COPING WITH THE FIRE DISASTER AT MZUZU UNIVERSITY: EXPERIENCES FROM LIBRARIANS AND STUDENTS

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Abstract

This study provides an account of the experiences of library staff and students at Mzuzu University as they coped with the fire disaster. A phenomenological research design was used to elicit experiences of both library staff and students when coping with fire disaster. Purposive sampling was used to identify library staff and students who participated in the study. Interview and focus group discussion were used to collect data from library staff while a questionnaire and focus group discussion were used to collect data from students. The study revealed that library staff used several strategies to rebuild the collection and provide service to students, such as appealing to donors and partners, using electronic resources and establishing a short loan counter. Library staff experienced both challenges and opportunities during the time of rebuilding the collection. Challenges included delay in acquisition of resources and lack of processing tools while opportunities included learning new skills, teamwork and acquisition of new resources among others. Students also faced challenges and opportunities when adapting to new ways of information delivery. Challenges included inadequate resources, lack of reading space, and limited access to electronic resources due to limited skills and poor network while opportunities included new skills, new resources, and a new information seeking culture. The library devised some strategies to minimize students’ challenges, which included increasing hotspots, increasing band width, training students in internet skills, and opening an interim library to provide more resources and reading space. Data was presented using tables and analysed using narrative text.

Key words: Fire disaster; Library; electronic resources; Library staff

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Introduction

Libraries experience disasters in many forms, including fire, water, earthquakes, and vandalisms. Library fire disasters have occurred throughout history. Alexandria Library, in Egypt, was partially destroyed by fire in 48BCE, and several historical artifacts and information sources were wiped out (Wilkinson, 2015). In 1986, approximately 400,000 volumes were destroyed by fire in the Los Angeles Central Library; in February 1988, fire gutted 400,000 newspapers and scientific periodicals and 3.6 million books in the USSR Academy of Sciences (Ngulube and Magazi, 2006). In 1994, fire destroyed 100,000 records of Norwich Central Library in England (Rattan and Payare, 2012), and on September 2, 2004, fire destroyed the Historic Library in Weimar, Germany, with 30,000 volumes of rare resources and unique works destroyed (Eberhard, 2004). Despite the nature, timing, and severity of fire disasters, each disaster causes great loss of precious resources and information (Adinku, 2005; Mchone-Chase, 2010) and also presents opportunities to librarians (Steward, 2014). When disasters strike, library staff engage in disaster response and recovery activities. Wong and Green (2006) distinguish disaster response from disaster recovery as follows: disaster response includes “all activities from the moment the disaster strikes until the disaster cleanup is finished while disaster recovery is all activities and decision-making processes that are essential to resume the library’s operations and services” (p. 76). Library institutions over the years have developed disaster plans for effective and efficient response and recovery from disasters (Hazlett, 2017; Ngulube and Magazi, 2006; Wong and Green, 2006; Adinku, 2005). This paper focuses on experiences of librarians and students after the Mzuzu University Library fire disaster.

Context

Mzuzu University was established by act of Parliament in 1997 as the second Malawian public university. With five faculties and three centres, the University has a student population of 4,067: 2,709 generic and 1,358 open and distance learning students; 184 academic staff; and 270 support staff (Mzuzu University Registry Record). On Thursday, December 17, 2015, the University Library closed its business day at round 10:00 pm as usual, with limited pressure from users as it was only one day to the official closing of the University for Christmas holiday and the end of the first semester. Most students had finished writing their exams and had gone home, and few were remaining to write their final papers the next day. While everyone was anticipating the holiday closing and time off—for university faculty and staff, a break from the hard work of teaching and helping students meet their needs academically and socially, and for students, time off from studies and pressure from meeting assessment deadlines—the unexpected news of fire gutting down the library greeted the University community in the early hours of December 18, 2015. The news came like a nightmare to many. No one had expected or imagined that this centre of
knowledge and the oasis of wisdom could unceremoniously be gutted down by fire. All responded to the unexpected event with shock and disbelief. University leaders and staff rushed to the campus upon hearing the news that the library was on fire, and those who could not be reached by phone were informed by the dazzling flame and cloud of smoke that lit and covered the sky. Others were never told about the incident and were greeted by the gutted library in the morning as they were either reporting for duties or coming to write their final end-of-semester exam. Many pondered with self-imposed questions without answers: What has happened? Why the library? The cause of the fire remains a mystery. However, it is speculated that it might have been caused by an electric fault.

