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Introduction: first encounter with OERs



December 17th, 2014

Monde Madiba

has successfully completed a free online offering of

Open Knowledge: Changing the Global Course of Learning

with the Creating Track.

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PLEASE NOTE: SOME ONLINE COURSES MAY DRAW ON MATERIAL FROM COURSES TAUGHT ON-CAMPUS BUT THEY ARE NOT EQUIVALENT TO ON-CAMPUS COURSES. THIS STATEMENT DOES NOT AFFIRM THAT THIS PARTICIPANT WAS ENROLLED AS A STUDENT AT STANFORD UNIVERSITY IN ANY WAY. IT DOES NOT CONFER A STANFORD UNIVERSITY GRADE, COURSE CREDIT OR DEGREE, AND IT DOES NOT VERIFY THE IDENTITY OF THE PARTICIPANT.

Authenticity of this statement of accomplishment can be verified at https://verify.class.stanford.edu/SOA/52018fc56ffd427286a1b3b060f212a6



Introduction

 According to United Nations Education, Scientific and Cultural Organization [UNESCO] (2015:12), OERs are:

"Open digital publications of high quality materials organized as courses that include lectures, related reading materials, snapshots of discussions, assignments, evaluations, and so on, used in academic environments such as universities, training institutions, schools and colleges".

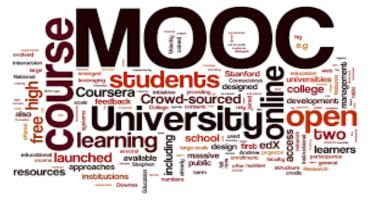
 What distinguishes OERs from the other resources is that they are freely accessible with flexible legal requirements (South African Institute for Distance Education 2014:3).



Introduction...continued













Introduction...continued



"All of these edX courses played a huge part in my getting a job at Microsoft". -Akshay Kulkarni, Age 22



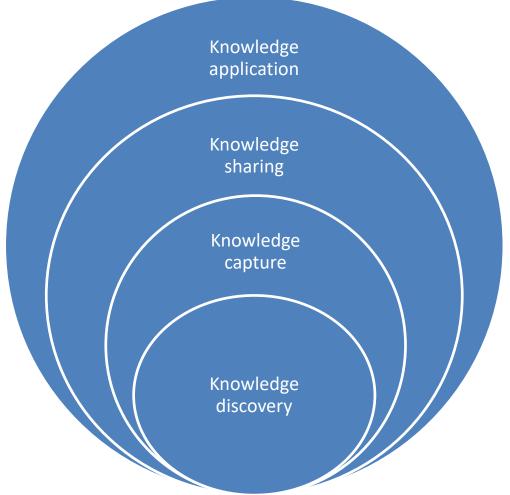
Background

- The introduction of the World Wide Web (WWW) in the early 90s by Tim Berners-Lee revolutionised the Information and Communication Technology (ICT) industry (Griset and Schafer 2011: 353).
- His ideas paved the way for the creation of the OERs which are an answer to the universal call for publicly funded research to be offered as a public good (Griset and Schafer 2011: 353).
- Furthermore, the OER **pioneer-institutions** which include Massachusetts Institute of Technology **(MIT)**, offer courses that vary from the sciences to liberal arts (UNESCO 2015:12-13).



Theoretical framework

 The study is modelled around the Knowledge Management (KM) processes (Becerra-Fernandez and Sabherwal 2010: 4).





Research problem

- Although South African universities have **excellent internet services**, there is **little evidence** to show maximum utilisation during curriculum design (Czerniewicz, Small and Walji 2014: 124).
- They have **not yet seen the potential** of OERs in teaching and learning (2016: 449).
- Some resist because they lack the requisite skills and techniques necessary to integrate OERs into teaching and learning (Johnson *et al.* 2013: 10).
- However, lecturers do create a number of digital resources for themselves and their students (Hodgkinson-Williams et al 2013:33).
- These contextually based digital resources are created and stored for personal use (2013:33).
- Such practices deny many students and fellow lecturers, free access to valuable knowledge (2013:33).



