SOCIAL ENTERPRISE AND SUSTAINABLE DEVELOPMENT:
E-LEARNING AS A TOOL FOR PROFESSIONAL TRAINING FOR YOUTH IN THE GLOBAL SOUTH

Cherie Enns and Nicole Klassen
University of the Fraser Valley
Abbotsford, Canada

Abstract

The research goal of this paper is to initiate the examination of the effectiveness of a mobile e-learning program as a professional training tool for youth in the global south offered through the UN Habitat Youth Fund. The challenges and opportunities are to be considered including the suitability of mobile technology, curriculum content, completion rates, gender balance and as well community impact. The Eminus Academy program offered in collaboration with University of the Fraser Valley, Eliademy learning management system and sponsored by Basf Foundation is a pilot program offering free online courses to youth affiliated with the UN Youth Fund in areas of social enterprise, community mapping, urban agriculture and project management. Youth in this report are defined as the age group 15 to 35 years.

Keywords: e-learning, youth, completion rates, online education, non-formal education, social entrepreneurialism, youth unemployment, UN Habitat Youth Fund.

Introduction

Countries in the global south are facing unprecedented urban growth as rural populations increasingly move to urban centres in search of employment. A significant portion of this growth in urban centres is youth. This reflects broader demographic shifts, as there has been a disproportionate increase of youth relative to the total population over the past decade. This creates a growing need to educate and empower youth with skills that will allow them to succeed in crowded and competitive job markets.

UN-Habitat is continuously looking for new ways to engage urban youth in order to improve their socio-economic status and wellbeing. It is the goal of UN-Habitat to continue to identify innovative ways to address youth development in a multidimensional capacity. Eminus Academy, a collaborative e-learning program promoting sustainable development and social entrepreneurialism in developing countries, is an example of an extension of this mandate.

Eminus is the newest addition to the Training and Capacity Building Module of the Urban Youth Fund programme. It has been developed for youth aged 15 to 35 years living in developing countries that have taken part in the Urban Youth Fund program. The program seeks to integrate the mobile technology, internet-based curriculum and applied empirical learning to provide a dynamic

learning opportunity for youth in the developing world. UN-Habitat partnered with the Canadian University of Fraser Valley to provide custom courses in the area of sustainable development, social enterprise and community planning.

The focus of this paper is to begin to examine the effectiveness of a mobile e-learning program as a professional training tool for youth in the global south offered through the UN Habitat Youth Fund. The challenges and opportunities are to be considered including the suitability of mobile technology, curriculum content, completion rates, gender balance and as well community impact.

Background
According to the UNESCO Education Strategy 2014-2021 (2014), among the global trends that support e-learning and mobile based learning is the increased use of mobile platforms, that have jumped beyond desk-top and laptop computers to phones, notebooks, and tablet formats, with the Internet following suit to promote greater access to Wi-Fi rather than costly infrastructure in cable and DSL delivery. According to UNESCOs Steve Vosloo, many of the 3.6 billion SMS-capable mobile phone subscribers in the global south are engaging in 'MEduation experiences (Raftree & Matrin, 2013). For example, Google plans to sell 200 million of its Android phones in Africa and it is estimated that by 2016 there will be a billion mobile phones on the continent of Africa (Fox, 2012).

Globally, the increased information and communication technology has enhanced the ability for e-learning platforms to deliver cost-effective basic higher education by increasing access to it, the quality of the teaching therein, and its relevance in developing lifelong learning. Economic growth, as stated in the strategy, is directly linked to the knowledge economy, which includes entrepreneurial talent and the ability to apply the knowledge and technology.

Five key topics at the *World Education Forum*, held in May 2015 in Incheon Korea, included the right to education, equality in education, inclusivity in education, quality of education, and lifelong learning (UNESCO, 2015). The *right to education* is a fundamental human right, which was further guaranteed at an international level with the Convention Against Discrimination in Education in 1960. *Equality in education* details the right for all people to have access to education -- children, youth, adults, men, women -- which is not depending on culture, income, or ability. *Inclusive education*, which is key to the rationale of mobile learning and e-learning applications, is the adaptation and consideration of the learners. *Quality of education*, also a fundamental principle of mobile and e-learning applications, is responsive and inclusive of the learners' needs and relevance to their context, the needs of individuals, countries, and the global population, and world labour and work trends. Finally, and definitely the most important in regards to mobile and e-learning application, is *lifelong learning* that is diverse with the ability of being context specific to meet the needs of all age groups, and that provides an array of skills that enhance global citizenship, entrepreneurial skills, and core skills as necessary.

