Global Giving

Supporting African Maths Initiatives (SAMI)

Digital Communities

Introduction

SAMI is a UK-based charity with a depth of knowledge and experience working across Africa in areas of education and global development. The Digital Communities Initiative (DCI) aims to build on our strong network and close relationships with partners in Kenya to make a real impact on people's lives and futures.

We've seen first-hand the incredible power that technology can have to improve the lives of those who need it most. The Digital Communities Initiative uses mobile tablets to support local groups such as students, farmers and enterprising women, to build skills and prospects. We work with local partners and use apps to target a wide variety of issues, such as improving numeracy and literacy, providing information on local crop pests and diseases, and teaching basic IT and business skills.

Since starting the project in August 2016 we have managed to reach out to more than 2000 people through a combination of over 100 training workshops, school visits and events. There has been an overwhelming response so far, and we are looking forward to building on its success.

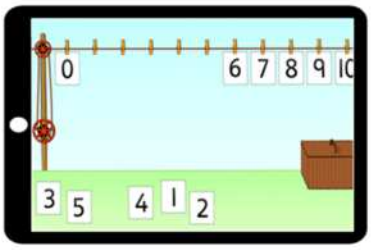
Figure 2: Community farmers use tablets to understand crop risk and decision making skills

Figure 1: Secondary school students using tablets to help learn mathematics

Project overview

SAMI will plan and deliver programmes to transform livelihoods across the following areas:

1. Primary Schools



Tablets will be loaded with apps proven to help students improve basic numeracy skills, reading skills, and make a shift from rote "chalk and talk" learning to more learner-centred forms of place-based and/or project-based learning. University maths and education students will be mentored by SAMI's professional teaching team and work closely with community primary school teachers, visiting schools weekly to help primary students access and make use of the learning resources. It is our hope that by doing this these children will be given a strong foundation of basic education, something vital so that they do not get left behind in the future.

2. Secondary Schools

A similar set of interventions will be carried out in secondary schools, with a focus on raising aspirations and grades within mathematics and computer science. These areas have been identified as the biggest barriers to university entry and scholarships, and are vital to help people in Africa develop the skills needed to solve problems facing the continent. Our previous experience working in this area has taught us that by combining excellent teaching resources with enthusiastic and gifted university students we can not only boost exam scores but also lift motivation and enhance opportunities for future study or career paths. We will place additional emphasis on supporting girls who are often marginalised in such contexts, with additional events such as a girl's coding workshop.

3. Agriculture

Agriculture plays a huge role in local communities and is usually the main source of income for families. Rich catalogues of information and tools aimed at helping farmers already exist, however access to such information is severely limited for the majority. SAMI members involved with global agricultural initiatives will work closely with skilled extension officers and agricultural studies students. Interventions will be planned and delivered to support farmers in their daily activities, such as using local climate data to make crop decisions, tools for budgeting, and access to informative videos on pests and diseases..

4. Women's Enterprises

A large number of women in rural areas engage in informal business activities which hardly grow beyond the level of subsistence. Potential gains in these endeavours can have a huge knock-on impact for families, such as providing the additional means needed to send children to school or to access better healthcare. Experts in these fields will work with University Development Studies and Mathematics students to help women surpass barriers which include financial constraints and psychological attitudes to risk, trust and cooperation. Tablets will be utilised to provide tools for financial management, planning and cooperation, collecting information and discussing possible solutions to improve understanding of risk.