

# Changing agri-education in Africa as we know it

 By [Cari Coetzee](#)

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Sharon Brown Peters is currently working with Agricolleges International to help revolutionise agricultural education in Africa through the use of innovative technologies and approaches. We chat to Peters about how the world of education in agriculture is changing.



Sharon Brown Peters

***You are an international educational technologist consultant – can you tell us more about what you do?***

The term “educational technology” encompasses a broad range of technologies and learning approaches such as: simulations and interactive learning, mobile learning, games-based learning, emerging technologies, data analytics, computer supported collaborative learning and the list goes on and on.

The research for my graduate thesis, early in the 2000’s, was about how online learning supported metacognition in high school students. It was ground-breaking at the time because most of the research had previously focused on adult learning through web-based platforms.

Since that time, I have taught courses both entirely online and in a “blended” approach of online and face-to-face to high school and adult learners, as well as completed an additional graduate level degree almost entirely online. For the past five years in India, I provided the support and training for teachers to integrate technology in a cloud-based (online) environment. Along the way, I oversaw a mobile learning

prototype and explored emerging technologies with the faculty.

About ten years ago I had the brilliant opportunity to work with a Canadian team of teachers in Africa to share our ICT approaches with African teachers. We worked in South Africa over a period of three years, as well as various places in rural Kenya. It was challenging pioneering work. Later, for two years, I worked as the ICT director for a school in Mozambique. Jump to 2016, when I heard about the vision for Agricolleges International, I was immediately drawn in because of my previous experiences and awareness of the vast potential of ICT and web-based learning for the African context.

Presently, as an international consultant in the ed tech field, I am supporting the academic training and policy-making of schools and colleges as they seek to provide ICT and web-based learning approaches within their various institutions in different areas in the world.

***■ Tell us about your work with Agricolleges International and your thoughts on their approach to education?***

While so many parts of the rest of the world have had access to solid internet-supported education, South Africa - and particularly the rural areas of SA - are just finally beginning to realise the educational opportunities that abound with that access. Agricolleges’ vision for introducing the transformational power of technology-supported and enhanced learning of agri-sciences is both ambitious and forward-thinking. The advantage to the learners includes personalisation (learning when and how works best for them), better quality of education through Agricolleges’ powerful network of academic expertise, digital skill-building beyond agri-sciences, and approaches to support a mindset of life-long learning.

## ■ **How is technology changing the world of education in general and in agricultural education, in particular?**

Technology permeates our lives, but it is the degree in which we can choose and use the best tools and technology-driven data that provides us with the ability to be highly skilled and successful within our areas of expertise. This is certainly the case for agriculture.

Skilled workers in agriculture will not only have the content knowledge around their particular areas of focus, such as farm management and animal and plant production but also be able to exploit the affordances of technology in order to evaluate, analyse and make decisions around data they have created with the use of technology tools. Technology should enhance the decision-making processes to create the best-case solutions for situations that are highly complex and variable. The job market in agriculture is in dire need of these kinds of skilled workers.