In response to growing youth populations in urban spaces, policymakers, development practitioners, and urban planners have called for increased attention to be paid to the plight that young people face in these spaces, as well as the potential demographic dividend that they bring (United Nations Economic and Social Council [UN ECOSOC], 2014). According to the Council, young people in urban centres are more vulnerable than other demographics to the problems caused by urbanization. For example, research shows that young people face greater social, political and economic marginalization in urban spaces when compared to other demographics. The World Bank estimates that, in Africa alone, 11 million youth are expected to enter the labor market every year for the next 10 years (Filmer & Fox, 2014).

With such promising technological innovation and interventions, Eminus e-learning is a much needed and refreshing option that can be offered a long side or as an alternative to the traditional education system. It continues to grow and lead the way in outreach and connectivity, offering students a chance to reach their own potential while also providing the global community the labour force that it has been lacking for so long. Concepts and goals from both *education for all* and the Millennium Development Goals can be realized through e-learning programs, such as Eminus, with improvements in the quality, access, investment, and gender equality within the educational framework.

According to the International Labour Organization (2015), global unemployment rates will continue to increase from 2014 to 2019, as shown in Figure 1. Employment levels vary across regions, with developing countries having the highest rates of unemployment, as seen in Figure 2 below (ILO, 2015). Youth unemployment globally is three times higher than that of their adult counterparts, with 74 million youth (especially women) being unemployed, suffering long-term unemployment and labour market exit, at the start of 2015 (ILO, 2015). Youth unemployment rates, including for youth who have tertiary/post-secondary training, are expected to continue to rise globally through to 2019 with the highest rates of increase (up to 2%) in Central America, Asia, and throughout Africa.
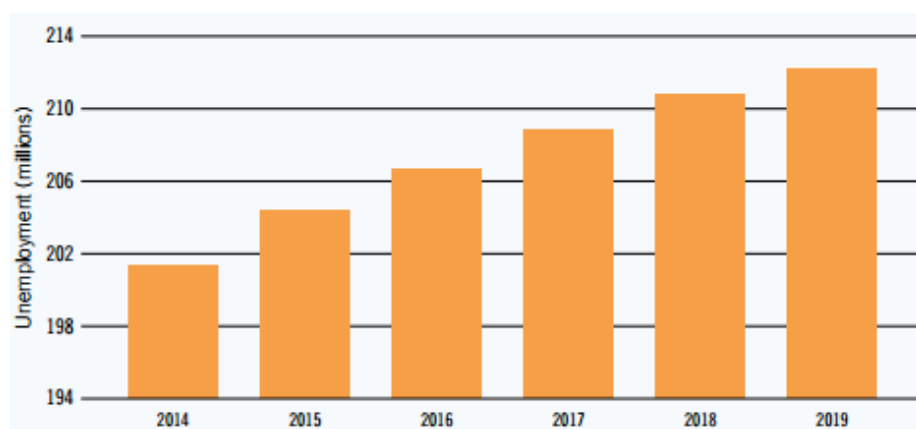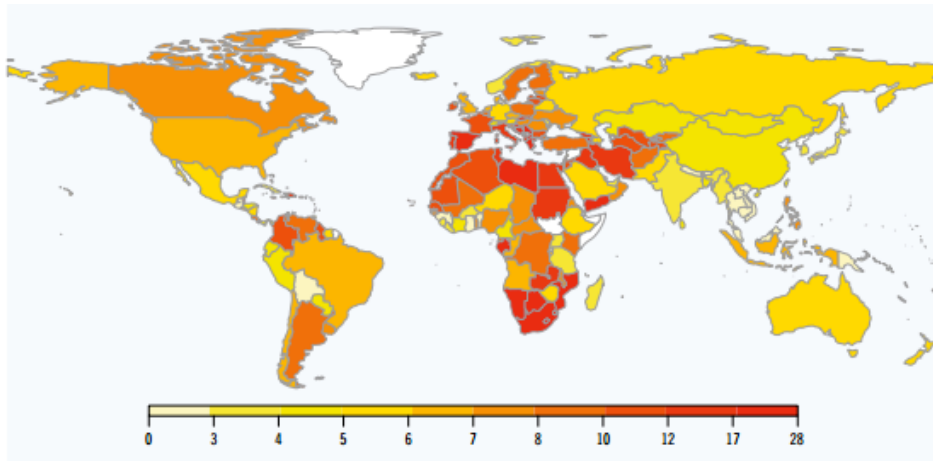

Figure 1. Global unemployment projections from 2014 to 2019 (ILO, 2015, p. 17).

