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Publication of research in ODL: Internationalisation or McDonaldization?

Jean Mitchell
University of South Africa
mitchje@unisa.ac.za

Abstract

At every McDonald's fast food outlet in the world, food and service are the same – you always know what standard and processes to expect. The force that drives McDonald's is its bureaucratic management, technology driven production, self–service. Similar driving forces seem to be affecting the publication of research in general and in ODL in particular. Amongst academics there is a need to publish the results of research, however, they often find reasons not to publish. The reasons vary from the unavailability of resources, to the low self concept of academics from developing countries regarding the acceptability of their work. We argue that all these obstacles can and should be overcome. Universities in the developing world are focusing on local research and academics are beginning to see the value of their findings in relation to international trends. However, this does not guarantee that research findings will be published. In order to make research known and to compete internationally, authors must apply their efforts according to the established rules. In addition, novice authors need nurturing in order to break into academic publishing. This paper reports on *ad hoc* initiatives undertaken to mentor new authors, face-to-face and at a distance, and acknowledges the need for a more sustainable method to be established by using an online learning platform.

Introduction

This paper presents a discussion on the publication of research in an Open and Distance and e-Learning environment that is constantly changing in a shrinking world. The big issue that I wish to address is that publication of academic research findings is influenced by many agencies outside of the researcher and the project being reported. In their endeavours to publish articles regarded as academically and empirically acceptable, could it be that journal editors act as gate keepers, favouring the research from certain authors, regions and even countries and keeping others out? Are attempts being made to hear international voices, or is academic publishing succumbing to a type of academic colonialism?

McDonaldization and Publication

I have chosen the title for this paper as a means of questioning whether the publication of ODL research in dedicated academic journals is a real move towards being inclusive and international, or whether it is creating an 'iron cage' of rules and formulae that fosters exclusivity and alienation. McDonaldization is a controversial concept that describes how rational organisation affects all

areas of life. The term is catchy and might even seem amusing, but it touches on serious issues. The term was created by sociologist George Ritzer (1996, 2002) who uses the organisation of the fast food chain as a metaphor for modern society and describes the process of McDonaldization as inevitable and essentially beneficial. But how does this view of society relate to the publication of research?

Consider these aspects of the McDonald franchise: it consists of a decentralised franchised structure of ownership; global markets; rational scientific processes of production and management; emphasis on standardised products; low-wage jobs with no degrees of freedom to depart from a predetermined recipe and process; the shift of some productive labour to the consumer; and consumption is offered as recreation.

In academic publishing control is wielded by external features like the demands of university authorities, the journals themselves, academic reputation and so on. Traditionally, individual journals have been 'owned' by institutions or professional organisations. However, there is a growing trend towards journals being managed, marketed and (to a certain degree) controlled by big publishing houses like Taylor and Francis, Sage and Elsevier. One of the advantages of this devolution of ownership is that the publishing houses take over some of the work and can give publications and authors greater exposure to global readers. Unfortunately characteristics that distinguish one journal in a field from another become blurred as the journals become more alike as the editors strive to meet the requirements of style and content laid down by the publishing houses.

In addition, much ODL research is undertaken by post-graduate students and middle-level staff within distance education institutions (Zawacki-Richter, Bäcker & Vogt, 2009) who need to comply with the instructions of supervisors and superiors to ensure that their articles or research reports fit into the prescribed academic pattern. All of this fits into Ritzer's summary of the McDonald process, namely efficiency, calculability, predictability and control.

The need for publication of ODL research

In Higher Education, research and the publication of its findings is important for all academics. If asked why they do research they would probably include reasons like to investigate issues, to find gaps in the body of knowledge and influence practice, to create new knowledge, to make information known to others, and even to survive in academia. In fact, it is imperative for academics to publish the results of research as this influences their further research opportunities, financial reward and promotion. Ideally, research should be about learning from each other, spreading good practice and creating partnerships and structures that allow us to solve problems and to learn from others. It should enable other people in a field to better understand situations and is one of the secrets to enhancing development (Lengha & Epah, 2010), but the rush to 'publish or perish' can create Mac Research that is as beneficial to progress as a MacMeal is to nutrition.

ODL is frequently seen as being an under-researched area and the necessity for improvement in the quality and quantity of research is generally recognized. Bates (2005) argues that while there is a considerable amount of research in ODL, the quality is variable. Good research can provide useful information to support innovation and improve existing practice and should be an integral part of an institution's activities. But what is 'good research'? Whose standards need to be met?

In order to make research known and to compete internationally, authors must abide by established rules of publication that are based on a model established by Western universities over hundreds of years. It is a tried and tested pattern and unless authors comply with it, they will not be heard. Can the publication of research from developing countries be feasible in such a McDonaldized world? Could all the processes meant to enhance efficiency favour those who share the same philosophy and exclude those who don't?

People from developing countries involved in the field of ODL often find reasons not to publish. These reasons vary from the unavailability of resources, intellectual colonialism and the want of research rigour, to the low self concept of academics from developing countries regarding the acceptability of their work. One would think that as the aim of research is the investigation of problems, developing countries should have much to offer. Researchers in these countries should have first-hand knowledge and understanding of their particular problems and should be the ones to investigate at grass root level. But this is not the case, especially in African countries.

In sub-Saharan Africa, for instance, scholarly publishing has been in decline since the 1980s (Vukor-Quarshie & Oseifuah, 2010). In some countries, like Cameroon, there are research centres but few reputable facilities for the publication of research results. Where publishing opportunities do exist, they are often regarded as not being acceptable and having works published in Europe or North America is seen as being far superior to publishing in home countries. Even the results of research are regarded differently: when a research paper is published outside of Africa it is taken seriously, but work published in Africa is said to be weak or of no relevance, even when it is of high quality (Lengha & Epah, 2010). As a result, Africa seems to be lagging behind.

The following table representing scholarly output between January 2007 and January 2008 presents a rather gloomy picture of scholarly publishing in Africa.

Table 1 Continental output of Scholarly publishing

Continent	No of countries	Scholarly publications	Percentage	Rank
Europe	38	12 675	49,74	1
North America	11	8709	37,14	2
Asia	27	2619	10, 27	3
Australia	4	406	1,59	4
South America	9	396	1,55	5
Africa	16	163	0,63	6

Mehmood ul Ajaz Wani & Sumeer Gul (2008) in Vukor-Quarshie and Oseifuah 2010, 87).

The table indicates that Europe leads scholarly publishing by far followed by North America and then Asia. The contributions from the South are much less with Africa contributing a mere 0,63%.

While these findings might represent scholarly publication in general, they resonate with the findings of a study on ODL publishing conducted by Zawacki-Richter, Bäcker, and Vogt (2009). In their analysis of the articles published in five leading ODL journal between 2000 and 2008, they found that the majority of articles came from only five countries: USA, Canada, UK, Australia and China. The USA was the leader in the field in both the number of articles published as well as the percentage of publications overall. I have condensed the original table to emphasize where academics from African countries rank in the publication of ODL research in prestigious journals.

Table 2 Continental output of ODL journal articles

Country	Total number of articles	%
1 USA	209	30.1
2 Canada	155	22.3
3 UK	99	14.2
4 Australia	66	9.5
5 China	29	4.2
9 South Africa	8	1.2
10 Nigeria	6	0.9
20 Botswana	3	0.4
25 Tanzania	3	0.4

One could say that as journal editors are predisposed to influencing change in their own countries, it is understandable that they tend to publish more from their own country of origin. However, as I've mentioned above, this is not a trend in Africa.

Possible solutions

I believe that these problems can and should be overcome and that moves towards the internationalisation of education can be to the advantage of research and publication. Universities in the developing world seem to be focusing more on local research, and academics are beginning to see the value of their findings in relation to international developments and are risking submitting articles to journals outside their borders. Modern technologies make the growing trend towards collaborative research and publication accessible, and the Internet is making information resources widely available, provided there is access and a reasonable band-width.

Research from developing countries must be presented in such a way that it will be taken seriously. First of all researchers themselves must believe in the results of their research before they can convince others. If research is presented with confidence it stands a better chance of being noticed amid the many others competing for influence (Abrami & Bernard 2006).

On the other hand, novice authors need nurturing in order to learn the rules and break into academic publishing. There are many programmes aimed to help or 'train' writers to play the writing game, in fact it is becoming a lucrative business in South Africa. Universities are willing to support writing training because they stand to gain in the long run.

As editors of an ODL journal, my colleague and I started a programme that differs from the norm because it is offered in a dual mode and runs over a period of about three months. Participants are first encouraged to visit a website where resources on ODL are available and where they can discuss problems they are having with the outline of their articles. Discussion forums on the site encourage them to consider certain aspects of academic writing. A week-long 'pressure cooker' workshop follows where participants write and peer review each other's work and have their own writing reviewed by critical readers every day. Once it has been completed the final first draft is reviewed and revised. After a few weeks (depending on the programmes of all concerned) a follow-up work session is held where the article is fine-tuned and advice for submission is given.

Conclusion

We plan to make a similar process available online for the benefit of all who might be interested. We hope that in this way we will be able to contribute to the internationalisation of publication in developing countries.

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Towards e-learning for all in Sri Lanka – progress and problems in some selected Sri Lankan 21st century initiatives

Peter Mozelius
Stockholm University, Sweden
mozelius@dsv.su.se

K.P. Hewagamage
University of Colombo School of Computing, Sri Lanka

Henrik Hansson
Stockholm University, Sweden

Abstract

In the 21st century Sri Lanka and many other regions in Asia have shown a rapid but heterogeneous development in the field of Information and Communications Technology (ICT).The difference in impact on urban regions and rural areas has sometimes been described as the internal digital divide. At the same time as the gap has diminished between cities in developing countries and the developed world the internal development gap has increased in many Asian countries. How can this gap be bridged? In this paper some Sri Lankan initiatives for islandwide dissemination are analyzed and discussed. The study is built on observations, recorded interviews and a literature study. In formal tertiary education we have chosen a nationwide online learning programme for a Bachelor of Information Technology (eBIT) and how the content and curriculum was developed and revised by the National e-Learning Centre (NeLC), at the University of Colombo (UCSC). Regarding primary school and informal learning we have selected the One Laptop Per Child (OLPC) initiative and the Nenasala Telecentre network. We find that these initiatives together have improved life for people in rural areas but that there still exists an internal digital and social gap that needs further bridging.

Keywords: ICT4D; Education for all; e-Learning; Distance education; Telecentres One-to-one computing; Sri Lanka.

1. Introduction

> *"Education is the most powerful weapon which you can use to change the world"* - Nelson Mandela

1.1 Education in the Sri Lankan Context

Sri Lanka is a country in the developing world with a high level of literacy and a well established policy of free education, that has poised itself to gain from the emerging global knowledge based economy. Primary and Secondary schools are free and accessible for all, but far from everyone leaves Secondary school with career opportunities. When it comes to higher education the situation is different and the actual intake to tertiary education for the year 2009 was 19,650 while the number of students left out of the university system was more than 100,000 in every yearly intake (Warnapala, 2009). During the two last decades

the country's use of information and communications technology (ICT) has increased and the infrastructure has improved in urban areas; the new digital divide is a rural-urban duality. (Gaiani et al, 2009b) On the Sri Lankan island computerization and internet facilities are mainly limited to the capital Colombo and its environs on the west coast and major towns like Kandy and Galle. In more sparsely populated non-urban areas, where over 75% of the population lives, the infrastructural situation is different and the digital divide a fact (Hansson et al, 2010).

The globe is seeing an explosion in the availability of information and knowledge especially through the advances in Information and Communication Technologies (ICT). The radio, the television and the Internet provide a synergy that is a potent force in disseminating knowledge much further and wider among the citizens of a country. In a less industrialized country such as Sri Lanka, which primarily relies on its human resources in its economy, the exploiting of these technological advancements to convert its populace from a largely knowledge consuming one to a knowledge producing one is of utmost importance. It has been stated that a society's probability for development must relate not only to the education of its graduates, but also to its most peripheral citizens. Both poverty and conflict can only be tackled effectively through the education of the masses. To quote two voices on these two aspects of society, Marian Wright Edelman says*, "Education is for improving the lives of others and for leaving your community and world better than you found it*", while Maria Montessori has said, *"Establishing lasting peace is the work of education; all politics can do is keep us out of war".* Post war Sri Lanka is in need of wide-scale education of all its citizens right up to the periphery in order to raise itself from the downward spirals of poverty and conflict.

1.2 Aim
The aim of this study is to analyze and discuss the progress of some selected technology enhanced education initiatives and their potential to support the idea of education for all in Sri Lanka.

2 Methodology

The study is built on observations, recorded interviews and a literature study.

2.1 Observations
In the observations of the UCSC based activities we have been part of the process and friendly with most of the informants. But in the research part we have always tried to be as neutral as possible with the approach of being *"outside observers"* (Walsham 1995). Authors have participated in the development of the eBIT and FIT programmes as well as in the construction of the National eLearning Centre (NeLC).

2.2 Semi-structured Interviews
In a broad definition, an interview could be seen as a purposeful discussion between two or more people (Kahn and Cannell, 1957). There are different kinds of interviews that can help you to gather and select relevant data for your specific research topics. In the range from strictly formalized interviews using

standardized questionnaires to more informal and unstructured conversations the interviews in this article should be classified as semi-structured in-depth interviews. (Scribd Inc, 2010).

2.3 Recorded Interviews in MP3-format
Within academic research there exists a tradition of in-depth interviews as a tool for gathering data on people's opinion and interpretation of more abstract and complex phenomena. Another tradition is to capture the answers by taking notes during the conversations.

In modern journalism interviews have frequently been recorded for many years, but the academic default standard is still mainly written text and shorthand. Modern digital audio technology opens up new possibilities of data collection, storage analysis and reuse (Mozelius, and Hansson, 2009). All interviews in this article can be found and downloaded at
http://people.dsv.su.se/~mozelius/thesis/interviews/. The names of the files are the same as they are given in the separate section for "Recorded interviews in MP3-format" at the end of this article. We have chosen the mp3-format since it is an open standard that can be played on most of the existing computer platforms.

2.4 Literature study
The history of ICT and e-learning in Sri Lanka is relatively young phenomenon and research papers and literature have been completed with information from the web and from Sri Lankan newspapers.

3   Some Selected Sri Lankan e-learning Initiatives

Many of the technology enhanced education initiatives below are designed, started and executed from the University of Colombo, School of Computing. Infrastructure and Internet access quality are better in the capital of Sri Lanka than in the island's rural areas. Learning activities that could be run from a computer in Colombo might not work in the Sri Lankan countryside. In many people's opinion the two most important Sri Lankan universities in the field of IT and Computer science have been, and still are, the University of Colombo and the University of Moratuwa. For many years the University of Moratuwa has specialized in hardware, meanwhile the University of Colombo, School of Computing (UCSC) has had a focus on software engineering and systems development (MP3-Jayaweera, 2011).

But there have been a lot of other actors involved as well. We have here, amongst a lot of others, selected *the eSri Lanka*, *the One Lap Top Per Child (OLPC)* and *the Distance Education Modernisation Project (DEMP)* initiatives.

3.1 The BIT Program – A Bachelor of Information Technology
At the end of the 20th century there was an increasing demand for IT graduates in Sri Lankan industry and still the traditional university system could not increase the intake for IT-programmes. To address this, a new tailor made Bachelor of Information Technology (BIT) was designed and started at the University of Colombo in 2000 (Wikramanayake, G. N. et al ,2007). The new

eBIT programme was constructed as an external programme without any teaching and learning sessions at the University in Colombo. UCSC designed the syllabi and were responsible for the curriculum and content, but for lectures and teaching sessions the students had to visit facilitating places and private teaching institutes (MP3-Nishakumari, 2011).

From the beginning of BIT, the use of ICT to communicate the programme was given special consideration allowing students to practice the use of ICT. All information about the programme such as registration, curriculum, examination, etc. has been published on http://www.bit.lk. Initially it was an information website but later it was transformed to a student portal, which allows one to register for the program as well as to retrieve examination results as well. The BIT programme, which includes some foreign students as well, has now in the new updated eBIT version become one of the most popular IT degrees in Sri Lanka.

3.2 eBIT – The Online Version of BIT

The older BIT curriculum was revised to develop online courses considering user-centric collaborative learning pedagogy and constructive alignment. A new Virtual Learning Environment (VLE) based on Moodle LMS was established and customized. This new and localized e-Learning framework was introduced as the "Vidupiyasa" (Interface for Learning and Knowledge). Interactive online learning materials were developed according to international e-Learning standards SCORM covering 28 courses of six semesters in the BIT degree.

Video lectures were developed for selected courses and distributed using a local TV channel, CDs and online TV called Vidudahara. In order to enhance the soft skills and the background knowledge of students, Vidudahara was used to webcast video recordings in all three languages at http://www.ucsc.tv. Assessment played an important role in the learning and teaching. Hence, an e-assessment system for formative and summative tests was developed to provide on demand testing. e-BIT Virtual learning environment itself contains more than 7000 MCQ questions to assist the learning.

The new eBIT programme was supposed to increase the pass rate of the BIT degree by providing online learning materials and assessment. After one year, the pass rate of first year (Diploma of IT) courses was thrice as much as the previous rate. At the same time many students obtained good grades in their courses due to online e-Learning content and e-assessments.

3.3 FIT – Foundations of Information Technology

Despite all the improvements in the eBIT programme the step from secondary school to the more advanced eBIT courses was difficult for many students. Lack of skills in English and Mathematics was a problem that needed to be addressed. The FIT programme was for that reason designed to be a bridging programme for students that have had problems in passing the ordinary A-level exam. Feedback on the FIT programme has been positive and these courses where students can learn basic Computer science, Mathematics and English for IT are also of interest for a broader target group than presumptive eBIT students. But the FIT programme has not been promoted since it would

probably attract a lot of students and there are for the moment no persons employed to handle the examination (MP3-Wikramanayake, 2011).

3.4 NeLC – A National eLearning Centre
An UCSC based e-learning centre was started in 2002, to support the transformation of the current BIT material into interactive e-learning content and facilitate the necessary curriculum development. At that time USCS collaborated with Swedish experts and got Japanese support from JAIKA at the same time as they had a dialogue with Australian universities (MP3-Wikramanayake, 2011).

The e-Learning Centre of UCSC was established to address the proper integration of ICT in the education process in Sri Lanka. At the beginning, there was no expertise in e-Learning at UCSC and the Swedish aid organization Sida provided assistance through a planning grant. A LMS was established to provide formative assessments without e-learning content, and training programmes were conducted to improve the knowledge of e-Learning practices. These activities initiated research and development (R&D) interest about e-Learning among faculty members. Later this has been extended to establish the virtual campus of UCSC called "Vidupiyasa" to deliver ICT education through an online environment/Internet (http://vle.bit.lk) . Vidupiyasa is a framework which integrates various learning and assessment environments with the idea of serving as a centre for e-Learning all over the Sri Lankan island.

3.5 DEMP - The Distance Education Modernisation Project
In 2003 the Open University of Sri Lanka (OUSL) got funding from the Asian Development Bank for modernizing their distance education. OUSL has during the last 30 years experimented with different forms of distance education (OUSL, 2011). The project was a collaboration with the Sri Lankan Ministry of Higher Education and part of the project was to develop infrastructure to support access to postsecondary education in Sri Lanka. Participation of women in higher education has increased during the last few decades. Women's representation in undergraduate enrolment went from 47.7 % in 1978 to 54.4 % in 2006 and the introduction of online courses at the OUSL seems to match the female need for flexibility. (Gunawardena and Karunanayake, 2008)

The DEMP project later became a white elephant and out of the planned 100 e-learning centres with fast Internet access only 26 were completed. (MP3-Nandasara, 2011)   With new funding from the Asian Development Bank the 26 DEMP Access centres were restarted and renamed as *NODE centres*. According to the the Ministry of Higher Education the NODE initiative should be the new National Online Distance Education Service of Sri Lanka with a target of 150 centres strategically spread all over the island (NODE, 2011)**.**

3.6 eSri Lanka and the Nenasala Telecentre Network
Several ICT initiatives have been launched by the Information and Communication Technology Agency of Sri Lanka (ICTA) under the umbrella of *eSri Lanka*. The main objectives of the eSri Lanka initiative is to "develop the economy of Sri Lanka, reduce poverty and improve the quality of life". (eSri Lanka, 2011) For this paper where we are analyzing projects that supports an

islandwide dissemination of e-learning we have chosen the eSri Lanka initiated Nenasala telecentre network (Nenasala, 2011).

Since the very beginning Sri Lankan telecentres have had a wide variety of models and organizations. (MP3-Wijayawardhana, 2008) Nenasala is a word of Sinhala origin that means a center for knowledge and Nenasala has been the given brand name for about 600 community driven Telecentres in rural Sri Lanka. Their overall aim is to bridge the internal digital divide and to promote local commerce and culture. The national network of telecentres was developed by the Sri Lankan Information and Communications Technology Agency (ICTA) with the aim of starting and establishing 1000 telecentres in rural regions . A Nenasala telecentre could be equipped in different ways but normally with 2-4 computers and a printer. Many telecentres, but not all, have Internet access by satelite (Meegammana et al, 2010).

During the first year of establishment the telecentres normally get their Internet bills paid by ICTA, during the second year with a 50% support and then the subsidization is phased out during the next two years (MP3-KoslandaTelecentre, 2011). A Nenasala can be successful without Internet access but if the Internet connection is cut off the rate of visitors will go down and in some rural areas it is hard to find a way to get Internet access to affordable prices (MP3-Haldemmulla_Manager, 2011).

Common services in the telecentres are training in basic computer science and how to use Office packages. It is also common to have courses on digital design and image handling. When telecentres are able to provide these kind of services in isolated rural areas it is appreciated (MP3-Haldemulla_ALevelGirlStudent, 2011).

3.7 One-to-one Computing
The term one-to-one computing has lately been frequently used and the main idea   of the concept is to equip every student in primary schools with a personal computer. In many countries this has been combined with giving the students Internet access to be able to search for information and to share content. Three examples of low-cost laptop brands produced for one-to-one computing are *Intel ClassMate*, *Asus Eee PC* and the One Laptop Per Child *(OLPC) XO computer*. In Sri Lanka there are several implementations of One-to-one computing. In the so called "eVillages" the Intel ClassMate computers are provided in combination with the use of Internet in the Primary school curricula. The computers have been distributed with digital learning objects and Intel has given support for computer maintenance. (MP3-eVillage-Interview, 2011)

In the Sri Lankan One Laptop Per Child (OLPC) initiative the focus is not on Internet access or connecting the XO computers to a network. The Sri Lankan Ministry of Education has not followed the recommendations from the OLPC foundation and has chosen their own model where emphasis is on content development in the islands local languages. (MP3-Gunadasa, 2011) Thirteen schools have been selected for the first pilot that will be evaluated during 2011.

The schools are located all over the island with students from various ethnic groups but all schools are in poor rural areas.

4. Analysis and Discussions

The transformation of the BIT programme to the technology enhanced eBIt has in many ways contributed to an improvement in the level of Sri Lankan e-learning and pass rates in distance education have certainly increased. From a pass rate around 2% in the early batches, some courses have increased the number of students passing to above 70%. In striving to remove the barriers to higher education the FIT programme must be seen as an amendment and the UCSC national e-learning centre has developed a lot of high quality content during the last decade. From several aspects the overall ICT situation has improved in Colombo and other urban areas but to bridge the internal digital divide the analyzed initiatives are a good start but not the solution. More must be done if Sri Lanka should live up to the ambition of "*Education for all*".

In the Northern region Jaffna has its own university, OLPC schools and telecentres, but the infrastructure and ICT facilities are still suffering from the 30 years of Civil war. Not more than 50% of the 600 Nenasalas could be classified as *in order and sustainable*, but this is far better than the telecentre situation in many other countries in the developing world.

The first year of one-to-one computing and XO computers in primary schools has not been evaluated and the official assessment from the World Bank has been delayed. But according to teachers in the primary schools there is a positive impact when it comes to both formal and informal learning. There have been problems with hardware as well as software support but the common opinion among teachers, students and parents seems to be that the pilot should be extended and made permanent.

5. Conclusions

After the ending of the 30 year long civil war, the Sri Lankan island has entered a new phase with a lot of interesting possibilities. The economy is growing fast and in 2010 the Colombo bourse was Asia's second-best performing market. Many sectors in industry, and not at least the IT-sector, have a huge demand for educated manpower. The traditional approach of providing education doesn't accord to the current demand and it does not increase social integration. ICT must be integrated in primary and secondary education to minimize the digital gap. The OLPC initiative is a good example in this direction. However, the island's schoolnet (www.schoolnet.lk) could be more productive and promote and support ICT in Sri Lankan education.

The described and analyzed initiatives together have improved the life for people in rural areas but if everyone should be included there are more actions to be taken. Specially, there should be good coordination between different initiatives to achieve overall objectives. Indirectly, some initiatives could benefit or complement each other but with a better overall coordination and linking mechanism, there would probably be more benefits than those we have

observed in our analysis. An island-wide ICT support for lifelong learning would also be a preventive peace-keeping project in a country where different population groups need to strive in the same direction to improve future development.

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Appendix A – Sri Lankan NODE Centres

Differently-abled persons with ICT ability – inclusion and empowerment in Sri Lankan rural areas via Telecentres

Peter Mozelius
Stockholm University, Sweden
mozelius@dsv.su.se

Niranjan Megammaana
Shilpa Sayura Project, Sri Lanka
niranjan.meegammana@gmail.com

Abstract

ICT facilities are unevenly spread in many countries and Sri Lanka definitely has its *internal digital divide*. The fast growth of ICT services in urban areas is not matched in the countryside. Telecentres in the *Sri Lankan Nenasala network* have frequently been used to support poor and isolated regions in an attempt to bridge the digital divide. This article is based on observations and interviews with the staff at the Koslanda Nenasala during two visits to the telecentre. The aim of this case study is to examine and discuss if a telecentre managed and operated by disabled persons could serve as a hub for inclusion and empowerment of other disabled people in a rural region. Findings shows that disabled persons can organize and run a telecentre in an innovative way with results above average. The Koslanda Nenasala has contributed to empowerment and career opportunities for disabled people in the region. The Koslanda organization and service model has also been replicated at five other telecentres in the Sri Lankan *Hill Country*. Other problems identified for a telecentre run and used by disabled persons are the costs for qualified staff and transportations. Telecentres in general depend on Internet access and this dependency is even stronger for a telecentre managed and used by disabled people.

Keywords: ICT4D; Inclusion; Telecentres; Nenasala; Education for all; Sri Lanka.

1. Introduction and Aim

1.1 ICT in Sri Lanka
The history of computers and computer science in Sri Lanka started in 1967 when the first mainframe computer was brought to the island and soon programming and computer science became an integrated part of mathematics at university level (MP3-Wikramanayake, 2011). A broader acquisition of computer and communication technologies in Sri Lanka started with the opening up of the economy in the late 1970s and its integration into globalization process.

In the 1980s the use of computers and IT still was, as in most other countries around the world, a privilege of the elite. Towards the end of the decade private as well as public institutions started to computerize their systems. The pioneers were airlines, travel trade and financial services and some public institutions. Currently, the industry, and private and public institutions use computers in their daily work and major information centres and libraries are also automated (Hansson et al, 2010).

These infrastructural developments made it possible for Sri Lanka to enter the *information super highway*, but access to computers and the Internet was still in 2010 not for everyone. In Sri Lanka data communication facilities are mainly limited to Colombo and its environs in the western province and major provincial towns such as Kandy, Galle, and Batticaloa. In rural areas, where over 75% of the population lives, the infrastructures are not at all as good as in urban regions (Hansson et al, 2010). In current attempts to bridge the *internal digital divide* the installation of telecentres in poor rural areas could be seen as an important initiative (Gaiani et al, 2009 b).

1.2 Disability and Inclusion in Asia and Sri Lanka

Like other Asian countries human potential is often being wasted across rural areas where unemployment is high, especially among women and people with disabilities. Sri Lanka has a relatively good infrastructure but for impaired persons it is not easy to commute or migrate for work (Srikanthan and Harrigan P, 2009). Estimations tells us that roughly 10% of population is disabled by physical, mental or sensory impairment in all countries but the types of disability can have regional variations (Hansson et al, 2009). Aid projects and ICT initiatives with specialized support for disabled people can have a positive impact both when it comes to individual empowerment and the support of the local community (Mozelius et al, 2008).

