ICT in Education Initiatives: Expectations and Ways Forward to Achieve the SDGs

Sustainable Education Meeting
September 19, 2017

VISION

A world where everyone has the opportunity to learn and prosper.

Centre for Innovative Teaching and Learning in ICT

Goal	Spark innovation and promote promising practices in the use of ICT for teaching and learning to catalyze significant improvements in secondary education across Africa.
Objectives	Develop new digital learning resources for African classrooms. Support education leaders to formulate evidence-based ICT policies and plans and foster a network of education innovators. Advance understanding of 'what works' in ICT for education through knowledge generation and sharing best practice.
	Foster ICT Innovations **Convene Stakeholders** **Advance Research**

Ed-tech is on the rise

Activities

Research

DfID, as part of its planned EdTech initiative, is planning a research grant (approx. £13.5m) for rigorous evaluations of a minimum of three interventions in three countries, and plans to build evidence on "what works" in the space

Department for International Development

The World Bank, has commissioned a number of publications on the use of ICT in education. It also publishes a frequent EduTech blog and the Systems Approach for Better Education Results (SABER) programme.

WORLD BANK GROUP

JPAL and IPA run randomized controlled trials testing various education interventions. They are currently working directly on the ground in East Africa (including Rwanda) to utilize RCT evidence to advocate for policy change, with some link to EdTech

J-PAL / ipa

Innovation

Relearn is a centre created by Nigeria's ccHub that seeks to improve learning outcomes in and outside of the classroom through content curation and capacity development. They are currently supporting the growth and rollout of Efiko platform

re:learn

Tigo Digital Changemakers Competition funds innovative digital technologies that have a social impact in Tanzania and Rwanda. This grant is provided alongside an incubation program which includes professional coaching, mentoring from a non-profit partners, Reach for Change

tigo

Microsoft uses its independent software vendor (ISV) system to provide discounted software and services to a portfolio of companies that they help with business support and networking. They also directly build and rollout EdTech platforms

Microsoft

Convening

eLearning Africa is a yearly conference that bring together practitioners and professionals from Africa and all other the world around issues related to ICT for Development, Education and Training

eLearning Africa

Mobile Learning Week is a flagship conference on ICT for Education hosted by UNESCO and UNHCR that includes strategy labs, `policy forums, symposia and workshops around effective EdTech for the BoP

mobile learning week

Future of Learning brings together educators, policymakers, social entrepreneurs and education thought leaders to help solve issues related to EdTech within Africa

FUTURE OF LEARNING

Other

Andela trains software developers and places them with tech companies as a means of sourcing affordable developer talent from Africa and solving for skills shortages amongst tech companies

Andela

Instill Education provides customized teacher training, particularly within South Africa, and also helps sensitize educators to the benefits and uses of technology in classrooms and schools

INSTILL EDUCATION

Partech Ventures is seeking to raise funds for promising early-stage ventures on the continent, with part of the portfolio likely to be dedicated to EdTech. Partech recognizes the need for patient capital, esp. for EdTech

PARTECH VENTURES

Source: Desk research, stakeholder interviews, Dalberg analysis. Note: A more exhaustive compilation of relevant activity within the space can be found in the ex

Dalberg   7

Growing number of Ed Tech entrepreneurs at early stages, with fewer at growth or mature stage

Number of users*

There are a large number of early stage EdTech implementers. Nascent entrepreneurs often find it challenging to transition from ideas and pilots to viable, potential scalable proofs of concepts

There are a handful of growth-stage EdTech ventures. Many of these solutions are providing linkages to employment, where there is a viable B2B pricing strategy

There are limited mature-stage EdTech ventures, resulting from limited viable business models to serve secondary school schools, teachers and students.

"Once the donor funding dries up and [solutions] try to go commercial they fall into the 'valley of death'"

"There are so few investors and so many ventures in Africa, that requirements for investment have become extremely demanding "

"Ventures and solutions that position themselves as platform businesses are typically more likely to receive private funding [than service businesses. However], it may create unrealistic expectations for growth by investors"

Early   **Growth**   **Maturity**

*Due to limited information available during desk review, the number of users is used for illustrative purposes – It is estimated by the stage of growth (expansion of products, expansion to geographies, etc.) and relative user reach compared to other players in the market.

