

**TECHNOLOGY-BASED LIBRARY ORIENTAION AND USER EDUCATION
PROGRAMME: STRIDES MADE BY MZUZU UNIVERSITY LIBRARY**

Paper presented at the XXIV SCECSAL CONFERENCE

**Inclusive Libraries and Information Services Toward Achieving Prosperity for Sustainable
Development in Africa**

**Hotel Safari
Windhoek, Namibia
8th-11th February 2021**

Aubrey Chaputula (PhD)¹ Allan Kanyundo² Lizzie Malemia³

¹Mzuzu University achaputula@yahoo.co.uk

²Mzuzu University ajkanyundo@yahoo.com

³Mzuzu University lmalemia@gmail.com

Abstract

The aim of this study was to explore strides made by Mzuzu University Library and Learning resources Centre in the implementation of a technology-based library orientation and user education programme. The study used the qualitative approach whereby data was collected through interviews conducted with 5 librarians and one focus group discussion conducted with 16 students. Data was analysed through content analysis, and findings presented using themes. Findings of the study revealed that implementation of the technologically-based library orientation has resulted in the commencement of informational and instructional programmes packaged in a way that makes their delivery to students on campus and remote places easier. Desktop and laptop computers, LCD projectors and library websites are all used in the delivery of the programme by the library while students use laptop and desktop computers, smartphones and tablets to access the services offered by the library. Inadequate computers and bandwidth, lack of digital skills and administrative inefficiencies are the factors militating against the effective delivery of the

programme. This study, therefore, recommends that Management of Mzuzu University Library should take necessary steps to address the administrative and technical hitches that have marred the implementation of the technologically-based library orientation and user education programme to ensure that it becomes a success.

Keywords: Library orientation; library technologies; information access; technology-based library orientation

Conceptual setting

Students in academic institutions need to be independent, self-directed learners (Kift, Nelson, & Clarke, 2010, p. 5) in order to improve their writing, research and critical thinking skills (Bovill, Bulley, & Morss, 2011, p. 3). This is facilitated by a well-equipped and stocked library. However, libraries are also places where students face various challenges and anxiety due to unfamiliarity with the host library's services and spaces, as well as the prevailing academic and information use conventions (Hughes, 2010, p. 4; Hughes, 2013, p. 23; Liu, 2013, p. 39). To overcome this problem, libraries offer orientation and user education programmes to enable users identify, access, retrieve and use information they need (Donald, Harmon, & Schweikhard, 2012, p. 594). Library orientation has traditionally been offered using the face-to-face mode. However, the pervasiveness of portable technological devices such as smartphones and laptops, coupled with increased access to the Internet, implies that library orientation programmes can now be easily offered through electronic means. The use of technological tools in library orientation programmes has assisted to overcome geographical and language barriers (Madhusudhan & Verma, 2008, p. 1), and also proven to be an effective way of offering information in a short span of time, convenient and flexible in scheduling time (Madhusudhan, 2010, n.p.).

Literature review

Strides made by university libraries

In order to get some basic information about the online tutorials practiced by libraries, Haahr (2008, n.p) used a random number generator to get a random selection of 100 colleges and universities from Peterson's list of Four-Year-Colleges 2008. A total of 372 online information literacy tutorials from the library website of the academic institutions were examined. The findings

indicate that 33% of the surveyed libraries have developed their own online tutorials. About 11% have links to online tutorials created by other libraries or database vendors. To describe the teaching programmes or online tutorials, about 17% of the libraries used the term “information literacy” rather than “library instruction”.

A study by Mikkelsen and Davidson (2011, p. 67) at Mason Library reveals that its library orientation was delivered using a dynamic multimodal presentation. First segment of the library’s orientation session comprised a short video tour of the library. The purpose of the video was to introduce new students to the library space and show how the library is used by peers.

Another study by Schrecker (2017, p. 10) at Ashland University in Ohio, United States of America, reveals that the library introduced a student orientation module in Blackboard which was envisioned as a point-of-need resource, a place for students’ access and review of library information at any time. Library tours and tutorials were designed to support the content, and instructional videos that were developed for teaching and learning.

Technology used by university libraries

EDUCAUSE tracked digital technologies that undergraduate students own and use in their academic work. The most popular devices owned by students were smart phones and laptops (Galanek, Gierdowski, & Brooks, 2018, p. 7). All of these have the capability of allowing access to information without imposing any restrictions on time or place. Mobile devices have become the main way in which users connect, communicate and discover. Libraries use mobile devices in the delivery of library services. For example, the services offered on mobile library websites include: user account, library catalogue, mobile-adaptive databases, Instant Messaging (IM), Short Messaging Service (SMS) reference services, working times, personnel, links to the Twitter/Flickr/YouTube/Facebook pages of the library, room and locker reservations, and links to the libraries’ main internet sites (Tay, 2014, n.p.). Temasek Polytechnic Library in Singapore indicated that its mobile application includes a time saving feature such as ISBN barcode scanner to check for item availability and a fun game called ‘Spin Me’, which recommends good reads when a user shakes his/her mobile device (Sabaratnam & Ong, 2013, p. 113).