In Sri Lanka disabled students at universities can get assistants and ICT tools have been developed for things like speech synthesis in English as well as in Sinhala and Tamil. But when it comes to transportation services in rural areas Sri Lanka is poor and with less support than their neighbour India (MP3-Koslanda, 2011).

1.3 *Aim*

The aim of this study is to analyze and discuss the activities of Lankan telecentres and their potential for supporting inclusion in the island's rural regions.

2. The Nenasala Network and the Koslanda Telecentre

The telecentre movement started in the 1990s when the Internet became an integral part of daily communication in many countries. Some people in developed countries were able to buy their own computers and Internet connections, but many others depended on some kind of shared access (Colle and Roman, 2003). A traditional narrow definition of a telecentre is that:

"… a telecentre is a place that offers the public connectivity with computers and networks", but a broader more modern definition might be that a telecentre is: "*a public place where people can get a variety of communication services and whose aim is to benefit the community"*. Because of its implicitly narrow focus the term telecentre might arguably be out-dated and a term like knowledge centres or information centres could be more suitable (Gaiani et al, 2009 a).

In Sri Lanka the Sinhala term *Nenasala* is used, which translated to English would mean center for knowledge (Meegammana et al, 2010). Telecentres are by design targeted to bridge the digital divide and support inclusion, but the lack of this has often been the overarching theme in contemporary discussions on development. There exists a unanimous agreement within governments, NGOs and corporate and international organizations that no development is true development unless all forms of divides are addressed with equal access to development (Gaiani et al, 2009 b).

In Sri Lanka the telecentre network started when the *eSri Lanka* project was initiated by the Information and Communications Technology Association (ICTA) in 2004 in collaboration with the international IT company Intel. In the early pilot 20 telecentres were started with World Bank funding under the name of *Vishwa Ghana Kendra* (VGK) (Gaiani et al, 2009 a). Later the VGK became a national programme with the aim of constructing 1000 telecentres with a geographical spread covering the island's rural regions. So far (27/02/2011), around 600 Nenasala have been set up by the Sri Lankan government. Nenasala Telecentres can be set up in several models but with the initial ICTA funding this is mainly done with 2 to 4 computers, a printer and broadband internet access (Meegammana et al, 2010).

In 2005 a telecentre, owned as well as operated by a disabled family, was started at Koslanda in a Tamil speaking region of the Sri Lankan Hill Country. At that time ICT facilities were rare in Koslanda and its neighbourhood. Initially the telecentre got the same initial support as all other Nenasala in Sri Lanka but later they received additional funding from aid organizations in other countries (MP3-Koslanda, 2011). The organization of the Koslanda Nenasala is a family project where Srikanthan mainly takes care of administration, project planning and software support meanwhile his brother Chandrakanthan handles hardware issues. Operators and teachers are all female and, as often in rural Sri Lanka, women are found to be more reliable workers than men (Srikanthan and Harrigan P, 2009).

At the Koslanda telecentre the major part of the clients are local people living in Koslanda and its surroundings in the Hill Country but there are international clients as well. A partnership has been established with the *NLingua Services*, a New Delhi based company. Voice transcriptions and other translation services have been done for an international target group by Koslanda residents. Audio files in Tamil, Sinhala and English languages can be transcribed in all possible directions (Wattegama, 2009).

3. Methodology

3.1 Observations
Observations were conducted during 2 visits to the Koslanda telecentre in July 2010 and February 2011. During these visits computers and software were used, tested and discussed by telecentre visitors, staff and the authors.

3.2 Interviews
Interviews could be defined as purposeful discussions between two or more people (Kahn and Cannell, 1957). Different kinds of interviews can help you to collect and select relevant data for your research questions and analyses. Interviews can be anything from strictly formalized interviews using standardized questionnaires to informal and unstructured conversations. The interviews conducted in this research should be classified as semi-structured interviews (Scribd Inc, 2010).

3.3 MP3 Recorded Interviews
Research studies on how people understand and interpret information and concepts, are often based on interviews and conversation methods. Academic research has a tradition of deep interviews as one of the most valuable research tools. For many years interviews have been captured by the interviewers taking notes during conversations. In journalism interviews have been recorded for a long time, but the academic default standard has been written text and shorthand in the collection of research data. The use of modern digital audio technology in the capturing of research data provides new opportunities for an improved storage and analysis of voices and dialogues. (Mozelius, and Hansson, 2009).

In this paper five of the most important informants were captured in four MP3-files. At an IT symposium in August 2008, an interview was held with one of the main architects of the Sri Lankan Nenasala network (Wijayawardhana, 2008). During the second visit to the Koslanda telecentre in February 2011 a conversation with the owner and one of his female employees was recorded (MP3-Koslanda, 2011). Since the female telecentre teacher was a bit reluctant about the recording her name will be omitted in this article. An important principle in action research and case studies is to respecting people's integrity within an agreed framework of ethics (Cohen et al, 2007).

4. Findings and Discussions

During recent years the staff at the Koslanda telecentre have developed a wide variety of computer based training in the field of IT. They provide a lot of shorter courses in areas like basic computer science, hardware, office packages and web design. Teaching sessions are given in Tamil, Sinhala and English. One of the female operators, who is originally from Kandy, has Sinhala as her mother tongue and has been working in aid projects in Ethiopia and Kenya with English as the main language (MP3-Koslanda, 2011). Her Tamil skills are good as well and she gives multi-lingual teaching sessions in mixed groups. Language skills could be seen as a speciality at this telecentre and translations of audio files have been one of their services where they have had international clients.

The Koslanda Nenasala also gives special services for other disabled persons in the neighborhood including vocational training. In a region where transportation facilities for people with special needs have been neglected these specialized ICT services have been appreciated. On Srikanthan's initiative an association for disabled Sri Lankan persons has been started and ICT services and software have been provided. Since transportation is a problem, online communication and email correspondence have been important tools. Telecentres in general are dependent on Internet access and in the Koslanda case the dependency is even stronger. During periods without Internet connectivity the number of visitors has decreased and in the association for disabled persons, communication between members has suffered. The telecentre has got additional support from external aid organizations in other countries and with German funding a *tuk-tuk*, a modern motorized version of the traditional three wheel rickshaw, was purchased. This has been a very useful vehicle for visits to other telecentres and the transportation of members in the association for disabled persons.

As all other telecentres in the Nenasala network Koslanda got an initial support for Internet provision with full compensation during the first year and then the subsidization has been phased out over five years. Broadband by satellite has mainly been the alternative but in rural areas the access subscription has been costly and the download speeds are still in 2011, often at an unacceptable level. Measurements done by the Sri Lankan Telecommunication Regulatory Commission (TRCSL) shows transmission values as low as 100 Kb/s in rural regions (Daily News, 03/03/2011).

But Koslanda has now a situation that is better than average when it comes to Internet access since broadband by fiber is under construction and will be ready to use in 2011. The broadband fiber connection to Koslanda's rich neighbor Wellawaya will be extended and fast reliable Internet access will be provided for a reasonable cost. This is a service that all telecentres in the region are longing for. At the Haldemmulla telecentre, not many kilometers away, no reliable Internet connectivity is available for the moment and the rate of visitors has dropped (MP3-Haldemulla, 2011).

Another problem that Koslanda shares with other telecentres is the cost of hiring skilled staff. This telecentre currently has staff with not only knowledge in the field of ICT. Chandrakanthan is experienced in the area of hardware and the teachers have excellent language skills. But their salaries are definitely lower than what is the case in an urban Internet café or IT learning centre.

With funding from various international aid organizations the Koslanda telecentre is better equipped than the average telecentre but still some important tools for disabled persons are missing. One example is software for speech synthesis in local languages to support the visually impaired. However, the Koslanda telecentre model has been successful and already replicated at five other telecentres in the Sri Lankan Hill Country.

Capacity building and empowerment has not only taken place for the telecentre visitors but also for the people that own and run the telecentre. A good example is Srikanthan himself, recently married and a candidate in the local elections. The most important issue for Srikanthan in politics is how to provide improved job opportunities for the inhabitants in Koslanda.

Image1.
Srikanthan, a candidate in the local elections   Photo: Peter Mozelius

5. Conclusions

Transportation is a huge problem for many differently-abled persons and in rural regions in developing countries solutions are sometimes hard to find. In Sri Lanka the support for transportation for disabled persons is even worse than in neighbouring countries like India. The purchase of a motorized vehicle has been valuable for the telecentre and opened up opportunities for an expansion. Several telecentres in the region could now run and be coordinated from Koslanda.

Like many other telecentres, schools and learning centres in rural areas, access to Internet is crucial. One factor that will improve future activities at the telecentre is the introduction of fast fibre-based Internet in Koslanda. Most practical problems are the same for disabled persons and others but there also exist special needs that should be given additional facilitation.

Koslanda telecentre has got more support than the average telecentre in the Nenasala network but the fact that a telecentre is owned and managed by a disabled family must be seen as a success story. Support is important for the differently-abled but their own commitment is the key to success. Out of around 600 originally started Nenasalas in Sri Lanka about 50% could be classified *as in order and sustainable* and the Koslanda Nenasala is definitely one of them.

Disabled people currently have worse opportunities in rural regions than in urban Sri Lanka. Telecentres could empower their visitors as well as their owners and support differently-abled persons with special needs.

6. Acknowledgement

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E-learning system implementation: critical success factors in cross-border delivery

Mariam Munawar
Ryerson University, University of Toronto, Canada
mariam.munawar@ryerson.ca

Ibrahim Munawar
Ryerson University, University of Toronto, Canada
ibrahim.munawar@utoronto.ca

Wendy Cukier
Ryerson University, University of Toronto, Canada
wcukier@ryerson.ca

Abstract

This paper examines critical success factors (CSFs) for e-learning system implementation. Specifically, open, distance and e-learning (ODEL) systems are discussed, with a look at cross-border delivery. ODEL projects fail due to a number of obstacles. By identifying CSFs, an institution can prevent failure and ensure success, specifically where cross-border education is of concern. This paper outlines five CSFs for e-learning system implementation:

(1) compliance to basic project management processes
(2) identification of stakeholders,
(3) adequate training,
(4) accurate cost/schedule estimating, and
(5) quality assurance through usability considerations.

Introduction

Cross-border education has seen a recent surge of interest as globalisation and information and communication technologies (ICT) fuel the ease of learning across national borders, with open, distance and e-learning systems allowing an individual to access content from another country within the comfort of his or her own residence. This is leading to a demand for cross-border education, resulting in an increase of initiatives designed to export education to reach an international audience.

As institutions rely on electronic means to deliver educational material, e-learning systems are rising to prominence; however, organizations must accurately manage an e-learning initiative to ensure its success, and this becomes even more important and complex in cross-border delivery. By following project management principles, specifically tailored for e-learning initiatives, an organization will be able to reap the fruit of its efforts.

E-learning initiatives are different than other projects, and those that deal with cross-border delivery tend to be even more specialized. E-learning projects are generally smaller than most other plans described in project management guides, often demanding rapid deployment with high quality outcome and little budget (Lynch & Roecker, 2007). The projects differ in that expectations for success are high and financial support generally low.

This paper identifies five critical success factors through a project management lens, which have been informed through analysis of the literature on this subject. These five CSFs include following basic project management principles and models, identifying key stakeholders, providing adequate training, accurately estimating cost and scheduling, and assuring quality through usability considerations.

CSF#1 Compliance to Basic Project Management Processes

The first critical success factor identified for successful implementation of e-learning systems is compliance to basic project management processes. Institutions can successfully launch e-learning if basic processes such as structure, planning and accountability measures are in place from the outset; identifying the project's purpose and goals, with milestones and deliverables created for each phase, is necessary to prevent failure (Pasian & Woodwill, 2006).

Using metrics is another basic. To ensure success of the system, it is important to focus on what is achievable, and this is aided through use of metrics for measurement of progress. Use of metrics must be approached with caution, and need to be defined accurately.

Avoiding hastiness is also a project management basic, and is critical for successful implementation. Hastiness results from an organization's rush to implement e-learning by transforming instructor-led training materials to e-learning content by individuals who do not have skills in instructional design or courseware development. This results in misaligned material that does not address the needs of the target audience (Mayberry, 2002). When dealing with cross-border delivery, this becomes even more sensitive as it is necessary to ensure that content is aligned within the socio-cultural context of the receiving country.

For projects that have been dealt with hastiness, Mayberry (2002) offers a solution through *e-learning redemption*, a process of converting a failed project to one that is functional. The process works through a gap analysis, where the current state of the project is assessed and its future state identified, with metrics defined to measure success. Although this process is 'redemption' it works well in the case of 'creation', at the start of the initiative to prevent failure. A useful set of tools for the redemption process include: a statement of work, a problem statement, project scope, current project status, a style guide, communication protocols, file management and version controls, quality checks, and an action plan (Mayberry, 2002).

Another project management basic is following a model as a blueprint. Numerous e-learning project management models exist and can be utilized in the launch of a cross-border ODEL initiative. New models continuously emerge; it is important to select an appropriate blueprint from the outset. Such models attempt to create frameworks to address user concerns due to the challenges presented by use of new technology, in an effort to make the most of the e-learning experience (Engelbrecht, 2003).

These frameworks serve as valuable tools in strategic planning, offering a method to evaluate existing e-learning initiatives as well as critical success factors (Engelbrecht, 2003). One of the top reasons e-learning projects fail is the inability to create an organizational context for producing e-learning, one that takes into account the most pressing business needs (Lynch and Roecker, 2006); successful e-learning implementation is dependent on building a strategy that meets both the needs of learners as well as the goals of the institution (Engelbrecht, 2003).

One useful framework developed by Holsapple and Lee-Post, called the *E-learning Success Model*, can be used to influence the design, development, and delivery of successful e-learning initiatives (figure 1). In using an information-systems centred approach, the researchers argue its validity because of its ability to recognize needs of users by harnessing the potential of new technologies. The model explicitly defines how to measure and assess success, with use of specific metrics. It defines three stages of e-learning system development: design, delivery and outcome analysis, and emphasizes measurement of success at each stage.

At the design stage, success is measured according to (1) *system quality*, which assesses desirable characteristics of the system such as ease of use, and user-friendliness; (2) *information quality*, which evaluates the content in terms of being organized, useful, and up-to-date; and (3) *service quality*, which measures interaction. A top reason for e-learning project failure is the inability to integrate multimedia effectively (Lynch & Roecker, 2007), with typical symptoms of failed projects relating to design issues such as "poor navigation structure; inappropriate graphics, animation, and interaction; content that lacks chunking; and buried or hidden content" (Mayberry, 2002). Thus the design stage of this model is a necessary step for success.

At the delivery stage, the success factors are (1) *use*, which measures extent to which course elements are used, such as PowerPoint slides, audio and visuals; and (2) *user satisfaction*, which measures opinions of users is regards to their satisfaction.

At the outcome stage, success is dependent on the *net benefits* of the e-learning system, which compares the positive and negative aspects such as enhanced learning and time savings, versus technology dependence and quality concerns.

System design

System Quality
1. easy-to-use
2. user friendly
3. stable
4. secure
5. fast
6. responsive

Information Quality
1. well organized
2. effectively presented
3. of the right length
4. clearly written
5. useful
6. up-to-date

Service Quality
1. prompt
2. responsive
3. fair
4. knowledgeable
5. available

System delivery

Use
1. PowerPoint slides
2. audio
3. script
4. discussion board
5. case studies
6. practice problems
7. Excel tutorials
8. assignments
9. practice exam.

User Satisfaction
1. overall satisfaction
2. enjoyable experience
3. overall success
4. recommend to others

System outcome

Net Benefits
Positive Aspects
1. enhanced learning
2. empowered
3. time savings
4. academic success
Negative Aspects
1. lack of contact
2. isolation
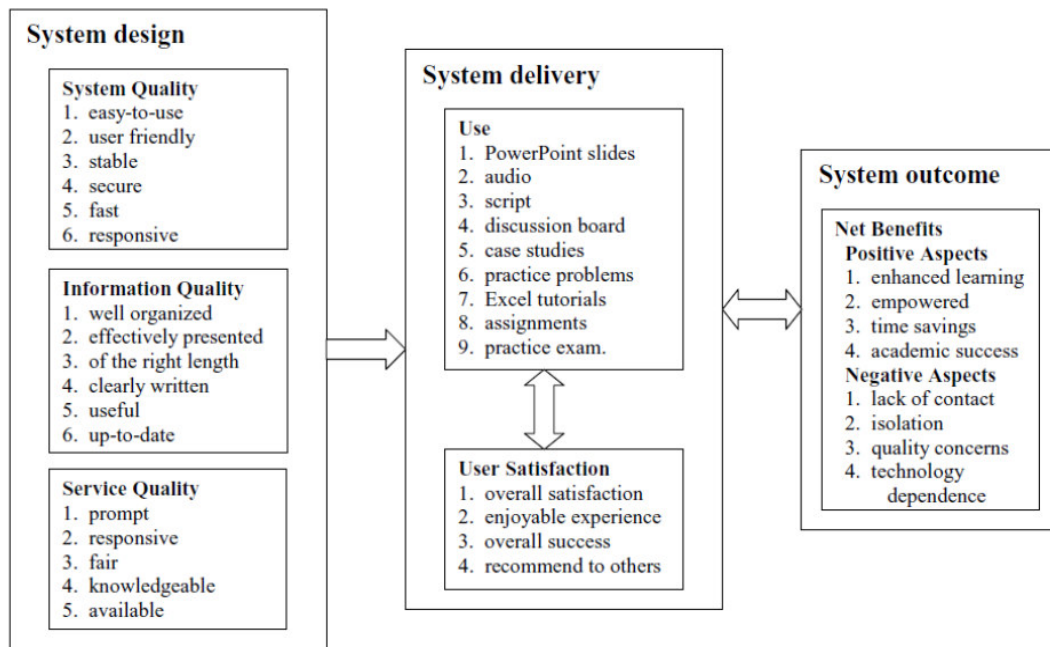3. quality concerns
4. technology dependence

Figure 1: E-learning Success Model and sample metrics (Holsapple and Lee-Post, 2006)

Beyond having a model to follow as a project management blueprint, a model to analyze instructional design (ISD) processes is as crucial at various stages of the e-learning implementation to ensure ISD is met at all levels. Lynch and Roecker (2007) use the familiar ADDIE model to aid analysis of instructional design tasks at various stages of e-learning project management. The ADDIE model forces an organization to **A**nalyze, **D**esign, **D**evelop, **I**mplement, and **E**valuate. On a similar note, Holsapple and Lee-Post (2006) suggest use of Action Research Methodology to validate their E-learning Success Model. The Action Research Methodology consists of five phases, not unlike the ADDIE model, which include: diagnosing, action planning, action taking, evaluating, and learning (Holsapple and Lee-Post, 2006).

It is suggested that prior to embarking on an e-learning system implementation, a strategic planning process be conducted (Engelbrecht, 2003). Such a process begins with an analysis of the current state, which will be used to inform a vision, and then a mission statement. After this has been formulated, use of a series of analyses to gain an understanding of the macro and micro environments is encouraged, including use of Porter's 5 Forces to analyze competition within the industry as well as the competitive pressures that would affect implementation of the e-learning system (Engelbrecht, 2003). A SWOT analysis can also be used to identify internal strengths and weaknesses against a backdrop of external opportunities and threats.

CSF#2: Stakeholder Identification

Another critical success factor for successful e-learning project implementation is stakeholder identification. The inability to clearly delineate roles and responsibilities for various stakeholders is a cause of failure, as is the inability to

keep stakeholders aligned with an organization's e-learning goals (Lynch & Roecker, 2007). Researchers stress that ensuring all team members are kept in the loop from the beginning is vital; communications and expectations need to be managed throughout the life cycle of the project (Pasian & Woodwill, 2006). Misunderstandings are especially crucial to control, and are more prone to exist where technology is of concern due to the uncertainty that surrounds it. Successful implementation of an e-learning project is dependent on the extent to which the needs and concerns of stakeholders are identified and addressed (Wagner, Hassanein, & Head, 2008). This becomes especially relevant in cross-border delivery as more stakeholders exist, sensitive to the goals of the e-learning initiative.

In the context of e-learning in higher education, stakeholders include students, instructors, educational institutions, content providers, technology providers, accreditation bodies and employers (Wagner, Hassanein, & Head, 2008). Specifically in the context of cross-border education, UNESCO and OECD identify six key stakeholders: governments, higher education institutions/providers, student bodies, quality assurance and accreditation entities, academic recognition bodies, and professional associations (UNESCO/OECD, 2005).

CSF#3: Adequate Training Procedures

A third critical success factor for e-learning project implementation is appropriate skills development. It is unrealistic to expect that each user of an e-learning system will be at the same level of familiarity and experience as the other; the learning curve must be understood and addressed (Pasian & Woodwill, 2006). Different stakeholders will have different learning needs: instructors need to understand how to communicate effectively online through interactive course development; learners may not be familiar with technology, and may not find it as attractive to use as traditional learning materials (Pasian & Woodwill, 2006). This becomes even more pronounced in cross-border delivery because needs of learners in different countries add another level of complexity that must be understood and managed.

E-learning training programs often fail because learners are not given enough time to understand how to use the technology (DeRouin, Fritzsche, & Salas, 2004). Although technology is intended to increase efficiency and ease, it requires the existence of a specific digital skill-set. Providing trainees with enough time to learn these skills so as to tackle barriers to digital skills uptake is crucial.

The necessary anticipation of learner needs will allow for development of processes to aid in learner skills development. Halpern (2002) observes that adults assume learning is not a difficult task, but when they realize it is not as they had expected, frustration arises (DeRouin, Fritzsche, & Salas, 2004). In order to tackle this, it is helpful to calibrate expectations by warning learners of the perquisites to using the technology (DeRouin, Fritzsche, & Salas, 2004).

CSF #4: Accurate Cost/Schedule Estimation

The fourth critical success factor for e-learning project implementation is the need to accurately estimate the cost of the system. Inability to do so has cost organizations millions. One common pitfall of implementing an e-learning system is "believing that e-learning is automatically a cheaper training alternative" (Weaver, 2002). This is more pronounced in cross-border educational settings where the lack of physical presence in another country may tempt institutions to considering it an inexpensive option. This is not to say that e-learning initiatives do not realize cost-savings; rather, the emphasis on forcefully trying to achieve savings is a flawed approach (Greenagel, 2002). Researchers and consultants argue that e-learning should not be assumed a cheap solution, and although economies of scale may be reaped in the future, it is still a doubtful feat; e-learning should be "justified on its own terms – in opening up access to lifelong learning or in providing richer environments for learning" (Attwell, 2003).

It is important to accurately estimate and identify the costs associated with e-learning solutions. Cost will differ for different institutions, and will depend on the type of e-learning solution an institution is offering. E-learning is an activity that adds value to the institution, and has its share of start-up and running costs, with start-up costs being typically higher in contrast to ongoing operations (Schechter, 2009). It is important for organizations to realize that allocating an appropriate budget upfront is critical for realizing the savings that will eventually ensue.

One of the biggest factors influencing e-learning cost is the size and complexity of the training program (Henderson, 2003). Expenses include software applications to create the e-learning system, establishment of management functions, course creation, enabling delivery as well as ongoing costs in the form of content creation and maintenance (Schechter, 2009). Costs are further incurred through the need for planning, infrastructure, installation, bandwidth, and systems integration, along with ongoing communications and marketing needed to ensure that learners are indeed using the system (Weaver, 2002).

Oftentimes organizations will overlook these costs and make purchase decisions based solely on the cost of course content, severely undercapitalizing the e-learning program and making it run significantly over budget (Weaver, 2002). This is very important to avoid in cross-border delivery where course content should not be the only factor in allocating an appropriate budget.

To help with accurate cost estimating, it is encouraged to thoroughly understand the cost of the individual components of the e-learning system; four key cost areas will help a project manager make an informed decision: E-learning courseware costs, course delivery costs, marketing communications costs, and administration and support costs (Henderson, 2003).

One way of understanding costs associated with e-learning implementation is the use of a return on investment (ROI) analysis, which helps quantify unavoidable risk. There are two types of ROI analyses that can be done: a *cost*

analysis which analyzes the savings realized, and a *value analysis* which assesses how the system brings value to the institution (Henderson, 2003).

Factor #5: Quality Assurance

The fifth critical success factor for e-learning system implementation is the importance and emphasis on quality. Every project plan needs to have a quality component, but in reality, few do. Quality assurance is becoming an important area of concern in cross-border delivery.

One way to ensure e-learning system quality is to incorporate usability within the system (Pennaa & Starab, 2007). Many e-learning projects tend to fail for a number of reasons, and a major contributor is poor usability (Miller, 2005) which reflects the overall quality of the system. Usability is a complex outcome of the effectiveness, efficiency and satisfaction a user obtains from the e-learning experience (Pennaa & Starab, 2007). Usability is the extent to which an application is learnable and allows users to accomplish specific goals effectively and with a high degree of satisfaction; it is a usable application that is meaningful to learners (Miller, 2005).

Luarn et al. (2002) provide a set of critical success factors for ensuring the success of an e-learning application; these should be considered by an institution in the usability design of a cross-border e-learning system. The factors include (1) *enhancement of learning performance* which describes how an e-learning system improves the skills and abilities of a learner, (2) *provision of after class services* which describes the types of after-class services a learner is provided, such as tests and exams, to measure progress and communication with instructors, (3) *maintenance of environmental quality* which describes the type of learning atmosphere a learner is provided in terms of software, hardware, space considerations, etc., (4) *establishment of an interactive mechanism* which describes the degree of interaction a learner is provided, (5) *provision of flexible learning* which describes how much flexibility a learner is afforded through the e-learning system and (6) *satisfaction of user needs* which describes the overall ability of the system to cater to the user.

Conclusion

Cross-border education is being facilitated through ODEL initiatives that rely on use of e-learning systems to electronically export education across national borders. As cross-border education experiences a rise in popularity, the number of initiatives is increasing, and it is becoming imperative for institutions to avoid failure in planning such programs. Appropriate project management of e-learning systems can be used to implement successful cross-border delivery. Through an examination of literature on this subject, this paper identified five critical success factors, which, if used appropriately, may help an institution avoid failure and save on costs.

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The Free Online Secondary School (FOSS): a solution to the obstacles of Secondary-School homeschooling

Mustafa Munawar
University of Toronto
mustafa.munawar@gmail.com

Abstract

This paper examines how eLearning creates an alternate means of studying for secondary-school students. Students who would otherwise attend a traditional brick-and-mortar school can now study and graduate from secondary school at home, through homeschooling. Homeschooling is favored for a number of reasons that include not having enough funds for traditional school, religious purposes, and not residing in proximity to a traditional school, inter alia. However, obstacles exist that prevent aspiring homeschoolers from studying from home. The problems that are preventing this knowledge to be universally accessible are discussed, along with various solutions. This paper lays the foundations for the development of an open, free, eLearning-based secondary school that homeschoolers can use as their primary form of study. It will provide a complete environment from start-to-finish for any aspiring homeschooler. This online school is called the FOSS (Free Online Secondary School), and is implemented as a web application, and is made available with the help of qualified volunteers.

It is a fundamental human right for individuals to be given the chance of having a school education. Schooling for secondary-school students is of particular importance since it builds the intellectual foundation of the individual that he or she will subsequently use for his entire life. For the purpose of this article, the term secondary school refers to the usage used in the United States system from grades 7-12, which generally maps to the age range 12-18.

Students who complete their secondary-school within the confines of their homes (usually using some form of eLearning) are said to be *homeschooled*. Homeschooling is the process in which secondary-school students do not attend a traditional school, but rather study the curriculum from home using predominantly online methods. Studying can either be done entirely individually, with the help of a guardian, such as a parent, or as part of a virtual classroom. The virtual classroom provides the closest experience to a traditional school, but it tends to be rather costly, and as such not viable to many.