Firefighters from Mzuzu City rushed to put out the fire. The scene was full of people: staff, students, and community members. Some helped to put out the fire, and others tried to rescue resources as the fire fiercely forced its way through the entire building. Others became spectators to the drama that was never planned or rehearsed, and still others found an opportunity to steal what was rescued. Rescue efforts became futile as the structural woodwork and carpet of the library fueled the fire. In no time the whole library was in ashes except for technical service area and server room in the main library, the Children’s Library, and the American Corner, which were in an annex to the main library. These sections were separated from the rest of the library by concrete walls. The engagement of firefighters proved useless as the fire engine that came first ran out of water. After a while two additional fire engines came, but the emotionally charged students, in frustration, chased them way. By 5:00 a.m. on December 18, 2015, the library completely collapsed, and the rescue mission was called off. Students who helped with the rescue process were told to go back and prepare for their exam at 8:00 a.m. A total of 45,000 volumes, 80 computers, 500 reading chairs, and 62 tables burned to ashes. As librarians and staff pondered where to put the rescued items, they were greeted by rains. Taken unaware, they struggled to find tents and plastic bags to cover the rescued items; hence, library materials were soaked and more damage was done. The end of the rescue mission quickly switched from disaster response to disaster recovery.
Problem Statement

The research literature has discussed different types of disasters that over the years have affected libraries. Each of these articles presented detailed accounts of what actually happened in each incident. In some cases, authors presented different ways librarians have responded to these disasters and how the process of recovery was done (Wilkison, 2015; Ngulube and Magazi, 2006; Wong and Green, 2006). In addition, some authors have written stories of disaster response and recovery activities, drawing from their personal experiences (Roberts, 2015; Holderfield, 2007; Hirst, 2008). Others provided guidelines on how librarians can respond to disasters based on experiences drawn from several incidents that they have read about and experienced (Hazlett, 2017; Barkley, 2007; Ngulube and Magazi, 2006). Learning from these articles and experiences, it is very clear that when disasters occur, librarians and those affected not only devise strategies for coping with these challenges (McHone-Chase, 2010); they also take advantage of the opportunities that arise from these disasters (Steward, 2014). Since the fire disaster occurred at Mzuzu University Library, nothing about the experiences of librarians and students during the disaster recovery has yet been documented. This paper, therefore, presents a documented account of the librarians who were physically involved during this disaster and the students whose academic life was affected.

Purpose of the Study

This study intends to provide an account from librarians and students on how they adapted after the fire disaster through narrative accounts of personal experiences from library staff and students.

Research Questions

This study intends to answer the following questions:

1. What strategies did librarians at Mzuzu University adopt to rebuild the collection and provide library services to students?
2. What challenges and opportunities did the library staff at Mzuzu University face during the process of rebuilding the collection?
3. What challenges and opportunities did students at Mzuzu University encounter with the newly adopted information service delivery methods?
4. What strategies did the librarians at Mzuzu University use to alleviate the challenges that students experienced because of the new information service delivery methods?
Significance of the study

This study will inform librarians and other information personnel on how to deal with disaster recovery, appraise them of the challenges encountered during a disaster, and highlight possible ways of dealing with such challenges during disasters. Since this paper is written by those who were physically involved in fire disaster recovery, the paper provides a firsthand account of decisions made and processes implemented while librarians, management, staff, and students managed the emotional aspects of the disaster. It is hoped that the practical lessons presented in this paper will provide insights for managing disasters in libraries to practicing librarians and other information personnel.

Review of Literature

Strategies for Recovery of Disasters

Development of Disaster Recovery Plans

Ahenkorah-Marfo and Borteye (2010) define disasters as incidents that threaten and damage the library’s building, collections, contents, facilities, or services. Disasters can be caused by several factors, including fire due to arson or electrical fault, water, and others. Institutions affected by disasters such as fire have used disaster recovery plans to facilitate a quick, effective, and efficient recovery and resumption of services. Wong and Green (2006) explain that disaster recovery involves “all activities and decision-making processes that are essential to resume the library’s operations and services” (p.76). Disaster plans help people to make quick, effective, and efficient decisions for speedy recovery and promote service continuity (Hazlett (2017; Adamo (2016; Rattan & Payare, 2012).

