



• USE of dlp to access iMlango content in normal classroom lesson at Bbeletu primary.



• ADAM Smith



• PARENT community supporting the initiative.

Upclose with Adam Smith

sQuidcard Ltd Chief executive Officer

E DUCATION is a basic human right that is recognized globally and documented in many education policies even among sub-Saharan African countries, Zambia inclusive. This being the case, education must be available to all people to enable them survive and develop to their maximum potential. While in Zambia for many years this had largely remained a mere talk and belief on policy papers, the New Dawn administration of President Hakainde Hichilema, barely a year in power, has made some earthmoving steps towards making education for all a reality. Be that as it may, the country still faces several challenges to deploy education to citizens especially in rural Zambia where, according to the World Bank, the poverty rate stood at 76.7 per cent in 2015.

This situation has far-reaching impacts as children who do not go to school often end up in child labor in order to contribute to household income. Furthermore, parents marry off their young girls to ease the economic burden on the family. Access to education in rural Zambia will lower both child labor and child marriage rates while providing a pathway out of poverty.

In order to improve access to education in rural Zambia, the country now has a perfect opportunity to use sQuidcard Ltd.

JOHN CHOLA speaks to sQuidcard Ltd Chief executive Officer, Adam Smith, who now explains how his organization can work with the cooperating partners in the education sector to help government provide quality education to all.



• STUDENTS accessing the portal in the computer lab.



• TEACHER training in Nairobi.



• School clubs - coming together to enter digital competitions.



• ATTENDANCE



• STUDENT-LED class learning

Please state your name, role and the company you work for?

My name is Adam Smith, I am the CEO of a company called sQuidcard Ltd.

What is "sQuid"?

sQuid is a multi-use transactional platform providing payment, e-learning and attendance solutions mainly in the education sector. Part of our business is in the UK, where we deliver a digital marketplace for 800 schools, and process on campus payments. The other part of our business is focused on Africa, where we specialise in deploying our platform to help transform the education experience for children in schools.

So, you help deliver digital learning in schools?

Broadly, yes. Although it's better to come at it from another direction and look at what is needed in schools to improve learning outcomes for children, and then to determine how digital services can contribute to that objective. We have spent the last eight years gaining an understanding of this very complex area through our extensive work in Kenyan schools, and now in Nigerian schools too.

So, this is more than just delivering computers for schools?

Most definitely. We think of the computer device as part of the access pillar, but we have three other pillars that are fundamental in delivering positive impact. Firstly, the teachers - we can't expect digital tools for children to work unless we ensure that teachers are skilled and motivated to use them, so digital teaching strategy is really important. Second, we believe that parents in all communities want the best for their children and can be mobilised to help with things like learning literacy by reading at home, especially if can provide them simple tools on their mobile phones. Thirdly, we think of content.

We call this the digital white space. The way that learning tools can be made accessible online, and how they can best be used, is still white space out there - and we need to ensure not just that the formal curriculum material is available, but also the innovation material too, that can help open a child's enquiring mind, or help them grasp that difficult maths problem.

So, coming back to your 'access' pillar - does this mean online services for schools?

Most definitely. We have to make connected schools a reality, and that means even in rural environments we must strive for internet access to schools, so that we can develop these pillars for transforming education.

Is school connectivity practical in places like rural Zambia?

Yes. This requires working with the network providers and getting their support. I have been involved in telecommunications, internet services and now digital learning for over 25 years, and we understand how to get this done. In our programme in Kenya, we connected 200 rural schools with satellite broadband.

Grid power is most desirable, but solar based solutions also work. We can power schools using solar energy, which is becoming more affordable. For instance, a school can now have a Smart Solar Media System, which can turn any space into a classroom. It comes with a projector, speakers, a flexible solar panel and power banks. It can power a computer laptop.

It is also important to recognise what is happening in all communities, which is the ever-growing access to smartphones and data services. Connectivity is far more widespread in rural

communities than we assume, and it is growing every day. Part of our access strategy is to tap into this network.

Once you have connectivity, the ability to access learning content, then the real challenges of delivering eLearning as a service can begin.

How can eLearning help improve delivery of quality education in rural areas?