Figure 2. Unemployment rates for individual countries as of 2014; no data is available for white shaded areas (ILO, 2015, p 17).

Without relevant applied education, training, experience and employable skills, many youth will be at risk of unemployment and social hardship. This, in turn, leads to increased crime, mental health problems, violence, conflicts and drug taking among youth populations (ILO, 2010). A lack of access to applied education and difficultly finding employment further compounds the social, political, and economic problems faced by youth in urban centres.

Non-formal Education

Formal education is based on prescribed outcomes, learning objectives, and sequential learning and bound by administrative organization, social norms and laws. Formal education practices include the test-retest method of grading that is also based on attendance, participation, and attitudes.

Eminus offers non-formal education that is not necessarily sequential learning, but has the opportunity to build on insights from previous courses to meet the changing needs and dynamics of the students therein by being more inclusive and relevant. Non-formal education does not prescribe learning outcomes, but general tasks for which the students may participate, students are not required to attend school, nor is the premise of grading based on social norms and standards. The key foundations of non-formal education are: being student-centric, promoting inclusivity, being adaptable, and providing contextually and globally relevant materials. Non-formal learning takes place as part of everyday activities and is outside of formal highly institutional settings.

For most of the developing country youth, formal education is costly, inaccessible, exclusive, and is based on Western educational systems of formal learning and training. The formal education system is limited in its ability to adapt to the needs of the student because it is based on a sequential learning system that has a foundation of cognitive development, which was developed without inclusion of children from different backgrounds, cultures, social factors, and so forth. The administrative bounds that rely on social testing, sequential learning, attendance and cognitive norms, limit the ability of many children, youth, and adults to participate in formal education systems given their specific living situations, country contexts and dynamics, and, for

some, economic ability. Therefore, e-learning as a non-formal educational provision increases the opportunity for those bounded by the formal system to access education that is relevant to their specific needs and contexts.

E-learning and its Implications for Eminus Academy Program

E-learning has become an irreplaceable and expanding form of pedagogy that has been woven into many programs and projects. Consequently, current literature on e-learning varies widely from virtual secondary schools, to quantifiable success matrixes, to for-profit workplace training. The emphasis and application of this brief literature review is to provide relevant information that expands on the challenges and opportunities that e-learning programs face, within the lens of international and social development education, as these areas are the focus of the Eminus project. E-learning on an international scale comes with a wide range of strengths, weaknesses, opportunities and threats that will be explored in the following sections.

Strengths and opportunities. E-learning education has substantial flexibility and maximizes use of the Internet in an efficient and cost effective manner. This is true for both learners and facilitators:

> Advantages of e-learning for learners include an increased accessibility to information, better content delivery, personalized instruction, content standardization, accountability, on-demand availability, self-pacing, interactivity, confidence, and increased convenience. E-learning reduces costs, enables a consistent delivery of content, and improves tracking, among other benefits for faculty.
> (Bhuasiri, Xaymoungkhoun, Zo, Rho, & Ciganek, 2012, p. 843).

Cost savings can be realized through reductions in "classroom and facilities cost, training cost, travel cost, printed materials cost, labor cost, and information overload" (Bhuasiri et al., 2012, p. 843).

Mentors and leading educators can easily be sourced into an e-learning program and subsequently allow it to disseminate high levels of quality education around the globe where similar levels of education might typically not be found. This is further iterated by Jones' work (2013), where he indicated "…learners who received higher supervisor support showed a significantly higher level of learning transfer" (p. 33). Eminus has integrated a mentorship model.

Challenges. Rosenberg (2001) described reasons for low completions rates such as: poor content, unauthentic learning, form over substance, non-versatile learning pace, technology barriers, information becomes difficult to refer back to after training, unreinforced learning, and materials not properly transitioned to technology.

Eminus is trying to address all issues through technology updates, youth input and development of content that is based on relevant and authentic UN Habitat practices and including real world applications in developing or strengthening new or existing social entrepreneurial initiatives. Also, the content is guided by a professor with over 25 years of experience in university level teaching,

and courses are then developed and facilitated by highly skilled individuals. This all contributes to good content and authentic learning opportunities. This is important because if the experience isn't authentic, the program will encounter difficulties (Rosenberg, 2001).