Roth et al. (2016, pp. 36-44) used the case study design to investigate the possibility of using the Edventure Builder platform to create a scalable, interactive, online library orientation activity. Findings revealed that the Edventure Builder software is intuitive, scalable and provides a variety of options to users, including flexibility in question format, and branching logic.

Sabaratnam and Ong (2013, pp. 103 - 120) indicated that the Singapore University of Technology and Design Library adopted new technologies such as surface computing, writable tables and interactive tools to promote collaborative research and learning where groups can share the same surface to discuss, search, save and go.

Challenges faced by university libraries

Making information and information communication technologies available to the world is not enough. Our education systems need to ensure that today's learners are empowered to learn and to take their place in the learning society. Marzilli et al. (2014, p. 1-20) observed that the lack of digital literacy skills among faculty and students, lack of competencies to adopt and implement technology, and unreliable hardware and software platforms are key barriers in teaching learning and research which are key goals of academic institutions.

Contextual setting

Mzuzu University Library started operating in 1998 upon the established of Mzuzu University by an Act of Parliament in 1997 as a second public university in Malawi. The Library currently serves over 6000 students and 200 academic staff from six faculties namely: Faculty of Education, Faculty of Environmental Sciences, Faculty of Tourism, Hospitality and Management, Faculty of Science Technology and Innovation, Faculty of Humanities and Social Sciences, and Faculty of Health Sciences (Mzuzu University Staff List, 2018, p. 2; Mzuzu University Student Information Handbook, 2018, p. 6). Currently, Mzuzu University Library has 23000 volumes of print books, 42 electronic databases and a well-stocked institutional repository hosting theses and dissertations other resources.

The Library has a sitting capacity of 400, and the service range provided include reader and reference services including lending services. Reference services are provided from the Reference

Desk whilst lending services are accessed from the Short Loan/Course Reserves Counter, Long Loan Counter and Malawiana and Special Collections. The Library also registers students' tablets, laptop computers and smartphones to enable owners' access electronic journals and books through its WIFI. Students who do not own any of these gadgets access e-resources in the E-Library section of the Library.

The Library plays an important role of providing information resources to support information needs of the university. To ensure that staff and students are acquainted to the resources and services offered in the library, an orientation programme is given to new students and academic staff. To successfully reach out to the huge numbers of students that get enrolled into the University, some of whom do not physically attend the orientation sessions conducted at the beginning of the semester, Mzuzu University Library introduced a technologically-based orientation programme a few years ago.

Problem and purpose of the study

One of the notoriously busy time for most library staff is at the start of the new academic year. This is such the case because librarians are busy with orientation and user education programmes, and as a consequence, library tours are conducted in a hurried manner. Introductory classes only focus on generic information skills and referencing conventions, disconnected from the students' course requirements. This can be confusing, even alienating, for new students (Hughes, 2016, p. 126). Ideally, orientation sessions should be conducted frequently with students and faculty in academic libraries to develop and sharpen their skills on how they can conduct research in the library and also update them on new resources the library has acquired. Mzuzu University launched the technologically-based library orientation in 2017. However, to-date no evaluative study has been conducted to assess the impact this service has had on its users. The purpose of this study, therefore, is to evaluate strides Mzuzu University Library has made in implementing the technologically-based library orientation and user education programme.

Questions

This study was guided by the following research questions:

- What strides has Mzuzu University Library made in the implementation of technologically-based library orientation and user education programme?
- What technologies are used in the implementation of orientation and user education programme at Mzuzu University Library?
- What are the challenges that Mzuzu University Library is facing in the implementation of technologically-based library orientation and user education programme?

Theoretical framework

This study was guided by the Technology Organisation and Environment (TOE) framework introduced by Tornatzky and Fleischer in 1990. TOE framework is an organisational level theory that states that three different elements of a firm's context influence technological adoption decisions. These three elements are the technological context, the organisational context, and the environmental context. All the three are posited to influence technological innovation in an organisation (Angeles, 2014, pp. 96-97). The TOE Framework has also been used in related studies. Gutierrez, Boukrami, and Lumsden (2015, pp. 788-807), for instance, used the TOE framework in the study of factors influencing managers' decision to adopt cloud computing in the UK.

