

# Global Knowledge Project

**CHALLENGES FACED BY ZAMBIAN INTERNATIONAL STUDENTS IN  
ACCESSING/USING ELECTRONIC RESOURCES IN THE LEARNING  
CENTER AT SOGN OG FJORDANE UNIVERSITY COLLEGE IN  
SOGNDAL, NORWAY.**

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Study program GLOBAL KNOWLEDGE

Subject Code GK 300

Date of Submission 13TH MAY, 2016.



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<b>Table of Contents</b>	<b>Page</b>
Agreement regarding the electronic deposit of scientific publications.....	i
Table of contents.....	ii
Abstract.....	iii
List of abbreviations.....	vi
<b>1: Introduction</b>	
1.1. Background and context of the study.....	1
1.2. Statement of the problem.....	2
1.3. Purpose and objectives.....	3
1.4. Research question.....	3
<b>2: Literature Review</b>	
2.1. Introduction.....	4
2.2. Theoretical foundations.....	4
2.3 Challenges faced by International students.....	6
2.3.1. Language barriers.....	7
2.3.2. Digital literacy.....	7
2.3.3. Library anxiety.....	8
2.3.4. Computer anxiety.....	9
2.3.5. Educational differences.....	9
2.3.6. Library differences.....	10
<b>3: Research Design and Methodology</b>	
3.1. Introduction.....	12
3.2. Definition of concepts.....	12
3.3. Methodology.....	12
3.4. Data collection tools.....	13
3.5. Study population.....	13
3.6 Inclusion criteria.....	13
3.7. Exclusion criteria.....	13
3.8. Sample selection.....	13
3.9. Pilot study.....	14

3.10. Ethical considerations.....	14
3.11. Weaknesses/Limitations.....	14
4: Presentation of empirical data	
4.1. Findings from the international students.....	15
4.1.1. Demographic data.....	15
4.1.2. Access to and utilization of ICT.....	15
4.1.4. Challenges experienced with electronic resources at SFUC.....	17
4.1.5. Advantages and disadvantages of e-resources.....	19
4.1.6. Student suggestions as solutions to their problems.....	20
4.2. Findings from the librarians.....	20
5: Discussion and Recommendations .....	22
5.1. Language.....	22
5.2. ICT.....	23
5.3. Cultural differences and educational background.....	24
5.4. Conclusion.....	27
5.5. Recommendations.....	28
References.....	28
Appendices.....	34
Appendix 1 Consent form.....	34
Appendix 2 Interview schedule for international students.....	35
Appendix 3 Questionnaire for international students.....	36
Appendix 4 Questionnaire for librarians.....	38

**ABSTRACT**

This study explores the challenges of international students in their use of technology in a Scandinavian institution of Higher Education. Qualitative data were collected using well structured questionnaires and an interview schedule. The data collected were analyzed and transcribed according to content. A total number of 11 participants (9 Zambian students on an exchange program and 2 librarians) were sampled from the total population.

The study reveals that Zambian students at SFUC in Norway encountered challenges with language, cultural differences and educational background as well as ICT in their use of electronic resources/devices. It further reveals that some of the challenges encountered such as logging in and using Fronter could be resolved by the students themselves with help from their friends and the librarians. However, challenges as a result of language and problems with the user interface could be resolved by the institution. When trying to find out why the students faced these challenges, the research reveals most of the students could not read Norwegian and lacked adequate skills on how to use e-resources among other things. The librarians revealed that the students were shy, had problems with language and were not as independent as Norwegian students.

**LIST OF ABBREVIATIONS**

AACR	Anglo-American Cataloguing Rules
ACRL	Association of College and Research Libraries
ER	Electronic Resource
HiSF	Høgskulen i Sogn og Fjordane
ICT	Information Communication and Technology
LC	Learning Center
OPAC	Online Public Access Catalogue
PC	Portable Computer
SCONUL	Society of College, National and University Libraries
SFUC	Sogn og Fjordane University College
VLE	Virtual Learning Environment

## **1.0 INTRODUCTION**

This chapter outlines the background of the study, followed by the statement of the problem, purpose and research questions.

