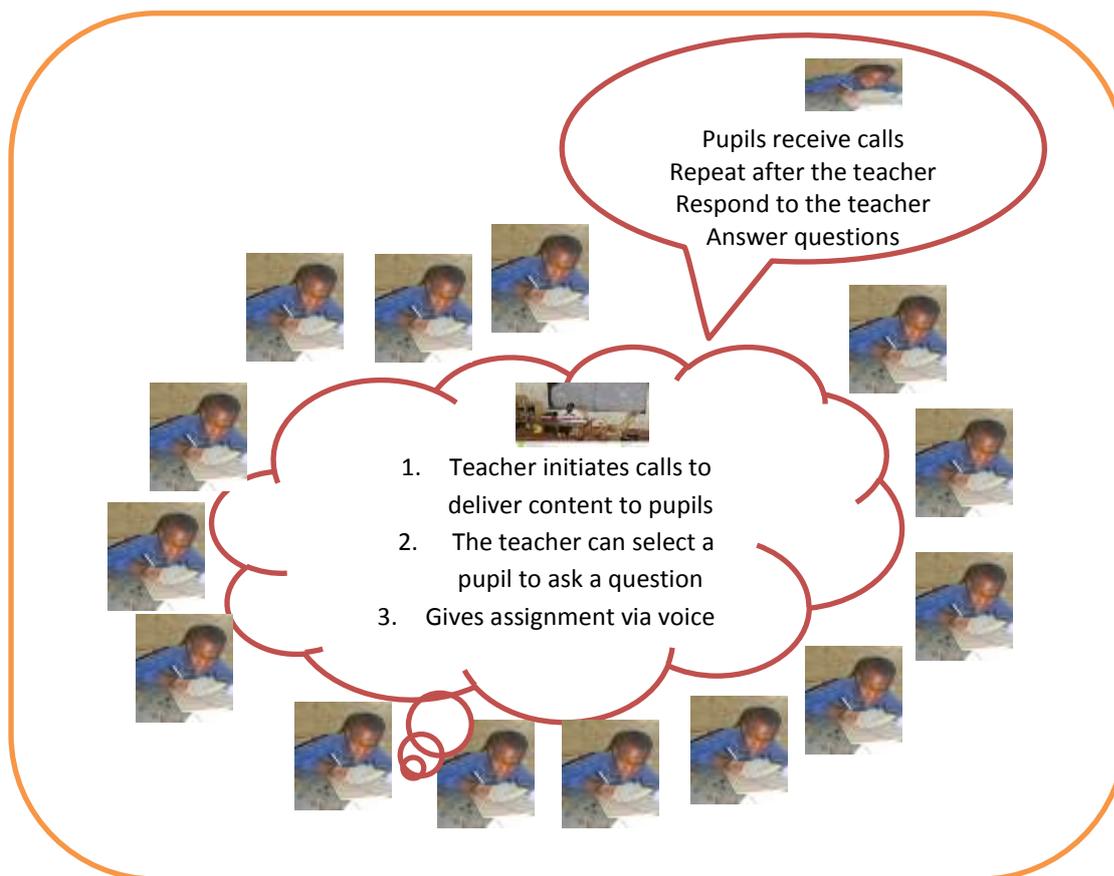
1. Demonstrate viability of use of a simple affordable and accessible on net teaching model for inclusion of all learners as a COVID 19 emergency learning solution
2. Prepare candidates for national exams in 2020 by completing the syllabus
3. Ensure learning at all levels take place and the 2020 syllabus is covered for all learners
4. Provide a long term solution of access to education for learners excluded in remote and marginalized areas, terrorist prone zones as well as learners with disabilities

5. Propose modalities of conducting the 2020 National exam

On -Net Teaching Solution

- The On-Net model is a simple solution that capitalizes on the extensive voice network in Kenya, locally available technology and resources to deliver content to learners in every part of the country
- The model uses simple voice technology where a teacher using a simple phone calls all pupils one by one and merges the calls
- Then using voice he/she proceeds to conduct the usual class asking pupils questions and them answering as required.
- The teacher is able to interact with pupils including asking pupils to repeat after her.

The On-Net Model



Advantages of On-Net Teaching Model

It uses technology that is available in all parts of Kenya

No new skills are required to competently participate

It is affordable in that cost of delivery is on the school and parents do not have to incur credit to participate

Uses devices that users already have and can be acquired locally and affordably

Content is delivered by Teachers who are conversant with learner's competence levels and entrusted with pupils by the Ministry of Education

Required

Telkom

1. A subsidized tariff to enable teachers to deliver content
2. Provide Sim-cards for all learners and teachers
3. Facilitate bulk calls for the content delivery lines so that the teacher can call several learners at once and reduce the time of accessing learners and the cumbersomeness of calling each pupil

Parents

1. Parents will pay an initial cost of purchasing a simple phone at a cost of less than Ksh 1000 popularly known as 'Mulika Mwizi' in Kenya.
2. Charging of phones

Outcomes

1. Children at the basic education level will be taught by their real teachers and complete the syllabus
2. Children will not repeat classes and for that reason avert catastrophes like suicide that have been witnessed before after parents asked their children to repeat
3. Candidates will be well prepared to sit their national exams in the year which can be done by learners taking exams from examination centers close to their homes and observing social distance and other measures
4. Proper transition from class to class will avoid a crisis at the time normal learning resumes
5. Practical lessons for secondary schools can then be conducted by mapping candidates to the nearest schools
6. Teachers will be able to guide the learners appropriately as they know their weaknesses and strengths
7. Parents are not required to pay money towards delivery of content and therefore children have no reason to miss class
8. Kenyan teachers who are currently not in school will be able to resume teaching and avoid stress related complications

9. The learning institutions will not be deserted and facilities will be not wear due to negligence

Sustainability

1. Over 300,000 teachers will subscribe per day to the education tariff which will be used to teach many lesson
2. The solution will continue post COVID 19 as this sorts out challenges of syllabus completion and revision that usually takes place during holidays
3. Learners in areas with teacher shortage or teachers leave due to terrorist hostility will no longer be disadvantaged as learners can be mapped to a Centre where teaching is done for such cases

Conclusion

The negative effects of school closure are enormous. Keeping children out of school may lead to loss of already acquired knowledge. Reports of early research on effects of COVID 19 on school going children include teenage pregnancies, child marriage, sibling sex, child labour, child crime, drugs among others. In addition statistics show that repeating of classes causes emotional distress in children and suicide cases have been reported in Kenya. Teachers have also been reported to suffer stress related complications. While parents with resources have opted for online classes and other solutions and will definitely have their children complete the respective syllabus in the current class and therefore have their children proceed to the next levels, children whose parents may not afford alternative learning solutions may find themselves at a disadvantage. Consequently parents with candidates in 2020 and who may have opted for the alternative solutions and their children have completed the syllabus may find themselves at a dilemma if the KNEC fails to conduct the 2020 national exams. It will be difficult to persuade learners who have completed the syllabus to repeat classes, and if a solution is not found, these children may lose interest in learning. Our solution has the potential to avert this situation as well as provide a long term solution to access challenges that have led to the education gap in remote areas, terrorist prone zones, refugee camps, learners with disabilities and the poor. We therefore, humbly prevail upon the Ministry of Education to embrace our solution, put back learners to class and restore hope in Kenyan children.