That is a great question. I mentioned the pillars of our strategy, but really the first question should be 'what is the learning environment in which we are trying to set those pillars?' Rural areas tend to be underserved when it comes to education - basic community infrastructure and services are usually poor, schools themselves are under-invested, it can be difficult to maintain the right numbers of teachers for the number of children, so schools need to get financial support from the parents, and of course parents themselves may not be very-well engaged in learning, given their own education levels and experiences.

With high pupil-teacher ratios, teachers have little to no time to attend to individual pupils' needs, which increases the chances of some children beginning to drift away from regular attendance at school, and as they become less engaged, they risk eventually dropping out altogether. So poor attendance leading to dropout is a gradual process, and one of our aims is to monitor attendance, highlighting through data those groups of children who are at risk and then using digital tools to try to reverse that, by improving engagement. Our attendance monitoring software effectively replaces the school register and provides a real-time understanding of attendance patterns at the school, year, class and gender level.

OK, so you find out what's going on in terms of pupil attendance but then what?

This is where we leverage the power of an eLearning programme.

Firstly, we help build teacher capacity, with online

teaching tools that they can easily access to help improve their teaching skills, building capacity to deliver great teaching for all the children. A key part of our programme is to help teachers through continuous professional development - providing resources and training through modules available online through the sQuid Portal resources. The desirable state is to have teachers uploading their own teaching materials and sharing them with others, creating a great resource for all, but especially for new teachers.

We focus particularly on how to teach literacy, and digital literacy. In Kenya we developed a mobile-based literacy teaching course to upskill teachers on how to teach English in class, supporting it with field officers who helped the schoolteachers engage and form groups to give each other feedback and help with digital content. Together with regular reading assessments of pupils, this helped improve literacy standards in schools.

The second area of focus is to deliver online learning materials to the pupils. We make digital local content accessible both at school and at home. In class, this can be with the teacher using a laptop and projector or with pupils using computer tablets. Offline capability enables downloadable content without a continuous need for the internet. We also work with the schools and parents to encourage them to load a very simple low bandwidth smartphone app so that children can access reading materials at home on their parent's phones. This is pioneering stuff, but it is important to try to get parents engaged in children's learning at home.

Tell us more about the work you have done in Africa

Our programme in Kenya started in 2015, in partnership with the Ministry of Education and part-funded by UK's Foreign and Commonwealth Development Office (DFID as it used to be named). We set out to improve education outcomes in maths, literacy and life skills for 285,000 children across

245 rural schools by delivering access to digital education services and content, supported by on-ground teams that worked closely with the schools and teachers. We built and installed the digital access tools and partnered with specialists in particular content areas, complementing our own focus on literacy. We bring over 250 man years of experience in what really works in transforming rural education systems, and we bring all the hardware, connectivity and solar solutions to ensure success, building local teams to help ensure what we do is effective and long-lasting. We are now deploying a similar programme in Nigeria.

Why are you thinking of doing a project in Zambia?

We can see huge effort in education is underway in Zambia - the government's recently announced hiring of 30 000 teachers is excellent news, and the close partnership between government and mining companies to help bring better access to education in the mining communities underlines the importance of supporting the rural schools. But the scale of the challenge is huge, and covid demonstrated the need to start implementing digital programmes. The eLearning platform and implementation capability we have would support government and mining community initiatives and add further resources to help achieve better education outcomes for children. We bring the ability to tailor a solution that meets the government needs whilst also opening up new thinking in how to best use digital tools. We look forward to talking with the government and the various mining companies to explore potential partnerships.

Before we conclude, any final words?

Achieving sustainable improvement in education requires long-term thinking. No one disagrees that digital programmes are essential, but too often they are of a fly-in/fly-out nature - very intense, wonderful while they last, but not long-term effective. Our vision is to create a situation where digital tools aren't a project but a truly valued part of the way we deliver teaching and learning in schools, and that they become 'the way we do things around here'. This also means an investment in local capability - not just training the teachers, but supporting the services, the equipment etc. - which adds local jobs too.

And let's not forget that it opens up opportunities beyond the school for other types of digital learning too.

If we can get to the point where digital is truly cost effective in education, then it will be on the way to being ubiquitous in all schools. And that means we would be giving every Zambian child an opportunity to grow up not just literate but digitally literate, opening up the opportunities for them to fully participate in the digital economy. This creates better employment and entrepreneurship and in turn drives GDP. That is a powerful vision.