### **1.1 Background**

Many studies carried out in various countries highlight the importance of Information, Communication and Technology (ICT) in universities because it plays a central role in a transformational period in higher education (Koester, 2011 cited by Alturise and Alojaiman, 2013). Several advantages exist in using ICT in universities because it provides teachers and students with an endless choice of multimedia, software, applications and devices with which to create more exciting, interactive lessons which attract students to the teacher and the subject being taught (Bingimlas, 2009; Aremu and Saka, 2006).

Information Technology being an integral part of higher education and learning is a tool which enables libraries to deliver services in a more efficient way and as a result, library systems are changing at an extremely rapid pace due to the development of technology (Rahman, 2011). Libraries are dealing with numerous information sources and computers have become an essential part of modern library systems. Swain & Panda (2009) as cited by Esew, Makarfi, Goshie and Jimada (2014) state that the rapid advancement of Information and Communication Technology (ICT) has brought revolutionary changes in the information scenario giving rise to a number of options to the user community to handle varied information sources conveniently and effortlessly. Consequently, e-resources have become the lively substance to the modern library's reserves in satisfying varied needs of students, teachers, and researchers with minimum risk and time. Thachill (2008) states that "academic libraries are part of an educational process and have a mission, they exist to support students, staff and academic faculty in their research and education by procuring and making available the best print and electronic resources" (p 1).

Scandinavian institutions of Higher Education attract a lot of students from other countries, presumably due to relatively low tuition. This situation brings about challenges for Scandinavian universities and colleges, which have to cater for a growing diversity among students, in terms of language, culture, and academic background (Habib, Johannesen and Øgrim, 2013).

Sogn og Fjordane University College (SFUC) is one of 25 state run university colleges in Norway and is located at two campuses within Sogn Og Fjordane county; Sogndal and Forde. It

has approximately 3800 students and 330 members of staff with an increasing number of students and academic staff from all parts of the world. The primary goal of the university library is to provide and make available information for the research and education that takes place at the university college. The library is a learning center where students, academic staff and other users can find information and gather inspiration for the development of their academic knowledge and for their personal growth hence SFUC was the object of this study. McQuistan and Henderson (1999) state that as academics progressed towards the 21st century, increases in student numbers, distance learning, changes in copyright issues and lack of funding meant that academic institutions had to look more closely at the use of electronic resources in order to meet these challenges. SFUC Learning Center (LC) provides access to a wide range of relevant and quality assured knowledge and learning resources, both in printed and electronic form and has facilities to access these different electronic resources for the users. All of these electronic resources are presented in the learning centre web site such as, e-books, e-journals, e-databases, e-papers, e-reference sources, e-content pages, e-learning tools, Online Public Access Catalog (OPAC) and several other materials in electronic form. Swain (2010) stated that as a result of technological revolution and the arrival of modern information and communication technologies (ICT), students no longer rely on the traditional library services. However, they are encouraged to trust in electronic resources with a presumption that the wealth of information available in electronic formats can utterly accomplish their scholastic needs as a better substitute to traditional print services. Several studies, particularly from English speaking countries, have found that international students are facing particular difficulties in using libraries and library resources. But the researchers still think that it is valid to investigate these difficulties outside the English speaking domain as English speaking students may equally have challenges in a non English speaking environment. Hence, this research attempts to identify and analyze the problems faced by Zambian international students in using electronic resources in the SFUC.

## **1.2 Statement of the problem**

The SFUC LC/library has a department for Digital services (the digital library). This department is responsible for the learning centre website, the digital publications at the university college (self archiving), and the management of shared electronic information resources. According to Madhusudhan (2010) as cited by Ansari (2009), providing access to resources is now considered



more important than collection building, especially if the access is perpetual in nature. E-resources facilitate the libraries to get the benefits of a large number of resources at an affordable cost and in minimal time. Moreover, the technology has changed the expectations of researchers, their patience, and their willingness to accept services that are available on demand. The e-resources are the answer to the expectations of the users.

SFUC LC website is a portal of its information to users. The learning centre buys access to a wide range of academic databases and provides access to these different digital services for the users, and all of these digital services and resources are presented in the learning centre web site (SFUC Library, 2016). Students, faculty members and staff are getting the benefit of using these electronic resources for their study and research. The technologically advanced resources and environment may pose a challenge to any new student. Several studies have been conducted which show that international students in particular encounter many problems in using such library resources (Habib, Johannesen and Øgrim, 2013; Rahman, 2011). In view of the rapid international student growth at SFUC and some students not fully utilizing online resources such as Fronter, our study explored the current use of electronic resources and the specific problems faced by international students while accessing these resources at the institution.