It can become difficult to always find the right pace and the right level of flexibility, which allows slower learners to keep up, while allowing faster learners to progress at a pace that doesn't leave them feeling disinterested. Strong, engaging and caring course facilitators have been important for improving course completion rates.

E-learning programs usually require significant startup investment "in technology such as hardware costs, software licenses, learning material development…" (Bhuasiri et al., 2012, p. 843) as well as considerable time (and possibly financial) investment in platform training. However, Eliademy, the online platform behind Eminus, is a free learning management system that is built for teachers. Navigation, uploading, and course editing is very straightforward and easily manageable. It is important that students are not required to always be online and that content is downloadable.

Lack of motivation. Motivation can be strongly affected by increasing content relevance to the end user. If trainees are motivated to learn, they are more likely to be engaged during the training, and, if engaged, more likely to complete the training and achieve the learning objectives (Jones, 2013). Offering course content that is clearly presented as a catalyst for the end results or goals that the student is looking to achieve will increase student commitment, while motive matching, "linking the instruction to the learning styles and interests of the learners," (Jones, 2013, p. 38) creates a more engaging atmosphere for the students. Eminus integrates a mentorship model into the e-learning delivery so to encourage completion and accountability.

Mobile tablet education systems have proven to be feasible and stable, as Eminus even works on most unreliable networks reliably. The tablets are a key piece of technology that will allow students to develop their entrepreneurial skills through a pre-loaded online educational program. This allows for stimulating course structures and effective instructors to be utilized globally. It is important going forward that tablets and/or laptops with Internet time be considered within the youth fund grant for selected youth organizations with accountability related to course completion required.

Through the technology and structure of the program, Eminus can enable young adults to achieve positive change and this can be seen through the success stories and testimonies of students in outgoing, course completion surveys. One student stated:

> Through the programme I was able to take my idea from mere concept to being one step closer to development by writing a business plan and creating a video pitch which would later be selected to receive seed funding from the UN-Habitat. Based on the current development of Link Your Purpose (LYP) I was able to apply for the prestigious German Social Enterprise Fellowship Programme.

E-Learning Impact and Story of Eminus

Global rates of unemployment position Eminus well as an important tool. Views on the growing impact of e-learning and its potential are frequently optimistic. E-learning began with its humble origins of online written outlines, instructional videos, and internet conference calls, and now we can utilize powerful interactive, real-time video, chat, and various instructional platforms that allow instructors and a multitude of students to download and upload content with mobile freedom all over the world (Rosenberg, 2001).

Outcomes. Figure 3 (below) is a link to the Eminus Academy YouTube channel, where program outcomes can be seen in the form of multiple social enterprise student pitch videos as well as two overview videos explaining Eminus. The second link, Figure 4, highlights a specific example that shows a group experience within the Eminus program. These examples further provide an assessment of course content and impact.

www.youtube.com/channel/UC6Dd4dn
MHiZ72bUxuyREeuw

https://www.youtube.com/watch?v=V
QUEKmTVTqY
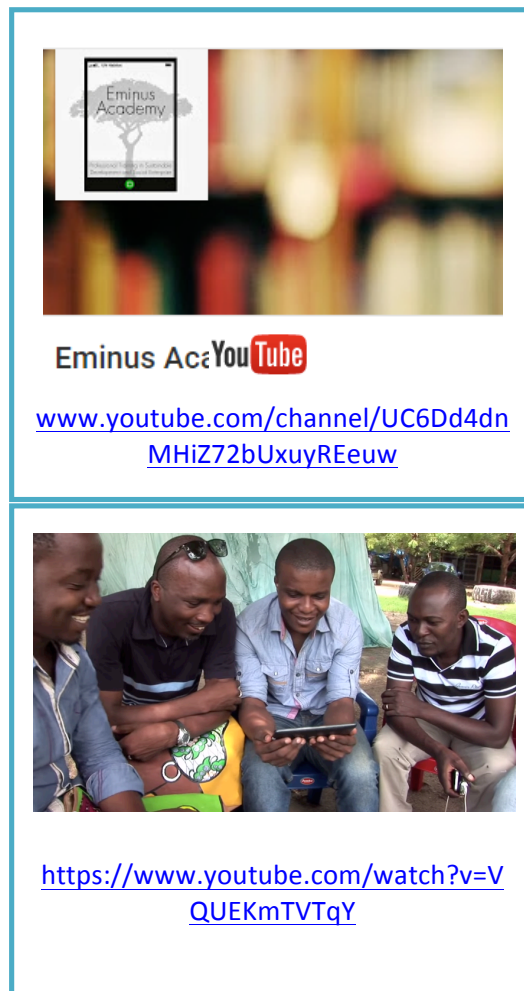
Figure 3. (top) Eminus Academy Youtube Channel (Eminus Academy, 2014).
Figure 4. (bottom) Nafasi Experience (Eminus Academy, 2015).

