

Lowering the Barrier to Entry Into South African Higher Education: Visual Arts In Online and Blended Learning Systems

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Introduction

The prospect of using technological tools in teaching and learning has grown in popularity in South Africa (SA) as enrollment in institutions of higher education continues to expand (Christie, 2008; DHET, 2013; World Bank, 2010, pg. 27). In 2012, SA's Department of Higher Education and Training (DHET) reported that 2 million students enrolled in vocational, public, and private post-school institutions (DHET, 2012, p. 2). SA educators and university leaders are confronted by a growing tertiary education population, a desire to embrace a creative economy and the visual arts, and the belief that access to online learning technologies and blended learning systems can potentially lower barriers to entry into higher education (Czemiewicz et al., 2014; Gunga & Ricketts, 2007, p. 902).

The purpose of this research is to discuss the transformative potential of these systems in SA. In this research, I examine initiatives by SA educators and organizations to creatively integrate online learning and blended learning systems. I gather this evidence by interviewing Future Learn Cape Town and Centre for Innovation in Learning and Teaching (CILT) at University of Cape Town (UCT), and two education companies, namely Get Smarter and Silulo Ulutho Technologies.

Keywords: accessibility, blended learning, e-learning, higher education, MOOCs, online learning, South Africa

Problem Statement

“... South African higher education is under pressure to increase participation from a diverse group of students and to produce the skills required for a rapidly changing society” (Jaffer et al., 2007, p. 2).

There are many challenges faced by the SA higher education system that can upset the implementation of online learning and blended learning systems. Lack of funding, inadequate academic preparedness, and resource misappropriation are major obstacles to enlivening SA society with new creative endeavors and technological innovation (Boateng, 2014; Jaffer et al., 2007). DHET envisages a post-school system that develops ‘thinking citizens’ who function creatively and ethically (DHET, 2013). However, many organizations believe government offices, such as DHET, are a cause of mismanagement (Boateng, 2014).

Despite SA's increased enrollment in institutions of higher education, the system remains unequal. The rate of African enrollment improved marginally from 9% to 14%, while that of “coloureds” (a term used in South Africa to refer to people of mixed racial descent) rose from 13% to 14% from 1993-2011 (MacGregor, 2014). Many of these classrooms are English-medium settings with vast multilingual needs (Jaffer et al., 2007, p. 1). Racial inequality in enrollment is further complicated by a high attrition system with around 40% of students leaving in the first year (Czemiewicz et al., 2014, p. 123).

The informants in this study envision online education and blended learning systems as a way to address these problems. This research posits that these organizations can be problem solvers in a resource-constrained country.

Methods

The primary method of data collection is through **in-depth, semi-structured interviews** conducted on Skype and in-person. Once a series of interviews are conducted the data will be transcribed and coded. This data will be integrated into the narrative of each case study.

Case Study

Future Learn Cape Town

www.futurelearn.com/partners/university-of-cape-town

Informants:
Sukaina Walji, Implementation Team, Centre for Innovation in Learning & Teaching
Andrew Deacon, Learning Designer, Centre for Innovation in Learning & Teaching



Sukaina Walji

Courses:
Medicine and the Arts: Humanizing Healthcare
Explores the field of medical humanities – the intersection of the arts, humanities and healthcare
What is a Mind?
Explore the most pertinent scientific and philosophical concepts for understanding our own minds

“...where now for MOOCs, I'd be tempted to see it as a 'glass half full' – lessons are being learned and opportunity beckons. Enabled by digital, networked and (sometimes) open technologies, MOOCs are only a part of broader changes in the way learning might be designed, delivered and assessed . . .” (Walji, 2013).