### **1.3 Purpose of the study**

The main purpose of this research study was to investigate the challenges faced by international students in using electronic resources at the SFUC. To achieve this, the study examined the views of Zambian international students towards electronic resources, their actual needs, electronic resources usage and their expectations of using electronic resources. The study was undertaken as part of the requirement for an award of one year study of Global knowledge. Results drawn from the study are to be shared with other students and staff at the institution to contribute to any existing knowledge and literature on the subject.

### **1.4 Research question**

1. What are the challenges Zambian students experience in relation to the use of electronic resources in the SFUC Learning Center as reflected by 9 Zambian students and 2 librarians?

## **2.0 LITERATURE REVIEW**

According to Polit and Beck (2014), literature review is a well written synthesis of information about a topic that includes a discussion on the research that has been done and the evidence gathered the methodologies, the strength and weaknesses of findings and the gaps that require more knowledge.

### **2.1 Introduction**

This chapter reviews documented literature on various works related to the research topic of this study. It starts with a theoretical foundation highlighting relevant concepts needed to find answers to the research problem. The literature review is done through literature search of both print and electronic materials on topics related to international students and the challenges they face while using the libraries in a foreign country in order to carry out their study. The aim is to gain an insight on different challenges faced by international students in using the electronic resources.

### **2.2 Theoretical foundations**

Modernization theory's most influential proponent, Karl Marx, claimed that economically developed societies show the future to less developed societies (Marx, 1973 cited by Inglehart and Baker, 2000) . The theory explains the process of modernization within a given society and shows less developed societies to progress as they adopt better ways of doing things from modern societies. In this case, these ways include ICT. Looking at underdevelopment in the United States during the post world war era, Inglehart and Baker, (2000) citing Lerner (1958) and Weiner (1966) in their article "Modernization, Cultural Change, and the Persistence of Traditional Values", pointed to underdevelopment as a consequence of a country's internal characteristics such as: traditional economies, traditional psychological and cultural traits. This therefore calls for modernity in people's cultures, which means changing or reflecting on their ways of doing things. Giddens (1991) in his book "Modernity and Self identity" explains three elements which he termed "separation of time and space", "disembedding mechanisms" or "abstract systems" and "institutional reflexivity" which he purports have penetrated all aspects of social life in a post-traditional society for instance Norway. Giddens (1991) further explains the concept of modernity and its tendencies towards globalization which has seen e.g. a reorganization of time and space and other influences on traditionally established practices and

suggests that to some extent “no one can opt out from the transformations brought about by modernity”. As a result of increased/free movement of people around the world and a wide range of universities offering places to foreign students, the world has become “a global village”. Even as people or countries develop, it is vital to consider the major role culture plays in their lives. Culture comprises of values, norms and practices of everyday life, therefore, an opportunity that brings together a group of people with different cultural backgrounds creates a platform to learn (Gunnestad, 2004). International students play a vital role in enriching the cultural and intellectual diversity of the education system in their host countries. But these students encounter many problems adjusting to the new environment due to their different backgrounds (Varga-Atkins and Ashcroft, 2014). These differences influence their expectation of library services and their adjustment to the new academic, cultural and library environment. It is important for one to acquire intercultural competence in order to understand different cultures (Jensen, 2007).

As Habib, Johannesen and Øgrim (2013) point out, “International students cannot be characterized as a homogenous group, but the relevant literature generally deals with one of two categories of international students: (1) students from what can be referred to as the Global South (which is also commonly labeled as the Third World or developing countries), and (2) students enrolled in institutions from the Global North on an exchange or internationalization programme” (p 196). Internationalization of tertiary education has brought about some concerns regarding the integration of international students and their adaptation to an unfamiliar academic culture and environment (Guo & Chase, 2011). Growing research literature on the subject identifies a number of key aspects related to cross-cultural differences some of which focus on variances regarding teaching and learning style (Heffernan, Morrison, Basu, & Weeney, 2010) while other research studies have a stronger focus on learning philosophies (Chen & Bennett, 2012). Technology acceptance has also been identified as a cultural issue that plays a major role in today’s learning experience (Yoo & Huang, 2011). Thomas et al (2005) in “Cultural Factors Shaping the Experience of ICTs: An Exploratory Review” cite elements such as social structures (e.g. egalitarian structures, ethnicity and education/literacy), temporal structures (such as subjective experience of time and the time use structures/expectations), values (e.g. openness to technological innovation and individualism) and communication (e.g. communication forms, patterns/expectations and low context vs. high context cultures) as factors that influence the