Setting Priorities for collection development

Prioritizing in a disaster environment allows people to commit time and resources first to things that are more important. Librarians need to identify priorities before the disaster so that materials that are most valuable or difficult to replace and process are given high priority during disaster recovery time. Priorities should be based on needs and providing continuity of services (Adamo, 2016; Wong & Green, 2006). After the earthquake at the University of Canterbury, Law Library staff identified resources that, if prepared, would have greatest impact on resumption of core library services at the university (Roberts, 2015).
Identification of Right Human Resource

Barkley (2007) explains that dealing with disaster requires people who are flexible and have creative problem-solving skills. Disaster recovery requires collaboration of different personnel to deal with specific activities. In the process of disaster recovery, librarians deal with fiscal, physical, and emotion challenges that require teamwork and shared responsibility. During crucial disaster situations, personnel deal with practical issues of building, collection, and services (Wilkinson, 2015; Ngulube & Magazi, 2006).

Space for Security of Items, Staff, and Continuity of Services

Holderfield (2007), Director of the Dongola, Illinois, Public Library, advised that during a library disaster, staff need a secure building or a place where rescued library materials and those being returned from loan can be kept to avoid theft or further damage due to weather. The University of Canterbury Library disaster plan has a continuity plan that stresses the importance of a safe building where staff may work and provide core services during an emergency (Roberts, 2015). During the Iowa City Flood of 2008, library staff re-located to safe buildings and continued processing materials and offering basic reference services (Hirst, 2008). Adamo (2016) and Stewart (2014) stress that during an emergency, it is important that librarians identify a place from which to continue library services and safe locations to store library materials.

Partnership with Other Libraries

Librarians partner with staff from other libraries to continue services during disasters (Adamo, 2016). McHone-Chase (2010) explains that librarians rely on interlibrary loan services during disasters for the collaboration and partnership of other librarians.

Challenges

Most institutions do not have disaster recovery plans, this affects effective decision-making and delays service continuity (Wong & Green, 2006). For example, Ahenkorah-Marfo and Borteye (2010) found that the Kwame Nkrumah University of Science and Technology (KNUST) main library, with 1,650 seating capacity, 25,000 users, and 290,000 volumes of books, did not have a disaster plan of any sort.

Disasters are emergencies, and institutions need extra financial resources to replace destroyed items. Limited financial resources during disaster emergencies affect level of replacement of destroyed resources (Adamo, 2016; Rattan & Payare, 2012; Ngulube & Magazi, 2006). In addition, limited funding denies
users the opportunity to access resources that are destroyed as it may take time to replace them as librarians wait for adequate funding, especially rare collection resources (Ngulube & Magazi, 2006).

In some cases, even though the library might have some resources remaining, the lack of appropriate and secure places for staff to provide continuity of services becomes a challenge. Despite having some resources that students could access after the earthquake, the University of Canterbury Library could not offer services to students because of safety concerns (Roberts, 2015).

Further, library staff and users have to adapt to new modes of service delivery that require new equipment and skills to allow continuity of services after a disaster. For example, new technology to access information and new processes required for the use of digitalization of materials may require library staff to develop skills that may not have been used before (Adamo, 2016; Breeding, 2012).

**Opportunities**

Steward (2014) states, “Disasters present an unprecedented opportunity for libraries to highlight their value to [their] community as professional providers of reliable information. [And they have] an opportunity to refocus to improve services and facilities” (p. 306). Ngulube and Magazi (2006) say that disaster recovery provides feedback on emergency plans as staff who are involved share experiences.

Disasters provide library staff and users an opportunity to learn new skills and acquire new equipment and facilities as they adapt to new ways of information delivery, such as use of digital resources; internet, such as Google and interlibrary loan (Adamo, 2016; Breeding, 2012; Mchone-Chase, 2010). Further, library staff learn new values of unity, collaboration, and leadership in the process of disaster recovery as response to disaster requires multiple skills (Ngulube & Magazi, 2006; Wong & Green, 2006). An interview of participants of the University of Iowa Libraries and University of New Mexico Libraries highlighted cooperation and coordination of participants as they worked in teams for the common good, highlighting fluid leadership among teams as a key attribute during disaster recovery (Wilkinson, 2015).

