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

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**Introduction**

The levels of numeracy 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 opportunity and platform for improving numeracy levels.

**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 numeracy support and identify chances to further develop understanding. New applications might offer the possibility of the use of machine learning to engage with the child and create learning feedback loops.

**Tasks**

Tasks will include:

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