adoption and usage of ICT. According to Neuliep (2009), human communication is dependent on the context in which it occurs i.e. high or low context communication therefore culture (race and language) have a bearing on communication, how one thinks, acts or behaves and interacts with others. Whether one comes from a collectivistic or individualistic society also affects communication (Neuliep, 2009).

Scandinavian education generally promotes more interaction among students and initiative as it is student-centered and technologically advanced whereas Asian and African academic cultures are more power-distant, teacher-centered and varying in the use of technology. This then may present a challenge to international students particularly those from Africa studying in Scandinavia, Norway in particular, as they mostly come from countries where they face difficulties already with technology. Chisenga (2004) cited by Egberogbe (2011) listed some factors hindering the use of e- resources in Nigerian higher institutions, which include but are not limited to lack of use of internet to provide information services to users and a lack of consistent training for users in new ICT services. Egberongbe (2011) also points out lack of information retrieval skills for exploiting electronic resources as a problem thus making the level of usage of resources by students very low.

### **2.3 Challenges faced by international students**

This paper draws attention to the problems of international students experienced in their use of libraries and e-resources. Baron & Strout-Dapaz (2001) State that three major problems-perceived by library staff- that occur with international students in their library use are: (1) Language barrier, (2) Cultural barriers, e.g. customs; Social norms; Education methods; Library services offered. (3) Library differences; Open vs. closed stacks; Self service vs. full service; request system. In a comprehensive review of 18 articles written between 1987 and 1993 on international students' use of US academic libraries Natowitz, (1995), (cited by Baron & Strout-Dapaz, 2001 and Jackson, 2005) effectively identified three major barriers that are commonly faced by international students with regards to their library use: language, cultural, and technological barriers. These three barriers prevent international students from taking full advantage of library services. Foreign students are encountering difficulties such as communication, learning styles and behaviours, and expectations of current and previous library experiences. Boers (1994) cited by Pullman (2014) noted in his study that aside from basic

cultural differences, factors such as learning styles, English language ability, and previous experience with computers affect foreign students' ability to use the library.

### **2.3.1 Language barriers**

Norwegian being the most spoken and written language at SFUC poses a challenge to foreign students who have never been exposed to the language as much as a student who has never undertaken courses in English would find it difficult to learn in that language. International students face language related challenges in a range of communication and study context, most lack vocabulary to describe what they mean when seeking help coupled with different cultural library practices in the new environment. Language difficulties impact not only information gathering skills but also help seeking behaviors. Hughes (2005) cited by Habib, Johannesen and Øgrim (2013) stated that linguistic factors tended to have more impact on the international students actual use of online resources, while cultural factors had greater influence on their wide educational experience. Language influences how people communicate with others whether directly or indirectly therefore if communication between two parties is to be successful, they must use the same language (Jensen, 2007; Neuliep, 2009). According to Baron and Strout-Dapaz (2001) "Cultural diversity in academics presents unique benefits and challenges. There is no doubt that international students enrich the learning process through sharing cultural norms and life experiences, differing communication styles and distinct learning styles" (p 314).

Despite that the researchers reviewed several articles related to this study, most of the articles are related to facing difficulties in using the library for international students in English speaking countries but these factors may also exist outside the English speaking domain like Norway.

### **2.3.2 Digital literacy**

International students come from various backgrounds most of whom have different but limited knowledge on use of digital or e-resources compared to the developed world as mentioned above. According to Johannesen, Erstad and Habib (2012), many international students are used to using Virtual Learning Environments (VLEs) from their earlier studies in their home institutions, but those typically use a number of different VLEs, while only one VLE is available at the studied institution. However, having to navigate through the system to find the relevant information is not always straightforward, and is therefore a source of dissatisfaction. One Asian

International student in a research carried out by Habib, Johannesen and Øgrim (2013) reports that when asking the administrative staff for help to register required information, she was repeatedly told to “log onto the Student web.” When she explained that she had trouble finding the right form within the generic Student web, the only answer she got was to “log onto the Student web”. According to Habib, Johannesen and Øgrim,( 2013), the above example illustrates how administrative staff may in some cases overestimate the actual level of digital literacy of some international students, which in turn may create frustrations amongst those students (p 200). Egberongbe (2011) also identifies lack of ICT skills as a challenge among students.

