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Changing lives with distance learning

The year is 2017, and throughout the developed world countries, education is largely taken for granted. Literacy, numeracy, and other basic skills are taught to us from an early age, and while we may complain about the quality of teachers, materials and facilities, truly, we've never had it so good. In much of the developing world, even a basic formal education is a thing of dreams. Where education is available, there are massive shortages of facilities, materials and qualified teachers, and class sizes are so large that the children learn very little. Distance learning is now being hailed as, if not a complete solution, a great stop-gap, and a way to deliver effective learning with limited resources.

More than ever today, education is the great divider. We don't even have to look abroad to see that this is true. In the UK, a university-level Degree is required for most jobs, jobs that would have been done by school-leavers in previous years. In some cases, like the 2013 ruling that required all new nurses to hold a BSc Degree instead of a two-year Diploma, this is a good thing; we all want healthcare professionals to be educated to a high standard.

Then Health Minister Ann Keen commented: "Nurses are the largest single profession within the health service, and are critical to the delivery of high quality health care. Degree

level education will provide new nurses with the decision-making skills they need to make high-level judgements in the transformed NHS."

However, when it comes to office jobs, of which we have many in the UK, the requirement of a Degree when previously a school-level education would have sufficed, is fast becoming a problem for the workforce. Studying for a Degree is time-consuming, and increasingly expensive. As of 2017, people graduating from a three-year university course can expect to leave with an average debt of more than £50,000, rivalling even the notoriously-expensive system in the USA. The UK



population is becoming ever more divided as a result. There are those willing to make the choice at the tender age of 17-18 to take on this massive debt, and/or those who receive financial help from families; but on the other hand, there are those for which this is simply too high a price to pay.

Today, people without Degrees in the UK are significantly limited in their career prospects. As the world becomes increasingly globalized, those without a higher education struggle to remain a relevant part of the workforce. However, for those in many developing nations, the high-quality school-level education we enjoy in the UK is a dream. Many children in parts of Asia, the Middle East and Africa lack even basic literacy and numeracy skills for a myriad of reasons; poor or no facilities, unqualified or no teachers, unaffordable school access, and a way of life that means many parents would prefer the children to help at home, or start work at an early age, rather than gain even a basic formal education.

There are many programmes around the world aimed at changing this, working to enhance the educational opportunities available to young people today. To truly make a difference to the lives of these children, governments,

charities and technology companies must work together to provide the resources and funding to where it's needed most.

Reaching refugees in Ghana

In the developed world, many of us consider refugee camps as temporary structures, places of haven that are quickly moved on from when a better solution is presented. In actuality, many refugees live in the camps for years on end, making them a much more permanent home than is commonly understood. Camp life presents some serious challenges for already-vulnerable people, and it is essential that the right infrastructure is installed; electricity, clean water, power, medical facilities, and, of course, educational facilities.

In June 2017, the Varkey Foundation and the United Nations High Commissioner for Refugees (UNHCR) made history with a first of its kind project delivering a two-way interactive educational scheme over satellite to 225 refugee children in the Ampain camp in Ghana. The scheme aims to regularly teach children who may not have access to regular schools due to their refugee status.

During the sessions, an interactive live feed lesson based

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on a studio in Accra is delivered to the classroom in the Ampain Primary School over satellite. The scheme makes use of solar-powered equipment, since electricity supplies at refugee camps are notoriously unreliable, or entirely absent.

“The Ampain primary school has been fitted with a satellite dish, which, through solar-powered technology, receives a live link to highly qualified teachers in a studio in Accra, who broadcast lessons direct to the refugee camp,” Leonora Dowley, Country Director for Ghana at the Varkey Foundation, told *Digital Trends*. “Each classroom has a projector so all the children can see the teacher giving the lessons, and each classroom has also been provided with a computer so that children can interact with the teacher in a direct, live, two-way link. This is much more effective than simply providing children with textbooks, as nothing can beat access to a great teacher.”

According to the UNHCR, teaching via distance learning is an integral part of its drive to encourage the adoption of viable solutions to some of the world’s refugee crises. The distance learning project aims to deliver vital services to children who are at risk of dropping out of school, or of education entirely. The classes are designed to help children catch up on their basic studies, continue to secondary education, and to learn the language of their host country. Literacy, numeracy, reproductive health, human rights, financial literacy and leadership are all included in the topics studies.

“We believe this is a highly replicable solution that could be deployed in other settings,” said Dowley. “Given the extent

of the refugee crisis, it will be exciting to see how things could develop on this front in future.”

Targeted courses in South Africa

Literacy and numeracy skills are an essential part of everyday life, and as such should be included in any basic education, however, when it comes to higher education, it is vital that people the world over receive the right education, on the right topics, that are needed in their locality. Media studies and the history of 20th century fashion may not be of much use across the African continent right now, but agriculture, food preparation, medicine and mining are.

In June 2017, AGRICOLLEGES International, a cloud-based e-learning institution, was launched to deliver affordable, accessible and industry-relevant agricultural course content. The institution uses Desire2Learn’s (D2L) Brightspace learning management system (LMS).