Students choose homeschooling for various reasons, such as not being able to afford tuition fees, or having a certain disability, or even for religious reasons. Therefore, it is incumbent open the community at large to make sure that homeschooling is a viable option to all students on an equal and unbiased basis.

There are many options that are currently available for aspiring homeschoolers, but they have some obstacles. One of the biggest obstacles is that they do not provide an Open Learning environment, and thus are not aligned with the values of social justice (Gaskell, 2008). This paper provides a proposal for a free, open secondary school, which is called the Free Online Secondary School (FOSS). The FOSS would provide solutions to the various obstacles that secondary-school homeschoolers face. The mission of the FOSS is simple: To create a free, open, high-quality, online secondary school for any student who wishes to complete his/her secondary education, regardless of his/her income level, gender, race and residence.

Cost and Curriculum

One would assume that the cost of online-based secondary-school homeschooling would be far less expensive than traditional schooling. This assumption is warranted because an online school does not incur the same costs as a traditional school: there is no physical premise for the school, the courses are delivered digitally and thus no printing costs (as opposed to textbooks), there are no school uniforms to be bought, etc. However, a quick survey of the various online homeschooling players reveals, in many cases, that homeschooling can be relatively costly.

The solution proposed to solve this obstacle is one of the key principles of the FOSS: to make the entire school free of any monetary requirement, and accessible to all regardless of income level. The FOSS would create, with the help of professional volunteers, a completely 'free' curriculum that is tailored for the 'average' secondary school. Most of the content in this curriculum would take a least-common-denominator approach, and would attempt to be compatible with the major countries education systems. For example, the subjects Physics and Mathematics for the various years would take into account how they are taught in different countries, and the curriculum would incorporate any and all differences.

An important rule for the FOSS is that it advocates a single worldwide curriculum. This means that a student who is using FOSS in Canada will study the same material and curriculum as a student using FOSS in Germany. Having a single curriculum used by every student regardless of his/her physical location is of utmost importance for various reasons. First, this would make maintaining the curriculum easy. Educators and content creators would only need to be worried about the correctness of a single system, versus maintaining various systems for different countries. Secondly, it would provide a unified benchmark for students to gauge how they are performing relative to other students. Thirdly, higher-education institutes would find the FOSS 'graduates' more credible because of the unified nature of the curriculum. Fourthly, students can easily collaborate with on another without worrying that another student may be part of a different curriculum. Lastly, students who 'move' from one physical location to another can continue to use FOSS without interruption.

Another important consideration is the language used for FOSS. The language used for the curriculum's content will initially just be English. Eventually the

FOSS system will support the world's major languages such as French, Hindi and Arabic. Supporting various languages is of paramount importance, because it is one of the ways that will enable FOSS to achieve its mission of a universally-accessible secondary education. In particular, supporting languages that are common in third-world nations is arguably a top priority since the people who live in these areas may simply not have the luxury of a quality education that is available in first-world nations. The FOSS may actually be their only option to get a quality education.

Assessment

A primary obstacle that hinders would-be secondary-school homeschoolers is the fear of not being assessed professionally. Assessment is critical in that it aids the student (and his/her guardian) in gauging the student's performance. Assessment can be broken up into two types: *Internal Assessment* and *External Assessment*. Internal assessment is assessment conducted by the school, usually on a continuous basis. External assessment is assessment not conducted by the school, but conducted by third-party organizations or governmental bodies. Both of these types of assessments are critical to a healthy homeschooling environment for secondary-school students.

Fortunately, external assessments are as readily available to homeschoolers as they are available to traditional scholars. . Not-for-profit organizations and bodies, which are usually called examination boards, hold exams at various locations throughout the year and provide a standardized means of gauging students. They do not discriminate between someone is homeschooling or schooling in the traditional manner. Some notable examination boards include The Collegeboard (based in the Untied States) and Edexcel (based in the UK). A notable drawback of external assessments is that they are not offered gratis—there is usually a small cost involved.

As for internal assessments, students who attend traditional school have a clear advantage. Students who attend traditional brick-and-mortar secondary schools do not suffer from the lack of internal assessments because assessment is deeply integrated within the system. For example, homework is continuously handed out and graded, and likewise there are term tests and assignments that gauge the performance of the student.

The obstacle is, then, that secondary-school homeschoolers do not have a means of being assessed (internally) in a high-quality manner. The solution to this obstacle is as follows.

Internal assessment requires that the student's progress is somehow monitored. So, there must be someone who is actively monitoring the student. Additionally, this internal assessment should be continuous and summative. Continuously assessing students is far more effective than simply assessing them at the end of the year, for example (Anderson, 2011). With FOSS being a volunteer-driven program, it does not have the luxury of hiring personnel who can assess students. So, most of the internal assessment will be automated in nature. This will be done by multiple choice questions, and fill-in-the-blank

questions. For questions that are qualitative in nature, a pool of volunteers will be designated to 'grade' assignments and tests. An important consideration is that it will be difficult to proctor an exam or mid-term test, and it may open room for students to cheat. Because of this, tests and assignments will be made open-book in nature. That is, the questions on these tests and exams will be more analytical and it will be impossible or very difficult to cheat.

Engaging, interesting (non-boring) content

Because the homeschooling student cannot rely on a traditional school system that will 'force' him or her to study, it is important that the content be as engaging as possible to keep the student's motivation high. The problem is that much eLearning content targeted for secondary-schools students today is dry and theoretical.

The solution to this obstacle is two-fold. First to create highly-visual content that utilizes multiple media types like animations, video, sound. Animations in particular make a difficult concept far easier to understand (Lam & McNaught, 2006). As a fringe benefit, creating highly-visual content makes it easy for non-English speakers to understand the information (Ratwatte, 2005). Second, create content that is more practical in nature and less theoretical.

Collaboration

Students that homeschool do not have the peers and classmates that traditional students have. Homeschoolers generally rely on minimal or no collaboration at all. Collaboration and socially engaging other peers is critical to the success of an eLearning system (Kehrwald, 2008). In some cases, minimal collaboration may be done with other homeschoolers who live within the locale of one another. The biggest problem with this is that there may not always be other homeschoolers residing in a particular student's locale, and if there are, contacting, identifying and forming groups with them would be a problem. In summary, the obstacle is that it is hard for secondary-school homeschoolers to find and communicate with other like-minded homeschoolers.

The solution is simple. For FOSS, there would be a collaboration feature deeply integrated within the system, called Classmates. The Classmates feature would allow students that are in the same years to discuss problems and assignments with one another. Students could bounce ideas of one another, and gain motivation. With the rise of online video chat services, such as YouTube, students could video chat in real-time with one another as well. Of course, this assumes that students live in a similar time zone. Only positive discussion that helps foster social encouragement will be allowed with the Classmates feature. Social encouragement increases the sense of achievement for students, which is critical especially for homeschoolers ((Butle, et al, 2002).

Recognition from Higher Education institutions

Secondary-school students who take the homeschooling route are always at risk of not being accepted into their higher education institution of choice. There

are many higher-education institutions that will not accept homeschoolers, and for a justifiable reason: the institutions do not know the credibility of the curriculum that the student studied. The solution to this problem is two-fold: Firstly, as discussed in a previous section, the FOSS should enable the student to take standardized assessments whenever possible. The FOSS should choose a particular type of assessment for all of its students, regardless of where the live in the world. As discussed previously, an ideal choice is Advanced Placement assessments.

Secondly, the FOSS should hold official talks with the 20 or so major higher education institutions of the world. Once major institutions accept' students who graduate from the FOSS, other institutions who are less prestigious would also allow suit.

Recognition from Governments

Some governments mandate that homeschooling is *not* a valid means for a student to study. In Turkey, for example, it is a criminal offence to for students to homeschool (HLSDA Turkey, 2010). This situation is indeed very complex, and there is little or no solution to this obstacle. The best solution is to let the opinion of the FOSS be employing grass-roots activists who admire the vision of the FOSS. Eventually, the government may decide to accept using the FOSS as a valid means of secondary-school education.

Students who are not connected to the Internet

There are many students throughout the world that do not have a connection to the Internet. Even if they do, it is either of very low-quality or exorbitant to the degree of being unusable. For these students, alternate means of homeschooling without the Internet must be devised. This is certainly a very complicated issue, and the initial version of FOSS will assume that a student has freely accessible high-quality Internet. Subsequent versions of FOSS may support students who are not online by replicating the curriculum on low-cost Android tablets, or by using One-Laptop-Per-Child (OLPC) project.

An important note is that the curriculum may not be printed and provided on paper to non-connected individuals. This is because a lot of the content of FOSS requires a high-level of interactivity, which is only achievable using a computer-based medium.

Mockup

Presented below is a small mockup of how version 1.0 of FOSS may end up looking:
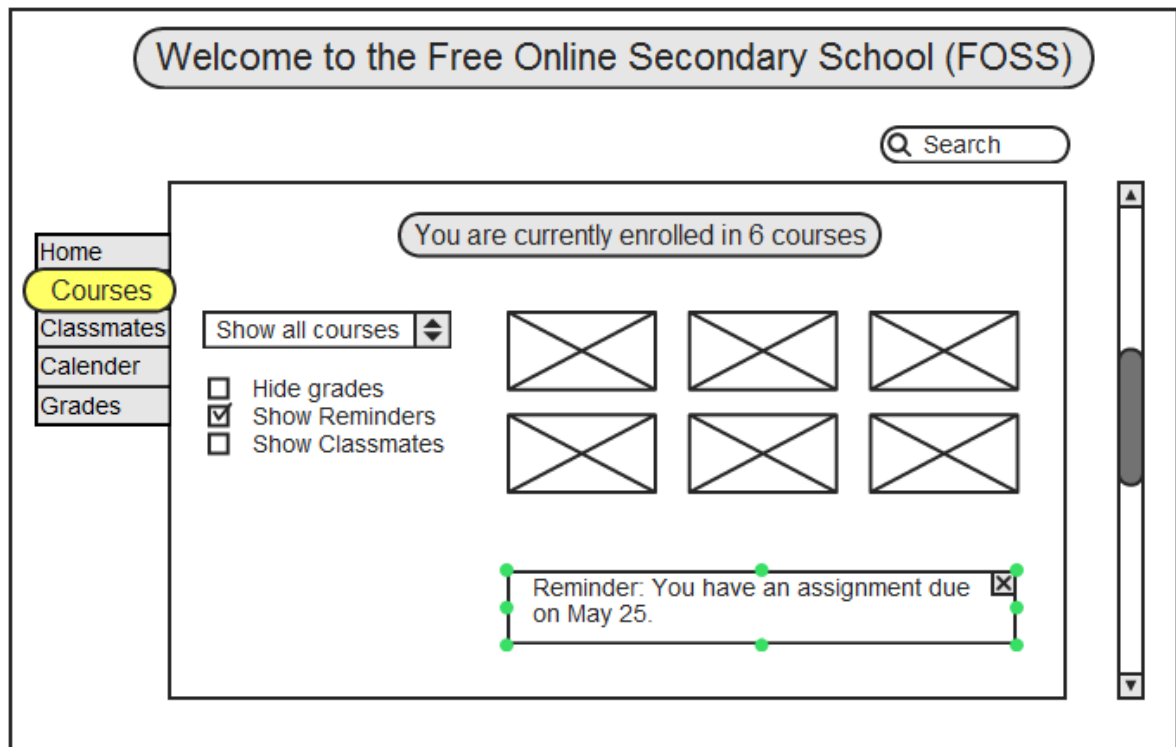
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Transnational hegemony, knowledge base and contestation

Adebayo M.A. Ninalowo
University of Lagos, Nigeria.
bayoninalowo@yahoo.co.uk
adebayo.ninalowo@gmail.com

Conceptual prelude

It is virtually incontrovertible that the historical patterns across the world are replete with instances of a spectrum of trans-territorial influence. Such enactment of influence or power may range from military coercion or forcible spatial expansion, slavery, colonialism, cultural and religious "civilizing" mission to economic and politico-ideological imperialism. The common denominator or underlying motif is hegemony, that is, some forms of imposing measures of domination, with or without the consent of subordinated societies, groups or other human entities.

The current state of techno-scientific development makes it possible to the effect that hegemonic global network is catalyzed and driven by computerized satellite information/communication technology, in ways that are, for all intents and purpose, historically unprecedented. In effect, the transnational dimensions of hegemonic tentacles or outpost of power enactment are typically multifarious (economic, political, cultural, military and so on). Although what should be normatively desirable would be for transnational hegemony to harbour and project indiscriminate amelioration of the human condition that ideal expectation is not as such in real terms. For the potential or actual benefits of transnational multilateral power enactment are facilitated by the level of development of formal knowledge or educational repertoire in a given society. In effect, the level of development of formal education or the knowledge base (repertoire) in a given society would seem to enhance accruable benefits of neo-imperialism that is ordinarily congealed or depicted as "globalization".

By the same token, perceived injustice as a function of actual inequities or outright structural institutional inequities, in respect to distribution of accruable benefits of transnational hegemony or trans-territorial enactment of power or influence, is likely to invoke instances of contestation over contradictory vested interests or outright socio-political conflict. That is to say that, of course, situations of perceived or actual injustice are tantamount to crisis of legitimation, contestation or counter-hegemony (à la Gramsci, 1971; Ninalowo, 2007, 2010). To be sure, the knowledge base of a particular society is to be properly construed as embracing a spectrum of formal institutional education, from kindergarten through tertiary levels. The knowledge base also, in significant ways, entails informal modes of learning, such as embedded in cultural nuances as well as political education and ideological consiousness[1]. It is in that sense we are properly able to juxtapose people's perceptions and cognitions, as to whether their existential conditions measure up to ideal or normative expectations. Thereby making determinations as to embark on contestation over issues of deleterious circumstances of domination.

A number of provisional corollaries are derivable from the foregoing submissions, viz.:

1. There are dialectical linkages within the nexus of transnational hegemony, knowledge base and contestation-congealed and activated as crisis of legitimation.
2. Transnational hegemony or multiplicity of trans-territorial domination may quite often enhance advantages of the knowledge base (repertoire) in hegemonic power blocs or societies.
3. Transnational hegemony would ordinarily attenuate possibilities of development of the knowledge base and the human condition in subordinate societies.
4. In consequence of (3) above, there would generally be contestation over contradictory vested interests or crisis of legitimation in response to instances of transnational hegemony.

At this juncture, we should want to proceed with a bit of conceptual amplification, as well as attendant inferences for contestation.

Conceptual amplification and the dialectics of contestation

> *Social agents are not passive bearers of ideology, but active appropriators who reproduce existing structures only through struggle, contestation and a partial penetration of those structures.* (Willis, 1977, p. 175).

A useful starting point for understanding the interpenetrations of hegemony and contestation (or counter-hegemony) as mediated by knowledge base, is the concept of ideology. There are many meanings of ideology. For the present exercise, ideology denotes, on the one hand, a system of ideas whereby people's perceptions are manipulated and distorted in order to serve the interest of the dominant class-that is, false consciousness (Marx, 1969). On the other hand, following Marx, ideology is a critique of domination and a guide for emancipation socio-political action (Gouldner, 1976). In the latter sense ideology represents a moment in contradictory class interests. That is, members of subaltern or marginalized classes, being conscious of the roots of their existential conditions, articulate and/or implement strategies towards changing the *status quo*. That is, circumstances of contestation or legitimation crisis (also, Ninalowo, 1984, 2004, 2010).

We should want to take a closer look at the concept of hegemony for it is conceptually broader and more dynamic than ideology as an analytical concept. Though Gramsci (1971), writing under difficult circumstances in an Italian Fascist prison between 1929 and 1935, never fully developed the concept of hegemony, it is from him that we begin to understand the concept in its complexity. The interpenetration of the process of legitimation and crisis as mediated by education is eminently captured by the concept of hegemony. Hegemony denotes an ongoing process (not a static moment) of ideological control whereby dominant codes of behaviour, attitudes, beliefs, and values are

reproduced in any social formation. Social institutions such as the school, family, mass media, law, and work organizations are vehicles through which hegemony is reproduced. It is crucial to note that hegemony is more than simply a process of ideological manipulation, it also involves "lived" experiences of subordinate groups. That is, it is not a monologic process but rather dialogic, involving ways in which people interpret and inculcate dominant hegemonic forms. Raymond Williams (1976, 1977) captures the intricate process of hegemony in the following passage:

> [Hegemony] is a whole body of practices and expectations of the whole of living: our senses and assignments of energy, our shaping perceptions of ourselves and our world. It is a lived system of meanings and values – constitutive and constituting – which as they are experienced as practices appear as reciprocally confirming. It thus constitutes a sense of reality for most people in the society… … ….. It is, that is to say, in the strongest sense a "culture", but a culture which has also to be seen as the lived dominance and subordination of particular classes. (Williams, 1977. P. 110).

Consistent with the notion of <u>contestation</u> is the existence of "counter-hegemonic" moments within the dynamics of hegemony. That is to say that, people quite often actively challenge the moral basis of dominant hegemony. People do contest, rather than passively inculcate the dominant system of values, beliefs and norms. In other words, domination is not truly absolutely total in real terms. There are moments such as when subaltern classes or groups would perceive a rupture between "what is" and "what ought to be." Consequently, they may either embark on ideology critique and/or political action, in a bid to ameliorate ontological social conditions. Such moments would constitute instances of <u>contestation</u>, "counter-hegemony" or "crisis of legitimation", of which more later in subsequent pages.

In what follows, we deal with some pertinent salient issues in the changing patterns of transnational global hegemony since the twilight of the 1980's.

Politico-ideological ascendancy of neo-imperialism: from global bi-polarity to uni-polarity

The end of the Second World War in 1945 witnessed effective bifurcation of global influence, ideologically and politically, into capitalist sphere and communist ambit.

Dominant players within the capitalist sphere included the United States of America, Canada, Britain, France, Western Germany and subordinate societies in Latin America and Africa. By contrast, communist influence was spear-headed by the USSR within the eastern hemisphere. The communist influence was not only imbibed in eastern Europe, but also in North Korea, Cuba and parts of Africa, notably Libya and Angola. Indeed, the period between the late 1940s and 1980s witnessed what was commonly referred to as military "balance of terror" between capitalist West and the Soviet (Communist) East.

Whereas the former is characterized by liberal democracy with the ideology and practice of free market economy; the latter is typified by centralized control by the state of affairs of governance, economy, culture and society.

From 1989 onwards, a series of event that smacked of counter revolutionary forces occurred within the Soviet power bloc. This was to alter the configuration of global enactment of influence to historically unprecedented levels. In response to internal agitations from the populace against what was perceived to be overwhelming levels of unfreedom deriving from totalitarian structural arrangements within Russian Soviet Union, in 1989, Mikhail Gorbachev, the erstwhile President, embarked on a combination of fundamental structural reforms known as **perestroika** (re-structuring) and **glasnost** (openness). This meant liberalization of the society, including the economy, polity and culture. It implied for instance, rather than centralized control and ownership of economic infrastructures and processes by the state, such were privatized. Instead of traditional cultural insularity within the Soviet Union, there emerged instances of cultural penetration from the capitalist West. In response to Gorbachev's initiatives of liberalization, the historical bifurcation of East Germany (communist) and West Germany (capitalist) was dissolved in 1990. That led to the collapse of the Berlin Wall, implying unification of Germany along the path of capitalism. Besides, various components of the former USSR had since disintegrated into various autonomous states, often at the expense of internecine wars.

The forces of counter-revolution within the former Soviet bloc had inevitably led to the inexorable ascendancy of triumph of global dominance and penetration of forces of capitalism. The dominance of trans-national penetration of capitalist hegemony had been spear-headed by the imperial United States of America (USA). That is to say that cross-cultural penetration of capitalist ideology and practice had been championed by the United States, in cases of resistance; compliance had often been enforced militarily. The military invasion of Iraq in 2003 by the United States, Britain and other allied forces regardless of lack of support by the UN Security Council; is indicative of inconsistency as to claims to democratic ethos. Perhaps more importantly, it is highly questionable whether the United States has a moral authority to police the world over stock-piling of the so called weapons of mass destruction, in view of its historical antecedents such as detonation of atomic bombs in Hiroshima and Nagasaki in Japan in 1945 that resulted in an apocalyptic holocaust of monumental proportions. American involvement in Cuban missile crisis of 1960s is still also rather fresh in historical memory.

But, beyond the morally dubious claim of imperial American authority to police the world for compliance with the practice of liberal democracy, one thing is clear, the great Italian political Philosopher, Antonio Gramsci (1971), once observed in regard to acts of domination or hegemony: Domination can never ultimately be truly total without its antithesis, that is, resistance. That is to say that the inevitable logical antithesis to moments of dominant hegemony is counter-hegemony or acts of resistance.

Somehow, that elementary principle had been trivialized or ignored altogether in the American invasion plans against Iraq. Hence, coalition forces have been surprised about the incessant magnitude of Iraq resistance, including suicide bomb attacks. The inevitable ignominious defeat of the Americans far away from their territorial boundary in Vietnam in an imperial war in 1965 also epitomizes the historical logic of hegemony and counter-hegemony (resistance). Of course, Western ethnocentric puritanical claim to ideology on matters of reproduction and consolidation of liberal democracy of which the American State is at the vanguard, both politically and militarily, is also manifested within the economic sphere worldwide.

What follows is a discussion of paradoxical realities of "globalization".

Paradoxical realities of "globalization"

The notion of globalization is hereby conceived essentially as a historically dynamic transnational penetration of forces of dominant hegemonic forms. The forces of dominant hegemonic forms are usually enacted and reproduced at inter-related terrains of the economy, polity, science, technology and culture. In real concrete terms, scientific and technological breakthroughs have historically been known to act significantly as catalyst in advancing the process of globalization. The process of globalization is to be understood as that of power or influence enactment across international or spatial boundaries, (Aina, 1996, 2003; Petras and Veltmeyer, 2001).

In that sense, it connotes a historical continuum that is conceptually and practically similar to colonialization; but there is a distinction between colonial rule and colonization. Colonial rule connotes a direct rule and physical presence by external domineering forces. In contradistinction, colonization implies the process of perpetual domination through key social institutions, economic relations, culture, ideology, including the presence of agents of domination, elitist privileges and social inequalities. In practical terms, the notion of globalization is analogous to that of neocolonialism or neo-imperialism (Onimode, 2002; Toyo, 2002; Ake, 1995; Petras and Veltmeyer, 2001). As we intimated earlier, driving forces underlying neo-imperialism consists of twin combination of mutually reinforcing ideology of advanced capitalism and liberal democracy. An ideological combination that had historically been predicated on exploitation of labour and allied subaltern classes and groups. For sustainability of capitalism and ultimate maximization of profit, it had meant that the logic of capitalist production with the complimentary ideology of liberal democracy had historically been expanded beyond Western spatial boundaries of origin. Hence, of course, the historical *raison d'être* for slavery, colonialist expansion across the Atlantic to Africa and Latin America. It is crucial at this juncture to emphasize that the undeclared motif for capitalist expansion beyond international boundaries is based on exploitation of both human and material resources in consonance with the vested interests of dominant forces within what is known as Capitalist International Division of Labour (CIDL). Consequently, there is skewedness in patterns of development in favour of core social formations of the West, as compared with reproduction of contradictions of underdevelopment in peripheral social formations within African and Latin

American spheres (see Walllerstein, 1979, Frank, 1972, 1979; Chossudovsky, 1997; Chossudovsky and Marshall, 2010, Onimode, 2002, Toyo, 2002, Veltmeyer, 1999; Bujra forthcoming).

Aspects of socio-economic contradictions of "globalization"

> *Global forces for development-expanding markets, advancing technology spreading democracy are benefiting large parts of the world. But they are also by-passing hundreds of millions of the world's poorest people. But just as globalization has systemically benefited some of the world's regions, it has by-passed others as well as many groups within countries. In the 1990s, most of the East and South Asia saw living standards improved dramatically. But large parts of sub-Saharan Africa, parts of Eastern Europe and the Commonwealth of Independent States (CIS) and many countries in Latin American and the Middle East did not. In addition, epidemic diseases, most dramatically HIV/AIDS, prey disproportionately on those left back even further – trapping poor people in a vicious cycle of poverty and disease.* (UNDP, 2003. Pp 15-16)

The foregoing passage had been invoked to reinforce an earlier assertion that there are, indeed, significant utilitarian values that ensue from forces of globalization. But the distribution of benefits is considerably skewed in favour of affluent or metropolitan societies and illicitly privileged members of ruling elites in peripheral social formation.

International economic/financial institution or agencies are particularly adept at reproduction of worldwide structural inequalities, by way of enacting and influencing policies across transnational geographical boundaries. Again, a case in point here is the economic policy that was introduced from the Bretton Woods system, of which American dominated World Bank and International Monetary Fund (IMF) are key institutions. That is, the so called Structural Adjusted Programme (SAP). Since the inception of that socio-economic policy across Africa as far back as the mid-1980s, it has resulted in a number of externally determined austerity measures whose consequences have effectively been detrimental to popular yearnings.

Firstly, SAP-related policies have resulted in incessant de-valuation of local currencies in relation to internationally acceptable currencies such as the British pound sterling and US dollar, contrary to relative greater value of some of the African currencies prior to SAP. For instance, the nominal exchange rate of East African shilling (EAS) up to 1968 was in the ratio of 1 EAS to 1.5 British pounds sterling; also in the 1970s seven (7) Kenyan shillings (Ks) used to fetch 1 US dollar. By contrast recently, the nominal exchange rate of Kenyan Shilling is in the ratio of 75 to 1 US dollar. Similarly, prior to the introduction of SAP-related policies, the value of Nigerian currency – the naira was almost twice that of the US dollar, but the inexorable depreciation of the naira in response to SAP had brought the value in relation to the US dollar in the ratio of about 1:150. That is one US dollar would attract one hundred and fifty naira. Some

immediate implications of incessant depreciation of nominal exchange rates of local currencies would ensue: (1) Whereas imported commodities, particularly manufactured goods would, of course, be more expensive, exported raw materials would be relatively cheaper to the advantage of foreign consumers, (ii) local inflationary trends and cost of living would necessarily be escalated – an effect that is exacerbated by local taxation on consumer goods.

Secondly, a key component of SAP is the policy of privatization of ownership of State (government) enterprises. This practically serves to further reproduce and consolidate the advantages of the rich in relation to subaltern social groups and classes. For privatization involves divestment of state shares in public enterprises, either in whole or in part. In so far as only those with substantial monetary resources can afford to buy or own shares from such public enterprises, a further reproduction and consolidation of structural inequalities are nurtured. That is of course, tantamount to negation of general vested interest. In effect, such exigencies of gross possessive individualism are breeding grounds for anomalous and illicit contestation for acquisitive advantage. The state then becomes a site for intra-class conflict, rather than providing instrumentalities for the amelioration and de-pauperization of the human condition.

Consequently, African societies features most prominently in the league of those exhibiting deepest levels of contradictions of underdevelopment as evidenced in earlier pages here (see also Onimode, 2002; Toyo, 2002; Chossudovsky, 1997; Chossudovsky and Marshall, 2010; Amin, 1974; Adedeji, 1989; Olukoshi, 1998; Mkanadawire and Olukoshi, 1996; Mo Ibrahim, 2010).

Thirdly, a factor in the links of SAP in respect to the general deterioration of the human condition that requires emphasis is the marginalization, if not outright pauperization, of the middle class across Africa. For by definition, the middle class comprises individuals with high levels of protracted formal education training and background, that is, professionals and academics, with varying levels of expertise and competence, including technocrats, bureaucrats and administrators in public and private sectors of the economy. In terms of status, prestige and privileges (including levels of remuneration), they used to enjoy relative advantages that were consistent with historical expectations of their various vocations. But that was not all. The old-age aphorism that "knowledge is power" is rather germane at this juncture. Indeed, that adage informed why proverbially rigorous thinkers as far back as the times of Plato, Aristotle and others had reposed a great deal of confidence in intellectuals in the management of affairs of the state and society. That is, members of the middle class had ordinarily been deemed to be harbingers and agents of ameliorative social changes. Indeed, that assertion had gone beyond the level of sheer semanticism or idealistic speculation. For it had historically been proven beyond any iota of equivocation to be invariably valid, we have instances from all over the world to buttress the veracity of the claim as to the middle class being key agents for development. The Japanese and the "Asian Tigers" economic/development miracles are part of the validation.