**Methodology**

This study adopted quantitative and a qualitative approach, with a phenomenological research design. Creswell (2014) defines phenomenological research design as the “researcher describes the lived experiences of individuals about a phenomenon as described by participants. This description culminates in the essence of the experiences for several individuals who have all experienced the
phenomenon” (p. 14). This design suits this study as participants in this study are those who experienced the process of the Mzuzu University disaster recovery. Data were collected through use of a questionnaire, interviews, and focus group discussions (FDG). Questionnaires were distributed to students’ representatives across all six faculties, and four senior library staff were interviewed based on their roles as E-resource librarian, technical services librarian, Children and Outreach librarian, who served as coordinator of disaster recovery activities, and University Librarian. Two focus group discussions were conducted involving library staff (FDGLS) who were supervisors in sections and students’ leadership representatives (FDGSL). In addition, a narrative account from the authors who were directly involved in the recovery activities is presented in the study.

A purposive sampling method was used. Picardi and Masick (2014) describe the purposive sample as when the researcher selects participants who have relevant knowledge to the study. This study involved 37 participants: 8 library staff (LS) (four senior library staff (SLS); four library assistants (LA)) and 29 student’s leaders (SL) (6 student union leaders and 23 students’ class representatives). These were directly involved in the process of disaster recovery as decision makers and representatives of users. Out of the eight library staff (LS), three who played a key role during the time of disaster and recovery, are authors of this paper.

**Presentation of Results and Discussion of Findings**

Through the use of a questionnaire, interviews, focus group discussions, and narration of personal accounts, data were collected to answer key research questions as presented below.

**What strategies did librarians at Mzuzu University adopt to rebuild the collection and provide library services to students?**

Through interviews with senior library staff and a focus group discussion with library staff, it was revealed that the library adopted several strategies to rebuild the collection (see Table 1).

<table>
<thead>
<tr>
<th>Table 1: Strategies used to rebuild collections and services</th>
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<tbody>
<tr>
<td>Appealing to donors resources</td>
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<tr>
<td>Collaboration with other libraries</td>
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<td>Expediting the acquisition process by focusing on e-resources</td>
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<tr>
<td>Conducting fundraising activities such as dinner dances to buy new resources</td>
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<tr>
<td>Establishment of hotspots for internet access</td>
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The major method used that brought a lot of dividends was appealing to donors. Additional major methods were collaboration with partners, using electronic resources for service delivery, and creating a short loan counter. A member of the library staff focus group discussion stated that the library bought no new resources in the first three months after the disaster and relied on donations from well-wishers locally and internationally for new resources. Based on authors’ personal experiences, apart from what donors and well-wishers gave, librarians also used a few resources that were rescued from the disaster and repaired broken furniture for use during the recovery period. For example, out of 7066 books acquired during this period, 4,595 (65%) were donated and 2471(35%) were recovered from previous library (Mzuzu University Acquisition Record, 2016).

What Challenges and Opportunities did the library staff at Mzuzu University face during the process of rebuilding collection?

Through interviews of senior library staff and library assistant focus group discussions, it was revealed that Mzuzu University library staff experienced the following challenges and opportunities:

**Challenges**

*Lack of space for storing rescued materials and staff to process Library Materials*

During focus group discussion with library staff (FGDLS) and interview with senior library staff (SLS) it was noted that lack of space for storage and working was a challenge. As a result, most rescued resources were stolen or soaked in water by rains and could not be restored. For example, books soaked in water could not be dried in safe places. One member echoed that the library recovery effort would have been better if there was a safe place to carry rescued resources to. Most items that people made an effort to rescue were lost in the process of recovery. In addition, staff did not have a designated space to work after the fire disaster. Library staff spent some days not knowing where to work from. The discussion group also noted that the absence of a plan made
things difficult. One of senior library staff (SLS) and coauthor agreed with the group’s observation as he stated:

*I personally remember how things that I helped rescue went missing in the process. Some of these items were a good starting point (SLS1)*.