Student responses to incoming and outgoing surveys display the exponential effect of the courses. Many youth take on the course so they can make better decisions in their social enterprises, and to pass on knowledge throughout their organization so, as one student stated in a survey, "The entire group will be

able to implement the approaches and skill in the development work that we do." This is due to the unique educational platform that Eminus employs, as well as the nature of the program, allowing a large quantity and variety of youth to participate (as seen in Figure 5) and exponentially increase the social impact of the Eminus courses.
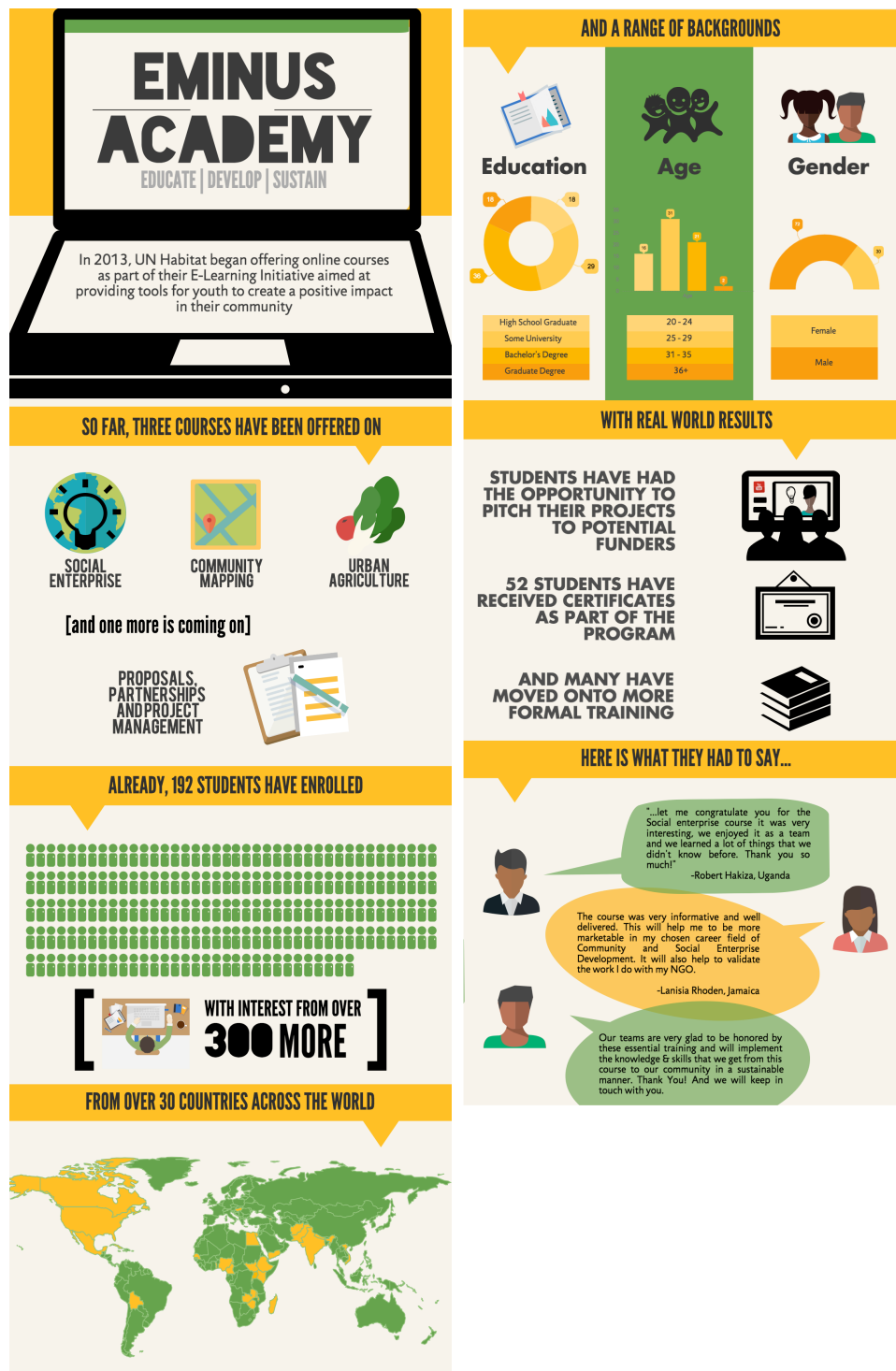