Alas, in so far as the African continent is concerned, sequel to SAP-related exigencies, with the attendant runaway inflation, astronomical high costs of living without commensurate increases in levels of remuneration, poor working conditions and allied matters, marginalization of the middle class is consequently reproduced. Not surprisingly, the scenario of marginalization engenders attendant problems of status inconsistency. That is, individuals with high social status and prestige, but without the realization or actualization of commensurable privileges or rewards would have a tendency to experience feelings of deprivation. Under such circumstances of de-moralization, due to poor incentives, there would be tendencies for people to look for other means in order to close the gap between expectations deriving from social status and concrete realities. That is, striving towards realignment of status. That is precisely the logic underlying the brain-drain phenomenon, intellectual exodus or emigration in search of "greener pasture". In effect, intellectual losses within peripheral social formation are appropriated as gains within the metropolitan sphere. Of course, whereas in the latter instances developments are consolidated, the reverse remains the case in the former - that is contradictions of underdevelopment continue to be nurtured and reproduced. The donor agencies or "development partners" and their indigenous states are not unmindful of the calculus of mass intellectual emigration, it is deemed quite rationally encouraging.

A brief note on unequal globalization of market exchange

It is by now almost picayune to note that asymmetric pattern in ostensible liberalization of international market or trade is, invariably in favour of dominant transnational corporations or other players in metropolitan set-up and their local cronies. Let us once more illustrate by way of the policy of privatization of public enterprises. On account of the fact that the policy of privatization involves divestment of government shares in public enterprises, either partly or totally so, it becomes axiomatic that those with substantial financial capital amongst members of the ruling elites, that are able to afford buying or owning shares from the process of privatization or sales of public enterprises. In effect, those with ill-gotten wealth are able to further benefit from illicit acts of corruption. By so doing, a further reproduction and consolidation of structural inequalities are engendered locally.

Moreover, the real emphasis in the pattern of international trade is such that manufactured goods are exported from the metropole, while mainly raw materials, natural and agricultural commodities are exported from the periphery. That is, of course, clearly conditions of unequal exchange since manufactured goods are by far exponentially more profitable. Such pattern of international market exchange is obviously inconsistent with possibilities for the amelioration of the human condition.

In a similar vein, the Nobel Laureate in Economics for 2002, Joseph E. Stiglitz was clearly declarative as follows:

> ......*Neither theory nor evidence supports the view that opening markets to short-term, speculative capital flows increases*

economic growth. But there is considerable evidence and theory that is increases economic instability, contributes to insecurity and poverty. So, such forms of capital market liberalization might in some ways increase "globalization". But they do not enhance growth – and even if growth increased slightly, this form of it might increase poverty, especially in countries without adequate social safety nets…. Asymmetric liberalization had global terms of trade effects. <u>The globalization studies suggest that Africa has suffered because it has not globalized. That may be partly true. But it is also true that Africa has suffered from the way that globalization has been managed.</u>
(Emphasis added from UNDP, 2003, p.80).

Indeed, some recent Human Development Reports by UNDP underscore the fact that countries from the African continent fall mainly within the cluster of those with low Human Development Index (HDI) (UNDP, 2003, 2004, 2006).

On the significance of satellite information communication technology (sict)

In spite of vast spatial colossus that the world is, it is possible to communicate with anybody in any part of the world within seconds. What makes that possible is, of course, advanced computer science, coupled with satellite information/communication technology.

Indeed, political economic and cultural aspects of globalization are practically driven by satellite information/communication technology. With advances in aeronautics and network of transportation technology, coupled with advances in SICT, it means that the world had literally been rendered as a "global village", thus lending credence to Marshall Mcluhan's adumbration since well over four decades ago. It should be noted that the idea that other aspects of globalization are hinged on SICT for optimal benefits is also generally applicable to human development. Indeed, there is hardly an area of human life where SICT has no functional value, including health, education (institutional, political and civic), crime control, security, vehicular traffic de-congestion and so on. However, nagging limitations arise as a function of poor government policies that often lack congruence with popular vested interests.

The limitations are particularly expressed by the following indicators:

1. **Low Tele-Density**: According to the International Telecommunications Union (ITU), by the end of 1999 the whole of Africa has about 14,500,000 telephone lines as opposed to 83,520,600 in Canada and the US. Similarly, according to the US Internet Council (USIC) in 2000, 136.68 million people were on-line in Canada and the US. Africa with a much as 13 per cent of the world's population had only two per cent of the total global telephone lines, only one percent of internet users, 1.2 percent of the total global internet users. (UNDP, 2001,pp 44-45)

2. **Low Literacy Rate**: The overall literacy rate amongst the adult population in Sub-Saharan Africa is only 2.4 percent (UNDP, 2003). General high levels of illiteracy are likely to limit access to advances in high technology, thereby contributing to anomalies of underdevelopment.

3. **Prohibitive Costs**: Another nagging problem is the cost of relevant electronic gadgets. Complimentary aspects of SICT such as computers, television sets, radios, land and wireless telephones reflect relatively low accessibility across Sub-Saharan Africa. A situation that is symptomatic of general high levels of poverty within the population.

On transnational cultural penetration

For simplicity, we hereby depict culture as the totality of a specific way of life of a particular set of people. It has to do with particular system of beliefs, values, ways of thinking as well as specific lifestyles of people in a given society. Prior to an attempt of understanding the effect of globalization on culture and the human condition, it would be useful to come to terms with some aspects of African traditional cultural expressions and compare and contrast with cultural influences from the West, for illustration.

Firstly, there is an unwritten norm in traditional African societies that prescribes deference and respect for elderly people. It is a cultural value that inherently facilities some semblance of social order, since it implicitly reduces potentialities for social acrimony (see Harunah, 2003). By contrast, the idea of deference to elders, even though it exists somewhat in western societies, it is not so emphasized as such. However, through inculcation of western values deriving from formal education and electronic media, the traditional African value of deference to elders would have either been adulterated or jettisoned altogether in some cases. This poses potential problems for social disharmony.

Secondly, what is germane here is the conceptual dichotomy of "gemeinshaften" and "gesellshaften" enunciated by a German Sociologist Ferdinard Tonnies. That conceptual dichotomy is synonymous with that of traditional/pre-industrial society vis à vis modern/industrial society. Whereas the former typification is exemplified by traditional African rural societies, the latter is illustrated by advanced western technologically-advanced societies. Social interactions in traditional societies are pursued as an end per se. By contrast, social relations in industrial societies are pursued as a means to an end. That is, the domain value during the course of social interaction in capitalistic-oriented societies is instrumentalistic. That is, social relations are usually entered into as a means towards the attainment of a goal. It is this instrumentalistic orientation, coupled with high levels of abject poverty and greed, that apparently nurtures gross materialism together with high incidents of corruption and self-centeredness in high and low social locations. The severity of the problems that are associated with high levels of corruption had been proven by several studies to be associated with inhibiting factors against human-centered development (See Ninalowo, 2007, 2010).

Thirdly, is a phenomenon which is congruent with capitalist logic, that is best typified as a commodification of culture. The idea is to display or sell cultural productions, with a view of profit maximization. However, transnational sale of cultural products, more often than not, amounts to both domineering alien cultural impositions as well as adulteration of local indigenous cultural forms. For instance, the United States, reportedly earns more out of cultural products (entertainments industry) than it apparently earns from export of computer, aircraft or automobiles. From American Hollywood films, more than thirty billion dollars was realized from the distribution of the cultural products all over the world, a testimony as to the effective commodification of cultural forms (UNDP, 2001). While on one hand, profitability in sales of cultural products is, functional to the economy of the country from where they originated. On the other hand, consumption of alien cultural forms may often be dysfunctional ultimately within the recipient society. For example, incidents of sexual hysteria and flamboyance that are normally displayed in foreign movies, are not unrelated to diffusion of sexually-transmitted diseases such as HIV/AIDS.

Finally, I would like to round up this segment of the discourse by way of providing a bit of relevant graphic anecdote in order to demonstrate an unsalutory effect of alien cultural imposition. According to inter-national news report that came fortuitously to the attention of this author from international electronic news media in 2003, a group of irate youth in India reportedly stormed a number of shops where so called "valentine" greetings cards were being displayed for sale. The youth also reportedly destroyed all the greetings cards they could lay their hands on and destroyed them, over claims that the "valentine" cards were tantamount to what was deemed to be a form of "cultural corruption" from the West; thereby undermining their sense of indigenous cultural autonomy. That amounted to a graphic illustration of resistance against alien cultural hegemony (or domination).

Beyond materialism and contestation

As we have seen earlier, challenges or contestation of hegemony in its various dimensions may clearly be linked with mass disenchantment deriving from socio-economic, deprivation, marginalization or outright poverty. By the same token, contestation against hegemony or domination, may well be against transnational cultural domination, unfreedom of association or speech or agitation as a quest for other non-material forms of freedom.

For instance, as of this writing, there had been series of popular uprisings across the Arab north African continent and the Middle East, including Tunisia, Egypt, Yemen, Libya, Bahrain and others. Although some observers had generally emphasized poverty as being predisposing factors. But, the quest for outright changes of regimes that had been in place for decades and democratization of governance had also featured prominently in the list of demands by the agitators. Meaning that freedom of associating and expression, as well as democratic participation, had also been of serious concerns to the protesters.

Although it took quite a number of decades for the people to react against perceived tyranny and autocracy, as well as aspects of transnational domination, all the same, the nexus of the dialectics of hegemony and counter-hegemony or crisis of legitimation (Ninalowo, 1984, 2004, 2010), as mediated by political consciousness or knowledge base, had been proven to be at play. To be sure, domination cannot ultimately be truly or absolutely total, without somehow being counterposed with resistance, to a limited or greater extent (à la, Gramsci, 1971).

It is instructive to note that advances in Satellite Information Communication Technology (SICT) had, of course, clearly facilitated the "domino" or "contagion" effects that the uprisings across North Africa and the Middle East had assumed. Irrespective of the reported blockage of internet facilities by the various autocracies, international electronic/digital news media and others have managed to convey impressionistic visual imageries of mass protest actions[2].

It is really not yet clear where agitations for regime changes would ultimately lead to in terms of specific character of emergent rulers. By the same token, it is clear that various transnational hegemonic interests are at stake, including "strategic interests" of Washington and Western Europe, the interest in the "war against terror", as well as "security" of Israel. Nonetheless, such maybe matters for other future research concerns.

FIGURE I: Schematic Crystallization of the Interactive Model of Transnational Hegemony, Knowledge Base and Contestation
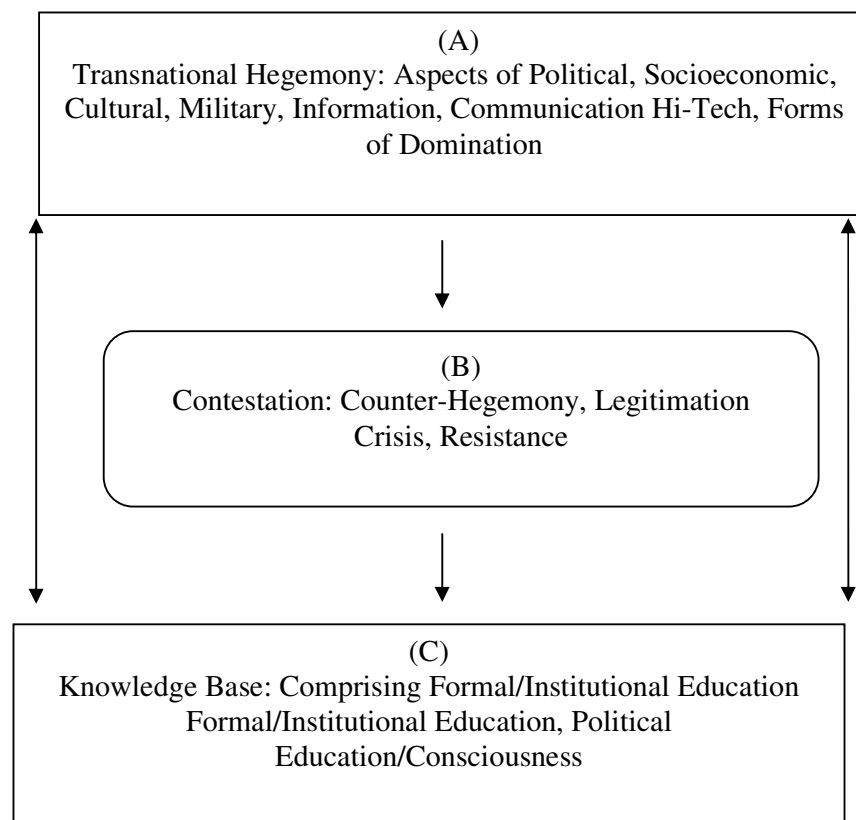
Profile As Depicted in Figure I
1. Components of Transnational Hegemony (in A) provide stimulus for moments of contestations (in B).
2. Perception and articulation of contestation, in response to moments of hegemony, are activated and appropriated at the point of Knowledge Base (in C).

Rounding-up

It was posited at the outset that what is ordinarily designated as "globalization" amount to multiplicity of influences, which should be more properly referred to as neo-imperialism, or conceptually better still, it is to be more appropriately depicted as transnational hegemony.

Transnational hegemony is congealed as salient dimensions or consequences of multi-lateral expressions of domination, that is, socio-cultural, political, socio-economic and military. A major propelling force for transnational hegemony is computerized satellite information communication technology (SICT). It was argued that forms of domination within and across territorial divides amount to moments of unequal exchange, particularly in so far as subordinate societies are concerned.

Consequently, both the realities and perceptions of multi-dimensional aspects of unequal exchange are, to a limited or greater extent, construed within the realm of knowledge repertoire or base in a given society. The knowledge base being understood not just as institutional or formal training, but it also encompasses dimensions of individuals and group socio-political consciousness that are derivable from their existential conditions.

In effect, moments of unequal exchange within the dynamics of transnational hegemony tend to engender and nurture crisis of legitimation or outright contestation. Hence, the tripartite dialectical linkages of transnational hegemony with the knowledge base within and across societies and contestation.

Notes

1. For more on cultural nuances as repositories of knowledge, see Lebakeng (2010).
2. The US government, through the State Department reportedly donated as much as 20 million US dollars in order to facilitate internet access as of the time the uprising was on-going in Egypt.

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Open, distance and e-learning in the dual economy of South Africa: promoting global social justice policy or furthering the digital divide?

Isaac Ntshoe
Central University of Technology, Free State, Bloemfontein
intshoe@cut.ac.za

Getrude Bohloko
Central University of Technology, Free State, Bloemfontein
gbohloko@cut.ac.za

Abstract

This paper addresses the shibboleths of open, distance and e-learning to promote social justice and equity and how this mode can potentially reproduce and reinforce inequities and inequalities and exacerbate the digital divide in societies. The paper examines policy intent behind the support for open, distance and e-learning to widen access and participation in higher education, and how this mode can subtly reproduce and reinforce inequities and inequalities in the context of a dual economy of the post-apartheid society. This is done by exploring the role of the open, distance and the e-learning mode to widen access, participation and to promote social justice and equity in higher education. Furthermore, the implicit and unintended consequences of open, distance and e-learning as they play out in practice will be interrogated, as well as how open, distance and e-learning promote the widening of access and, at the same time, reinforce and reproduce the digital divide and therefore the inequities and social injustices in the dual economy in South Africa. The last part of the paper is devoted to a discussion of the implications of open, distance and e-learning for policy and practice using Bourdieu's notion of symbolic violence.

Competing conceptualisations of open, distance and e-learning and social justice

Despite inherent nuances, the terms *open* and *distance* are usually used interchangeably in information and communications technology (ICT), web-based, e-learning, online-learning or online delivery modes. The assumption is that deliberate interventions in teaching and learning with ICT facilitates the realisation of social justice by making available ICT resources in schools, and thus contributes to bridging the digital divide that may exist both between and within schools (Were, Rubagiza & Sutherland 2009, p. 2).

The *digital divide* on the other hand, refers to the gap between those who are able to access and apply these technologies and those who are not. The term is increasingly used to describe the social implications of unequal access by some sectors of the community to ICT and to the acquisition of the necessary skills (National Office for the Information Economy 2001; Welling 2001). At a global

level, the digital divide reflects the existing economic divisions in the world today and continues to have implications for social justice. Accordingly, while richer countries are able to provide Internet facilities and other information technologies to their citizens in their educational settings, learners from poorer countries where the Internet and other technologies are not easily accessible, do not necessarily benefit from the information age and cannot, therefore, compete in the global economy. In the same vein, disparities in terms of access to information technologies also exist among groups of people in richer and poorer countries based on their social economic status, rural/urban locations and gender differences (Were, Rubagiza & Sutherland 2009).

Digital divide studies underscore two kinds of areas: the first involves issues of resource distribution which refer to differential access to hardware, software and Internet connectivity, including bandwidth issues, across nation states (with numerous north-south uneven patterns) and within nation states (regional, urban-rural, by category of difference such as class, race or gender, and across and within educational institutions, by faculty and department). The second type of area highlighted, in addition to physical access, is: individual, social, cultural, economic and institutional factors that influence the extent to which people will actually use the ICT resources to which they have physical access (Ravjee 2007).

With reference to the role of connectivity, Rupam (2001) laments the fact that while India is the world's fastest-growing mobile market with some 771 million mobile subscribers and monthly additions averaging around 19 million, only the wealthier segment of India's population, mainly based in urban areas, uses modern communications technology. India's Prime Minister expressed concern that most Indians are missing out on the 'digital revolution' due to a lack of Internet access for the nation's poor, despite the economy boasting one of the world's strongest growth rates (Rupam 2001).

As a result of the interest in ICT globally, institutions of higher education have responded by encouraging the use of email, synchronous and asynchronous discussion fora, downloadable PowerPoint slides, i-lectures, e-readings and text messaging; all of which have consequences for students who do not have the economic capital necessary to access these developments (Bourdieu, 1986). Consequently, if students do not live in the 'right' area (deemed by Internet providers to be worthy of provision), then they do not have the means to achieve the 'support' that is supposedly offered. Thus, by making more materials, dialogues and teaching experiences available via Internet resources, tertiary education may further alienate those who are unable to access these resources because of their economic and location limitations (Johnson, Macdonald & Brabazon 2008). Students who do not have personal computers or broadband access to the Internet are disadvantaged, marginalised or ignored by those who focus on delivering online components as part of the university programme (Johnson, Macdonald & Brabazon 2008).

The discussions on open and distance, ICT, e-learning, online learning and online delivery in this paper are grounded on the symbolic violence approach, and the social, cultural and economic capitals coined by Bourdieu (1990).

Symbolic violence accounts for forms of coercion which are effected without physical force; that is, "gentle, invisible violence, unrecognised as such, chosen as much as undergone, that of trust, obligation, personal loyalty, hospitality, gifts, debts, piety" (Bourdieu 1990, p. 127). The use of symbolic violence by the dominant is often so entrenched in cultural and sociological norms that the dominant party may not even be aware that they are perpetuating the norm; in fact, the dominated tend to be accepting of the domination (Johnson, Macdonald & Brabazon 2008).

Other theorists have also probed the conceptualisation of symbolic violence. Webb, Schirato and Danaher define the term as violence that is exercised upon individuals in a symbolic, rather than in a physical way. It may take the form of people being denied resources and treated as inferior or being limited in terms of realistic aspirations. Gender relations, for example, have tended to be constituted out of symbolic violence which has denied women the rights and opportunities available to men (2002, p. xvi).

Inherent in symbolic violence and access is capital; the term has multiple meanings within Bourdieu's theory of practice. Bourdieu uses economic capital as the basis for writing about and developing the concepts of other capitals: cultural, social, and symbolic. He describes three types of capital which can present themselves in three fundamental guises: as economic capital, which is immediately and directly convertible into money and may be institutionalised in the form of property rights; as cultural capital, which is convertible, on certain conditions, into economic capital and may be institutionalised in the form of educational qualifications; and as social capital, made up of social obligations ('connections'), which is convertible, in certain conditions, into economic capital and may be institutionalised in the form of a title of nobility (1986, p. 47).

Social justice and equity of open, distance and e-learning in South Africa

In response to the global movement to massify higher education by expanding access, the growing social demand for higher education, and the seeming inability of institutions to absorb the mounting student numbers on the one hand, and the social and equity imperatives that have become urgent on the other, the South African government devised a policy that mainstreams open and distance learning as a key player in meeting the complex demands facing the country. With the country's readmission to the international community, the years immediately after the first democratically elected government of 1994 saw the mushrooming of open and distance learning and a correspondingly increasing use of ICT and e-learning. This mode of delivery of education triggered an increase in the private contribution to higher education, as well as an interest in cross-border provision of education services, including franchising and the licensing by institutions from technologically advanced economies.

However, the publicity of open, distance and e-learning as strategies for promoting social justice and equity in South Africa needs to be put into perspective. The National Plan on Higher Education (The Plan) (Department of Education 2001) endorses firstly, the policy responses in the White Paper that flagged the need for changes in ICT and the development of new and different

modes of delivery. Accordingly, The Plan recommends changes in models and modes for providing and delivering higher education that has to be massified. The need for unorthodox modes was induced by anxiety that traditional models of delivery were being replaced by modes that incorporate the provision of learner support through a variety of mechanisms, including learning centres with audio-visual and computer-assisted support (Department of Education 2001). The rationale behind this suggestion, that distance education and resource-based learning have a "crucial role to play in meeting the challenge to expand access, diversify the body of learners, and enhance quality, in a context of resource constraint", is obvious (Republic of South Africa 1996, 2.57).

Two caveats on open, distance and e-learning as alternatives to contact tuition are: firstly, while increased access and accelerated expansion of higher education through open and distance learning were aimed at overcoming elitism in the higher education system for a post-apartheid setting, social inclusion, social justice and equity that forms the backdrop of the transformation process and is enshrined in Chapter Two of the Bill of Rights of the Constitution, remains largely debatable (Republic of South Africa 1996).

Secondly, the quality of provision was, and still is compromised in favour of other motives. It is against this background that The Plan warns that increased access of black students through distance education programmes and satellite campuses should not be allowed to be paraded as a commitment to equity of access (Department of Education 2001, Sect; 3.2). This caveat originated as a result of the hype of open, distance and e-learning institutions in South Africa developing a number of programmes for use on the Internet that are no more than email versions of poorly written correspondence texts. In the main, the emphasis has been on minimising costs rather than on developing quality programmes to reach students en masse. Therefore, there has been little evidence of the creative use of multi-media modes of delivery or innovative research-based approaches to curriculum design, development and delivery. Moreover, the quality of the programmes is undermined by a lack of research into the needs and contexts of students, appropriate modes of delivery and new methods of assessment, making the relevance of the programmes open to question (Department of Education 2001). The reservations expressed of The Plan were endorsed in a study conducted in 2006 which found that the mounting use of satellite campuses, web-based broadcasting and forms of technologies have become the norm, rather than the exception not only in institutions that are dedicated to open and distance learning, but also in public institutions (Ntshoe, 2006). Thus, despite the policy that only certain institutions should be dedicated to providing open and distance learning, some institutions that provide contact tuition are also using dual mode and in particular, various forms of ICT. Students in some institutions offering contact tuition pointed out that all study materials, including assignment topics, are placed on university websites and students are required to download this information. However, it is in institutions that offer teaching through open and distance modes in South Africa where ICT is most popular; where students are encouraged to apply, register and download the course materials and assignments from the Internet.

Discussions and conclusion

The trend emerging from the discussion is that despite an increasing realisation and commitment by the international community to pay attention to issues of social justice and inequities, the digital divide seems to be widening between technologically advanced societies and those less developed, between rural and urban communities, and more importantly, between social classes in societies.

Accordingly, the Internet and the interest in ICT and e-learning as modes of delivery in institutions that provide education through open and distance learning, is not as liberating as it seems for some groups in societies. The unintended outcomes of the digital divide are differential access to hardware, software and Internet connectivity, including bandwidth issues across nation states (with numerous north-south uneven patterns). Consequently, while the north-south divide is something that needs to be borne in mind, it is the digital divide within nation states (regional, urban-rural, by category of difference such as class, race or gender, and across and within educational institutions by faculty and department) in South Africa that is of interest to the researcher in this paper.

The policy implications of ICT to deliver education services is that such delivery mode in the post-apartheid setting needs to be crafted in such a way that it is not only adopted for convenience, but that it takes into account existing disparities in urban-rural provinces, middle-class versus poor sections of the community and gender and racial stereotypes. Furthermore, the policy has added implications across and within educational institutions that still reflect historical divides in terms of those with adequate resources and of those without; the inequities between students who possess the necessary cultural and economic capital and those who do not, in the post-apartheid setting. The stark reality about the slew of e-learning and ICT modes of delivery in open and distance learning is that apart from physical access, social, cultural, economic and institutional factors influence and even determine the extent to which people will actually use ICT resources (cf. Ravjee, 2007).

Under the conditions described above, the quality of teaching and learning, the quality of the instructional materials being utilised, the educational implications related to questions of process and context, and the general educational outcomes related to the use of various technologies tend to become secondary considerations in policy development. The result is that although distance education is essentially an educational endeavour, it is often formulated primarily on the basis of non-educational considerations (Cloet, undated). Accordingly, rather than supporting increased participation and the promotion of social justice and equity, open, distance and e-learning has become a popular mode primarily for commercial reasons, including franchising programmes and learning materials by institutions with resources within countries and regions, as well as in institutions across borders and globally.

Furthermore, the internet connectivity can be misleading because of the diversity of the student population in terms of urban-rural origin and class.

Firstly, some students do not have computers at home or laptops with which they can access the Internet. Secondly, some of them have to travel 120 kilometres to access the nearest Internet café to be able to download information from the university. Thirdly, some live deep in rural areas where there is no electricity connection. The reality is therefore, that students from rural areas and from disadvantaged communities in urban areas are easily excluded from benefiting from Internet connectivity.

In a country with a dual economy such as South Africa with primarily black students coming from the second, and primarily white students from first economy, it is expected that students who will be alienated from the increasing use of e-learning and ICT, will be those from disadvantaged communities. Thus, by mainstreaming e-learning and ICT by making more teaching materials and assignments available via Internet resources, tertiary institutions are running the risk of further alienating those who are unable to access the resources because of economic and location limitations (cf. Johnson, Macdonald & Brabazon 2008).

Following Bourdieu's concepts of cultural capital and symbolic violence, institutions and students in South Africa have embraced e-learning and ICT as modes of delivery and the communication of progammes, assignments and teaching materials, voluntarily so to speak, and not by force. The mode is usually embraced by users, students and institutions because the humanitarian element often exploits emotional aspects including trust, obligation, personal loyalty, hospitality, gifts and debts.

 Seen from this angle therefore, the symbolic violence of e-learning and ICT is entrenched in cultural and sociological norms; that those who provide them, such as suppliers and institutions may not necessarily be aware that they are perpetuating the norm, and in fact, the dominated (students and users) tend to be accepting of the domination. Although suppliers may indeed be aware of the motive for encouraging institutions to use e-learning to make a profit, seen from Bourdieu's cultural and social capital perspective, e-learning and ICT in the open and distance mode of delivery has the potential to preserve social privileges across generations. Crossley's illustration of how symbolic violence plays itself out discounts the assumption that open and distance education, including online and web-based learning, exemplify the public good of this mode in many instances, including in South Africa. Conversely, open and distance learning and all its variations are typical exemplars of the private, good? dimension of education as students from disadvantaged communities are excluded because of their lack of cultural, social and economic capital deficits. Consequently, even though theoretically, students are not barred from pursuing their studies though open and distance education and can theoretically benefit from all ICT and online learning, destitute students often lack the cultural, social and economic capital to pursue their dreams, just as they are not free to attend an opera or a fine restaurant (cf. Crossley, 1995).

In this paper, it is argued that in the post-apartheid setting, the intended policy was that of increased access, participation and the enhancement of the equity imperative in higher education for previously disadvantaged groups through

open, distance and e-learning. In fact, the stark reality in South Africa is that most students from disadvantaged groups are indirectly and may implicitly be denied that very access, while the issue of social justice and equity remains problematic.