Future Learn Cape Town is a collaboration between University of Cape Town (UCT) Centre for Innovation in Learning and Teaching (CILT) and The Open University's privately owned massive open online course (MOOC) company Future Learn (Future Learn, 2015). By pioneering the facilitation and design of this initiative, the Centre for Higher Education will aim at introducing free courses to SA and Future Learn's global community of formal and informal learners. CILT is committed to fostering transformative practices in learning and teaching, an exercise in knowledge-sharing and building (CILT, 2015). The center is directed by Laura Czemiewicz and led by a team of forty learning technology and curriculum/course designers. The center is presented with a range of challenges to make these services available to the wider SA audience—those in need of education who don't necessarily have the skills to understand what a MOOC is and how to use it. The team also recognizes the value in free and low-cost education that transforms the informal education space and provides opportunities for experimentation (Czemiewicz et al., 2014, p. 134).

Case Study

Silulo Ulutho Technologies

www.silulo.co.za

Informant: Luvuyo Rani, Founder



Luvuyo Rani

Courses:
–Basic computer skills
–Graphic Design
–Web Design
–Digital Video Editing

“These women and men graduate from high school without any computer computer skills, which means that when they look for employment, they are still wrong. They may speak English well but they can't type anything. This means that for us, we're bridging that gap” (L. Rani, personal communication, April 3, 2015).

Luvuyo Rani founded Silulo Ulutho Technologies in 2004 as a computer maintenance and repair company, but quickly realized his target audience didn't know how to use computers. He therefore made a commitment to educate his audience. Through socially-responsible entrepreneurship, Rani bridges the gap between SA's secondary and tertiary education systems.

“Each training center has about 25 seats. We teach two hour classes, for six hours a day. This means one center can take up to 250 students . . . At the moment it's more based on in-person. Students come to class. The majority of the students never had computer before. . . We are getting close to adding the online learning because we have captive audience.” (L. Rani, personal communication, April 3, 2015).

Rani brings low-cost information technology services and computer education courses to thousands of low income residents in South African townships. Rani's flagship internet cafe was built in the Western Cape's Khayelitsha Township—a low-income community of nearly 400,000 residents around 98% of whom are Black Africans and speak Xhosa language. To date, he has served nearly 40,000 students, most of whom are female. He has opened over 30 internet cafes and training centers throughout SA and plans to continue to expand.

Boateng, N.A. (2014). Technical efficiency and primary education in South Africa: evidence from sub-national level analyses. *South African Journal of Education*, 34(2), 1-18.
Bureau of Market Research (1995). *International market insight*. Pretoria: Bureau of Market Research.
Centre for Innovation in Learning and Teaching (2013). *Our mission*. Retrieved from www.cilt.uct.ac.za/cilt/mission
Czemiewicz, L. and Brown, C. (2013). The habits of digital “strangers” in higher education. *British Journal of Educational Technology*, 44, 44-53.
Czemiewicz, L., Deacon, A., Small, J., & Walji, S. (2014). Developing world MOOCs: A curriculum view of the MOOC landscape. *Journal of Global Literacies, Technologies, and Emerging Pedagogies*, 2(3), 122-139.
Christie, P. (2008). *Opening the Doors of Learning: Changing schools in South Africa*. Johannesburg: Heinemann. Retrieved from www.education.uct.ac.za/files/default/files/image_tool/images/134/v-openingdoors.pdf
Department of Higher Education and Training (2013). *White paper for post-school education and training*. Pretoria: Department of Higher Education and Training.
Eliand, A. (2002). *Art and cognition: Integrating the visual arts in the curriculum*. New York: Teachers College Press.
Future Learn (2015). *About*. Retrieved from www.futurelearn.com/about.
Get Smarter (2014). *University of Cape Town: Post-graduate programmes*. Retrieved from www.getsmarter.co.za/postgraduate.
Gunga, S. D., & Ricketts, I. W. (2007). Facing the challenges of e-learning initiatives in African universities. *British Journal of Educational Technology*, 38(5), 896-906.
Jaffer, L., Ng'ambi, D., & Czemiewicz, L. (2007). The role of ICTs in higher education in South Africa: One strategy for addressing teaching and learning challenges. *International Journal of Education and Development Using ICT*, 3(4).