### **2.3.3 Library anxiety**

Bostick (1992) as cited by Jiao & Onwuegbuzie (2002) has identified five dimensions of library anxiety, namely, “barriers with staff”, “affective barriers”, “comfort with the library”, “knowledge of the library”, and “mechanical barriers”. Barriers with staff refer to the perception of students that librarians and other library staff are intimidating and unapproachable”. In addition, the librarian is perceived as being too busy to provide assistance in using the library. Affective barriers are seen as stemming from students feelings of inadequacy about using the library while comfort with the library deals with how safe, welcoming, and non-threatening students perceive the library to be. Knowledge of the library refers to how familiar with the library students feel they are whereas mechanical barriers are feelings which emerge as results of student reliance on mechanical library equipment, including computer indexes, online facilities, computer printers, copy machines and change machines. Those students who have difficulty using library technology are seen to experience high anxiety levels. According to Ansari (2009) the concept of library anxiety was first formally recognised and studied in 1986 by Constance A. Mellon who conducted a 2-year qualitative investigation on college students enrolled in beginning composition course. Mellon (1986) theorized that feelings of anxiety stem from one or more of the following four sources: (1) the relative size of the library (the most prevalent cause); (2) a lack of knowledge about the location of materials, equipment, and the like; (3) how to initiate their library research, and (4) how to proceed. Her theory states that “students become so anxious about having to gather information in a library for their research paper that they are unable to approach the problem logically or effectively. Specific components of this theory are (a) students fears are due to a feeling that other students are competent at library use while they

alone are incompetent; (b) this lack of competence is somehow shameful and must be kept hidden and; (c) asking questions reveals their inadequacies” (p. 162). Thus international students need more assistance compared to local students and library staff must be encouraged and trained to accept and understand the cultural differences of international students.

#### **2.3.4 Computer anxiety**

In addition to facing library anxiety, many students, and particularly foreign students who come from developing countries where libraries are not automated, may suffer from computer anxiety. Three aspects of computer anxiety detected by Bradley & Russell (1997) in their study, which are: a. Damage anxiety: fear of breaking equipment or losing information; b. Task anxiety: fear of not understanding computer jargon, of getting stuck, or of not knowing where to start; and c. Social anxiety: fear of appearing ignorant to those who are watching. Like library anxiety, nervousness about computer use actually influences the degree of which the technology can be effectively used. International students are often computer literate. However, technology is still not a common phenomenon in libraries throughout the world so that many international students have little experience with computer in libraries and do not feel prepared to use libraries. Ogunsola & Okusaga (2006) stated that the fact still remains that many countries especially the developing countries currently do not have email, fax, telephone and computer based libraries services. Jackson (2005) mentioned that “many surveys showed that international students lack the necessary exposure to computers, especially to computers in libraries, to effectively utilize the growing online resources in the 21st Century academic university library” (p. 199).

#### **2.3.5 Educational differences**

Educational system differences can be a major issue for international students. Education systems throughout the world are differing from country to country where the student’s role is more observational or imitative. In many countries, the predominant teaching method is lecture and recitation; students learn from rote memory and are expected to recall information rather than analyze, synthesize, critique, or expand on it. Students from developing countries still rely on lecture notes and textbooks. Hughes (2005) cited by Habib, Johannesen, & Øgrim, (2013), stated that international students need to adjust to new styles of teaching, learning and assessment, which often involve a shift from teacher-centered models of instruction based on