Therefore, although open, distance, ICT and e-learning are often intended to promote access and equity, and to narrow the digital divide by enabling students who, for one reason or another, are denied access to the conventional means of education, this is not necessarily the reason why institutions are involved in distance education (cf. Ravjee 2007). Conversely, the reasons behind these modes of delivery seem to be more about a threat to the continued existence of programmes or even institutions, rather than a commitment to the principles of social justice (Evans & King 1991). Through symbolic violence and cultural deficits students from poor family backgrounds and informal settlements are continuously exposed to symbolic violence as they are excluded from taking part not in a physical sense, but in a more ruthless and alienating way, through finance and class (Johnson, Macdonald & Brabazon 2008).

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Looking at the gift horse: how ODL principles and practice can guide appropriate use of OER

Jennifer O'Rourke
jmorourke@shaw.ca

Abstract

The article will explore issues arising from use of open educational resources (OER) as components of distance learning materials, and will consider how basic open and distance learning (ODL) principles and processes can guide appropriate use of externally produced learning resources to contribute to genuine access to quality learning.

1. Introduction

Some years ago, on a Toronto bus, two young lads were talking about their favourite music: one said to his friend, excitedly conveying newly-discovered information, "Did you know that Paul McCartney was in another band before he was in The Wings?"

In distance learning, too, significant developments can be quite easily overshadowed by the most recent innovation. Without a sense of the history and purpose of the original developments, innovations can take directions that undermine the original principles and intent underlying an effective strategy. This article proposes that applying the essential principles and good practices of ODL can guide judicious use of OER for the right learners, the right goals and the right reasons.

As colleague Helen Lentell points out, champions of OER claim that OER can "bring down the walls of academia, making knowledge available to those who have been excluded and disadvantaged." (Lentell, 2011). These claims are remarkably similar to those offered by proponents of open and distance learning in the 1970s. Although the name is new, OER continue a long practice of sharing educational resources; writings and translations among medieval wandering scholars (Waddell, 1929); mimeographed lessons among teachers; lecture notes and previous exam papers among students. OER's distinctive feature is clarity about usage rights in the face of a global stalemate about increasingly complex intellectual property and copyright provisions. (Parry, 2011)

2. The start up of OER

Although the term OER originated at a UNESCO conference on using open courseware for higher education in developing countries (UNESCO 2002), the conference and concept were shaped by a $11 million funded initiative at a US campus based institution, Massachusetts Institute of Technology, to place its face to face teaching materials online for free public access. Although MIT

made it clear that its goal was not to provide accredited learning opportunities, and was "fundamentally an information dissemination initiative" (MIT, 2001) with no credit on offer, the initiative shaped the perception of OER as a generous step in expanding learning opportunities. However, one could argue that MIT and other institutions who followed suit developed a lucrative recycling strategy; obtaining external funding to put existing teaching materials on the web, in effect marketing their institutions' expertise.

Institutions in developed countries, mostly supported by external funding, continue to focus on production and distribution of OER, largely through repurposing existing teaching materials with little discussion of the needs of prospective learners. Proponents of OER have developed an array of re-usage guidelines that alleviate restrictive copyright provisions, and require users who adapt OER to make their adapted resources available under similar terms.

The following factors can present challenges to meaningful discussion of the relationship between OER and ODL:

- Despite the common use of the word "open", OER are not specifically intended for open and distance learning.
- There is enormous diversity in OER, encompassing a broad range of learning resources, from single diagrams to complete courses, at every level of education.
- Because campus based universities rather than an open learning provider launched the OER concept, the term "open access" acquired a new interpretation, "anyone can get our teaching materials online", which is quite different from the ODL interpretation; access to a complete educational experience, including tuition, support and accreditation.
- The initial impetus for developing OER has no clear and consistent alignment with most rationales for providing open and distance learning, especially in contexts where ODL is intended to improve educational levels among whole populations and to serve social justice goals.

The following review of open and distance learning principles and recent developments in OER sets the stage for proposing considerations for incorporating or repurposing OER for distance learning provision.

3. What our ancestors did for us: underlying values in open and distance learning

ODL has many ancestors; threads of practice that have combined to form the fabric of ODL. Each practice brought distinct values and perspectives:

- Independent study/syllabus preparation for exams supported the concept of education as an individual asset, and followed the practice of charging for accreditation rather than for instruction.
- Popular non-formal education, derived from the concept of learning as a social good and an essential attribute of a just society, implies accessibility, active participation, and context-relevant learning leading to empowerment.

- Outreach, at every level of learning, implies the universal right to access to education, emphasizing the provider's responsibility to ensure accessibility of resources, learner support and technologies, and to address specific learning needs, such as "second chance" learning for those who missed initial educational opportunities.
- Technology-led initiatives explore the potential of technologies to improve access, learning effectiveness, and cost-effectiveness, and, ideally, are governed by the principle of demonstrating their value before full adoption.

Some of ODL's ancestral values and principles are mutually exclusive, and others are points along a spectrum; a question of emphasis rather than a choice between opposing world views.

• the value of education	education as a social good--- education should be available to all, or
	education as an individual asset--- as a limited commodity with a market value, education should be allocated according to the individual's attributes and merit.
• the relative importance of the learning experience and learning outcomes	a learning experience is as important as the learning outcomes because it develops skills and pathways relevant to the discipline: design should support development of learning skills **and** achievement of learning goals or
	the process is irrelevant and only measurable outcomes matter, so design restricts educational strategies and content to readily measurable elements.
• the individual and social aspects of learning	learning is an individual process--- the individual alone must master the content and skills, leading to design principles that support individual study or
	learning is a social process---- collaborative learning processes develop broader and deeper understanding and skills, leading to design principles that support collective, social learning.
• interpretations of the meaning of independence in learning	learners are self-directed, self-managed, skilled in multi-tasking--- potentially justifying minimal support and limited flexibility on timelines and assessment requirements.
	learners manage many demands and may need to develop skills and confidence in handling

	different learning processes, so providers should offer a range of support to help learners develop these skills.
• the relationship of learning resources to the context in which they are developed and used	learning resources and instructional strategies are value neutral, so learning materials are interchangeable across contexts and cultures.
	learning resources and instructional strategies inevitably reflect the context in which they are developed and used, so providers using learning materials in other than their original context must consider all the contextual factors of design, content and learning processes and adapt the materials appropriately.

The mid to late 20th century expansion of open and distance learning, based on the rationale of providing access to learning for those with limited learning opportunities, aligned ODL with a view of education as a social good; developing a better-educated population. Although changing political climates, funding models, technologies and contexts have strained allegiance to these values (Lentell and O'Rourke, 2009), decision-makers still proclaim tacit agreement with them. Moreover, distance educators continue to support core values of respect for learners and sustainability of provision (Lentell and O'Rourke, Cambridge conference session, 2009).

4. ODL and OER concepts of learning resources

ODL's stated mission, to provide genuine access to learning, especially for those previously excluded, led to the recognition that effective resources for distance learning must address both the academic subject requirements and the learners' context and needs for guidance, feedback and support. As a result, the process of developing distance learning resources requires thoughtful design that anticipates learners' needs and questions at every stage. Providers who are committed to quality distance learning apply recognised principles of effective learning design in their distance courses, and monitor learner responses and learning outcomes for each course.

Course development typically involves teamwork among experts in the discipline, in instruction and in technologies: effective course provision requires maintaining continuity between course concepts and the tutoring process. Providers committed to genuine access to learning regard tutoring and learner support as an essential component of ODL, rather than an optional extra.

As with any field, ODL has seen continuing experimentation with different strategies. For example, early initiatives in developing online courses, especially in universities with no ODL experience, introduced a DIY aspect to course development, with results that resembled early 20th century distance courses

comprising lecture notes, a list of texts and instructions for the final exam. Although the media were different (PowerPoint, visuals, discussions), the underlying assumption was the same; that materials developed for face to face courses are equally applicable for distance learning. This assumption is an important issue for considering OER and open and distance learning.

OER concepts of developing educational resources are somewhat difficult to pin down, since it is a young initiative and there is a diversity of producers of materials originally intended for many different purposes, notably on-site teaching. OER were first defined as:

"The open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for noncommercial purposes." (UNESCO, 2002)

As Butcher (2010) notes, the OER concept is legal and economic, because "it describes educational resources that are freely available for use by educators and learners, without an accompanying need to pay royalties or licence fees."

Recurring themes in OER literature seem to focus more on the process of producing OER than on meeting learners needs,

"this emerging open education movement.... is built on the belief that everyone should have the freedom to use, customize, improve and redistribute educational resources without constraint." (Cape Town Open Education Declaration, 2008, quoted in d'Antoni, 2009)

The background note for an extended consultation among decision makers, the 2010 UNESCO/COL initiative, *Taking OER beyond the OER community, Policy and Capacity*, stated that the OER concept was not well understood, and observed,

"... it is probable that the flow of OER is currently occurring mainly in one direction – from the north to the south. Despite some emerging initiatives, OER are still a marginal and donor-driven phenomenon in most of the developing world." (UNESCO, 2010)

Some recent OER initiatives are associated with collaborative development of learning resources, a concept that is familiar in ODL. However, as ODL has demonstrated, collaboration requires investing in time, funding and capacity-building, and involves negotiating differences in context, perspectives, and approaches to teaching and learning.

5. Looking the gift horse in the mouth: considerations in using or repurposing educational resources

An assumption that currently available OER will include an item that is a perfect fit for an ODL course brings to mind the theory that a thousand monkeys working at a thousand typewriters would eventually produce the works of

Shakespeare. Folklore and popular culture also offer cautionary tales about unwitting buyers and exceptional deals.

Principles emerging from three components of ODL experience can help guide the use of OER in ODL; developing learning materials; negotiating course sharing between providers, and capacity building.

Lessons from developing learning resources

Needs analysis, the first process in developing learning materials, can also provide a framework for identifying OER with potential uses for a specific ODL situation. Identifying learning needs, goals, context, outcomes, appropriate teaching, learning and assessment strategies establishes a starting point for the search and a framework for assessing the "finds". Locating one's own position and destination makes it easier to navigate the complex terrain of OER.

Developing ODL learning resources is typically a collaborative process, requiring extensive consultation among specialists in the discipline, in instruction, and in technologies. Recent case studies describe the use of collaborative processes to identify and adapt OER resources for uses in other educational situations, a pilot project in which the University of Malawi adapted materials from Michigan State University, (Ngalande, 2010) and a long-term initiative to develop ODL resources from OER and other source materials for the Virtual University for Small States of the Commonwealth (VUSSC) (West and Daniel 2009). Without collaborative support and specialist staff expertise, developing OER can be overwhelming burden on individual faculty (Donkor and Tagoe, 2010).

Collaboration works best where there is equality among all partners: if one partner has all the cards (or materials or skills), it limits the capacity of others to negotiate the best way to adapt resources appropriately for their end-users.

Lessons from course sharing between ODL providers

Typically ODL materials are designed for learners studying a program in a specific context, governed by specific credit and qualifications parameters. But designing learning resources for specific learning needs and context can also limit broader use of those resources. The ODL history of transferring materials from one context to another raised issues of compatibility with different contexts, content, cultures (both local and organizational) and accreditation. In addition, considering OER for distance learning raises questions about the appropriateness for ODL of materials developed for classroom use.

The principles guiding ODL providers in successfully sharing course materials, despite the challenges, are relevant to the process of identifying and using OER. An institution might acquire an ODL course needed to offer a complete programme for a degree if it does not have access to staff or other resources to develop the course itself. The process requires collaboration between distance learning specialists and academics at both the source and acquiring institutions, and ideally involves collegial conversations to share perspectives.

Clarifying learning needs, goals and methods is similar to these steps for developing a course, and provides a basis for searching for an appropriate course from another institution. Identifying credit weight and academic requirements refines the search.

Reviewing course materials from another institution examines compatibility in terms of intended learners, content, philosophical perspective, approaches to teaching and learning, assessment strategies and technology requirements. Key considerations are openness to modification, in terms of course design and copyright, and costs of acquisition and adaptation.

Although course sharing processes work fairly well within a shared cultural context, especially when academics at both institutions know each other, they are less successful where there are significant differences in cultural, organizational or educational contexts. However, personal contact makes a difference. In one case study of an African university adapting resources, the source materials came from a collaborating institution in the US, rather than from an institution previously unknown to the end users in Africa (Ngalande, 2010).

Lessons about capacity building
Although some ODL providers offer formal learning programs to prepare staff for their role, the learning process often occurs during the process of developing ODL resources and teaching at a distance (Burge and O'Rourke, 1998, Lockwood, 1998).

Ideally, staff development is an "each one teach one" process. Members of course teams share their knowledge about a discipline, about effective learning strategies for a specific situation, about use of technologies. Academic staff share their ODL experiences with academic colleagues, within and across disciplines. Course developers and technology specialists share ideas garnered from one course with other developers and academics. Reviewing ODL courses from other institutions helps to clarify concepts about effective design and instructional strategies.

Proponents of using OER for ODL emphasize the importance of both formal and informal capacity building. Butcher (2010) notes that reviewing OER critically with a view to adaptation can be a learning experience for both faculty and learners, if resources are available to support the process. However, "investment in designing effective educational environments is critically important to good education": the alternative, "exporting masses of educational resources" from the developed world can undermine capacity building potential in the developing world.

There is considerable overlap between essential ODL skills and the list of skills required for effective use of OER in the UNESCO/COL Guidelines for OER in Higher Education: "Programme, course, and materials design and development expertise, with a particular focus on helping educators to harness the full potential of resource-based learning in their programmes and courses", as well

as the leadership, management, and technical skills associated with ODL expertise (UNESCO, 2011).

Despite the apparent overlap of skills needed for developing OER and ODL resources, it is important to recognize that the OER concept has not yet developed a common understanding of a purpose or métier that would serve as the basis for appropriate and consistent capacity development strategies. So far, the focus of OER has been on placing product on the shelves; rather than on the more taxing issues of delivering all the elements of accessible, creditable learning that ODL continues to address.

6. Conclusion

Although the rhetoric refers to OER's potential to expand access to education, OER is essentially a method of making educational resources available for free, under six different types of licensing agreements. Many of the promising externally funded pilot projects in OER have been to develop or adapt resources for use in face to face settings, or for independent, unaccredited study or for "teaser" study components leading to registration for paid studies, rather than for open and distance learning.

Open and distance learning experience provides a unique perspective for a critical consideration of OER, and brings familiarity with the costs, skills and commitment required to provide open access to genuine learning opportunities, and often, a healthy skepticism about developments that promise revolutionary change but promote a particular interpretation of improved access to learning. On the positive side, applying ODL principles and experience to OER could inform more systematic, coherent, user-friendly strategies for providing accessible learning resources.

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Gender, age, marital status and open, distance and sandwich educational programmes in South West Nigeria: implications for internationalisation across borders in learning

Joyce Olufunke Ogunsanmi
University of Ado Ekiti, Nigeria
Ogunsanmiolufunke@Yahoo.com

Abstract

The study investigated the influence of gender, age and marital status on open, distance and e-learning in Nigeria. The forms of open, distance and e-learning in Nigeria are open, part-time, sandwich done through open and daily basis, weekend, and sandwich/holiday programmes.

The study was a descriptive research of the survey type. The sample consisted of male and female undergraduates from 3 institutions – the Federal Polytechnic, Ado – Ekiti (232), the National Open University, Akure (72) and the University of Ado – Ekiti (484).

A questionnaire solicited information from the undergraduates randomly selected as sample on items relating to gender, age, marital status and type of educational training in the selected institutions running the programmes. Three research questions were raised for the study. Results revealed that there were more females than males and that undergraduates within the age bracket of 20-25 years were more than other age brackets. Also, singles were more than the married, separated, divorced and widow. These result / findings were discussed and the counselling implications were highlighted towards internationlisation of gender, age and marital status across borders in learning.

Keywords: Age, gender, marital status, open learning, distance learning, sandwich programmes young and old undergraduates.

Introduction

Nigeria, like other nations of the world, values education for her citizens and emphasizes quality education in all forms. There is no gain-saying the fact that quality education is very necessary for individuals and for national development. The Nigerians society is not static, but dynamic. This means that it must demand certain priorities in terms of new knowledge, status and updating of existing knowledge (Allan, 1977).

The intention of the Government of Nigeria to make education available to all citizens is highly appreciated by all who know the relevance of education in the development of individuals and the nation.

Thus, people are encouraged to acquire knowledge through regular and irregular education. In order to achieve this objective, efforts are made to design

programmes that could enable people to go for further learning at convenient times. As such, people who are in employment could still undergo higher education. Hence, there are distance learning, sandwich programmes, open learning and part-time programmes designed by the Federal Ministry of Education. These programmes have attracted many people for years and many graduates have been produced through them (Njoku, 1996). They have been introduced into the educational system of Nigeria so that both individuals and societal aspirations for acquisition of more knowledge could be met through them (Owuamanam Ogunsanmi, 2009).

Almost all higher institutions of learning have some form of the mentioned irregular education programmes as sandwich, distance or part-time programmes apart from the regular open learning programmes of the National Open University of Nigeria (Jegede, 2002).

The establishment of degree programmes in the forms of part-time, distance learning, sandwich and week-end programmes was an attempt to solve problems observed in Nigeria concerning development issues about adolescent, young adults and adults (male and female). Some of the problems include low enrolment in and poor quality of Public Sector Vocational in Technical Colleges, formal education not well attuned to the needs of the labour market, high rates of female illiteracy, low female enrolment in and high drop-out from adult education programmes, underlying problems of low political commitment and low funding of adult education (National Planning Commission & UNICEF, Nigeria, 2001 and 2002). It has been observed that the level of education of women and the general populace has improved, especially in the Southern Western and Eastern Nigeria (Uduigwomen, 2004). It has also been observed that individuals have been trained through sandwich programmes, distance learning and part-time programmes in Law Teaching, Business and Management (Akomolafe, 2006). The advantage of open and distance learning (ODL) is that it takes place outside the traditional school system and is characterized by liberal admission procedure and requirements. The sandwich programme ruins during vacations and in some cases, week-ends in notable universities in Nigerians. The Open and Distance Learning, sandwich and part-time programmes are commonly run in most Universities in Nigeria, like the Lagos State University, Lagos University of Ibadan, Ibadan, university of Lagos, Lagos, University of Ado – Ekiti, Ado- Ekiti , Ahmadu Bello University, Zaria and University of Benin, Benin and Adekunle Ajasin University, Akungba Akoko.

These universities compare with in some respects with universities outside Nigeria, which also run programmes on part-time, online, through distance learning and e-learning. Such programmes include Law, Business & Financial Management and Teaching at the undergraduate and post-graduate levels. Some of such universities overseas include University of Southern California, University of Phoenix and Dominican University.

The culture of education injected into the average Nigerian seems to compare with that of foreign or westernized education. It appears it is commonplace to see married, unmarried, young adults, adults, male, female single, separated and widow, undergoing different and varied programmes in Nigerian universities

on part-time basis, open and distance learning method and sandwich programmes.

The actual number of males as observed against females, the age groups of individuals involved and their marital status are not clearly known.

Therefore, this study was an attempt to investigate whether there are more males than females learning through the various forms of educational methods. Also, it sought to find out the most common age group of participants and an idea of the number of men and women, the separated, divorced individuals and widows or widowers.

To guide the study, the following research questions were raised:

1. Are there more males than females on part-time, open distance learning and sandwich educational programmes in South West Nigeria?
2. Are there more young than old undergraduates on part-time, Open, distance learning and sandwich educational programmes in South West Nigeria?
3. Are there more singles than married, separated, divorced or widows on part-time, open, distance learning and sandwich educational programmes in South West Nigeria?

Research method

The research employed the descriptive design of the survey type. The population was all undergraduates on part-time, open, distance learning and sandwich programmes in three selected educational institutions. The states from which the institutions (The Federal Polythenics, Ado-Ekiti, Ekiti State, National Open University, Akure Ondo State and University of Ado – Ekiti , Ekiti State) were also purposively selected in the South West of Nigeria.

0The sample consisted of 778 undergraduates randomly selected from the study centres. The research instrument was a questionnaire designed by the researcher. It contained items on bio-data of the sample. The responses were analysed using frequency counts and percentage.

Results

Research question 1
Are there more males than females on part-time, open, distance learning and sandwich programmes in South West Nigeria?

Table 1: Sex of Undergraduates on part-time open, distance learning and sandwich programmes

Frequency counts and percentages were used in analyzing the data.

Sex	Frequency	Percentage (%)
Male	351	44.5
Female	437	55.5
Total	788	100.0

Table 1 reveals that out of the 788 undergraduates sampled for the study, there were 351 (44.5%) males and 437 (55.5) females on the various programmes. This indicates that there were more females than males undergoing part-time, open, distance learning and sandwich programmes in South West Nigeria.

Research question 2
Are there more young than old undergraduates on part-time, open, distance learning and sandwich educational programmes in South West Nigeria?

This sought to investigate whether there were more young than old individuals on the various programmes. Frequency counts and percentage were used to analyse the data.

Table 2: Age of undergraduates on part-time, open, distance learning and sandwich programmes

Age	Frequency	Percentage (%)
Below 20 yrs	156	19.8
20-25 yrs	438	55.6
26-30yrs	117	14.8
30-35 yrs	25	3.2
36-40yrs	20	2.5
Above 40 yrs	32	4.1
Total	788	100.0

Table 2 revealed that undergraduates below 20yrs and 20-25 yrs formed 75.4% of the total sample, those between 26yrs and 40yrs formed 20.5 of the total sample and above 40 yrs formed 4.1% of the total sample for the study. Hence, there were more young undergraduates on the various programmes.

Research question 3
Are there more singles than married, separated, divorced or widow on part-time, open, distance learning and sandwich educational programmes in South West Nigeria?

Frequency counts and percentages were used in analysing the data as presented on table 3.

Table 3

Marital status	Frequency	Percentage (%)
Single	424	53.8
Married	339	43.0
Separated	16	2.0
Divorced	6	0.8
Widow	3	0.4
Total	**788**	**100.00**

Table 3 revealed that singles on the various educational programmes were 424 (53.8%), married, 339 (43%), separated, 16 (2.0), divorced, 6 (0.8%) and widow, 3 (0.4%). Hence, singles on the various programmes were more than the married, separated, divorced and widow.

Discussion: conclusion, implications and recommendations

The analysis of the data generated revealed that there were more females than males, more young adults than old adults and more singles than married men and women, separated spouses, divorced individuals widows and widowers. The finding that there are more females than men learning through the various methods of learning (distance learning, part-time or sandwich) agrees with Uduigwomen (2004), who observed that the level of education of women in Nigeria has improved. Also, the finding that a lot of people have been trained in various professions in Nigeria agrees with Akomolafe (2006). This is an improvement on the observations of problems of higher drop-outs from school, low funding of education and too strict admission requirements that brought about the establishment of these irregular forms of education in Nigeria. Thus, the level of literacy is being raised as individuals can also have education through the open university way, part-time, sandwich or distance learning.

The present level of exposure of Nigerians to these means of education is encouraging, even though there is still a long way to go in terms of education through e-learning.

The great problem of poor electricity supply is everywhere in Nigeria. The poverty of individuals prevents the acquisition of electronic study materials like computers, flash drives and so on. However, the indicators arising from the findings of this study give hope to positive internationalisation of learning across the Nigerian boarders for Nigerians. The young, as well as married and singles will cope with the various forms and methods of education among foreigners and overseas.

The government should put in place all mechanisms to realize the goals and objectives of open and distance learning (ODL) programmes as well as the goals objectives in as contained in the National Policy on Education (FCN 2004)

All institutions operating open, part-time, sandwich and distance learning should be well funded. Information and Communication Technology (ICT) education should be encouraged and intensified to equip individuals with skills to cope with e-learning in Nigeria.

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Promoting intercultural understanding among university undergraduates through sandwich programmes in Nigeria

E.O. Osakinle
University of Ado-Ekiti, Nigeria
funmiosakinle@yahoo.com

M.B.I. Omoniyi
Adekunle Ajasin University, Nigeria
Zioncan25@Yahoo.Co.Uk

Abstract

This article describes how intercultural understanding among university undergraduates through a sandwich programme is promoted in Nigeria. The aim was to examine if the sandwich programme of the university could promote intercultural understanding among the students. Since students come from various parts of the country to attend the programme, four null hypotheses were generated for the study and 400 samples were selected across all levels. A questionnaire constructed by the researchers entitled: Promoting Intercultural Understanding Questionnaire (PIUQ) was used to collect data from the sandwich students. The hypotheses were analysed using Pearson Product Moment Correlation Analysis and they were tested at 0.05 level of significance. The results revealed that there was no significant relationship between intercultural understanding of sandwich students and their language, values, knowledge and beliefs. It was, therefore, concluded that sandwich students need proper intercultural understanding, they are to have more intercultural appreciation of and engagement with cultural and individual differences. This needs to be fulfilled in a spirit of tolerance, empathy and respect but cannot be achieved unless the common humanity of all human communities is recognized and accepted without reservation.

Introduction

Nigeria is no doubt a multi-ethnic nation. This brings about diversities in culture, religion, as well as language. To this end, this paper attempts to explore these diversities with a view to promoting intercultural understanding among university undergraduates through a sandwich programme, thereby engendering national integration and unity.

It is clear that all the ethnic nationalities in Nigeria are hospitable, loving and accommodating. The experience of the United States of America has shown the whole world that cultural diversities and heterogeneity, if properly managed, can become major assets to development and greatness. Nigeria has all it takes to be great as the United States of America in terms of human and material resources. However, there is the need to develop a new attitude and orientations towards ourselves. This can only be achieved if we have unbiased information and knowledge (understanding) of ourselves.

According to Omotoso (2006), Nigeria is a multi-ethnic state. It is generally believed that the country has over 250 ethnic groups. Most of these ethnic groups have distinct customs, traditions and language. Omotoso (2006) went further to say that the larger and politically dominant groups are the Yoruba, the Igbo and the Hausa/Fulani. Apart from these major ethnic groups there are others such as the Ijaw, Edo, Urhobo, Igala, Nupe, Ebira, Kanuri, Idoma, Ibibio, Efik, Junkun and others. It is note worthy, that each ethnic group occupies a distinct territory and most of the smaller had very little contact with other groups before the imposition of colonial rule.

Culture is a veritable tool used to bring change and meaning to people's lives. Such as arts, health/sanitation, language, law, music. According to Ayodele (2006), education is a learning process, either formal or informal, which includes learning the content of a given culture (selected skills, knowledge and attitude). Education is, in fact, a process of socialization (enculturation). Education is the process of cultural transmission for continuity and growth and for knowledge dissemination. According to Fafunwa (1974), education is "either to ensure social control or to guarantee rational direction of the society or both. Morrish (1972), drawing from Jaeger and Selznick (1964), believed that, in very general terms, the objective of education is to provide pupils and students with the means of understanding their society and its structures, and to open up for them a way of creating 'meaning' out of their environment and their relationship". According to Morrish (1972), education should not merely preserve and transmit the best of the past; it must also demonstrate its function in the present as well as its possibilities for the future. The process of education is part and parcel of the socialization process, while socialization or education is learning to confirm to a given cultural pattern. Education and culture are, therefore, inseparably interrelated. This is what the sandwich programme attempts to bring to the doorsteps of its partakers. A lot of the students meet on the programme and marry later.

Borode (1998) views sandwich education as a formal adult education programme organized between the off-hours of holidays of conventional education, notable for the training of workers on the job. In the same vein, Nwegwa (1997) sees a sandwich course as an aspect of in-service programme which is given to people who are already studying either for their general education and upgrading or to enable them to obtain higher certificate diplomas or professional qualifications. A sandwich programme has its contact periods during teachers' holidays. The period of the sandwich helps students to interact, and to gain access to the full time studies, to share the higher institution community life experiences and ensure that the trainees enhance their own educational improvements. Adesina (2001) in Odu, et al (2009) explained that some of the reasons for establishing sandwich degree programme in the Nigerian universities of higher learning include: exposing participants of the programme to modern and contemporary approaches, techniques, knowledge and skills with a view to improving their efficiency and updating / their knowledge of essential subjects.

