**Supporting literacy skills using mobile applications developing countries**

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**Introduction**

The levels of literacy at Primary School level (ages 6 to 11) in Africa are known to be significantly behind minimum international levels. This is compounded by the frequency of teacher absence, which can be as high as 20% to 58% on any given day in Nigeria and Uganda respectively. Furthermore, only about half or fewer primary school leavers in Africa can read.

The dramatic spread of mobile phones in developing countries provides an important platform for enabling literacy. However, although effort has been put into developing apps for financial literacy and to help primary school teachers in enabling literacy in children, there is little that enables the primary school child to gain literacy skills. Bookly provides access to books, but it does not support literacy development.

**Purpose**

The purpose of this project is to explore the use of mobile telecommunication solutions/technologies to compliment learning in African, with particular focus on urban areas where additional support outside the classrooms are non-existent.

This development project is will demonstrate the feasibility of apps which cooperate with the primary school learner to offer literacy support and identify chances to learn new words, develop grammar understanding and become proficient readers.

New applications might offer the possibility of the use of machine learning to engage with the child and create learning feedback loops. For example, the app listens to the child, picks up words. Shows them in context, provides more sophisticated alternatives, find a story to read which contains the word(s) or develops the themes etc. Such applications will interact directly with the child to increase reading vocabulary and encourage engagement with reading.

**Tasks**

Tasks will include:

1. Literature review on comparative literacy levels in one African country
2. Review of current mobile support for literacy in an African country.
3. Review current technologies that can support delivery of educational material (basic literacy and numeracy) to urban areas via mobile phones.
4. Develop and design a prototype-learning assistant for basic literacy, delivered via a mobile platform.
5. Assess risks for successful deployment, covering infrastructure, culture, ethics, etc.

References

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***Note****:* Literacy is defined as being able to read a three-sentence passage either “ fluently without help” or “well but with a little help.”