Figure 5. Eminus infographic displaying a brief program overview, demographics, and testimonials.

One of the most tangible outcomes is the certificate of course completion (as seen in Figure 6 below), this not only adds credentials and empowers youth in their careers, but also builds confidence and makes for socially responsible citizens. Many students cite certification as a valuable part of the course, as it is something that they can add to their resume and use to physically demonstrate their training. Course completion certificates are issued for each course completed and a program certificate is issued upon completion of all four courses.

Figure 6. Eminus student with course completion certificate.

The below testimonials are witness to the work being done through Eminus and the effect that program completion has on youth.

- "Thank you a lot for your unreserved considerations, and we have got the Certificate of Completion of your course today. Our teams are very glad to be honored by these essential training and will implement the knowledge & skills that we get from this course to our community in a sustainable manner." Tewabe Worku, Ethiopia.
- "This great idea can enhance the youth opportunity to work towards achieving the millennium development goals from a decision making position, design and implementation of projects, movements, activities, etc., as it gives the tools to do it." Gabriela Mariaca, Bolivia.
- "This certificate is evidence of my experience and knowledge that I can use in my future." Zahra Ahmadi, Afghanistan.

External factors are always present that help or hinder the success of programs. This is no different with Eminus. Eminus utilizes powerful tools that allow for instant international mobile ICT centered on social entrepreneurial initiatives. However, most mobile ICT are internet-access dependent. This proves a challenge in some cases, but solutions are always worked out on a case-by-case basis.

Other factors that could influence course completion include security, health, competency and, of course, facilitators and platform functionality. The completion rate for those enrolling in the courses is just over half (51%), largely due to the many limiting factors. Completion rates for online learning is often less than 10% (*The Economist*, 2014), and with the technical challenges for many youth taking the courses the data suggests our completion

rate, at least four times this amount, is good. It is also important to note that completion rates are actually higher than reported as some course members are not participating students, but are only observers and therefore will not complete the course. As the program is still in progress, new data related to course completion and community impact is continually collected and added to the program data collection.

The below paragraphs provide examples of feedback from three students regarding the challenges faced in completing their courses:

- As Karama Team we've been making efforts to complete the first course connected to the UN-Habitat program and round up our business plan and elevator pitch. Unfortunately we have been dealing with some practical limitations; e.g. our camera that we used to take pictures with and simple videos just broke. So we have not been able to complete a filmed 'elevator pitch'. Since we do have the intention to complete the course, we have made a presentation full of pictures from our work and team. It has the same structure as our "elevator pitch.".

- The situation in South Sudan is currently not favorable for working conditions, we would not access offices at times and communication networks would be off most of the time. Also working in remote areas during provision of relief projects affected my attention on the course, but I am glad I have learned a lot.

- It was tailored to suit my time at work. Since it was online, with proper time between each chapter, I was able to properly digest each section of the course and sometimes go further to understand a certain topic. The tablets were actually very beneficial as I was able to download the readings on it and review them when I am at hospital at work between patients' visits.

Conclusion

A careful review of outcomes beyond what can be shared in the scope of this paper indicates that Eminus is providing a link between education and work. The evidence of the project is that young urban people have been able to create employment for themselves and others through the establishment of social enterprises. While youth are involved in content development and delivery, there is not yet gender equality in the program and we are working to address this.

The over 200 participants to date ranged between the ages of 20 to 30 years, the majority within the 20 to 25 years age range. Of the respondents to the expression of interest to the module, 69% were male, while 31% were female. More consideration is to be given to increasing female participation. There have been really significant outcomes for some of the female participants with the courses also opening doors related to further project funding and education. For example, the program has developed social enterprises from youth-led projects, all at a distance, allowing instructors to virtually be in multiple places at once.