Methodology

This study adopted a case study design that made use of qualitative research method. Data was collected through in-depth semi-structured interviews with a purposively selected sample of 5 librarians, and one focus group comprising 16 Level 5 Bachelor of Education Students, making a total sample of 21 participants. Librarians were included in the study because they plan and manage the orientation and user education programme. Conversely, selection of Bachelor of Education students was based on ease of accessibility and their having spent more time on campus hence able to provide rich sources of data for the study. Data collected from interviews were transcribed in MS Word, analysed through content analysis, and reported using themes.

Findings and Discussion

Strides made by Mzuzu University Library in the implementation of technologically-based library orientation and user education

Results from the interview and focus group discussion revealed that a number of strides have been registered in the implementation of technologically-based library orientation and user education programme. Firstly, academic staff and students are able to access orientation content whenever they want it and from wherever. This has been achieved because the Library has uploaded informational content on its user and reference service offering, and instructional content on e-journal access, use of the catalogue and access to print resources on to its website. The content is in a form of videos, audio clips and brochures on to its website. This content can be downloaded at the user's convenient time using personal ICT gadgets and Library computers, and is used to supplement library tours and instructional sessions librarians organise for new students. These initiatives have improved the delivery of the library orientation programme.

In the focus group discussion, a student participant commented:

“The library orientation has enabled us acquire skills on how to locate books using the OPAC, exposed us to Library Sections, and also enabled us to access resources even outside the library by using our personal gadgets, accorded us skills on how to borrow books using the automated system from various sections of the library, how to access electronic library resources using either the computers in the library or our own personal gadgets like laptops, smart phones and tablets.”

These findings concur with those made in a survey done by Haahr (2008, n.p.) from Peterson's Four-Year-Colleges 2008 who examined 372 online information literacy tutorials from the library websites academic institutions. The findings indicated that 33% of the surveyed libraries have developed their own online tutorials. The results are also supported by findings from a study conducted by Schrecker (2017, p. 10) at Ashland University in Ohio United States of America that revealed that the Library introduced a Library Student Orientation module in Blackboard which was envisioned as a point-of-need resource, a place for students' access and review of library information at any time. Just as it was found in the present study, findings of the study by Schrecker (2017, p. 10) indicated that instructional videos were developed to support library tours and tutorials that were conducted to new users.

Technologies used in the implementation of technologically-based library orientation and user education programme at Mzuzu University Library

The second question of the study sought to establish technologies that are used in the implementation of technologically-based library orientation and user education programme at Mzuzu University Library. Results from both the interviews with librarians revealed that Mzuzu University Library uses desktop and laptop computers, pre-recorded videos embedded on the library website, social media (WhatsApp and Facebook), and LCD projectors in the implementation of its library orientation and user education programmes. On the contrary, the focus group indicated that students mainly use smart phones, desktop and laptop computers to access user education programmes offered by the library. Tablets are slightly used.

One of the librarians commented saying:

“One thing that you need to know is that orientation should be based on user needs. For first-year students, the best technology to showcase what the library has are the LCD projectors because you can demonstrate for them to see while listening. When orienting continuing students who are conversant with some processes of searching, videos might be the best because videos demonstrate processes. And when you want to demonstrate routine activities that happen in the library and you do not want to waste time, process videos are the best.”

These findings are consistent with those made in the EDUCAUSE (2018) survey of undergraduate students' use of digital technologies in the USA that revealed that the most popular devices owned by students were smart phones and laptops (Galanek, Gierdowski, & Brooks, 2018, p. 7). This signifies that Mzuzu University Library was offering its orientation programmes using technologies that were widely used by the students raising the prospect of the services being used by many users. Likewise, Tay (2014) pointed out that mobile devices have become the main way through which users connect, communicate and discover hence libraries use mobile devices in the delivery of services something that was taking place in this study.

Challenges Mzuzu University Library is facing in implementing technologically-based library orientation and user education programme

The study also sought to find out challenges Mzuzu University Library is facing in the implementation of the technologically-based library orientation programme. Results of interviews conducted with librarians and a focus group discussion conducted with students revealed challenges that are besetting the implementation of the technologically-based library orientation and user education programme. Some of them include lack of adequate skills and time. In this regard, it was noted that ODeL students are not offered a course in End-user computing. The study also found that there is limited WIFI coverage on campus. This aspect limits users' ability to access tutorials and resources uploaded to the website. The study further discovered that the number of computers is limited. Consequently, students who do not have their own laptops, smart phones or tablets face challenges in accessing e-resources. Other challenges affecting the delivery of the orientation programme are lack of space in the Library, power outages, and slow internet connectivity.

In a focus group discussion with students, one of the participants made the following comments:

“The Library does not have adequate computers. Some of us lack skills on how to operate a computer, and ODeL students are not offered a course in End-user computing.”