Lack of working tools and infrastructure for Processing Materials

During a focus discussion with library staff (FGDLS), it was noted that lack of processing materials such as computers, stamps, stationary-like paper, glue, and scissors stalled the recovery process. One member noted that ordering new stamps took more than one month, taking into account that resource processing was urgent and needed to be done in a specific period of time. Further, a senior library staff and coauthor in technical services noted in an interview that lack of an internet connection brought about challenges of developing bibliographic information and cataloging of resources. In his own word as presented in this verbatim:

Surely, in terms of instruments, we didn’t have enough instruments because at that particular time we were . . . building our collection using online resources. Like we were using databases that [were] internet based, and our server [was] also, did not have internet at that particular time . . . . Computers were also gutted down by fire and we did not have computers (SLS2)

From authors’ personal experiences at one point, the library lacked both a computer for data entry and a printer to print labels. Computers rescued from the fire developed faults, and some were also missing parts, such as cables

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1 Narration from SLS1: Senior Library Staff 1  co-author  
2 Narration from SLS 2: Senior Library Staff 2  co-author
Time constraints and human resources

Senior library staff from technical services noted time and resource challenges in an interview as presented verbatim:

We really needed to put the collection back in a very short time so that the school can resume. That one was a big problem, to be able to build the collection in a short period of time. Human resource—it was a challenge because we needed a lot of human resources on the ground to make sure that some of the people are consolidating needs...while others [were] processing some materials (SLS2)

These sentiments were echoed in a focus group discussion with library staff who noted time and human resource pressure led to abandoning some activities for others, which was a sign of panic. The authors also, from their own observations, noted that there was too much to do with the limited resources and staff. In some cases staff had to work late nights and weekends.

Knowledge gap between Library Staff and Stakeholders

Decisions on how the library should develop its collection shifted from the library to the university boardroom. Librarians were generators of information on which decisions were made. There was at times a misunderstanding as regards to what stakeholders needed and what was logistically and environmentally possible and acceptable. For example, a decision was made to develop a new library collection based on electronic resources only because it is an easy and fast way to getting resources, and in addition, there are a lot of free resources online.\(^3\) From the librarian point of view, having only electronic resources was not tenable because of students’ background, as most students had limited skills, could not afford electronic gadgets, and subscription to e-resources was more expensive due to limited time that publishers allow users to access. In addition, freely available online resources did not meet all needs of students. Other freely available resources, such as Google Books, provided only partially access (Lizzie Malemia, Senior Library Staff, personal communication, October 7, 2017). Further, there was a misunderstanding about buying thin client computers and desktops. Stakeholders wanted thin clients while librarians wanted desktop computers because of the previous experience with thin clients on security issues. These discussions delayed the procurement of what was needed.\(^4\)

\(^3\) Narration from authors’ experiences

\(^4\) Narration from authors’ experiences
Delay in the acquisition of resources

Through focus group discussions, interviews with library staff acquisition of resource stalled due to several reasons:

i) Lack of funds

There was no money for the resources as the incidence happened in mid-year and the university had exhausted its first-half budget. A senior library staff in technical service asserted:

*We really needed to replace the collection quickly, but our buying power was very weak. . . . That one was a big problem, to be able to build the collection in a very short period of time where we did not have funds. Acquisition of library resources depended on well-wishers, and it was difficult to determine when they would respond. [Some] responded quickly and others did not* (SLS2).

ii) Procurement Processes

The processes of procurement at times stalled the activities of collection building. During a focus group discussion with library staff (FGDLS) it was noted that although the Director of Public Procurement had made some waivers in the procurement process, suppliers took time to source what was needed. This stalled processing and acquisition of necessary resources. For example, procurement of computers and furniture for the library required a lot of time for suppliers to make them available. Members indicated that one of the major challenges was to replace the special collection that it is out of print. Without funds for reprinting, the only option was to ask those who had the titles to donate them, and it was not easy to find such donors.

iii) Identification of needs

Collection development for the library is a holistic activity. It requires taking into account needs of all departments. The major method of identifying these needs was through consultation with academic staff. In a focus group discussion with library staff, it was noted that compiling of list of resources to be presented to well-wishers and donors was delayed because some departments took a very long time to give the library the list of their information needs. In some cases, the librarians used their knowledge to come up with a department’s information needs. For example, the librarian who had knowledge of education

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5 *Narration from authors’ experience*
helped to come up with the list of education books to avert further delay in submitting information needs to donors (FGDLS).