authorized texts to more self-directed learning that draws on virtually unlimited print and online information source. Scandinavian teaching and learning culture can be characterized as focusing on critical thinking and reasoning, and as being to a large extent grounded in socio-cultural learning theories (Habib, Johannesen, & Øgrim, 2013). In Scandinavia, students and faculty members relate to each other freely with little difference in status (Arnesen & Lundahl, 2006). Students in this case are expected to be independent and self-regulating in their learning activities as collaboration and peer learning are the most common ways of learning. The Scandinavian model of education is generally considered to be more interactive and student-centered than Asian and African academic cultures, which have been described as more power-distant and teacher-centered. The student-teacher relationship that exists in learning environments in traditional societies is power-distant where the teacher is seen as the “boss” and “students do not know anything” and therefore are not expected to initiate any form of learning is more common in Africa. Learning in this situation is more teacher centered which Freire described well in the banking concept in his book “Pedagogy of the oppressed” (Freire, 1993). One may also describe learning in a traditional society like Zambia as being more behaviouristic. As described by Pritchard (2009), learning in this context takes place with little regard for mental processes and understanding, instead certain behaviours are upheld and rewarded while others attract punishment. On the other hand, learning in a high modern society like Norway is in line with the constructivism theory where mental construction is encouraged and the learners are independent as they build on what they already know.

The working group of Society of College, National and University Libraries (a membership organisation for all academic and national libraries in the UK and Ireland) mentioned that “the international students may be used to more formal teaching methods and unused to critical thinking, group work and independent learning. It may be inappropriate to argue with or question the professor, thus fostering a more formal relationship between student and teacher that excludes discussion of feelings or opinion”, (SCONUL, 2008).

### **2.3.6 Library differences**

Just as national education systems and values differ throughout the world, so do libraries, thus international students face different barriers as they attempt to understand and efficiently use the library. International students especially from developing countries are used to closed access



libraries and to having materials brought to them by library staff, rather than finding information for themselves from the shelves and using self-service systems. Jackson (2005) stated that students from other countries are accustomed to different library services and varying degrees of access to information. Many international students are unfamiliar with the open shelves in libraries. Despite the fact that most developing countries' libraries are closed stacks, non circulating collections are common. Students from developing countries are not familiar with online library services because, in many developing countries libraries are not providing online automated services. According to Patton (2002), using library specific technology such as online catalogue, electronic databases, microform reader/printers, and self-service photocopies ranked as the greatest anxiety producer in both native English and Non-native Speaking English. A study by McKenzie (1995) revealed that a majority of international students did not have any experience using electronic databases, results showed the need for the library to provide more opportunities for the international students to become aware of and use some of the electronic materials that were available at the (Kent State) University library.

#### **2.4 Library orientation and introduction as a solution**

Library orientation and guided tour can be helpful for international students to use the library effectively. To explain the need of library orientation program, Liestman & Wu (1990) cited by Jackson (2005) noted the success of a multi-lingual library orientation program that assists nonnative speakers in using library resources effectively. Liu (1993) stated that international students need a physical library tour early in their program to avert initial anxiety. Boers (1994) cited by Pullman (2014) also recommended that library use instruction classes should be offered to international students fairly soon after their arrival. Association of College & Research Libraries (ACRL), (2001) states that “most librarians agree on the concepts they feel are necessary for students to master in order to be information literate: the ability to (a) effectively plan research, (b) to efficiently gather information, (c) to critically evaluate information and sources, (d) to properly use information, and (e) to ethically acknowledge source”.

### **3.0 RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

This chapter describes how the study was conducted and the method used to answer the research questions. It explains the sampling, data collection, and how data analysis was done. In addition, ethical considerations and research limitations are also explained in this chapter.

#### **3.2 Definition of concepts**

**Research design-** A systematic plan for a research project specifying whom to integrate in the research (sampling), whom or what to compare for which dimensions etc (Flick, 2011).

**International student-** people who move to another country with the objective of studying (Kritz, 2012).

**Electronic resource-** Any work encoded and made available for access through the use of a computer network (Aarc2, 2002).

**Electronic device-** A device that accomplishes its purpose electronically such as a computer, projector, photocopying machine, printer, video display, digital scanner, etc (Free dictionary n.d.).

**Challenge-** Is the situation of being faced with/something that needs great mental or physical effort in order to be done successfully and therefore tests a person's ability (Cambridge dictionary n.d.).

**Access-** Access is the extent to which a person or user can obtain a good or service at the time it is needed (Online Business Dictionary n.d.).

### **3.3 RESEARCH METHODOLOGY**

Research methodology or methods are everyday techniques such as asking, observing, understanding etc., but used in a systematic way in order to collect and analyze data (Flick, 2011).