While consideration is given to ladder this program into more formal accreditation academic courses, the non-formal aspect of the program is seen as valuable. Eminus statistics with respect to gender, level of education and course completion mirror trends documented elsewhere ("The Digital Degree," 2014).

Outgoing surveys completed by Eminus students, as well as through general correspondence, reveal technological issues as being one of the most frequently cited barriers to consistent participation and timely completion of assignments. E-learning is a tool that has long been required and will have profound effects on education globally for years to come. Flexible, affordable and easy to access education systems allows training opportunities in so many new places. Many youth take on courses so they can make better decisions in their communities themselves, but also so they can pass on their knowledge throughout their organization so, as one student put it, "the entire group will be able to implement the approaches and skill in the development work that we do." The opportunities that carefully planned and well-executed e-learning programs have to impact the world of education are phenomenal.

Concentrated efforts must be made to recognize weaknesses and threats in in educational programs to ensure they are to succeed. Similarly, understanding the strengths and opportunities that accompany e-learning, which are again unique in each situation, will allow for programs to capitalize on these and provide quality results.

Recommendations

Moving forward, open enrollment, combined with an enhanced screening process and mentorship program has been considered for future students within the program to further increase participation and interaction. Participation opportunities also lie in re-involving graduated Eminus students that have interest in facilitating course delivery. For example a doctor from Cairo, who recently finished an Eminus course, would like to develop a course on Ebola protocol for youth organizations.

Providing credentials, in the form of a certificate of completion, has proven to be an excellent motivator for students. Outgoing survey responses indicate that students are appreciative of the course completion certificates and that they feel they have gained a physical indicator that demonstrates their accomplishments and credentials to employers and clients alike. Expanding credentials to become a more formal academic accreditation could build on this success.

Further Research

Further research is warranted in methods of increasing gender balance in participation within similar types of programs, especially in developing countries, beyond being non-discriminatory in entrance requirements and screening processes. Perhaps exploring gender equity and gender equality in developing countries' e-learning programs could provide a basis for achieving improved gender balance.

Acknowledgements

References

Bhuasiri, W., Xaymoungkhoun, O., Zo, H., Rho, J. J., & Ciganek, A. P. (2012). Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty. *Computers & Education,* 58843-855. doi:10.1016/j.compedu.2011.10.010

Eminus Academy. (2014, July 28). Eminus Academy [Video file]. Retrieved from https://www.youtube.com/watch?v=aiy2Ot78KPc

Eminus Academy. (2015, May 18). Nafasi Experience [Video file]. Retrieved from https://www.youtube.com/watch?v=VQUEKmTVTqY

Filmer, D., & Fox, L. (2014). Overview: Youth Employment in Sub-Saharan Africa. Washington, DC: World Bank. doi:10.1596/978-1-4648-0107-5

Fox, Z. (2012, June 18). 5 Reasons mobile is the future of sustainable development. Retrieved from http://mashable.com/2012/06/18/mobile-sustainability/

International Labour Office (ILO). (2010). *Global employment trends for youth: August 2010: Special issue on the impact of the global economic crisis on youth*. Geneva: International Labour Office.

International Labour Office (ILO). (2015). *World employment and social outlook: Trends 2015*. Geneva: International Labour Office.

Jones, A. R. (2013). Increasing adult learner motivation for completing self-directed e-learning. *Performance Improvement, 52*(7), 32-42. doi:10.1002/pfi.21361

Raftree, Linda & Martin, Nick. (2013). What's holding back mobile phones for education? *Stanford Social Innovation Review*. Retrieved from http://www.ssireview.org/blog/entry/whats_holding_back_mobile_phones_for_education

Rosenberg, M. J. (2001). *E-learning: strategies for delivering knowledge in the digital age*. New York: McGraw-Hill.

The digital degree. (2014, June 28). *The Economist*. Retrieved from: http://www.economist.com/news/briefing/21605899-staid-higher-education-business-about-experience-welcome-earthquake-digital

United Nations Economic and Social Council (UN ECOSOC). (2014). United Nations Economic Commission for Africa: Sustainable urbanization in Africa.

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2015). World Education Forum 2015. Retrieved from https://en.unesco.org/world-education-forum-2015/

Author Details
Cherie Enns
cherie.enns@ufv.ca
Nicole Klassen
Nicole.klassen@ufv.ca