**Opportunities**

Availability of opportunities during disasters is supported by Adamo (2016); Breeding (2012) and Ngulube and Magazi (2006). Rebuilding the library brought the following opportunities to library staff:

*Library staff acquired new skills in handling resources and designing activities.*

A focus group discussion with library staff revealed that staff who never worked in technical services had a chance to learn skills in cataloging and classification. Further, one senior library staff noted she learned new skills in dealing with new electronic resources such as the use of e-granary (a digital collection of teaching materials for off-line use). One of senior library staff and coauthor also recounted how the experience gave him new skills as follows:

> Personally, as a coordinator of activities for reestablishment of library services, I acquired new skills on organizing people, making presentations to management, and designing a new library. The disaster made me acquire new information about different resources and how they are organized. Since, I was [responsible for] coordination [of] library rebuilding activities, I attended management meetings where I could defend some decisions on collection development. This experience required me to be prepared (SLS1).

**Teamwork**

Rebuilding a library collection brought about teamwork. The previous library had different sections with specific staff assigned to each. The issue of collection development was a domain of technical service. However, after the fire all sections were dissolved. All library staff worked as a team as information processors. An interview with one of the senior library staff highlighted teamwork during the time of rebuilding the collection:

> I saw a very, very comprehensive teamwork spirit. There was shortage of staff in the technical services, but we were able to unite to work together. We developed a very, very wonderful team spirit and we cherish that one (SLS2)

Teamwork was also noted in the focus discussion with library staff who mentioned that the library worked as a family with one goal and sharing the same emotions.
New Resources
Rebuilding of the collection of the library bought new resources. The old library that was inherited from the Teachers College of the 1980’s had old stock. The appeal to well-wishers for donations of resources was based on the needs of the university. The library received the latest and most needed relevant resources. New and relevant resources were acquired, new processing materials were acquired, and the library explored other means of doing things. For example, Nielsen Bookdataonline database for identifying, searching and consolidating bibliographic data was replaced by Amazon book data (SLS2). In addition, the decision to use more electronic resources in the library made the university increase Wi-Fi hot spots around the campus, and the library acquired e-granary, Outernet and TEEAL (Lizzie Malemia, personal communication, 7th October, 2017).

Advocacy
Rebuilding of the new library provided librarians with an advocacy tool. The absence of the library made people realise its importance. The school calendar was based on the readiness of the library. One of the senior library staff in an interview said that the vice chancellor in one of the meetins in the boardroom mentioned that the burning down and collection rebuilding processes of the library had made him understand more about the library and its importance. University community members looked up to librarians as regards to advice on collection development and design. At one point, a senior library staff was invited to the boardroom to explain about Kindles so that the university could make decisions on whether to acquire them through donations (SLS3). In addition, in a focus group discussion with library staff, one participant commented on advocacy as follows:

We took that opportunity to advocate for library activities because many people from different backgrounds came to appreciate the job that the library did. For instance, Mzuzu City personnel came to [commend] the good job library staff did, the management of it, [which] the vice chancellor and deans appreciated (LA).

In support of the above, the authors also observed that through interactions and activities on the ground, librarians were able to showcase their skills as information professionals. When the new interim library was built, university community members shared positive remarks, such as, “You guys are

6 Narration from authors’ experience
7 Senior library staff and coauthor
8 LA: library staff who serves as library assistant.
professionals.” At one time, when there were visitors touring the library, the vice chancellor voiced his satisfaction on how library staff worked and organized information.

**New partners**
The library used to work with specific partners who had been helping it in collection development. However, after the fire more partners came in. These included Strathclyde University with donation of new furniture and books, Books for Africa through the American Embassy, Virginia Technical College, the University of Malawi, Ireland, BookAid International, and others (SLS2).

**What challenges and opportunities did students at Mzuzu University encounter with the newly adopted information service delivery methods?**

Using a questionnaire and focus group discussions, data were collected to determine challenges and opportunities that students encountered when the library provided services without the library.

**Challenges that students encountered with new adopted information services delivery**

**Coping with academic work without a library**

Students were asked how they coped with their academic work without a library

<table>
<thead>
<tr>
<th>Table 2: Strategies students used to cope without a library</th>
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<tbody>
<tr>
<td><strong>Response</strong></td>
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<td>---------------</td>
</tr>
<tr>
<td>1. Used notes from lecturers</td>
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<tr>
<td>2. Used Internet</td>
</tr>
<tr>
<td>3. Used photocopied materials</td>
</tr>
<tr>
<td>4. Went to look for information from other libraries in town</td>
</tr>
<tr>
<td>5. Other:</td>
</tr>
<tr>
<td>• Relied on group discussions with friends</td>
</tr>
<tr>
<td>• It was difficult to cope with academic work because materials that we were using were limited e.g. Computers and books</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</table>
Table 2 reveals the major source of information students used was the internet: 15 out of 29 (51%) of the students coped with academic work by mostly using the Internet. The least number depended on photocopied materials represented by 4%. On the other hand, others relied on group discussions with friends while some said it was difficult to cope with academic work because of the limited number of books and computers.