Literature review

Intercultural activity, as noted by Sen Gupta (2003), is generally understood to be any encounter between people of different cultures. According to the Standard Dictionary of the English Language (Funk and Wagnalls, 1970), "understanding" means "the sum of the mental powers by which knowledge is acquired, retained, and extended; the power of apprehending, relations and making inferences (deductions, conclusions) from them". It can also mean "an agreement between two or more persons; sometimes an arrangement or settlement of differences, or disputed points". In the present context, intercultural understanding included close acquaintance, empathy and appreciation between people of different cultures.

Culture refers to the consistent ways in which people experience, make sense of, and respond to, the world around them; it represents the collective 'ways of doing' of a given population; it is common to all human groups; it is shaped by historical, social, political, economic, and geographic factors (Marshall, 2002); it is learned in the sense that it is acquired knowledge that people use to interpret their world, and from which they generate social behaviour; language plays a critical role in its transmission (Campbell, 2004; Marshall, 2002). Culture is therefore a continuous, dynamic process, which indicates that we reinterpret and modify our assumptions as we grow and learn from our contact with external influences (Hernandez, 1989). It is manifest in material goods and artifacts (e.g. food, dress, and arts) as well as in fundamental beliefs, perceptions of time and space, and precepts about human nature (Marshall, 2002), and its characteristics vary from highly explicit or obvious (recognizable in its material manifestations) to highly implicit or deeply hidden elements (attitudes, values, beliefs). It should be understood, however, that these explicit and implicit elements are interwoven because of constant interaction between them (Arvizu et al., in Hernandez, 1989).

People are naturally steeped in their own culture (i.e. enculturated) and therefore ethnocentric (Sen Gupta, 2003). By this token, ethnocentrism is inherent in the human condition and proceeds from the premise that "our way is the best way and the only way" (Bennet, 2003). It follows therefore that in the event of an intercultural encounter, people would be challenged by the sudden difference in culture, which shifts their focus from their familiar sphere to aspects of themselves with which they are unfamiliar. Relatively, superficial differences may not be experienced as challenging, but they can be if they implicate fundamental beliefs and values, because encounters may force an evaluation or re-evaluation of such beliefs and values (Sen Gupta, 2003). When a person experiences a change in cultural context, acculturation is the outcome. Acculturation can and often does cause a more or less disruptive and destructive sense of cultural alternation, disorientation and general loss of cultural identity. Anxiety and feelings of alienation may develop when individuals start feeling that they are moving away from their group and are running the risk of becoming outsiders in their culture of origin. A backlash effect of acculturation may be therefore that people retreat into a cocoon of their pre-exposure beliefs and refuse to look at their own cultural systems from the viewpoint of the "other". Similarly, learners' receptiveness to teaching material may be

significantly reduced if the content of the material makes them fell isolated and/or marginalized in the classroom (Sen Gupta, 2003).

People from different cultures tend to perceive the world differently, but are sometimes unaware of alternative ways of perceiving, believing, behaving and judging. Hall (1959; 1976) contends that most people hold unconscious assumptions about what is appropriate in terms of space, time, interpersonal relations and ways of seeking truth. These assumptions may cause intractable difficulties in intercultural encounters. A conscious effort must therefore be made to overcome ethnocentric attitudes and to recognize the cultural differences between nations and ethnic groups. According to Bennet (2003), this recognition process takes place in six stages: denial, defence, minimizing, acceptance, adaptation, and integration.

Inter-(cross-) cultural awareness is a prerequisite for the achievement of intercultural understanding that begins when a person realizes that he or she has a particular cultural identity that is one among many, and becomes aware of the similarities and differences between them (Bennet, 2003). The ability to differentiate enables people to compare and therefore evaluate their culture in relation to that of others, which means that they take a decisive step away from the ethnocentric position from which the discovery of cultural diversity started (Cushner and Brislin in Sen Gupta, 2003). Neither understanding nor true acceptance is likely when differences are only identified at a superficial level. Developing intercultural competence includes self-reflection, gathering information about your own and other cultures, appreciating cultural similarities and differences, using cultural resources, and acknowledging the essential equality and value of all cultures (Klein and Chen, 2001). It is demonstrated, amongst other things, by the ability or sensitivity to interpret intercultural styles of communication (language, signs, gestures, body language, and customs) (Bennet, 2003).

People communicate within and between cultures by means of language, which is therefore central to their social relationship. It both reveals and marks status, power, authority, and levels of education. Cultural differences, therefore, tend to be revealed in language, and misunderstandings between people from different cultures tend to arise from their use of language to communicate with each other (Campbell, 2004).

However, effective intercultural communication depends on both the language and the cultural perceptions and priorities of whoever one interacts with. Culture-specific perceptions and priorities are evident from a specific cultural code (symbols, manners, dress, and gestures) (Sketie, 2005). Successful communication is only possible on the basis of a shared code. "To share a code you must know the meaning of the foreign word(s) and the meaning must be the same in both languages for if it is different, the code is not shared" (Ter-Minasova, 2003). People should therefore be sensitive to the way in which members of other cultures perceive reality and why; how they express their perceptions; and importantly, how their perceptions differ from those of other cultures (Campbell, 2004). It follows, too, that although language is the primary vehicle of communication, non-verbal communication is equally important.

To guide the study¸ the following hypotheses were generated:

Sandwich programme would not bring a significant relationship in intercultural understanding among students and their language.
Sandwich programme would not bring a significant relationship in intercultural understanding among students and their values.
Sandwich programme would not bring a significant relationship in intercultural understanding among students and their knowledge.
Sandwich programme would not bring a significant relationship in intercultural understanding among students and their beliefs.

Purpose of the study

The purpose of the study was to examine the intercultural understanding among university undergraduates through sandwich programme. It was also to examine whether the coming together of these students during the contact periods influenced them in any way to such an extent that it would be reflected in their behaviour after the contacts and in their various schools.

Methodology

Descriptive research of the survey type using interview method was used to enable the researcher get the students on the programme as well as meet them on the jobs. The population for the study comprised all sandwich undergraduates in the programme in the University of Ado-Ekiti, Nigeria (UNAD). The first sample consisted of 400 undergraduates of the sandwich programme of UNAD. The selection of the samples was done through simple random sampling.

The instrument used was a questionnaire titled: Promoting Intercultural Understanding Questionnaire (PIUQ). The questionnaire had two parts (A & B), part A was on the bio-data which sought information on sandwich students, their levels, sex, age and area of specialization. Other information: present employer, position in the school. The respondents were to fill the bio-data as appropriate to them. The part B of the questionnaire consisted of 20 items which sought information concerning the promotion of intercultural understanding of students on the sandwich programme.

A test-retest method was used to ascertain the reliability of the instrument. 30 copies of the questionnaire were administered on the respondents that were not part of the sample used for the study from the Part Time Programme (PTP) of the University. After two weeks of first administration, the test was re-administered. Pearson Product Moment Correlation Coefficient was used to analyse the two tests and a reliability coefficient of 0.75 was obtained. This was found to be reasonably high and therefore considered reliable for the study.

Five research assistants were used. Each of the research assistants was instructed to visit the sampled schools for the administration of the instrument. The researcher and research assistants were able to get the sandwich programme students during the contact as well as when they came to the office

for certain. Personal contact between the researchers, research assistants and respondents enhanced better understanding of the items in the instruments. The copies of the questionnaire were collected after completion.

The data collected were analysed using Pearson Product Moment Correlation.

Table 1: showing relationship in intercultural understanding among Sandwich students and their language

Variable	N	Mean	S.D	df	r_c	r_t
Intercultural	400	2.49	0.71	398	0.05	0.164
Language	400	3.40	1.58			

The result on table 1 showed that r_c (0.05) is less than r_t (0.164). It implies that there is no significant relationship between Sandwich Students' intercultural understanding and their language. The null hypothesis is accepted. It therefore means that Sandwich Students use languages to bring about understanding of themselves while interacting during contacts.

Table 2: showing relationship in intercultural understanding among Sandwich students and their values

Variable	N	Mean	S.D	df	r_c	r_t
Intercultural	400	2.49	0.71	398	0.162*	0.164
Value	400	10.03	1.77			

Table 2 revealed that r_c (0.162) is less than r_t (0.164). Hence, the null hypothesis was accepted. There is no significant relationship between the intercultural understanding of Sandwich Students and what they value. This means that the Sandwich Students value others from other cultures in terms of cultural similarities and differences.

Table 3: showing relationship in intercultural understanding among Sandwich students and their knowledge

Variable	N	Mean	S.D	df	r_c	r_t
Intercultural	400	2.49	0.71	398	0.188*	0.164
Knowledge	400	4.82	1.84			

Table 3 showed that r_c (0.188) is greater than r_t. It revealed that there is a significant relationship between the intercultural understanding and level of knowledge among Sandwich Students. The hypothesis is not accepted. It therefore means that Sandwich Students have a good knowledge of intercultural understanding of students from other cultures.

Table 4: showing relationship in intercultural understanding among Sandwich students and their beliefs

Variable	N	Mean	S.D	df	r_c	r_t
Intercultural	400	2.49	0.71	398	0.065	0.164
Belief	400	2.42	0.80			

Table 4 revealed that r_c (0.065) is less than r_t (0.164), it proves that intercultural understanding of Sandwich Students is not having any significant relationship

with their belief. The hypothesis is therefore accepted. It therefore means that Sandwich Students have a good understanding about the beliefs and ways of doing things in other cultures.

Discussion

Findings from the study showed that sandwich students use language to bring about understanding of themselves while interacting during contact. It is clear that people communicate within and between cultures by means of language, which is central to their social relationship. Language reveals and marks status, power, authority and level of education. According to Campbell, (2004), cultural differences tend to be revealed in language and misunderstandings between people from different cultures tend to arise from their use of language to communicate with each other. Language plays a critical role in the transmission of culture (Campbell, 2004; Marsh, 2002).

From the findings, it was discovered that sandwich students value others from other culture in terms of cultural similarities and differences. This findings, however, contradicts the Bennet, (2003) which says that inter-(cross)-cultural awareness is a prerequisite for the achievement of intercultural understanding that begins when a person realizes that he or she has a particular cultural identity that is one among many, and becomes aware of the similarities and differences between them.

The findings also revealed that sandwich students have a good knowledge of intercultural understanding from other cultures. This finding supports Ayodele (2006) that education is a learning process, either formal or informal, which includes learning the content of a given culture (selected skills, knowledge and attitude). The finding also supports Fafunwa (1974) which says that education is "either to ensure social control or to guarantee rational direction of the society. Furthermore, Morrish (1972) believed that, in every general terms, the objective of education is to provide students with the means of understanding their society and its structures and to open up for them a way of creating 'meaning' out their environment and their relationship."

The finding revealed that Sandwich students have a good understanding about the beliefs and ways of doing things in other cultures. This finding is supported by Marshall, (2002) that culture refers to the consistent ways in which people experience, make sense of, and respond to, the world around them. It represents the collective 'ways of doing' of a given population. It is common to all human groups, it is shaped by historical, social, political, economic and geographic factors. Marshall (2002) further said that culture manifests in material goods and artifacts (e.g. food, dress and arts) as well as in fundamental beliefs, perceptions of time and space, and precepts about human nature.

Conclusion and recommendations

In conclusion, what is required to achieve proper intercultural understanding is informed intellectual appreciation of and engagement with cultural and

individual differences, which presupposes recognition and acceptance, in principle, of the existence and inevitability of cultural diversity. These requirements should be fulfilled in a spirit of tolerance, empathy and respect, which cannot be achieved unless the common humanity of all human communities is recognized and accepted without reservation.

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Towards a social justice architecture for open, distance and e-learning

Paul Prinsloo
University of South Africa
prinsp@unisa.ac.za

Abstract

Serving social justice does not come naturally in a world where it may be seen as a synonym for both the universalisation of western liberal democracy and neo-liberal beliefs in the normative nature of the market to determine value and relationships. Within the context of the changing role of higher education in the 21st century, it is clear that social justice is not high on the list of priorities, either for higher education, or for open, distance and e-learning (ODEL).

Serving social justice requires reconsidering the role of higher education and contesting the metanarratives of performativity and market-driven curricula and pedagogies. We need to defend higher education as 'a moral and political practice' which prepares graduates for more than just employment and a life in service of consumerism.

This paper provides a conceptual exploration of education not as 'an unmixed good' (Giroux 2003), but in a context where increases in knowledge and expertise are used either to abuse and exploit, or to serve humankind. This paper proposes some pointers for the development of a social justice architecture as a possible framework for thinking about the role of ODEL in serving social justice.

Introduction

The unquestioned 'redemptive' role of education in promoting social justice becomes debatable amidst the 'debris of utopian projects' (Gray 2008, p. 1) and consideration of various unsuccessful attempts to export Western liberal democracy as exponents of social justice.

The 30 articles contained in the Universal Declaration of Human Rights accepted by the General Assembly of the United Nations in 1948 provide a generally accepted basis for a definition of social justice. It is, however, crucial to distinguish between serving social justice and the belief in the 'universalisation of western liberal democracy as the final form of human government' (Fukuyama in Gray 2008, p.175). The convergence of the broader discourses on social justice with attempts of the universal cloning of western liberal democracy (Gray 2008) and neo-liberal beliefs that the market is and should be the primary 'producer of cultural logic and value' (Lynch 2006, p. 3) requires a careful and very sober reflection on the relationship between ODEL and social justice.

Three personal disclaimers are therefore in order.

In following Gray (2004), I believe that there is no basis for the wide-spread belief that progress in knowledge and science will *necessarily* result in a more just and compassionate society. Gray (2004, p. 70) warns that knowledge and science cannot (and will not) 'end the conflicts in history. It is an instrument that humans use to achieve their goals, whether winning wars or curing the sick, alleviating poverty or committing genocide'.

The second disclaimer, building on the first, is that no education ever was or will be neutral. All education stands in service of particular ideologies, promises and claims. The choice to unashamedly serve social justice is therefore a legitimate one. However, such a strategic choice brings about unique responsibilities and, potentially, also liabilities…

Accepting that 'knowledge is not an unmixed good; it can be used as much as a curse as a blessing' (Gray 2004, p. 70), I soberly accept the *impossibility* to achieve 'universal and lasting peace [which] can be established only if it is based on social justice' (International Labour Organisation Constitution). Equally impossible is to accept the status quo of inequalities and injustices as permanent.

It falls outside the scope of this paper to fully map the discourses and historical gestalts of social justice from the early coinage of the notion of social justice by Taparelli in 1840 through the work of John Rawls to present-day theories and gestalts of social justice. There are ample examples of how different regimes and organisations have used and perverted the belief in social justice for aims tainted by individual and group utopian projects (Gray 2008).

Against this background, this paper aims to provide a provisional conceptual framework for a social justice architecture for higher education and ODEL. In order to achieve this aim, I will firstly comment on the non-neutrality of education before mapping some of the current discourses in higher education as the context for suggesting a number of pointers for developing a social justice architecture.

The neutrality of education

No education is neutral (Apple 2004; Bernstein 1996). Curricula are contested spaces and the result of a combination of compromises and victories of different ideologies and claims by different stakeholders (Prinsloo 2007). *All* education sustains (and in the case of ODEL exports) the epistemologies and ontologies of those who developed these curricula (eg Altbach & Knight 2007; Westwood 2006). Those on the receiving end are often not aware of the ideologies embedded in the curriculum; or do not care for a variety of reasons, such as the urgent need for education, the lack of local resources or political will. Colonialisation and the often uncontested export of Western epistemologies have entrenched the status of North-Atlantic canons and epistemologies of knowledge throughout the developing world. Students' competencies in these imported canons are often marketed (by international higher education

institutions) or seen (by students and the communities they support) as their passports to employment and personal fulfilment; or increasing their success for immigrating to a developed world context.

The increasing internationalisation of higher education and the reach of cross-border education; and acknowledging the impossibility of developing curricula that are not laced with cultural and epistemological assumptions and claims; leaves us with the question: How do we develop curricula and pedagogies acknowledging that the way *we* see the world is not the only legitimate way of seeing the world; and that our knowledge is partial and partisan to our geopolitical, socio-economic and cultural contexts and histories?

The above question cannot (and should not) be answered without seriously considering the broader context of higher education in the 21st century.

The broader context of higher education[1]

There are multiple and often contradictory claims regarding the changing role of higher education in the 21st century (eg Barnett 2000; Blackmore 2001; Giroux 2003). These authors (and others) differ regarding *how* higher education should respond to the impact of neo-liberal capitalism (Giroux 2003); managerialism and the corporatisation of higher education (Diefenbach 2007) and the changing role of higher education within the context of globalisation (Barnett 2000; Blackmore 2001). Despite different opinions on how higher education should respond, there is general agreement that universities are no longer the 'primary producers, determiners, transmitters, and authorisers of valued knowledge' (Blackmore 2001, p. 353; see also Barnett 2000). Giroux (2003, p. 182) claims that higher education has become the 'handmaiden' of corporations in an 'age of money and profit, [where] academic disciplines gain stature almost exclusively through their exchange value on the market, and students now rush to take courses and receive professional credentials that provide them with the cache they need to sell themselves to the higher bidder'. Blackmore (2001, p. 353) talks about 'academic capitalism' where academics 'sell their expertise to the highest bidder, research collaboratively, and teach on/off line, locally and internationally'. Performativity, 'creeping vocalisation and the subordination of learning to the dictates of the market – has become an open, and defining, principle of education at all levels of learning' (Giroux 2003, p.185). While these authors disagree whether the above constitutes a 'crisis' or is part of the 'natural' evolution of higher education (e.g., Blackmore 2001, p.354); it crucially informs our quest in considering the role of ODEL in promoting social justice.

Considering the claims of the above authors, it seems realistic to accept that social justice is not necessarily high on the list of priorities for higher education in the present age. If we therefore intend to explore the question of how higher education (and ODEL in particular) should *support* social justice; it would necessitate contesting these metanarratives of performativity and market-driven

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[1] I acknowledge that although ODEL also may refer to primary, secondary and adult education, I use the notion of 'higher education' as an overarching term which includes ODEL. ODEL is inseparable from the broader context of higher education. Considering the increasing convergence between 'traditional' forms of higher education and ODEL practices, "higher education" is used as general encompassing term.

curricula. We should reinstate and defend higher education as 'a moral and political practice' which prepares graduates for more than just employment and a life of consumerism (Giroux 2003, p. 188). We need to secure higher education '… as a resource vital to the democratic and civic life of the nation' (Giroux 2003, p.192).

While preparing graduates for employment is not excluded from the general mandate of higher education, Giroux (2003, p.193) proposes that higher education's first and foremost role is to 'educate students for active and critical citizenship'. Redefining higher education as 'moral and political practice' means, according to Giroux (2003, p. 180), contesting the 'market-driven juggernaut [which] continues to mobilise desires in the interests of producing market identities and market relationships that ultimately sever the link between education and social change while reducing agency to the obligations of consumerism. The liberal democratic vocabulary of social justice has been replaced by the lure of the 'lotto, casino capitalism and the Dow-Jones Industrial Average' (Giroux 2003, p.180).

If we give Giroux (2003) the benefit of the doubt (for now) that higher education has sold out to 'rapacious capitalism' and that the only way to fulfilment as human beings is through the mantra of becoming and being compliant workers and depoliticised self-interested individuals (Giroux 2003, p. 181), then considering social justice as a viable or worthy project in ODEL will mean a dramatic turn-about. This turn-about will encompass formulating a counter-narrative which has implications for the role of higher education, the development of curricula, the nature and impact of pedagogies and access to higher education.

The impact of such a turn-about on the role, content and scope of cross-border education will be immense. Blackmore (2001, p. 357) moots the notion that in the light of the tightening of expenditures on education, higher education institutions are increasingly looking for 'export-earning potential of education as commodity'. Distance education defined as a 'profitable market' is, for many universities, a viable option to explore and to expand their offering of 'standardised, pre-packaged curriculum and methodological efficiency' (Giroux 2003, p.190; see also Haigh 2008).

If ODEL takes up the challenge of formulating and enacting a vocabulary for social justice and transformation, we will have to let go of romanticised notions of what higher education was like in the "good old days". Higher education was always in service of the dominant ideologies and perpetuated and sustained various geopolitical and socioeconomic meta-narratives of its time. *Social justice was never high on the agenda.* ODEL has to recognize and embrace the fact that our epistemologies and ontologies are context-specific and that our understanding of the world and of others is partial and conditional.

With the above as a basis, I now proceed to tentatively explore a number of pointers for a social justice architecture for higher education in general and ODEL in particular.

Towards a social justice architecture

The basis of an architecture for social justice is found in a redefined role for higher education (and ODEL in particular) resulting in a number of implications of such a new foundation for curricula, pedagogy and access. I specifically discuss "access" last because social justice is often seen as referring only to access to education whereas it actually encompasses so much more.

Redefining the role for higher education and ODEL

After mooting the fact that the role of higher education has unequivocally changed, Barnett (2000, pp. 417-420) proposes that higher education should offer particular ways of generating and assimilating knowledge such as offering revolutionary accounts of the world; scrutinising and evaluating new knowledge claims; formulating and enacting therapeutic epistemologies which emphasise not knowledge as such but rather ways of being and pedagogies for critical action.

Higher education should no longer submit to its (new) masters, whether neo-liberal economic dispensations or market-driven curricula (eg Blackmore 2001; Giroux 2003). We need to change the 'university's knowledge production system from an endorsing machine to one that seeks to produce radically new frames of understanding' (Barnett 2000, p. 417). Instead of selling out to the highest bidder (Giroux 2003, p. 184); universities have to re-establish their independence in doing and publishing research; developing curricula, designing therapeutic pedagogies and promoting responsible and broader access. Instead of supporting market-driven emphases on performativity and transferable skills; higher education has to provide counter-narratives, including 'new images, new technologies, new texts, new discourses; new forms of professional life' (Giroux 2003, p 417).

The therapeutic epistemology and pedagogies proposed by Barnett (2000, p. 419) will not only restore 'an identity between self and meanings' but will provide a powerful counter-narrative to the notion of homo economicus as sole definition of humanity (Mintzberg, Simons & Basu 2002; Giroux 2003) and provide an urgent antidote against humanity as homo rapiens (Gray 2004, p. 32).

Such a redefined role for higher education has clear implications for curricula, pedagogies and access.

The development of curricula

If curricula are 'transitional, emergent, temporal spaces' which 'flow from, perpetuate and result in socioeconomic and political belief systems and structures' (Prinsloo 2007, p. 44); it is crucial that students are encouraged to 'interrogate economic, cultural and political commonplaces' and 'investigate and redefine clichéd explanations of poverty, racism and sexism, and to be bold enough to explore different responses to the dilemmas involved in creating

societal wealth while addressing vast inequalities and managing finite resources' (Prinsloo et al 2006, p. 208). Such curricula will make the hidden curriculum visible and consciously interrupt normative discourses and provide spaces of action to confront racism, sexism, classism, etc (eg Apple 2009; Nurenberg 2011).

Re-imagining curricula encompassing previously excluded voices often results (however unintentionally) in promoting guilt (whether socioeconomic, racial or gender) and is (mostly?) counterproductive (Nurenberg 2011, p. 56). Workable spaces need to be created where issues of racial and social (in)justices can be addressed by minimising the possibility for privileged students (or students who benefited from unjust structures or practices) to 'immediately dismiss the topic or merely parrot back what they feel the teacher wants to hear while hardening all the more against the whole prospect' (Nurenberg 2011, p. 61).

Developing curricula which make the 'invisible visible' in safe but challenging spaces should be an integral part of higher education in the service of humanity (see also Freire 1973). Developing curricula for the privileged has for years been 'normal' in higher education and ODEL. Curricula serving social justice will be, and should be, an uncomfortable practice for educators, instructional designers and students. It cannot and will not be easy.

Implications for pedagogy

Pedagogies serving social justice look different from pedagogies for/of the privileged (Curry-Stevens 2005; Nurenberg 2011). Critical for this changed role for higher education is for pedagogy to embrace the need for critical action (Barnett 2000, p. 419). This will require discarding the dichotomy of theory and practice as a falsity and recognising that the relationship between theory and practice is dialectical, as *praxis* (Barnett in Blackmore 2001, p. 360). Higher education needs to prepare graduates 'to act purposefully in an environment where all bets are off, where everything is uncertain and where everything is challengeable' (Barnett 2000, p.419). In the context of critical environmental education, Rowe (2002, p.2) proposes a move away from producing 'armchair pontificators' who have all the necessary knowledge and skills, but no commitment to act as 'positive change agents'. Illiteracy for Freire (1973, p. 53) was more than just not being able to read and write, but crucially also meant being unable (or unwilling) to act and intervene.

Implications for access

Social justice and open admission requirements have often been portrayed as synonymous. Serving social justice is though much more than providing access. While open and distance learning (ODL) has always celebrated "openness" as a key characteristic, definitions and scopes of "openness" depend on the different institutions' charters, national legislation, product qualification mixes, the role of regulatory bodies, and so forth. While broadening access is an essential element of serving social justice, it often results in dismal pass rates in the nexus of under-prepared students *and* institutions. Opening up higher education also has to mean critically engaging with the epistemological distance between

the curricula and the epistemologies of learners coming under-prepared to institutions who are equally under-prepared for these students' specific needs and aspirations. "Access" in the social justice sense therefore means much more than meeting quotas of previously disadvantaged or excluded races, genders or cultures. Broadening access to higher education, often through ODEL, brings to the fore issues of social, cultural and epistemological capital, of students and institutions alike.

Conclusion

In the beginning of this paper, I offered three disclaimers serving to make known my own predispositions with regard to the question of how higher education in general (and ODEL in particular), can and should serve social justice. Serving social justice is not without its pitfalls, challenges and opportunities.

Serving social justice means formulating and defending the moral and political nature of higher education with its implications for curricula, pedagogies and access. While realising that serving social justice does not mean believing in the notion that progress in scientific knowledge and increasing the reach of education through broadening access will *necessarily* result in a more just and compassionate society; it boldly asserts the refusal to accept the present status quo, permeated with inequalities and injustices, as permanent.

Acknowledgement

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Effectiveness of the Online Course on Critical Thinking Skills among students of Arab Open University (AOU)

Rashida A. Ramadan
Department of Education, Arab Open University, Kuwait
rashida2122@hotmail.com

Abstract

The value and importance of critical thinking is clearly established as a preliminary step to achieve social justice; the challenge for instructors lies in successfully promoting students' critical thinking skills within the confines of a traditional classroom experience. Since instructors are faced with large numbers of students, they have to change their policy about contact time to meet their instructional objectives and facilitate learning; they are often forced to make instructional decisions between content coverage, depth of understanding, and critical analysis of course material. This paper examines critical thinking of students before and after using a Learning Management System (LMS) as in the e-learning program at the AOU (Kuwait branch). A descriptive–qusi survey approach was used in this study. Students (n=112) filled twice in a web-based closed questions in critical thinking. Reliability and validity of instrument were determined by using Cronbach's Alpha ($\alpha=0.89$). Descriptive and inferential statistics were used to analyze the data using SPSS Win19. Results received were analyzed, putting the students' responses in relation to gender, age, knowledge of computers in using LMS of e-learning during the period of tutoring. Results showed that the adoption of E-Learning Model significantly improved students' critical thinking skills; there was no significant difference among students based on gender or age, regarding the development of critical thinking. E-Learning Model can solve many social and cultural barriers.

These findings suggest that using E-Learning environment with LMS could be an effective pedagogy to enhance students' critical thinking skills.

Keywords: E-learning; Learning Management System (LMS); Critical Thinking; Open Education.

Introduction

Advances in Information and Communication Technology (ICT) are opening up new opportunities for distance learning, open, and e-learning. The use of ICT in delivery of education has major implications for learners and institutions. It is widely accepted that advances in information technology and new developments in learning provide opportunities to create well-designed, learner-centred, interactive, affordable, efficient, flexible e-learning environments.

In the following paragraphs we introduce the theoretical background of the main concepts of the study and some related literatures.