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11 May 2017



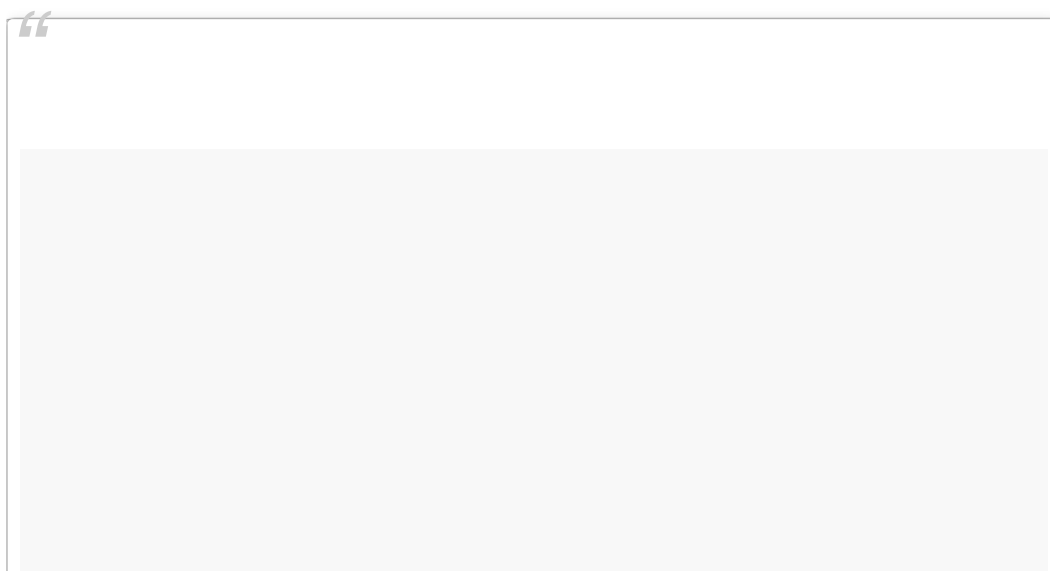
## ■ **How is this changing agriculture “on the ground”?**

Africa currently demonstrates the fastest growth in adoption of mobile technology, and this along with access to the internet provides a unique opportunity for agricultural productivity improvement as well as agricultural business development overall in Africa. Given the low levels of post-secondary education access and enrolment in Africa, it's imperative upon the world to help “switch on” Africa's mobile platforms and to assist in bringing focused education and platforms to Africa's youth in order to develop its potential to feed itself and the world.

Skill sets with technology drive better business practices because agriculture workers will have an understanding around collecting and manipulating data with spreadsheets and other tools. Communication technologies are used to facilitate access to global information for value chain development.

The increasingly rapid development of such technologies as mobile-directed drones, augmented and virtual reality, as well as data-driven analyses, in their application to the agricultural sector, are creating a demand for skilled workers who possess the analytic abilities to operate the new tools and interpret the data and take action accordingly.

Agricolleges is offering opportunities for learners to gain skill sets in digital technologies as they engage in the learning of the content. Our educational platform is designed to engage learners and, through machine learning algorithms, provide individualised pathways to promote best learning. We will also explore emerging technologies, such as games-based, mobile and cognitive learning applications for the fit to our instructional approaches.





Meet Sharon Brown-Peters @sbrownpeters who's responsible for the exciting educational #technology behind #AGRICOLLEGES international 💎💎💎💎

*A post shared by AGRICOLLEGES international (@agricolleges) on Jun 22, 2017 at 3:43am PDT*

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■ ***What are some of the most important factors to consider in the delivery of education in Africa, particularly in rural areas?***

We have been very mindful of the challenges in Africa on the delivery of broadband internet-based education. Africa has been a world leader in its development of mobile applications in technology in the last decade and we are very aware of the large majority of users who rely on mobile devices for their access to the internet. Our instructional designers of the courses we will offer are developing the course work with the mobile user in mind. Our selection of D2L's Brightspace as our learning platform was based on the need for mobile access and its ability to deliver and store content offline as well as offer functionality within their mobile apps.

■ ***What are your views on female participation in the agriculture and related industries? What would you like to see more of from women?***

I chose to jump into a male-dominated sector when entering the field of technology more than 15 years ago. Fortunately, my experience was mostly positive and welcomed by the men with whom I worked. The pairing of agriculture and technology in South Africa is a fantastic opportunity for women in particular. This is the important message for women considering the field - this is a big opportunity for you. We have the ability and now we must seize that opportunity. Though it is not easy, nor also for men, by seizing the opportunity to learn the skill sets - both digital and agricultural - we are providing greater opportunities for the enhancement of our employability and ultimate success in this very important and dynamic sector. Our question to you - how can we help you attain that success?

## ABOUT CARI COETZEE

Cari Coetzee is a contributor to Bizcommunity Tourism, Agriculture and Lifestyle.

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