Qualitative research methodology which according to Flick (2014), is a method interested in analyzing the subjective meaning or the social production of issues, events or practices by collecting non-standardized data and analyzing texts and images rather than numbers and statistics was used to explore some aspects of the problems experienced by the students generally through generation of words, rather than numbers, as data for analysis. A mixed method of data

collection was used in order to gather a richer content of information using an interview schedule and questionnaires.

### **3.4 Data collection tools**

An interview schedule and questionnaires were used to obtain information from respondents.

The interview schedule was chosen because it is user friendly and provides an opportunity to gather more/detailed information whereas the questionnaire allowed the respondents to give specific information making it possible to have a rich collection of information.

The interview schedule ensures that respondents answer all the questions, thereby avoiding incidences of incompleteness and gives opportunity to probe further on some questions thereby getting a comprehensive data concerning the research topic. The tool also allows the interviewer to observe the respondents' level of understanding as questions are asked in variable sequence and slightly reformulated in order to allow the interviewees to unfold their views or experiences (Flick, 2011).

### **3.5 Study population**

Population in research is an aggregate of all possible study objects about which a statement is intended (e.g., nurses) (Flick, 2011). The study population in this study is the Zambian students and librarians at SFUC.

### **3.6 Inclusion criteria**

All the Zambian students and two librarians that were able to speak English available at the time of data collection and consented to participate were included in the study.

### **3.7 Exclusion criteria**

Non Zambian international students and librarians not able to communicate in English were not interviewed or subjected to a questionnaire.

### **3.8 Sample selection**

A sample is a subset of a population selected to participate in a study (Polit and Beck, 2010).

Qualitative research is generally based on non probability and purposive sampling. Purposive sampling was used in this study to select the sample from the student population in a deliberate manner in order to have the one that would yield the most relevant and plentiful data of the study.

### **3.9 Pilot study**

A pilot study is a small-scale experiment or set of observations undertaken to decide how and whether to launch a full-scale project (Free dictionary n.d.).

The pilot study was conducted on one librarian and two Zambian international students. All the steps that were expected to take place in the main study were followed thus the pilot study helped the researchers identify and make necessary changes to the interview schedule and the questionnaires. Questions were reformulated/revised after the pilot study to make it easy for the respondents to understand for example questions were rephrased in the questionnaires for both the librarians (questions 4 and 7) and the students (questions on access and utilization of ICT and challenges experienced). It also helped the researchers determine the feasibility of the study and reliability of the data collecting tools.

### **3.10 Ethical considerations**

Ethics is a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligations to the study participants (Polit and Beck, 2010).

Considering that the participants would be subjected to an interview, the researchers explained the purpose of the research and interview to all the interviewees. Consent was obtained from all the participants with assurance that the information gathered will be used only for academic purposes not any other. No form of coercion or enticing was used and the participants were informed of their right to withdraw at any time/stage during the study. Confidentiality and anonymity were ensured through the use of numbers instead of their real names.

### **3.11 Weaknesses/ limitations**

First, the study was limited to Zambian students coming to Norway to study in SFUC.

Secondly, purposive sampling was used in this study and the size of the sample presented a limitation to the study as only 11 participants (9 students and 2 librarians) were involved.

Thirdly, the literature review covered only publications in English language and some of the articles/books used were a bit old and difficult to find new and relevant literature.

Lastly, the study was limited by place and time as it was limited specifically to Zambian international students enrolled at SFUC and the number of Zambian students at the university could not have been enough to allow a bigger number of participants. Therefore, the findings cannot necessarily be generalized to all international students.

## **4.0 PRESENTATION OF EMPIRICAL DATA**

### **4.1 Introduction**

This chapter attempts to describe and present the data as gathered through an interview guide and questionnaires as the researchers used the qualitative method. Qualitative data was collected using an interview guide and questionnaires given to *Zambian* students and librarians at SFUC.

Qualitative analysis is the organization and interpretation of narrative data for the purpose of discovering important underlying themes, categories and patterns of relationships (Polit & Beck, 2010). The data gathered was analyzed using content analysis in order to organize, provide structure to and elicit meaning from data.