Research questions

The primary research question is:

What are the perceptions & experiences of lecturers at the University of the Free State on the usage of OERs in teaching and learning?

Subsidiary questions are:

- 1. What have been the developments in the field of OERs in higher education?
- 2. What are the lecturers' experiences on the use of OERs in teaching and learning?
- 3. How can the UFS strategize for possible promotion, development and integration of OERs in higher education?



Purpose & objectives of the study

The **purpose of this study** is to investigate the lecturers' experiences on the use and integration of OERs in their teaching and learning.

In order to address the research question, the researcher will strive to:

- investigate through literature search the developments in the field of OERs in higher education;
- describe the UFS lecturers' experiences on the use of OERs in teaching and learning;
- develop possible strategies for the promotion, development and integration of OERs in higher education.



Design and Methodology

Design

- This study is informed by **interpretivist paradigm** whose framework falls within the discursive **qualitative research** (Henning, van Rensburg and Smit 2004:16).
- A descriptive case study design has been chosen to guide the study. A research design plays a critical role in helping to address both the primary and secondary questions (Henning, van Rensburg and Smit 2004:30).

Methodology

- In this study, interviews were conducted with the participants who are the UFS lecturers (Creswell 2014:190).
- Despite its unobtrusive nature, audio recording was used to capture the exact experiences and realities related to the phenomenon understudy (Creswell 2014: 192).



Research-participant selection method

- This is a purposeful sampling based on the researcher's knowledge that the selected lecturer's expertise would assist in answering both the primary and secondary questions (MacMillan and Schumacher 2014 152).
- All seven faculties were targeted and eighteen lecturers formed part of the study. Furthermore, the use of a sampling by case (theory-based) strategy, further assisted in allowing the lecturers to share their views regarding OER usage in teaching and learning (2014: 351).
- The **nine lecturers** represented the highest number of participants, followed by **three Associate Professors**, **two HODs**, **two Programme Directors**, **one Senior Lecturer** and **one Professor**.
- Gender: Sixteen Females and 2 Males.
- Years of experience: from 3 years to 37 years.



Analysis of data

- Nvivo: a qualitative data analysis computer software package produced by QSR International was used.
- Collected data was dissected into manageable themes and in this study it was linked to the components of the KM processes model which are data capturing, storage, dissemination and application (2016: 196).
- The created **themes were used as sub-headings** during the interpretation and presentation of findings (Creswell 2016: 153).



- Varying levels of perceptions about OERs.
- Shared perceptions on the influence of the Internet.
- Efficacy of OERs in teaching and learning.
- The proposed development, implementation and promotion of OERs policy at the UFS.
- Experiences with regard to the use of the 5Rs principles of OERs



- Theme 1: Varying levels of perceptions about OERs
- 3 sub-themes:
- Fully knowledgeable,
- Partly knowledgeable or
- not knowledgeable
- '(...) I associate OERs to be resources that lecturers can easily access, maybe online and where we are not going to pay for copyright usage and are open for lecturers to use for their students. [This could] be (...) in a book form, or slides, or videos that [may be used] without asking for permission from the original authors.' [Sue]



- Theme 2: Shared perceptions on the influence of the Internet.
- Four sub-themes:
- Influence of the internet,
- Pros and cons of using the internet,
- digital natives versus digital imigrants &
- integration of the Internet into teaching and learning
- 'It plays a big role, as you can access it anytime, anywhere and you don't even have to go to the library...' [Siba]
- 'No, I use blackboard, on campus, sometimes, not as often, because I prefer face-to-face, that's my mode of teaching. I like to do it that way.' [Liziwe]