Open, Distance and e-Learning

Higher education institutions in developing countries often have problems regarding using technology. E-Learning offers many opportunities for supporting education in higher education in developing countries such as Kuwait. The term online course embraces a variety of electronic delivery media, for example web-based multimedia, interactive television, virtual classrooms, video conferencing, and so forth. E-learning, as a positive reaction by universities to the challenge introduced by IT, is characterized by; (1) separation in time and/or space between the teacher and students, among the students themselves, and between the students and educational resources; (2) interaction between the teacher and students, among the students, and between the students and educational resources by means of one or more media, especially through the Internet; and (3) a process of teaching and learning not limited to the immediate time and/or place (Oh, 2003).

In this paper e-learning is defined as teaching and learning that are delivered, supported, and enhanced through the use of digital technologies and media. We consider it mostly off campus learning through the combination between class attendance and the learning management system(LMS) which may encompass a few face to face meetings, but the default mode occurred by distance.

E-learning in Kuwait is still in its infancy stages and there are only a few online programs. The history of e-learning in the Arab Open University (AOU) in Kuwait at present time does not exceed more than 9 years, yet from a realistic point of view we might say that e-based learning in that university has had a 9 year experience and even more. E-learning in Kuwait is delivered by both the private sector and government organizations.

Many studies have been exploring the importance of e-learning regarding the development of student thinking (Gerber&Malovicova, 2009) who describe and analyze efforts to use collaborative asynchronous discussion forums in a three semester online education program for NGO leaders and managers in Slovakia, as a country with autocratic styles of teacher-centered education, presents strong barriers to the implementation of collaborative learning activities. The authors used Garrison's four stage cognitive processing categories to analyze some of the online discussions in the program. The two higher order critical thinking categories – integration and solution – appeared in student discussions only when prompted by specific instructional techniques. Recent studies by the National Centre for Education statistics show a growing demand and acceptance of online learning (Waits & Lewis, 2003).

Some studies indicate that students have more positive attitudes about the course and their learning in an online context, Sanders and Morrison-Shetlar (2002) examined student attitudes with regard to the Web-enabled learning component in a general biology course for undergraduate non-majors. Their

results showed a positive effect on student learning, problem-solving skills, and critical thinking skills, with females responding more positively than males.

Learner motivation is one of the key factors affecting student performance and learning, particularly online learning success (Cole, Field & Harris, 2004). If students perceive some benefits to their learning, they will likely be more motivated to perform well. As McKeachie (2002) observes, "Students who are motivated to learn will choose tasks that enhance their learning, will work hard at those tasks, and will persist in the face of difficulty in order to attain their goals."

As a result, it is seen that learners' perception plays substantial role in improving efficiency of e-learning system.

Critical Thinking:

In recent years' critical thinking' has become something of a 'buzz word' in educational circles. For many reasons, educators have become very interested in teaching 'thinking skills' of various kinds in contrast with teaching information and content. Of course, you can do both, but in the past the emphasis in most people's teaching has been on teaching content-history, physics, geography or whatever- and, though many teachers would claim to teach their students 'how to think' most would say that they do this indirectly or implicitly in the course of teaching the content which belongs to their special subject. (Fisher, 2001; 1) John Dewey, the 'father' of the modern critical thinking tradition, called critical thinking 'reflective thinking' and defined it as an active persistent, and careful consideration of a belief or supposed form of knowledge in the light of the ground which support it and the further conclusions to which it tends (Dewey, 1909; 9).

Edward Glaser (1941) defined it as an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experience, knowledge of the methods of logical enquiry and reasoning and some skill in applying those methods. Critical thinking calls for a persistent effort to examine any believe or supposed form of knowledge in the light of the evidence that supports it and the further conclusions to which it tends (Glaser, 1941; 5).

Robert Ennis added to this and says that critical thinking is reasonable, reflective thinking that is focused on deciding what to believe or do (Cf. Norris and Ennis, 1989). This definition has gained wide currency in the field, and widely used.

Richard Paul said critical thinking is that mode of thinking- about any subject, content or problem- in which the thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them. (Paul, Fisher and Nosich, 1993; 4) Paul defined critical thinking and said, "critical thinking are thinking about your thinking while you're thinking to make your thinking better" (Paul, 1993; 91), "a unique kind of purposeful thinking in which the thinker systematically and

habitually imposes criteria and intellectual standards upon the thinking, taking charge of the construction of thinking, guiding the construction of the thinking according to the standards, assessing the effectiveness of the thinking according to the purpose, the criteria, and the standards (Paul, 1993; 21).

We discovered from these definitions that, critical thinking is the ability to look at a situation, clearly understand it from multiple perspectives and take appropriate actions.

 Critical thinkers consider information carefully and separate facts from opinions and assumptions, they think about different possible ways to solve a problem, they come to correct conclusions, decide on a course of action and implement it effectively economically. They evaluate the results of their decisions, and they re-evaluate both their results and the way of they approach problems.

Critical Thinking Skills

Critical thinking skills are essential in every situation in our life because all students need to evaluate, assess, analyze, conceptualize, and judge what is presented as information or facts. Critical thinking skills are important in a democracy where citizens need to be informed in order to make judgments and decisions. Critical thinking skills consist of fundamental concepts of how we understand and learn and are the epitome of education (Shaughnessy, 1985). The student is able to distinguish between fact and opinion and bias from reason. The student can distinguish between primary and secondary sources, can evaluate information sources, can recognize deceptive or misleading arguments, and can recognize ethnocentrism and stereotypes. Critical thinking is "the careful and deliberate improving critical thinking determination of whether to accept, reject, or suspend judgment about a claim" (Moore & Parker, 2007). Critical thinking is "the process of evaluating what other people say or write to determine whether to believe their statements." Critical thinking consists of "assessing authenticity, accuracy, and worth of knowledge claims and arguments."

Human Rights:

Human rights are "rights and freedoms to which all humans are entitled." Proponents of the concept usually assert that everyone is endowed with certain entitlements merely by reason of being human (Feldman, David, 1993; 3). Human rights are thus conceived in a universalist and egalitarian fashion. Such entitlements can exist as shared norms of actual human moralities, as justified moral norms or natural rights supported by strong reasons, or as legal rights either at a national level or within international law (Nickel, James, 2006). However, there is no consensus as to the precise nature of what in particular should or should not be regarded as a human right in any of the preceding senses, and the abstract concept of human rights has been a subject of intense philosophical debate and criticism.

The human rights movement emerged in the 1970s, especially from former socialists in eastern and Western Europe, with major contributions also from the

United States and Latin America. The movement quickly gelled as social activism and political rhetoric in many nations put it high on the world agenda (Moyn, Samuel, 2010). By the 21st century, Moyn has argued, the human rights movement expanded beyond its original anti-totalitarianism to include numerous cases involving humanitarianism and social and economic development in the Third World (McLemee, Scot, 2010).

Human rights are rights inherent to all human beings, whatever our nationality, place of residence, sex, national or ethnic origin, colour, religion, language, or any other status. We are all equally entitled to our human rights without discrimination. These rights are all interrelated, interdependent and indivisible. Universal human rights are often expressed and guaranteed by law, in the forms of treaties, customary international law, general principles and other sources of international law. International human rights law lays down obligations of Governments to act in certain ways or to refrain from certain acts, in order to promote and protect human rights and fundamental freedoms of individuals or groups

All human rights are indivisible, whether they are civil and political rights, such as the right to life, equality before the law and freedom of expression; economic, social and cultural rights, such as the rights to work, social security and education, or collective rights, such as the rights to development and self-determination, are indivisible, interrelated and interdependent. The improvement of one right facilitates advancement of the others. Likewise, the deprivation of one right adversely affects the others.

Social Justice:

Social justice generally refers to the idea of creating a society or institution that is based on the principles of equality and solidarity, that understands and values human rights, and that recognizes the dignity of every human being (Zajda & et al, 2006).

 Mick Dodson (1993) mentioned that social justice is what faces you in the morning. It is awakening in a house with adequate water supply, cooking facilities and sanitation. It is the ability to nourish your children and send them to school where their education not only equips them for employment but reinforces their knowledge and understanding of their cultural inheritance. It is the prospect of genuine employment and good health: a life of choices and opportunity, free from discrimination.

Social justice is a certain terms or phrases appear so frequently that we often assume their meaning is well understood and agreed upon. However, meaning is often slippery and can be associated with a surprisingly diverse range of definitions.

In 2006 Dr Myron Friesen and Maxim Institute began a collaborative research project exploring Kiwis point of view on social justice in New Zealand, they asked people to define it, and give the challenges faced in working towards social justice in New Zealand. People responses revealed that social justice

was conceptualised in eleven different forms. These forms were: Equal Distribution, Tolerance, Equal Treatment, Criminal Justice, Equal Rights, Equal Opportunities, Legislative, Responsibility, Democratic, Collectivism and Individualism.

Social justice can refer to both a philosophical problem and an important issue in politics, religion and civil society. The term "social justice" is often employed by the political left to describe a society with a greater degree of economic egalitarianism, which may be achieved through progressive taxation, income redistribution, or property redistribution. The right wing also uses the term social justice, but generally believes that a just society is best achieved through the operation of a free market, which they believe provides equality of opportunity and promotes philanthropy and charity. Both right and left tend to agree on the importance of rule of law, human rights, and some form of a welfare safety net (though the left supports this latter element to a greater extent (e.g. to provide for capable individuals in society) than the right).

Social justice is the quality of a society's generalized right-ness. As there is no objective, known standard of what is *just*, the term can be amorphous and refer to sometimes self-contradictory values of justice. It is generally thought of as a society, which affords individuals and groups fair treatment and a just share of the benefits of society. (Different proponents of social justice have developed different interpretations of what constitutes *fair treatment* and a *just share*.) It can also refer to the distribution of advantages and disadvantages within a society.

Social justice is both a philosophical problem and an important issue in politics, religion and civil society. Most individuals wish to live in a just society, but different political ideologies have different conceptions of what a 'just society' actually is. The term "social justice" is often employed by the political left to describe a society with a greater degree of economic egalitarianism, which may be achieved through progressive taxation, income redistribution, or property redistribution. The right wing also uses the term social justice, but generally believes that a just society is best achieved through the operation of a free market, which they believe provides equality of opportunity and promotes philanthropy and charity. Both right and left tend to agree on the importance of rule of law, human rights, and some form of a welfare safety net (though the left supports this latter element to a greater extent (e.g. to provide for capable individuals in society) than the right).

Social Justice features as an apolitical philosophical concept (insofar as any philosophical analysis of politics can be free from bias) in much of John Rawls' writing. It is fundamental to Catholic social teaching, and is one of the Four Pillars of the Green Party upheld by the worldwide green parties. Some of the tenets of social justice, sometimes renamed **civil justice**, have been adopted by those who lie on the left or center-left of the political spectrum (e.g. Socialists, Social Democrats, etc). Social justice is also a concept that some use to describe the movement towards a socially just world. In this context, social justice is based on the concepts of human rights and equality.

In this article, the main purpose of present study is to provide an overview of the effectiveness of e-learning on critical thinking in the light of human being and on the other hand on social justice. This paper adds to the growing body of literature exploring students' performance towards e-learning viewed by virtual students in Kuwait.

Methodology

The data for the present study are based on students' experiences taking an online learning unit offered by the Arab Open University (AOU) through its website. Currently about 5000 Kuwaitian students are taking e-learning courses at B.A. degree programs in Kuwait.

Self Learning Skills Course Objects (GR 101), which is created by using sound, text, graphic and animation are accessible to students, registered for that course, in the Learning Management System (LMS) system, through the internet or intranet. This introductory course aimed at clarifying the study map for all students through the four years programme. The university offers CDs as part of their educational system, related to the online courses or as general information. It should be noted that live classes with audio and video are compulsory six times per one semester at least for every course at the moment in Kuwait. This is mainly due to the main system of AOU. So, in virtual concept of the university, all courses (except practical courses and laboratories) are digitized and saved with high quality.

Students can attend on-line classes whenever and wherever they have access to the Internet. One important fact in selecting virtual universities mentioned above is that they all use blended learning method, which has been recognized as the most effective way for virtual learning in the world.

Due to the ability of most LMS systems, all on-line activities of students can be recorded, such that the details of their connectivity are available to professors, administrators and supervisors. According to the educational rules of universities in Kuwait, students are not allowed to be absent from classes more than 25% of the total number of class attendance. Although courses are available on-line to all students at all times, which is considered as the most important benefit of virtual learning, students must follow a weekly schedule to attend these classes; else they will receive a warning note, and finally a failing grade.

The methodological approach of this study employed an analytical method (correlational study). The study population consists of 112 students. So, virtual students in this study were the target population who have been selected by using stratified randomization method (n=112).

Critical thinking questionnaire with 150 items and five sections was administered to collect the necessary data. The questionnaire covered six areas: 1) demographic characteristics such as age, sex, name, and field of study; 2) the knowing of assumptions: it consists of 30 items ,student were required to tell whether the assumption belongs to the main statement or not 3)

the interpretation of issues: it consists of 30 items ,student required to show the ability to interpret the statement given to him or not 4) the evaluation of discussions and arguments: it consists of 30 items ,student required to show the ability to present an acceptable judgement about the statement given to him 5) the ability of induction: it consists of 30 items ,student required to show the ability to induct an acceptable statement from the statement given to him 6) the ability of reasoning and deduction : it consists of 30 items, student required to show the ability to present an acceptable reason about his deduction. Content and face validity of instrument were established by investigating the level of critical thinking of students in Arab Open University in Kuwait. A pilot study was conducted with 41 students in Arab Open University. Questionnaire reliability was estimated by calculating Cronbach's Alpha. Reliability for the overall instrument was estimated at 0.89. Students filled in a web-based closed questions questionnaire. Email addresses for this population were obtained from their engaged faculty's websites. The web-based AOU format of the questionnaire was designed. The compiled data were saved at a data bank designed for this purpose. After the initial mailing and two follow-ups (resending a letter and a copy of the questionnaire by email), a total of 112 students responded.

Data collected were analyzed using the Statistical Package for the Social Sciences (SPSS19). Appropriate statistical procedures for description (frequencies, percent, means, and standard deviations) and inference were used.

In accordance with the online learning approach of the research, the study group was taught the subjects of the GR(101) through a website with various visuals through LMS and animations specially designed for this purpose. In this face-to-face learning process during the classes, the instructor introduced an outline of the subject and illustrated it with the visuals in the website. After the course subject was presented, the students were assigned to perform the activities on the website outside the classroom environment to provide them with further details about the course subject, as well as with further various examples through the website.

The students delivered their activity assignments to the instructor through e-mail. Furthermore, they could also communicate with the instructor through e-mail whenever they had questions about the subject or the assignments. These activity assignments delivered to the instructor through e-mails were then added into the observation files of each student to follow up their improvement.

Results

An examination of the pretest-posttest mean difference scores in the mean difference score pertaining to the total score of critical thinking is $X = 85.053$ for the posttest, and $X = 78.578$ for the pretest, indicating a higher mean difference score for the posttest. In order to determine whether this observed difference was a significant one, a t-test was performed for the pretest-posttest difference scores in the critical thinking. Table 1 summarizes the findings on the difference

between the pretest and posttest in which of the sub-dimensions of the study group in the critical thinking scale .

Table 1. t-test of the Pretest-Posttest Difference Scores of the Study Group in terms of the Sub dimensions of Critical Thinking

Variables	Test	X	SD	t	Sig.
knowing assumptions	Pretest	17.354	3.560	4.20	p<0.01
	Posttest	19.341	3.421		
interpretation of issues	Pretest	19.005	4.159	0.20	Not Significant
	Posttest	19.107	3.998		
the evaluation of discussions and arguments	Pretest	16.658	4.025	7.22	p<0.001
	Posttest	20.528	4.001		
the ability of induction	Pretest	17.563	3.707	1.14	Not Significant
	Posttest	16.950	3.654		
the ability of reasoning and deduction	Pretest	7.998	2.895	2.81	p<0.01
	Posttest	9.127	3.112		
the whole critical thinking	Pretest	78.578	12.079	3.83	p<0.01
	Posttest	85.053	13.111		

Examining Table 1, it could be observed that student critical thinking improved significantly in favor of the experiment group at the sub-dimensions of knowing assumptions (t =4.20, p<0.01) and the evaluation of discussions and arguments (t =7.22, p<0.001) and the ability of reasoning and deduction (t =2.81, p<0.01) and the whole critical thinking (t =3.83, p<0.01). On the other hand, such difference between the pretest and posttest in each of the evaluation of arguments and the ability of induction is not the case for other sub-dimensions. These findings could be interpreted as indicating that, when compared to an instruction performed using the traditional instruction method, the one using the e-learning model contributes more to student critical thinking according to particularly at the sub-dimensions of the evaluation of discussions and arguments and the ability of reasoning and deduction.

These findings suggest that using E-Learning environment with constructivist principles could be an effective pedagogy to enhance students' critical thinking skills. Due to small sample size, the findings of this study could not be generalized to the target population. However, the results are transferable to similar contexts.

Conclusion

According the AOU educational policy which equipped with modern e-learning facilities, that is one of today's urgent needs in developing countries like Kuwait. New learning technologies need to be targeted so that they may develop applied learning skills in the students. As the writer of this paper has proposed, developing e-learning systems could be considered as a solution for the human being situation and consequently social justice of online higher education in developing countries. If e-learning is to have a meaningful role in higher education, it is important that universities focus on students' critical thinking and

their expectations with regard to the role of e-learning within their higher education experiences.

E-learning represents an important, growing trend in the application of technology to facilitate student learning .The study presented here focused on students' social justice and how to develop it through the e-learning among users with mostly limited prior e-learning experience. The findings provide important insight about students' critical thinking through e-learning and raise practical considerations for its implementation about a real life of human being issues especially in social justice. This study is thus just an initial effort at providing Insightful analyses to the policy makers of education in developing countries. Additional studies are recommended to extend the research on direct relationship between social justice and the use e-learning.

Rashida A. Ramadan, PhD
Professor of Psychology , Department of Education
Arab Open University ,Kuwait
rashida2122@hotmail.com

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Solar powered floating schools in flood-prone Bangladesh: Opportunities and Challenges

Mohammed Rezwan
Shidhulai Swanirvar Sangstha
rezwan@shidhulai.org

Abstract

One-third of Bangladesh goes under floodwater every year and climate change has increased flooding in recent years. Shidhulai Swanirvar Sangstha (a non profit organization) envisions river ecology as communications network, insisting that, "If the children cannot come to school because of roads going under flood-water, then the school should come to them". Shidhulai operates a fleet of floating schools, libraries and floating training centres with wireless internet access, serving close to 90,000 families. Boats themselves are outfitted with solar panels that power computers, lights and multimedia equipments. But the boats bring more than services to these cut-off areas - they bring electricity.

Context

Bangladesh is the lower riparian of three major river systems of South Asia, the Ganges, Brahmaputra and Meghna (GBM), and constitutes about 7 per cent of the combined catchments area forming the largest delta in the world. In the country 46 percent (75 million) live within ten meters above sea level and 33 percent (54 million) below five meters above sea level. Therefore Bangladesh becomes one of the most flood-prone regions in the world. One third of the country floods annually during the monsoon season, but extreme floods cover up to two thirds. Climate change has increased the flooding recent years – the country had floods twice in 2007, ten million people were affected, 332 schools destroyed and 4,893 schools damaged by that flooding. According to the Intergovernmental Panel on Climate Change (IPCC), things will get worse in near future. Over the next 40 years, 17 percent of the land will be lost to the sea resulting 20 million climate refugees. Now pressure on the land is so overwhelming that it leaves little choice for the poorest segment of the population but to move to remote, inaccessible riverside areas to settle. Government and NGO's are not active in these areas because they are so hard to reach and are subjected to regular flooding. Shidhulai Swanirvar Sangstha targets these people in the flood-prone Chalanbeel regions of Natore, Pabna and Sirajganj districts in the northwestern Bangladesh. The project site is a low-lying area and subjected to flooding during the monsoon. Here many people have no land with which to support themselves. People only get one crop in a year and depend on fishing to supplement income and food supply. Road access is very limited in most parts of the project areas and boats are the only means of transport. Communities live along rivers or canals are mostly the landless, and work as day laborers. The villages have no mains electricity, no telephone lines, very basic sanitation and use water from wells or rivers. Although all children are meant to get free education, it is difficult for children to

go to school in the region, school is far away, transport is limited, and roads to schools get flooded in the monsoon. The flood prevents students from attending classes for three-four months. This often results in school dropouts and with in a year these neo-literates relapse into illiterates. Girls are not allowed to move around freely due to the cultural norms and the age of first marriage for females is 14.76 years. Therefore, many parents are reluctant to let girls go to school. Girl's primary school completion rates are below 40 percent. Kerosene lamps are widely used in rural areas, but it provides faint light. People living at river basins always need a kind of lamp that they can always carry particularly during the flooding.

Introduction

Climate Change is the major environmental issue of our time, it has resulted increased and untimely rain impacting food production, sea level rise that contaminates coastal freshwater reserves, an increase in catastrophic flooding, and also the warming atmosphere spreading the pest and diseases. The most dangerous climate changes may still be avoided if we transform our hydrocarbon based energy systems and if we initiate rational and adequately financed adaptation programs to prevent disasters and migrations at a massive scale.

Bangladesh is the Climate Change Ground Zero. Shidhulai Swanirvar Sangstha (a non profit organization) took a complex problem the 'flooding and poverty', and developed a simple solution that balances the needs of everyone involved. This paper is about its innovations that allow people to adapt to the extreme conditions.

Shidhulai envisions the river ecology as a communications network insisting that, "If the children cannot come to school because of roads going under flood-water, then the school should come to them." The floating school project inspires, informs, and enables people so that they can act together to improve their quality of life, to adopt with the changing situation and also to protect the natural environment.

Channeling Solutions

A floating school is the only school where children do not need to go to school as it comes to them. It is the combination of a school bus and schoolhouse. It collects students from different riverside villages and finally docking at last destination the boat arranges onboard class. After the class the boat drops students at their places and then moves forward to pick other groups, again it arranges an onboard class and after the class it drops students in their villages, and boat moves forward for other groups. This is the way the school works throughout the day and arrange 3 classes. It has a classroom for 30 students, an internet-linked laptop/computer, book library and electronic resources.

Solar power enables school to provide late evening class to the working children. So when school is done, many students take home the recharged SuryaHurricane lanterns (an innovative low-cost solar lantern made from

recycled parts of the conventional and much used kerosene hurricane lantern) to provide hours of light in their homes at night. The students having good exam results are only eligible to receive the SuryaHurricane lanterns as scholarships. They are re-charged twice a week at the re-charging station on the boat.

Boat schools provide basic primary education up to grade IV. Shidhulai introduces the first river-based environmental curriculum in the country that teaches how to protect the environment and conserve water. The boat school provides education six days a week. On-board meetings on child & women rights, health education and micro-enterprise developments are arranged for the parents once in every month. Shidhulai floating health clinics visit the students regularly. Medicines and educational materials are given free to the students. About 1,600 students are now studying on 20 school boats.

The library boat has complete facility of a standing library, for example, 1,500 books, 2-4 computers with Internet access, printer and mobile phones. Children, youths, senior citizens, and particularly women learn computer skills, send and receive emails, and get information on job opportunities, exam results, government process and services. Out of the 10 library boats, there are 2 two-tier boats that have on-board class rooms, libraries, training spaces and solar lamps re-charging facilities. There is a space in the lower deck that used as a classroom for 30 school children until afternoon, and then it is used as reading space for library users. Library stack room and computer room are located on the same floor. A multipurpose space is located on the upper-deck, which is used as reading room, and sometimes adult's trainings on agriculture are arranged here in the morning or evening. Therefore, on these two-tier boats, it is common to see children getting lessons on the lower deck and parents are learning sustainable farming techniques on the upper deck at the same time. Library boats serve 15,000 people a year.

Five training boats are equipped with laptops, multimedia equipments and educational presentations, and make their ways through the rivers, docking at villages the boats teach farmers techniques for preventing water pollution and erosion, introducing SuryaHurricane lanterns, and promoting environmentally sustainable agriculture, biodiversity and climate change adaptations (i.e. flood resistant sugarcane varieties and tier farming). The boats utilize in-house developed content, including web tutorials, presentations and documentaries. The video conferencing on the boats facilitate a conversation between scientists and farmers about effective agricultural practices and climate change. Each boat visits a village twice in a month and continues the training for three months. 30 Farmers are trained during each training session. During the daytime these boats arrange onboard training programs for the farmers. In the evening educational programs are arranged on large screens/sail cloth of another two training boats, so that many people can see from their own courtyards. About 300 people attend each evening show at the riverbank. The boats use the solar energy to run the training equipments.

Three-tier farming (3TF) includes a bamboo structure built on water having two floors - the lower floor is made of water hyacinth and bamboo truss, where farmer grows vegetables. Underneath this floating bed, the farmer raises fish

within an enclosure created by fishing net with bamboo poles. Poultry is raised on the top floor that has a roof.

Social and economic impacts

In a deeply conservative society such as Bangladesh, religion and culture restricts the mobility of girls and women. The unique approach of the project addresses these barriers. Boats provide maximum flexibility and reach villagers that, for logistical, social, or cultural reasons, cannot access a permanent institution. Girls and women now take full advantage of the education and information facilities delivered right to their doorsteps. The proximity of the facilities allays the concerns of their parents and guardians. The floating school is taking education to the doorsteps and offering schooling as per schedules of working children - this saves valuable time for them. Students now can borrow the schoolbooks from the book library of the boats, which helps them to get better exam results and inspire them for higher education. The neo-literates who used to relapse in to illiterates are now in touch with education using the educational resources of book library. Children's enrolment to schools is increased by 40 percent and dropout ratio is reduced by 45 percent, and early marriage is reduced by 75 percent. Children are having sound health, sanitary latrine usage is increased by 80 percent and people are informed about issues like HIV/Aids, unintended pregnancy, reproductive rights and early marriage issues.

Because of the boat education farmers are now concerned about the endangered species and working together to conserve water and preserve the biodiversity. Villagers are self-organized to address local problems such sanitation and clean drinking water. The boat project has provided practical advice and education that is helping the villagers learn to help themselves. Because of new farming techniques, agricultural productivity is increased by 70 percent and farmers can now cultivate a variety of crops outside the normal growing season. The annual income of farmers has increased by 55 percent. Tier farming ensures the availability of vegetables throughout the monsoon, and it brings extra incomes to the families.

The trained farmers have been liberated from the extra time spent in agricultural fields. Now they can engage themselves in other income generating works and thousands of landless farmers did not have to leave their villages in search of work during the monsoon. They now have a better diet, new houses, home improvements etc.

Using solar energy to re-charge SuryaHurricane lanterns for off-boat use extends the range of services that Shidhulai boats can offer. Solar lamps provide families with high-quality light in the evening for children to study and women to do craftwork to earn extra income. They also save the cost of kerosene, and eliminate the pollution and fire risk of using a kerosene lamp. SuryaHurricane lanterns help fishermen to spend more time in catching fish which increases their income. Also boatmen are using SuryaHurricane lanterns on their transportation boats to give signals for preventing accidents in night.

Climate protection

Due to the knowledge gap of farmers on the proper use of pesticides, the usage went up a hundred times over last forty years. With the education of the training boats, farmers are trained on mechanical means of controlling harmful insects. They have reduced the usage of pesticides by 65 percent which controls fish kills and saves beneficial insects. There have been improvements in water quality as well. The training boat educated people on the tree & grass filter strip establishment, and encouraged them to establish trees and grass at the river banks, which slowed the soil erosion and polluted runoff. By introducing renewable energy to the flood-prone communities, the project is helping to protect both the people and environment. With the reduced reliance on kerosene, carbon dioxide emissions and atmospheric pollution are reduced.