Kahn, M. (2013). *ICT innovation in South Africa: Lessons learnt from Mxit*. ITU Kolesoscooping: Building Sustainable Communities (K-2013), 22-24. Retrieved from leetexplore.ieee.org/exproy.cul.columbia.edu/stamp/stamp.jsp?pubNumber=6533762
Laursen, K., Masciacelli, F., & Prencipe A. (2012) Regions matter: How localized social capital affects innovation and external knowledge acquisition. *Organization Science*, 23(1),177-193.
Kohli, J. C., Bligh, M. G., & Carsten, M. K. (2013). The vision integration process: Applying Rogers' diffusion of innovations theory to leader-follower communications. *Leadership*, 9(4), 466-485
MacGregor, K. (2014). *Higher education in the 20th year of democracy*. Retrieved from www.universityofcape-town.com/articles.php?story=20140423131548486
Mary Jesselyn Co, UCE, Business School, & Bruce Mitchell, U. Business School (2006). *Entrepreneurship education in south africa: A nationwide survey*. *Education & Training*, 48(5), 348-359.
Mlambo-Ngcuka, P. (2013). *Mobile learning facilitated ICT teacher development: Innovation report*. EngD thesis, University of Warwick. Retrieved from wrp.warwick.ac.uk/58641.
Rogerson, C. M. (2006). *Creative industries and urban tourism: South African perspectives*. *Urban Forum* 17(2), 149-166. Netherlands: Springer.
Statistics South Africa (2014). *Poverty trends in South Africa: An examination of absolute poverty between 2006 and 2011*. Pretoria: Statistics South Africa.
Swamy, R. W. (2010). *Inter/Actions/Inter/Sections: Art education in a digital visual culture*. Reston: National Art Education Association.
Walji, Sukaina (2013). *MOOCs: is your glass half empty or half full*. Retrieved from littlegreycellblog.wordpress.com/2013/11/17/moocs-is-your-glass-half-empty-or-half-full
The World Bank (2010). *Financing higher education in africa, directions in development*. Washington, D.C.: Officer of the Publisher, The World Bank.

Case Study

GetSmarter

www.getsmarter.co.za

Informants:
Sam Paddock, Founder and CEO
Jackie Palmer, Learner Performance Manager
4 design students to be selected by Jackie Palmer



Sam Paddock

Courses:
–Project Management
–Business Marketing
–Graphic Design
–Digital Photography
–User Experience
–Web Design

“Now that we've entered the information era, modern careerists have to become lifelong learners if they wish to stay relevant and advance their professional ambitions” (R. Paddock, 2014, *University of Cape Town Postgraduate Programmes, para. 2).

GetSmarter offers short-format online courses for the completion of part-time post-graduate diploma programs at the University of Cape Town (UCT). Sam Paddock founded the company, which was based on a virtual campus prototype he designed in a Business Science Information Systems Class while attending UCT. Paddock's company integrates online learning and blended learning modes and is the only online education company in SA to be accredited by SA's vocational skills training organization, the Sector Education Training Authority (SETA). GetSmarter's target audience are working professionals seeking to advance their skill set or change professions. Students are generally 22-55-years-olds. 85% of these students are South Africans while 15% come from Libya, Botswana, Zambia, Nigeria, Kenya, and Tanzania. Students are typically middle-class and have access to higher quality internet.

“I think we are able to claim for our program which stands out in stark contrast to a typical online programs computation rates our graduation is about 90%, and not because we make it easy, but because we provide a lot of support, and students are highly motivated” (S. Paddock, personal communication, March 14, 2015).

Paddock reinforces the online curriculum by assigning tutors to guide students. The course content design is informed by the ADDIE (Analysis Design Development Implementation & Evaluation) instructional design methodology. These methods and constant reinforcement has resulted in a 94% course completion rate and 90% program graduation rate.