Dalberg

Constraints are at both the education and ecosystem level

Government*
There is limited accountability of and capacity within government to effectively regulate and implement EdTech in classrooms, even when funding is available

Parents and Community
Effective use of technology-enabled solutions in the classroom is typically not a major concern for parents and community members, who may lack the digital literacy to effectively engage themselves

Schools/ Administrators
School leaders can be constrained by lack of resources, connectivity, and buy-in from government. They may also not see EdTech as a priority, given competing priorities and limited evidence

Teachers
Teachers are typically overburdened, under-resourced, and under-capacitated, leaving little room for effective EdTech in the classroom

Students / Learners**
Learners oftentimes lack access to EdTech; Even when they do, technology may be poorly tailored, or learners may not be using the technology for learning, requiring careful support
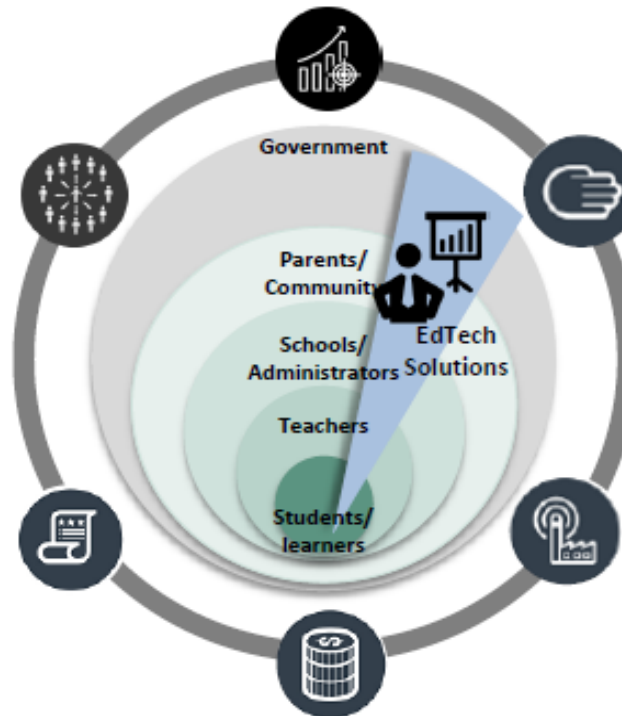
Market Access
Access to market is limited, resulting from interlinked challenges, including lack of government receptiveness, the high cost of building partnerships to serve less lucrative consumer segments, and limited demand

Knowledge and Data
There is very limited information available regarding the efficacy of EdTech, which inhibits the ability of implementers to design solutions and funders to provide appropriate and well-targeted funding

Infrastructure
A lack of devices, high costs of data to run software, limited access to internet connectivity, and intermittent power hamper broader uptake of EdTech, especially in poorer and rural areas.

Funding
Private capital is available, but few solutions can generate viable returns for investors. Donor funding often limits the amount of money implementers can spend on operations, causing challenges for businesses seeking scale

Policy
Policies and regulations are not keeping up with rapid tech changes. Policymakers are typically unwilling to invest in EdTech at large scale as a result of its cost and limited evidence of effectiveness, oftentimes only engaging on curriculum design

Human Capital
The availability of software developers and business-minded talent required to build and grow solutions is lacking in many of the less mature markets. Tech experts often create solutions keeping technologies first rather than students and teachers

Source: Stakeholder interviews, Dalberg analysis. Note: *Government in this context refers more to civil servants and officials charged with administering the delivery of education, rather than creating the policy environment **Learners in this context includes secondary school-aged children that are not currently attending formal secondary school.

Dalberg   9

Innovators and entrepreneurs need several things

- Information about the size of the market

- Viable business models

- Tested product design

- Patient capital to test and refine models

- Exposure/linkages with investors/governments

Bridging the existing gaps and accelerating Ed Tech innovation in Africa

Flagship

Experimental

1 Market Platform

Develop a **shared understanding** of EdTech, and the primary drivers of supply + demand

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Research + Convening

2 Buyers Market

Link innovators to a **broader market,** including potential investors + leading governments

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Find Existing Innovation

3 Open Innovation

Use **collaborative methods** to improve innovators technical expertise + business skills

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Enable New Innovation

4 Case in Point

Profile **successful innovations** to develop proof points for the efficacy of EdTech

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Scale Select Innovation

5 EdTech X Africa

Leverage **existing EdTech activity** and momentum, and advocate for an Africa focus

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Scale Select Innovation