Scale up and replications possibilities

With regard to client populations (20 million people), the project shows great potential for scaling up within the country. To date thousands of flood-prone villages are only accessible by boats and this project is the only development program, which has shown the potential to reach these target groups. As designed boats, educational materials, technology and strategies are already developed by Shidhulai, only further resources are needed to scale up or replicate the project. The model can be replicated not only in any river-based community, but there are aspects of it—solar lamps, solar system, locally developed contents and tier farming - that are applicable anywhere. In fact, the project is very easy to replicate - build a boat, equip it with books, computers, power it with solar energy, and bring it to communities through the waterways. The crucial initial steps in a successful boat project replication are: first and most important, one has to find the right person to direct the program - someone who has the right combination of technical skills and people skills, and who knows the replication site well. Second, the replication should emphasize on the use of local materials and personnel (for example, wooden boats should be built from trees that are native to the area). Third, Shidhulai would want to stay involved with the replication long enough to be sure they get off to a healthy start.

Shidhulai's 'floating education' model has been replicated by local organizations in Bangladesh, for example, Care Bangladesh/Grameenphone, People's Oriented Program Implementation, Subarno Foundation, Grambangla Unneyon Committee etc.

Lessons learnt

Shidhulai used generators to run the onboard computers that were costly, noisy and polluted the air. Now the boats use solar photovoltaic modules to generate all the electricity needed for the lights, computers and multimedia projectors. It also re-charges SuryaHurricane lanterns that Shidhulai has supplied to people.

Introducing the internet to boats proved to be a daunting challenge. Initially, Shidhulai used the data-fax enabled mobile systems along with high-gain

antennae to transmit signals from the boats. Later the system was upgraded with high-speed data cards that use the wireless network. These cards are used at the USB ports.

At the beginning, Shidhulai used a traditional country boat as a classroom, but after working with it for four months Architect Mohammed Rezwan decided to design a new boat for the school, because local country boats have following problems:

• The roof is placed on a low height, students can not walk through the boat;
• Columns that hold the weight of roof run through the interior;
• Roofs are not rain protected;
• The floor is made from bamboo, therefore it is not flat and furniture's are not stable on it;
• Boats are not spacious to accommodate the space required for a school, library or training facility.

Boats were specially designed by Mr Rezwan. These boats are outfitted with multi-layered waterproof roofs and there are side windows that are opened for ventilation. The roof is placed at a height so that people can easily walk through it. A metal truss takes the weight of the roof, so the interior is not obstructed by pillars, allowing the accommodation to be made spacious and comfortable. The floor is made from wood and flat. The lengths of the Shidhulai boats are 50-65 feet and beams are 10-13 feet, thus boats are spacious enough to accommodate the classrooms. These entire features make inner space comfortable for the users and equipment. Boats are built with local materials, traditional knowledge and labor. Now boats are built with the Sal Tree (*Vatica robusta*) having the life span of 50 to 100 years.

Due to the seasonal flooding people have to migrate from one place to another for weeks. The stationary solar system is not suitable for this situation. People living at river basins always need a kind of lamp that they can always carry particularly during the disasters. Therefore Shidhulai introduced the SuryaHurricane lanterns.

Conclusion

If, as the NASA Goddard Institute for Space Studies predicts, sea levels rise significantly by the end of this century, a lot of Bangladesh will simply disappear. Issues like this need local solution by local people. Shidhulai as a local organization is proving that it is possible to deal with this climate change, to tackle pollution, and at the same time, to lift people out of poverty. The boat project has proved its usefulness in providing year round education even during the height of monsoon. Also Shidhulai has developed tier farming - thus farmers could produce huge harvests of vegetables in submerged Bangladesh.

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The ethics of connection: CAMELS and caveats or the pros and cons of digital connectivity for teaching and learning

Pamela Ryan
University of South Africa
ryanpd@unisa.ac.za

Abstract

This paper begins by considering the concept of connection from a number of perspectives then proceeds to examine the ways in which connectivity is productive channel for teaching and learning in higher education. Digital connection would appear to be one of the instruments higher education can use to further social justice in education by opening up the opportunities for learning through open platforms. However, the ease of connectivity also leads to practices such as the lifting of others' ideas and the purchasing of essays and even dissertations online that might be deemed unethical. Finally, the paper considers whether digital connections are sufficient forms of human relationship in the context of higher education or whether face-to-face contact is a more enabling form for human and scholarly intervention.

> 'These are only hints and guesses'
> (T.S. Eliot: *Four Quartets*)

Introduction

The form (it is too loose to call it a methodology) of this paper is that of *bricolage* or the creation of something from a diverse range of available things/objects/artefacts. I have intentionally adopted this form to echo or mimic what the internet does in facilitating how we absorb information and knowledge and in, possibly, altering the patterns of our brains. I trust that the reader, particularly if s/he is accustomed to a more linear or teleological approach, will not find this form too unruly.

Bricolage and the bricoleur

In 1962, Claude Lévi-Strauss, used the term 'bricoleur' to distinguish a particular kind of thinking/creating/making from that engaged in by the 'engineer'. He defined a bricoleur as a 'jack of all trades', a non-specialist who uses a variety of tools for a variety of purposes. By observing so-called primitive cultures in Brazil and North America, Levi-Strauss concluded that their art, for instance, is created through the group with no single attributed artist, arriving at a creativity that was distributed rather than owned, multiple rather than singular, shared rather than unique. In his book, *The Savage Mind* (1962), Lévi-Strauss used the word bricoleur to describe the primitive artist as a collector of objects

who put pre-existing things together in new ways to the benefit of communities[2]. Striking parallels with the way we use the internet cannot be overlooked and lead to interesting thinking about the ways in which the internet may not only be the major technological invention of the present but also perhaps a harbinger of the future and an echo of the past[3].

I have amended Lévi-Strauss's use of the words bricoleur/bricolage in describing my approach in this paper since the objects I have gathered are cerebral and conceptual rather than tangible and concrete, and their sources gleaned from literary, ethnographic, technological, pedagogical, psychoanalytic and postmodernist texts and blogs, accessed from the internet, social media and printed books. These disparate elements are held together by the presiding idea that 'connection' has an ethical basis.

I could also have used the word 'rhizome' from *A Thousand Plateaus* by Gilles Deleuze and Felix Guattari[4], since the rhizomatic describes connectedness as a way of thinking and being in social life, politics, texts and relationships. And

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[2] I have shamefully compressed the complexity and contradictions of this wonderful book to produce a single idea. *The Savage Mind* is a scrupulously observed record of tribal language and practices out of which Lévi-Strauss arrives at careful but not always verifiable distinctions between magic and science. Look at, for instance, this wonderful paragraph:
I am not however commending a return to the popular belief (although is has some validity in its own narrow context) according to which magic is a timid and stuttering form of science. One deprives oneself of all means of understanding magical thought if one tries to reduce it to a moment or stage in technical and scientific evolution. Like a shadow moving ahead of its owner it is in a sense complete in itself, and as finished and coherent in its immateriality as the substantial being which it precedes. Magical thought is not to be regarded as a beginning, a rudiment, a sketch, a part of a whole which has not yet materialized. It forms a well-articulated system, and is in this respect independent of that other system which constitutes science…It is therefore better, instead of contrasting magic and science, to compare them as two parallel modes of acquiring knowledge (1962:10).

[3] It seems, as one becomes older,
That the past has another pattern, and ceases to be a mere sequence—
Or even development: the latter a partial fallacy
Encouraged by superficial notions of evolution,
Which becomes, in the popular mind, a means of disowning the past.
The moments of happiness—not the sense of well-being,
Fruition, fulfilment, security or affection,
Or even a very good dinner, but the sudden illumination—
We had the experience but missed the meaning,
And approach to the meaning restores the experience
In a different form, beyond any meaning
We can assign to happiness. I have said before
That the past experience revived in the meaning
Is not the experience of one life only
But of many generations…
T.S Eliot provides his own perspective on this flow between the past, present and future ('The Dry Salvages', Part 3 of *Four Quartets*).

[4] 'A rhizome ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles (1987:7)'. This quote suggests something of the metaphoric meaning of the rhizome in the thinking of Deleuze and Guattari, and shows it uncanny prescience in foreshadowing precisely the attributes of the internet some twenty-five years ago. In their description of non-linear mapping of different kinds of reality as multiplicity opposed to unity, the weaving of interconnections and the endless sequence of possibilities, *A Thousand Plateaus* describes 'a plane of consistency of multiplicities, even through the dimensions of this 'plane' increase with the number of connections that are made on it…'. The internet as rhizome perhaps?

because *bricolage* and *rhizomatic* are metaphors, they are particularly compelling ways in which to conceive of and talk about connectivity since a metaphor has a binding effect, using one concept to express a range of other ideas, 'yoking' ideas together in much the same way as Donne uses the conceit in 17th century poetry.

One of the object/concepts I am using in this bricolage is the literary text, so let me begin with the two words most often quoted by writers describing the internet and social media yet usually without making the necessary connection to the original, content merely with quoting: "Only connect…".

In his novel *Howards End*, Forster is not only describing two worlds and two world-views but is also commenting on those worlds, at times, through the gentle irony of his narrator. The receding world belongs to the Schlegel family whose values, despite their German affiliations, are rooted in the traditions of the English countryside with its old houses, farms, estates and villages. The Wilcoxes, on the other hand, embody a new breed of middle class industrialists who are always on the move, self-made men adroitly maneuvering amongst the trappings of industrial modernity. The eponymous Howards End, the old house belonging to the Wilcox family, becomes a resonant emblem of continuity and presence which is threatened by the vagaries of inheritance and modernity, and the Schlegels seem to be representative of Forster's ideal society, people who believe in connectedness ('personal relations are the real life') and for whom 'public life should mirror whatever is good in the life within'.

Forster's themes arrange themselves around change and are announced early in the book with the narrator's description of a house in Wickham Place, London, which is set back from a 'lofty promontory of buildings'. Forster describes it as a backwater, 'or rather of an estuary, whose waters flowed in from the invisible sea, and ebbed into a profound silence while the waves without were still beating' (p. 39). What is announced here is the tenuous hold of the past on the present with expensive flats encroaching on the quiet backwater, 'as humanity piled itself higher and higher on the precious soil of London' (p39/40). However, as a modernist writer, Forster casts a wry glance at the heated Romanticism of his protagonist whose fervent ideals are based on a love of Beethoven or, more accurately, on the German poet, Schiller, who provided the words for the 9th Symphony, as the following quotation so aptly reveals:

> *In these English farms, if anywhere, one might see life steadily and see it whole, group in one vision its transitoriness and its eternal youth, connect—connect without bitterness until all men are brothers [Chapter 33:825, eBook edition; emphasis mine].*

And in the following quotation, the full meaning of the two words "only connect" is revealed, as Helen tries to imbue the working class Leonard Bast with the sensibilities of her beliefs:

> *Mature as he was, she might yet be able to help him to the building of the rainbow bridge that should connect the prose in us with the passion.*

Without it we are meaningless fragments, half monks, half beasts, unconnected arches that have never joined into a man. With it love is born, and alights on the highest curve, glowing against the gray, sober against the fire…
Only connect! That was the whole of her sermon. Only connect the prose and the passion, and both will be exalted, and human love will be seen at its height. Live in fragments no longer. Only connect, and the beast and the monk, robbed of the isolation that is life to either, will die (Chapter 22:575, eBbook edition).

Here, connection takes on an ethical dimension, nudging us to the title of this paper: connecting the prosaic with poetry, connecting the peripheral with the permanent, makes us more human, more worthy of being human. That, at least, is my interpretation of the passage quoted above.

I find it interesting that Richard Mabey, an English naturalist and writer of extraordinary books, reaches much the same conclusion but by focusing on planet earth:

The most extraordinary – and the most powerfully Romantic – image of our lifetimes is the unforgettable portrait of our planet from space. The earth beneath our feet, cast as our property, taken for granted, riven into myriad disconnected systems, was suddenly glimpsed as something beyond us – a single place, fertile, vulnerable, terribly alone. (Mabey, 2011: 35/6)

In beginning to write about the ethics of connection, I have derived a possible premise from two writers holding separate yet linked visions. Forster, a literary author and Mabey, a literary naturalist, both speak with passion about the consequences of disconnection. It is my hypothesis (tentative) or fervent wish (futile?) that we are moving out of an age of disconnection and self-interest into one of connection, prompted by the ethics[5] of sharing and community, and that this is nowhere more evident than in the functions and usages of social media, a form of conversation and communication that is rapidly gaining on the internet as a means whereby people accrue knowledge, share knowledge and produce knowledge (for whatever pure or nefarious reasons).

For the purposes of this conference which aims to explore the role of open and distance learning and eLearning in internationalization and social justice, I suggest that unless we as educationalists latch onto this new and connective way of thinking, reading and being in the world, we will rapidly become defunct in the minds of future students, who will be given ample opportunities to teach themselves in self- determining communities of practice.
To what should we be paying heed?

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[5] I am using the word 'ethics' in my title and in the paper in two ways: as a set of rules for good or normative behavior as in how should we be using social media as a connective medium; and in the broader sense of a system of moral principles (Wikipedia definition).

Only connect, and…

Before we start, we could try a game. Complete the sentence 'only connect, and…

Here are my answers:

Only connect, and you will know what your daughter's friend had for breakfast this morning;
Only connect, and you may prevent a fire from taking hold on Table Mountain;
Only connect, and you will have world news instantly on your screen;
Only connect, and you will feel part of something bigger than yourself;
Only connect, and you will learn something;
Only connect, and you may topple governments;
Only connect, and you can spread whatever message you choose, be this advanced notice of a riot or an uprising or a mass murder;
Only connect, and someone will know who you are, may remove your password from the site and keep a surveillance on your every movement or transaction.

My answers have been gleaned from my own experience of Facebook and Twitter and from current news stories on my newsfeeds, and they demonstrate the positive and negative effects of social networking as we now define it in its digital mode. If anyone doubted the positive potential of social networks such as Twitter, Facebook or YouTube, these must have been squashed by late 2010 when social movements across North Africa toppled authoritarian regimes. These movements were substantially helped by ordinary people taking videos of violent attacks on civilians using their ordinary mobile phones and publishing these on Facebook and YouTube. The consequent backlash by the state, which infiltrated Facebook and began wiping people's passwords from the system using these to read their messages and trace their identity reveals the downside of social networking sites. In the educational environment, the ease whereby students can purchase assignments or even dissertations has caused consternation amongst the academic fraternity. However, in both examples, much depends on how the response is framed. Facebook chose not to respond to these infiltrations as political interference but as cases of civilian hacking. Much depends, too, on how we respond as teachers to practices of paying for others to write essays.

To return to the question: we should be paying heed to…

New Literacies, or the way students read:

It is by now well documented that the internet in general and social networking in particular have caused a possible shift in the way our brains work[6] and in the way students acquire and apply knowledge. Our attention is as acute as ever but takes in with amazing rapidity a vast number of bytes of information. Seldom do we focus on a single text for the purposes of analysis or interpretation. Instead we engage in rapid scanning, sifting, sorting processes creating textual

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[6] See for instance Nicholas Carr, *The Shallows: How the Internet is Changing the Way we Think, Read and Remember* (2010)

collages or mosaics of mashed texts. We become bricoleurs, not of permanent literatures but of flexible, expandable or expendable literacies that become forms of accretion, texts leading to other texts, across a web of information.

Recent research into contemporary pedagogies, however, questions the extent to which universities should adapt their ways of teaching and align their practices with the digital practices of students and with burgeoning information on the effects of digital technologies on our brains. For instance, Lea and Jones (2011) suggest that claims about students' inability to participate in conventional academic practices or academic literacies 'is akin to a deficit model of student learning and writing' and go on to propose that we need much more engaged and in-depth research into the process of meaning-making for student learners in a digital age (2011: 379). This is sensible advice. Nevertheless, it is my contention that teachers who ignore these trends and who do not factor the changing shape of digital literacy into the design of their study materials and teaching practices are most likely to be dismayed by what they infer to be cheating or plagiarism, and make software companies ever richer by purchasing Turnitin or other plagiarism detectors in order to 'catch them at it'. These are the same teachers who attend conferences on plagiarism and who write articles about plagiarism, bemoaning all the while the negative effects this has on teaching and learning, particularly, but not only, in an open and distance context.

Several of my colleagues who teach humanities are dismayed by the way students approach their writing tasks and voice their frustrations about not being able to control such practices. It seems that without intelligent intervention, we will soon encounter an impasse in our teaching practices with a resulting disconnect between teachers and students. However, the limitation, I think, is with teachers who have not properly understood and who are not willing to accept that the reading practices of the present generation (and even those of us who belong to older generations) have changed irrevocably. Teachers who remain glued to the past will continue to lament the so-called poverty of their students in their inability to focus on single and sometimes lengthy texts and to produce sustained and independent analyses of those texts.

Perhaps the answer lies in acknowledging that this is no longer the way things are and to adapt accordingly. In a rapidly changing and networked world all of us who read, all of us who are in higher education, have to come to terms with a new way of absorbing information and knowledge. We have to move from expecting students to read single texts to allowing them to move swiftly from one text to another. Reading now is not a matter of concentration on a single text but an accretion whereby one text leads to another which leads to another in a developing web of textual knowledge. Designing tasks that make constructive use of these new gifts is one way to connect with our students without necessarily adopting radically new practices on an institutional level.

Interestingly, the notion that there may be an alternative way of reading and of thinking about texts, is not a new idea. Roland Barthes, in 'From Work to Text' showed the correspondences between a 'work' and a 'text' by describing them as follows:

The work is a fragment of substance, it occupies a portion of the spaces of books (for example in a library). The Text is a methodological field… the work is held in the hand, the text is held in language: it exists only when caught up in a discourse… the Text is experienced only in an activity, in a production (italics in the original). It follows that the Text cannot stop (for example, at a library shelf); its constitutive moment is transversal (notably, it can traverse the work, several works). (1978:57).

In this description, the text seems to be 'virtual' in the sense we understand it today: not in existence *per se* as an object but rather as a connective device. Later, Barthes describes the text as a web or a tissue invoking the theory of intertextuality, which he derived from Julia Kristeva, who coined the term basing her ideas on the work of Ferdinand de Saussure, the father of semiotics.

On re-reading these writers, I was struck by the way in which Roland Barthes and Julia Kristeva, in their writing about intertextuality, prefigured the current age of the internet, which operates in much the same way. Kristeva first suggested that we should approach texts not as discrete entities but as the product of other texts. We therefore read 'across' texts since all texts are caught in a web of information inextricably woven into a fabric of loose threads. The text, therefore, has no boundaries but exists in relation to other texts. If we substitute "sites" for texts, we have an implicit description of how the world-wide-web operates. Perhaps we may conclude that, particularly in our thinking about adapting our teaching practices, we have only just caught up with thinking that was disseminated, albeit to a limited audience, in the late 1970s.

Linking up with the idea of the 'virtual' text, Valima and Hoffman define the knowledge society as an imaginary social space:

Knowledge society as a discourse, therefore, tends to create an imaginary social space in which everything related to knowledge and/or knowledge production can be included and interconnected, regardless of whether the discourse concerns individuals, organisations, business enterprises or entire societies (2007:2).

Ideas about virtual spaces and discursive intertexts in the context of knowledge societies are illuminating as descriptions of intertextuality where texts exist only in interconnectedness. But they are now amplified to extend the concept of interconnectedness from texts to people who are constantly looking for and forging connections with others using social media. These connections, like the texts that preceded them, are not permanent or bounded entities but rather take place along fluid lines of connection like the rhizomes in Deleuze and Guittari's text. These loose connections take place along cross border-zones and on a global scale, in effect reducing the physical distance between connected individuals. Further, these connections are impermanent and imaginary in the real sense by being dependent on an imaginary closeness produced by ethereal connectivity. Despite these conditions, the key lies in the fluidity and ease of transmission of thoughts, ideas and conversations between these

connected entities. Again, what impact does this have on teaching and learning?

In their *Handbook of Emerging Technologies* (2009), Siemens and Tittenberger point out that students create 'personal frameworks of coherence' to make sense of the often disconnected and at time contradictory pieces of information they glean from the internet and 'control over personal coherence making has significant implications for higher education' in the kinds of learning tasks we create and the specific pedagogies we adopt (2009:1). And like rhizomatic mapping, connectivism 'is the view that knowledge and cognition are distributed across networks of people and technology and learning is the process of connecting, growing, and navigating those networks (2009:12)'.

Siemens and Tittenberger carefully delineate what is meant by networked learning by demarcating three areas: neural, with knowledge distributed across numerous sections of the brain; conceptual, where students must acquire an understanding of the conceptual connections within any domain of knowledge; and external, those relationships and connections we forge in social networks and web technologies. They sensibly conclude that as educators we may require students to engage in different practices at different levels of complexity but they suggest that 'the elimination of barriers to connection is the greatest systemic challenge our institutions face' (2009:11).

This is particularly relevant in South Africa and the African Continent in general where the barriers to connection are frequently systemic or outside the control of the university. While I do not wish to dwell on this topic which is vast and could form the basis for several papers, these barriers are being rapidly deconstructed with the almost ubiquitous ownership of the mobile phone in Africa and in the several sea cables that have reached our shores, providing us with faster broadband speeds and lessening costs for connection. I am more concerned in this paper with the ethical dimensions of connection and the institutional reluctance to embrace the affordances of connectivity in all its forms for the betterment of society.

Lea and Jones (2011) spent hours in conversation with students as they learnt about the way in which students engaged with digital and other texts and their attempts at meaning-making. Their findings reveal a 'significant shift…to engagement in a wide range of hybrid texts, requiring *a sophisticated level of rhetorical complexity in bringing these different texts together* (387, my emphasis)'. But more significantly, these authors show that students follow the lead of their lecturers and tutors in guiding what material to source, their searches being determined by institutional requirements around assessment and the authenticity of those sources being a concern for the students who want to know that their choices are validated. Through this two-way connection between the institution and the students:

> *New forms of knowledge are being brought into the academy and validated by the university through departmental and tutor practices (2011:388).*

Connected teaching

I have not encountered this term before but I believe it signals an important shift in our thinking about the ethics of connection. Connected teaching encompasses not only the teaching we do using digital connections but also the way in which we engage our students, connecting with them emphathically, pedagogically and meaningfully. Already in 2006, the Spellings report in the US called for a renewed emphasis on a desirable set of skills in the teaching profession. These included the skills of collaboration, not only through working in teams but also by understanding the power of social media and their collective and connective possibilities (Spellings, 2006: 13). It is also incumbent on university teachers to ensure that students can transfer what are generally social skills when using social media to their studies and eventually to their workplace. New skills need to be acquired, including sorting, sifting, making intelligent choices and critical decisions about which knowledge is useful for a particular research problem or question? Indeed, what these new skills amount to is a different kind of literacy beyond what we usually deem relevant for a university education. To reading, writing and thinking we must add reading digitally, critical selection, and critical distinction between different digital discourses. Most crucially, the shift we all need to make, teachers and students alike, is between solitary scholarship and communities of practice.

Connecting across institutional borderlines: CAMELS and other dirty beasts

The idea of the CAMEL was introduced to me, in 2009, by a friend and colleague from the University of Greenwich, Jill Jameson, who had been part of a CAMEL. From the first, I was intrigued by the idea and by the metaphors and associations it threw up especially for interface, connectedness and communities of practice. CAMEL is an acronym, first penned by JISC for *Collaborative Approaches to the Management of E-Learning*. According to the JISC website:

> The CAMEL project was a pilot to explore the development of a Community of Practice amongst e-learning, systems, and learning technology practitioners working on aspects of promoting Lifelong Learning across institutions. The project was led by JISC infoNet in partnership with JISC, the Association for Learning Technology (ALT) and the Higher Education Academy.

While this was the original terminology used, the model is suitable for a wider range of applications as a primary means whereby groups of people can support each other and share knowledge. The model also makes use of face-to-face meetings on each community's home-ground to enhance the practice of eLearning.

The camel is a remarkable animal, capable of travelling vast distances without food or water, selectively grazing so as to preserve the fragile ecology of the desert, able to adjust its body temperature and with a double row of eyelashes to protect its eyes from sandstorms. As a metaphor (there's that word again) for

adaptability and endurance, the camel is an effective image for e-learning, and the caravan in which the camel travels is an equally descriptive term for collaborative journeying through the unknown ground of digitally-enhanced learning. These values resonate with a socially responsive model for open and distance learning and e-learning but add the human element: the face-to-face encounters on home ground with the intention of sharing information of mutual concern[7]. Moreover, the face-to-face connections that take place in a CAMEL could be usefully incorporated into communities of practice amongst and between universities across the globe with teams who are prepared to journey long distances making connections with other teams and sharing their ideas and resources.

From CAMELS to MOOCS and other innovative practices

Just as we now have a respected institution of higher learning ready to award credits to people who amass online courses, we also have MOOCS[8], massive open online courses which rely on peer collaboration to enlighten those learners who may not be familiar with LMS and who need help with the technology necessary to do the course. Similarly, Eric Mazur has found a way of making effective use of peer collaboration during the course of a face-to-face lecture using software called *Learning Catalytics*. By using class time for peer-to-peer discussion around a particular maths or physics problem, Mazur found that his students engage in deeper learning through sharing ideas with each other and suggests that this may be a more effective teaching tool than the lecture[9].

In another creative venture, a group called *collaborative pedagogy* recently announced itself on Twitter with its intention to attract students from multiple disciplines to work on a larger project using the iPad or a similar netbook device.

These are only a few innovative learning practices which follow the ethics of openness, sharing, collaboration and connection.

Openness and social justice

As Neil Butcher notes:

> … *people who seek to ringfence, protect and hide their educational content and research will most likely place limits on their academic careers. They will also increasingly be excluded from opportunities to improve their teaching practice and domain-specific knowledge by sharing and collaborating with growing networks of academics around the world (Butcher, 2011:11).*

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[7] For more information on CAMELS see The CAMEL Project, JISC Infonet, 2006. http://change.mooc.ca [8] An example of a MOOC starting in September 2011 can be found at The course is called Change: Education, Learning and Technology. http://www.ecampusnews.com/top-news/ending-the-tyranny-of-the-lecture/[9] (

Butcher also warns that unless institutions of higher learning adopt flexible ways in which to make intelligent use of open educational resources they risk redundancy:

> *It is becoming increasingly evident that, on the teaching and learning side, educational institutions that succeed are likely to do so predominantly by understanding that their real potential educational value lies not in content itself… but in their ability to guide students effectively through educational resources via well-designed teaching and learning pathways, offer effective support to students… and provide intelligent assessment and critical feedback to students on their performance (ultimately leading to some form of accreditation) [2011:44].*

What Butcher is advocating here relies on connectedness between like-minded institutions through partnerships whereby any open course passed by a student will be afforded credit and he cites the example of Athabasca University and its Technology Enhanced Knowledge Research Institute, which is running a project called *Open Education Resource (OER) for assessment and credit for students,* and which will create:

> *flexible pathways for learners using open learning materials hosted on the Internet to earn credible credentials from accredited higher education institutions' (quoted in Butcher, 2011: 36).*

As Butcher notes, there are subtle economic advantages for universities who abandon their outdated practices, which have been based on previous notions of competition and financial reward, and adopt the values of sharing and openness instead (2011:37) but for my purposes, the ethical benefits of such connectedness are what counts and a substantial component of the ethics of connection therefore is the extent to which we as educators are prepared to share our knowledge not only with lifelong learners but also on an institutional scale, with other universities. How we do this and when will determine our future effectiveness as providers of learning, purveyors of knowledge.

By way of conclusion or full circle: opening to the ethics of connection

Social networking at its best and the open educational resources movement are part of a wave of visionary and humanitarian impulses that could change the face of education irrevocably. But the realization of this vision, of free and open access to educational resources, we as educators and as educational institutions will have to put aside habits of mind that we have accrued over the last century. These habits encompass notions of 'ownership', 'territory', payment for knowledge distribution, tradition, academic inviolability and so on. In place of these outdated concepts, we need to insert ideas around transparency, openness, sharing, community, free and open education, education as a social good, commonality and adaptability. As Butcher says:

> *At its most effective, creating and sharing OER is essentially about working together towards a common cause, whether this be within a single faculty or across a global network. Sharing materials that others*

can adapt and use recognizes the value inherent in team work and the improvements in thinking that will emerge from such collaboration. Consequently, rewards and incentives will shift to reflect appreciation for sharing and communal building at the expense of individualism and unhealthy competition. Conversely, if we wait for systemic policies to change before we start collaborating, then we have only ourselves to blame if the system's values are never shifted (2011:45).

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