“We will offer students from all walks of life, starting in South Africa, the opportunity to access or continue their education in the Agri-Sciences,” said Howard Blight, Chairperson and Founder of AGRICOLLEGES International. “AGRICOLLEGES International has established a cloud-based e-learning platform, where students can study on computers and mobile devices from anywhere in the world with Internet access, providing a dynamic learning environment without the added costs of being ‘on campus.’ From 2018, we will venture north into the sub-continent, offering the same programmes to students from other African countries.”

More than two thirds of people in Africa rely on agriculture



Refugee Technology Project - Varkey Foundation Ghana. Photo Tech Trends Edtech



as their main source of income and food supply; however, there is a large gap in agriculture education which means that students are not getting access to high-quality education to enable them to farm effectively. A shortage of skilled people in the agriculture sector, and a decrease in the number of students enrolling on agricultural courses, could lead to a disaster on the continent. A recent survey by Sujaaz Media of young people aged 15-24 in Kenya showed that the respondents were avoiding the agriculture industry due to the poor wages, lack of fun, and personal connection. According to the survey, the young people view agriculture as a labour-intensive career that is both remote from other people, and dirty. A modern approach to agricultural education, which delivers the right content in an effective way and appeals to young people, is sorely needed.

"There is a dire need for quality and affordable, tertiary, agri-education in South Africa, Africa and the rest of the developing world," said Blight. "While some universities throughout the country are turning away thousands of student applicants each year, due to a lack of facilities for students looking for some form of tertiary education, it is equally true that our universities are being asked to accommodate more and more poorly prepared and poorly resourced students with fewer and fewer resources to do so. Diploma level courses studied through AGRICOLLEGES International will meet both the needs of the industry to gain young, skilled agricultural talent, but also at a price-point that is affordable - under R29,000 (approximately US\$2,240) per year."

A range of 'Centres of Excellence' are being identified and will be established all around South Africa, to provide students with the practical and experiential component of the Agri-Sciences curriculum. Several centres will be established at agricultural schools and colleges, making effective use of existing available infrastructure while reducing capital investment. Others will be in collaboration with mega-farmers, irrigation companies, agri-chemical companies, pack-houses, etc. The practical component will balance the theory to create a complete learning solution.

Bridging the digital divide in Zambia

Those of us in the satellite industry are hearing a lot about the digital divide; the economic and social inequality that results from limited access to information and communication technologies (ICT) is making an enormous impact on the lives of many throughout the developing world. Delivering the infrastructure for Internet access is a real game-changer in bridging the digital divide, and providing access to higher education in practical subjects such as law and IT can make a significant difference.

In April 2017, Vodafone Zambia launched the JUMP Academy, a first of its kind Internet-enabled application that delivers unlimited access to a wide variety of educational materials tailored to the local curriculum, and accessible through any device. As part of the initial roll-out, the Academy will provide free introductory content in mass communication, psychology, IT and law, with plans to add more courses.

According to Vodafone Zambia's CEO Lars Stork, the JUMP Academy will deliver a series of lecture videos that cover a range of subjects, featuring qualified lecturers from institutions including the University of Zambia, The Copperbelt University, The University of Lusaka, the Zambia Centre for Accountancy Studies, and Harvard University.

"We are excited to demonstrate Vodafone's commitment to bridging the digital divide in education through the launch

of the JUMP Academy. The primary aim of this initiative is to align education to current trends in the ICT space, thereby complementing government's efforts to digitise learning. Through partnerships and the numerous educational resources on the platform, we hope to fast-track education into the digital age, thus facilitating the enhancement of systems such as health, governance and economic growth," said Stork. "I am proud to note that the Academy can be accessed for free. Furthermore, I am excited to state that a product as innovative as this was conceptualised and produced right here in Zambia by brilliant local talent. While other organisations import their products, and offload them on the market, we choose to innovate in Zambia and export to the rest of Africa. This is a standard for us."

The JUMP Academy is a major component of Vodafone Zambia's online portal, JUMP, an educational and socially-managed portal that serves to enhance e-learning for personal development and growth. JUMP also hosts a music platform with a wide catalogue of downloadable music produced by budding local musicians.

Young people comprise around 60 percent of Zambia's population, and despite relatively widespread access to the Internet, e-learning has yet to gain significant ground in the country. Minister of Higher Education Professor Nkandu Luo commended Vodafone Zambia for its interest in the advancement and empowerment of young people through education.

"My ministry understands that with the introduction of ICT in education, a new world of possibilities is available to assist both lecturer and student maximise on the learning experience. E-learning has become increasingly popular across Africa. Our nation's rise in internet users and the revolutionary changes that have happened in education have created a very fertile environment for e-learning to grow and we commend Vodafone Zambia for leading the charge," said Luo. He added that, in addition to supporting education, the JUMP Academy would also help deliver computer literate and digital skills, which have become increasingly vital in today's world. ■



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