Students’ representatives were also asked about challenges they encountered due to the absence of the library at Mzuzu University (n=29):

Table 3: Student representative responses concerning challenges

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>1. Lack of reading space</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>2. Lack of places for discussions</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>3. Lack of reading materials</td>
<td>14</td>
<td>48</td>
</tr>
<tr>
<td>4. Use of library computers for research was no longer there</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>5. Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Poor performance, as we relied on lecture notes</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>• There was no sufficient time to use available books due to pressure of time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100</td>
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Table 3 shows that 14 out of 29 responses, representing 48%, said that absence of the library deprived them of reading materials while 7% said absence of the library deprived them of a place do their discussions. Another 7% observed that absence of the library led them to perform poorly since they relied on lecture notes.

During the focus group discussion with students’ leaders (FGDSL), it was also revealed that absence of the physical library had some psychological effects. Even though at least some students found the digital and online services the library provided in the interim to be useful, other students missed the physical library and collection. Students felt that without a library, the school was not real, as stated in the comment of one of the students’ leaders:

"I think one of the most critical issues that were visible among students was the aspect of psychology because the intervention that was being implemented was a new concept, whereas our university system was predominantly physical. In the absence of the physical
structure of the library and materials, the students were psychologically affected (SL1).}

When students’ leaders were asked what challenges the introduction of the temporary short loan collection brought, the following were their responses (n=29):

Table 4: Student responses to limited short loan collection

<table>
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<tr>
<th>Responses</th>
<th>Total</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>1. Inadequate reference materials</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>2. Time and space constraint since there was no space to sit and read</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>3. Limited taste for information products</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>4. Loss of confidence where the available reading materials could indeed satisfy information needs</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>5. Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Most relevant materials were not available</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 4 reveals that more students represented by 34 percent (10 out of 29) responses felt that introduction of a temporary short loan collection in the American Corner eroded confidence in students as to whether the available materials could indeed satisfy their information needs. Four percent (1 out of 29) of the students’ responses indicate that most relevant materials were not available.

In a follow-up focus group discussion with students’ leaders (FGDSL), it was revealed that most students did not use the short loan collection because of time constraints. Students had to check out a book, take it to a reading space way from the short loan site, and return it within an hour.

Coping with academic work using electronic resources

Students were asked how they were affected when librarians decided to provide materials mainly in electronic format. Table 5 presents their opinions (n=29).

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9 SL: Student leader
Table 5: Student opinions about electronic resources.

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Limited access to information due to limited skills</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>2. Limited access to information due to limited network</td>
<td>15</td>
<td>52</td>
</tr>
<tr>
<td>3. Lack of gadgets (table lets, phone, laptops, computers) to use for accessing electronic materials</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>4. Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• High number of students few gadgets</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>• Gadgets are so expensive to buy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Poor network e.g. Wi-Fi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5 shows that 15 out of 29 respondents (52%) were of the view that the decision by librarians to provide information mainly in electronic format blocked many students’ access to information due to limited access of network resources while 10% (3 out of 29) felt that there were few gadgets available to cater to the information needs of a high number of students.

Findings during focus group discussions with students indicated that most students had limited access to electronic resources due to poor skills for accessing and evaluation electronic resources, poor Wi-Fi connectivity, and a lack of gadgets as access points. For example, one student leader (SL) in the focus group described these issues as follows:

*Hotspots were there so that Wi-Fi was running, but with that kind of background where [students] come from typical rural areas with limited technology skills. So [for a] certain group of students, it was very much difficult to use these facilities (SL2).*

From the findings above, it is revealed that the internet was the major source of information, but students had limited access due to poor skills, lack of gadgets, and poor network connectivity. In addition, the absence of the library as a physical building created problem related to inadequate reading materials and lack of reading space; students were psychologically affected.