- Theme 3: Efficacy of OERs in terms of teaching and learning
- Five sub-themes:
- Prescribing freely available e-books
- Choice between print and electronic formats
- Faculties adopting OERs in teaching and learning
- Usage of OERs at under- or postgraduate levels
- Cost, quality and context of OERs
- '80% of us in the department contributed [to the currently-used prescribed textbook]. It is a Van Schaik [publisher] textbook ... We don't prescribe the OERs because they are not RSA-based and, secondly, we have contributed to that particular textbook, and therefore you are more likely to prescribe that book than the OERs.' [Sue]



- Theme 4: The proposed development, implementation and promotion of OER policy for the UFS
- 'I think I would go for it. I would love to be part of it. I would support it. I think it is important because some of us do what we think is the best ... when you actually get into the OERs and see what other people are doing, and how they are presenting in class ... you get an idea that makes you believe you can do that also. I think it is good to use it as a benchmark ... so that you are aware of what is going on in other places.' [Sue]
- 'I must be honest, I am **not happy about what you are recommending**. I think there are people who would do things like that. I **am not a pioneer** in that sense ... I think I need to have a mind shift, in my own manner of how I work, but **if that becomes a trend and a norm**, I would not resist.' [Desi]



- Theme 5: Experiences of lecturers with regard to the use of the principle of the 5Rs of OERs:
- Re-use
- Re-work
- Re-mix
- Re-distribute
- Retain
- 'Yes, I do it. I use it just to explain certain concepts like a gene, which is a biological concept which may have been used in our modules, but will have to explain in a way that suits our discipline.'
 [Mpho]
- 'No, also I have never done that. I would page through it and haver a look at it but I have never used [it]. I have never re-used it. I have never used parts of it.' [Carolina]



The interpretation of results

- The interpretation of results using the knowledge management processes model
- Knowledge Discovery
- They are aware of the need to search for new knowledge
- The majority of the lecturers consider the Internet as a valuable platform
- There is evidence of the production of new tacit or explicit knowledge
- Knowledge Capture
- Knowledge is captured, stored and distributed during the teaching and learning process
- Lecturers rely heavily on the use of knowledge that is stored in different spaces on the Internet



The interpretation of results

- The interpretation of results using the knowledge management processes model
- Knowledge Sharing
- The majority of the lecturers share with their students.
- Some are reluctant to share among themselves or with the outside world.
- Knowledge Application
- Lecturers at the UFS are the main sources of both tacit and explicit knowledge.
- They harvest from different sources, such as the Internet (use as is or in a modified state).
- The presence of a policy would assist in the production of proper procedures that would enhance the application of knowledge, including OERs, by the UFS lecturers during their teaching and learning.



Recommendations based on the findings

- The creation of awareness campaigns by the library as well as information sessions by CTL to motivate lecturers would assist them in realising the need for applying OERs in their teaching and learning activities.
- There is a need to upgrade the computer literacy skills of lecturers and ensure that they are all at an advanced level.
- Lecturers need to be trained on the different forms of information literacies that are needed for searching for various sources of information in their different formats.
- Faculty debates on the pros and cons of OERs need to be established.



Recommendations based on the findings

- There is a need to revisit the current pedagogies that are mostly conducted behind the veil of the Learning Management System, such as, Blackboard, and to explore the possibilities of using those that encourage open practices.
- There is a need to revisit and modify the outdated promotion- and reputation related practices that are enforced and encouraged by accredited bodies such as the NRF and HEQC.
- Champions who demonstrate the use of OERs in their faculties need to be identified.
- It is also important for the UFS to invite well-known institutions such as SAIDE, Creative Commons and HEIs that are already implementing OERs, including UNISA and UCT, to share their experiences in order to allay the fears that many lecturers indicated during the interview sessions.



Recommendations for further research

- It is important to conduct future research that will present empirical evidence to prove the efficacy of OERs at HEIs.
- Research should be conducted on how to develop, implement and promote OERs at HEIs.
- HEIs need to develop models that will suit their unique institutions to integrate OERs successfully in teaching and learning activities
- Inclusion of commercial publishing houses.