Key Insights

Research question: Can access to higher education be improved by online learning technologies and blended learning systems?

1. Cross-sector collaboration

“In South Africa, for instance, implementation of the tertiary education reform announced in February 2001 ... was stalled by the political resistance of some constituencies. Yet ignoring potential opponents and failing to engage them in a dialogue about the proposed reforms is a recipe for failure” (World Bank, 2010, p. 161).

Partnerships between sectors is an important objective for SA educators in order to meet the demands of a growing higher education population (World Bank, 2010). The informants in this study have all benefited from cross-sector collaboration. In preliminary interviews, the organizations reported feeling a lack of commitment from government and described partnerships with corporations and non-profit organizations as beneficial.

Diffusion of innovations can result from cross-sector collaborations. Users and non-users of technology engaging in online learning technologies and blended learning systems can benefit from a cross-sectoral leader-follower model in which communication channels and social systems intersect (Kohl et al., 2013, p. 467). The informants in this research are leaders. Paddock from GetSmarter has been particularly successful with diffusion innovations in student outcomes and retention.

2. Creativity and entrepreneurship

Integrating visual arts curricula into online learning and blended learning systems is an important strand of this research (Eliand, 2002; Sweeny, 2010). This research argues that visual arts and art education is integral to the future success of SA's creative economy. The development of creative industries and tourism-led cultural capital has been significant in SA which can be linked to an

ongoing demand for the visual arts and the need for new learning technologies (Rogerson, C. M., 2006, p. 151). Furthermore, SA-based creative industries draw upon SA's unique multiculturalism including local skills and traditions. Teaching the arts can contribute to a better understanding of SA's cultural landscape and teaches citizens to visually depict SA's future (Eliand, 2002, p. 172). All of the informants in this project offer courses in the visual arts.

Entrepreneurship education is also integral to SA's development and the integration of learning technologies. The informants in this project are entrepreneurs—they take risks and they innovate (Jesslyn Co et. al. 2006, p. 348).

“For the Black population to compensate for the economic imbalance arising from the proliferation of their labour force members – and disregarding the backlog of workers not in employment – they will have to expand their entrepreneurial cadre in the formal sector 11 times over the period of 20 years” (Bureau of Market Research, 1995, “International Market Insight”).

3. Localized problem solving

The process of innovating should be geographically sensitive (Laursen et al., 2012, p. 179). There are no cookie-cutter solutions for the development of education technology in SA—different regions have specific needs “and teaching and learning can be enhanced when uses of educational technology are driven by educational needs” (Jaffer et al., 2007, p. 1).

4. Accelerating media and technological literacy

Technology will only be useful in democratizing access to SA's higher education system when people understand how to use it. In 2011 as many as 23 million South Africans were living below the upper-bound poverty line (Statistics South Africa, 2014). Companies like Silulo Ulutho Technologies bridge the gap between secondary and tertiary education. Silulo Ulutho Technologies has recognized the importance of being on-site and online, creating blended learning environments.

Conclusion

The trick is to identify solutions where educational technology will be appropriate and when and how to use educational technology in these situations” (Jaffer et al., 2007, p. 5).

As the potential for online education and blended learning systems gains more recognition in SA, new models for technology acceptance, geographically localized solutions, and increased access to technologies are needed (Porter and Donthu, 2006). Targeted use of technologies and cross-sector collaboration will also play a significant role in lowering the barrier to entry into S.A. institutions of higher education. Mlambo-Ngcuka (2013) also cites the importance of leadership, practical applications, and integration of pedagogy and subject knowledge with technology (p. 1).

With 24 public universities and over 50 public technical and vocational education and training colleges, SA already possesses a robust infrastructure to build upon. As organizations such as Future Learn Cape Town, UCT CILT, Get Smarter, and Silulo Ulutho Technologies work to improve the quality and technological capabilities of the SA tertiary education system crucial transformations may be possible.

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