**Opportunities for Students**

*Opportunities brought by emphasis to use electronic resources*
Emphasis on using electronic resources brought the following opportunities to students (n=29):

**Table 6: Student identified opportunities in response to the availability of electronic resources.**

<table>
<thead>
<tr>
<th>Response</th>
<th>Total (f)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Forced me to acquire new skills in the use of computers and other electronic gadgets</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>2. Forced me/parents/guardians to acquire electronic gadgets for my use</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>3. Opened my knowledge about the electronic resources available</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>4. Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• I failed to cope up with technology</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 6 above shows that 11 out of 29 (38%) of the students felt that emphasis on the use of electronic resources forced them to acquire new skills in the use of computers and other electronic gadgets while only 3% said they failed to cope with the electronic information resources and technology.

In a focus group discussion with students ‘leaders (FGDSL), it was revealed that use of electronic resources exposed students to the latest information and new resources such as e-Granary. In addition, it helped most students develop a new culture of relying on electronic resources as opposed to print resources. One participant expressed this as follows:

*A new culture has developed even without the physical structures of the library. We can still survive and move forward. The culture has been adopted and confidence has increasingly grown that we can survive without physical structures, even the confidence on using the internet (SL3).*

From the findings above, the introduction of the internet and absence of the library provided students with new opportunities. Students acquired new skills in technology use and electronic information evaluation. In addition, students were introduced to new sources of information that help them change their attitudes towards the use of electronic resources.
What Strategies did the Librarians at Mzuzu University use to alleviate the challenges that students experienced because of new information delivery methods?

Using interview and focus group discussions with library staff, data were collected related to strategies the librarians used to alleviate challenges students faced when using new information delivery methods.

Coping with academic work using electronic Resources

One of the major challenges for students was how to access resources. During an interview with Lizzie Malemia, senior library staff responsible for e-resources, she described how the librarians introduced a training program on how students can access and evaluate electronic resources. Librarians increased bandwidth to improve connectivity of Wi-Fi and increased hot spots for WiFi access on campus. In order to increase confidence in the use of e-resources as a source of information to students who were used to print resources, the librarians engaged a resource person from the University of Malawi, College of Medicine who talked about the use of e-resources in the place of a physical library (personal communication, October 7, 2017). This session was also mentioned in a focus group discussion with students. Students described how the librarian from the College of Medicine encouraged many students to use e-resources as a trusted source of information for academic work. In addition, the librarians strengthened the network infrastructure so that student could access some e-resources through a local area network.10

Lack of Reading Area and Other Resources

In the early days of the new semester, students were temporarily allowed to use teaching areas for studies during the day and night. However, an assembly hall was turned into an interim library. It was opened with a seating capacity of 400 and provided space for students to study.11 The library prioritized processing of all resources required by students and lecturers. Librarians gave priority to resources that were on course outlines in order to ease resource pressure faced by students. With more donations from well-wishers, the library managed to come up with a basic collection for most subject by the end of the first month of the semester(SLS2) In a focus group discussion with library staff, it was noted that library staff sourced documents from government offices that were needed in the local collection (FGDLS).

From the findings, limited use of electronic resources due to lack of skills and infrastructure, limited printed resources, and a lack of reading spaces were major challenges. In order to improve this, the librarians engaged in training

10 Observation from authors
11 Observation from authors
students’ skills and increased hotspot area and internet bandwidth to improve connectivity. To increase resources, the librarians prioritized processing resources in response to curriculum needs. As for reading spaces, the librarians used teaching areas briefly before they were able to open an interim library

**Conclusion and Recommendations**

In conclusion, the Mzuzu University Library fire disaster provided the library with insights on how to handle different aspects during a disaster. This study revealed that when disasters strike, there are both challenges and opportunities for both library staff and students. Library staff had challenges of lack of space for storing and processing resources, lack of materials for processing materials, shortage of human resources, and time constraints and delays in procurement of resources while students faced challenges of inadequate learning resources, lack of reading spaces, and limited access to electronic resources due to lack of skills and poor connectivity. On the other hand, library staff had an opportunity to learn new skills, build team work, and acquire new and better resources while students also acquired new skills and developed a new culture of use of electronic resources for academic purposes.

However, what is clear is that there is need for institutions to come up with disaster plan to help in the process of disaster recovery to minimize any necessary delays. Further, the authors of this study recommend that in times of library disaster, librarians should take a leading role in advising management of issues of collection development and the information access environment. In addition, institutional leaders need to develop deliberate measures to avoid disasters of any form. Lastly, librarians need to introduce students to various sources of information and engage them to use them so that they develop confidence in all resources.

**References**