Another student added:

“The network connection on campus is poor. This affects us when we want to access some content. The orientation is only offered in first and last years. Sometimes it happens that you only get to understand things in the fourth year after struggling all these years.”

Yet another student said:

“Nowadays students are required to register their gadgets every now and then to access the campus-wide WIFI. Sometimes you go where the registration of gadgets takes place two or three times and still can't register because there are many people. You just give up, and you cannot access Internet because the data bundles are very expensive.”

These findings agree with those made by Marzilli et al. (2014, pp. 1-20) who observed that the lack of digital literacy skills among faculty and students, lack of competencies to adopt and implement technology, and unreliable hardware and software platforms are key barriers in teaching learning and research which are key goals of academic institutions.

Conclusion and recommendations

The purpose of this study was to explore strides Mzuzu University Library has made in implementing the technologically-based library orientation and user education programme. Findings revealed that implementation of technologically based library orientation has resulted in the commencement of informational and instructional programmes packaged in a way that makes their delivery to students on campus and remote places easier. Desktop and laptop computers, LCD projectors and library website are used in the delivery of the programme by the library while students use laptop and desktop computers, smartphones and tablets to access the services offered by the library. Inadequate computers and bandwidth, lack of digital skills and administrative inefficiencies have been identified as some of the factors militating against the effective delivery of the programme. This study, therefore, recommends that Management of Mzuzu University Library should purchase more computers and work with ICT Directorate in procurement of bigger bandwidth to improve Internet connectivity. These interventions will ensure that the technologically-based library orientation programme becomes a success.

References

- Bovill, C., Cathy J. B., & Kate, M. (2011). Engaging and empowering first-year students through curriculum design: Perspectives from the literature. *Teaching in Higher Education, 16* (2), 197-209.
- Donald, M. S., Harmon, K., & Schweikhard, D. (2012). Find your place: Enhancing library relevance and involvement with a campus community. *College & Research Libraries News, 73*(10), 590-594.
- Galanek, J. D., Diana, C., Gierdowski, D., & Christopher, B. (2018). ECAR study of

- undergraduate students and information technology. Retrieved from <https://library.educause.edu/~media/files/library/2018/10/studentitstudy2018>.
- Gutierrez, A., Elias, B, & Ranald, L. (2015). Technological, organisational and environmental factors influencing managers' decision to adopt cloud computing in the UK. *Journal of Enterprise Information Management*, 28(6), 788-807.
- Haahr, M. (2008). *Random.org: True random number service*. Retrieved from <http://www.random.org>.
- Hughes, H. (2013). International students using online information resources to learn. Queensland, Australia: Queensland University of Technology.
- Hughes, H. (2010). International students' experiences of university libraries and librarians. *Australian Academic & Research Libraries*, 41(2), 77-89.
- Kift, S., Karen, N., & John, C. 2010. Transition pedagogy: A third generation approach to FYE: A case study of policy and practice for the higher education sector." *The International Journal of the First Year in Higher Education*, 1(1), 1–20.
- Madhusudhan, M., & Singh, P. (2010). A multimedia-based library orientation programme at Dyal Singh College Library, New Delhi. *Library Review* 59(6), 430-444. <https://doi.org/10.1108/00242531011053940>
- Madhusudhan, M., & Verma, R. (2008). The creation of a multimedia orientation to the Department of Library and Information Science, University of Delhi: A systems analysis. *Library Philosophy and Practice*, (May), 1-6. <http://digitalcommons.unl.edu/libphilprac/191>
- Marzilli, C. J.D., Helly, S., Marmion, R., McWhorter, P., Roberts, T., & Scott, M. (2014).

Faculty attitudes towards integrating technology and innovation. *International Journal on Integrating Technology in Education*, 3(1),1–20.

Mikkelsen, S., & Sara, D. (2011). Inside the iPod, outside the classroom.

Reference Services Review, 39(1), 66-80. <https://www.emerald.com/insight>

Roth, A., Dominique, T., Crystal, G., & Lia, F. (2016). Building a scalable mobile Library orientation activity with Edventure Builder. *Library Hi Tech*, 34(1), 36-44.

Sabaratnam, J. S., & Esther, O. (2013). Singapore libraries: From bricks and mortar to information anytime anywhere. *International Federation of Library Associations and Institutions*, 39(2), 103–120. DOI: 10.1177/0340035213488710.

Schrecker, D. L. (2017). Library orientation in blackboard: supporting online and distance learners. *Library Hi Tech News*, 34(6), 11-13.

Tay, A. (2014). Musings about librarianship. Retrieved from

<http://musingsaboutlibrarianship.blogpost.com.tr/p/about-me.html#.Uzslgfl ti>.