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- Allen, E and Seaman, J. 2016. Opening the textbook: educational resources in US Higher Education, 2015-2016. USA: Babson survey research group. Available in http://www.onlinelearningsurvey.com/reports/openingthetextbook2016.pdf [Retrieved from 2016-08-22].
- Becerra-Fernandez, I. and Sabherwal, R. 2010. Knowledge Management systems and processes. New York: M.E. Sharpe.
- Clark, R. C. 2014. Multimedia learning in e-courses. In: The Cambridge handbook of multimedia learning. New York: Cambridge University Press.
- Creswell, J. W. 2014. Research design: qualitative, quantitative, and mixed methods approaches. London: SAGE.



- Creswell, J. W. 2016. 30 essential skills for the qualitative researcher. London: SAGE.
- Czerniewicz, L., Deacon, A., Small, J. and Walji, S. 2014.
 Developing world MOOCs: a curriculum view of the MOOC landscape. In: Journal of global literacies, technologies and emerging pedagogies, vol. 2 (3), pp 122-139.
- Du ploy-Cilliers, F., Davis, C., and Bezuidenhout, R. 2014. Research Matters. Claremont: Juta.
- Griset, P. and Schafer, V. 2011. Hosting the World Wide Web Consortium for Europe: from CERN to INRIA, history and technology, 27:3, pp 353-370. Available from http://www.tandfonline.com/doi/pdf/10.1080/07341512.2011.604177 [Retrieved from 2016-05-22].



- Haythornthwaite, C., Andrews, R., Fransman, J. and Meyers, E., M.
 2016. The Sage handbook of E-learning research. London: SAGE.
- Henning, E., van Rensburg, W., and Smit, B. 2004. Finding your way in qualitative research. Hatfield: Van Schaik.
- Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., and Ludgate, H. (2013). NMC Horizon Report: 2013 Higher Education Edition. Austin, Texas: The New Media Consortium. Available from
- http://www.nmc.org/pdf/2013-horizon-report-HE.pdf [Retrieved from 2016-04-20].



- Maree, J.G. 2012. Complete your thesis or dissertation successfully: practical guidelines. Claremont: Juta.
- McGreal, R, 2013.Introduction: The need for Open Educational Resources. In: Open Educational Resources: Innovations, Research and Practice. Vancouver: Commonwealth of Learning. Available from
- https://oerknowledgecloud.org/sites/oerknowledgecloud.org/files/pub_ PS_OER-IRP_web.pdf [Retrieved from 2016-04-20].
- McMillan, J and Schumacher, S. 2014. Research in education: evidence-based inquiry. Essex: Pearson Education Limited.



- Mertens, D. M. 1998. Research methods in education and psychology: integrating diversity with quantitative and qualitative approaches. London: SAGE.
- Siemens, G. and Tittenberger, P. 2009. Handbook of emerging technologies for learning. Available from http://elearnspace.org/Articles/HETL.pdf [Retrieved from 2016-04-20].
- South African Institute for Distance Education. 2014. Open Educational Resources. Available from
- http://www.saide.org.za/open-educational-resources [Retrieved from 2016-08-13].



- South Africa. 2013. Department of Higher Education and Training: Report of the Ministerial Committee for the Review of the Funding of Universities October 2013. Available from http://www.dhet.gov.za/SiteAssets/LatestNews/ReportMinisterialCommitteefortheorements [Retrieved 2015-06-16].
- UNESCO. 2015. Concepts of openness and open access: Module 2. Paris: United Nations Educational, Scientific and Cultural Organization, Available from http://unesdoc.unesco.org/images/0023/002322/232207E.pdf [Retrieved from 2016 03-21].
- Veletsianos, G. 2011. Designing Opportunities for Transformation with Emerging Technologies, 2011. In Educational Technology 51 (2), 41-46. Available from
- http://www.veletsianos.com/wp-content/uploads/2011/02/designingopportunities-transformation-emerging-technologies.pdf [Retrieved from 2016-04-20].