### **4.2 Findings from the international students**

A total of 9 *Zambian* students provided the data documented in this paper. Six students were interviewed (four teachers and two social workers) and eight were subjected to questionnaires (one nurse, three social workers and four teachers). Of the nine, two social workers and three teachers were subjected to both a questionnaire and an interview, 1 nurse, 1 teacher and 1 social worker were subjected to a questionnaire only while 1 teacher was subjected to an interview only.

After having transcribed all the data from the questionnaires and the interviews, the researchers grouped or categorized the responses by using codes in the texts in relation to the research problems. The categories of description were stated with some preconceived themes based on literature reviewed and themes that recur in the data were categorized or grouped together. Thus the categories emerged from previous literature and current data.

The researchers agreed on the content of the data and identified the following themes;

#### **4.2.1 Demographic data**

Of the 9 informants, six were males and three were females with participants' age ranging from 29 to 40 years old. Four of the informants were raised in the rural areas of *Zambia*.

#### **4.2.2 Access to and utilization of ICT**

Three of the participants in the study had never used computers in a library before coming to *Norway* with one of them saying "*when I was in college, we never used computers instead we used to submit hand written assignments*".

Most libraries in *Zambia* either do not have public computers or have very few computers hence the libraries are very different in various aspects when compared to the library at SFUC. When

asked what their previous experiences (before coming to Norway) with electronic resources were, the responses varied from; *"I was able to open electronic equipment, go to word, excel and send emails and documents e.t.c."* Another informant responded *"Not much because of limited equipment in the libraries and limited knowledge"*. Other responses included *"I was only able to photocopy and use a smart phone"*, *"Able to open and close a computer, type reports and other documents"* and *"Typing assignments on a PC"*. Another student explained *"When I was in High school, I was taught how to turn on a computer and navigate it..... I was taught how to use Microsoft word, excel, epi info and power point. Also learnt how to use Google.....Then In my work place, I used computers to type some reports, in the University, I learnt again all the above plus SPSS, how to search for e-materials and other things.....watch videos, read news etc"*

Despite most of the informants reporting having used electronic devices/resources before coming to Norway, the fact that they had difficulties in their home country in relation to access and utilization of ICT is supported by their responses. For instance when asked how different the library services at SFUC were from their previous institution's library, all the respondents cited lack of equipment although other issues were raised. One respondent said *"SFUC has more computers, faster network, a lot of options in e library, library not congested, Print out things individually, Open 24-7, can renew your loans online, Internet ever functioning, hardly off. Truly, the opposite is the case in my former institution in Zambia.....very few computers, very slow network which is on and off, fewer options in the E library, congested, only photocopy, closes Monday to Friday at midnight and at 22hrs on weekends and of course can never renew loans online"*. Another respondent said *"SFUC has facilities and equipment needed in a library compared to my previous institution library"*

Others responded *"In our Zambian libraries, we don't have computers while here it has been good for me because the library has materials e.g. computers"* , *"The library services here are more advanced and wide"* and *"Very big difference e.g. access to internet in the library at SFUC is good and helps to search for books using the computer and for those that are online. Most books are available here compared to my former institution where I had difficulties finding books"*. Others stated *"The previous library is quite big in terms of size but lacks books compared to this one"*, *"Here the internet is free, enough space in the library and computers are enough. Books can be gotten from another institution and computers are well managed such that they are able to locate a book a person is looking for"* and *"In Zambia, my institution's library is*

*densely populated which disadvantages me because it becomes difficult to access books of my choice."*

When asked what previous library experiences in their home country made it difficult to use SFUC Library, especially e-resources, a number of issues were cited but the lack of computers in the previous library seemed to dominate among other issues raised. *"The format on the e library back home was different so adapting to this one was initially difficult"* said one of the respondents.

Some of the respondents said their previous education system had no impact on their use of SFUC library/learning center although two respondents replied; *"It has made it easier for me to use e resources here because I understand the basics of using e resources from home"* and the other student said *"we didn't have computers in government schools and internet facilities therefore it is very difficult to access unless you pay or buy data bundles."* Almost all the informants reported frequenting the library except one who reported having last used the library more than two months prior to participating in the study.

#### **4.2.3 Challenges experienced with electronic resources at SFUC**

A number of issues were brought to light during the individual interviews and through the questionnaires. The respondents were asked what Norwegian linguistic and cultural aspects made it difficult for them to ask for help when using electronic resources/devices in the SFUC. Language and the fact that Norwegians are reserved people seemed to be some of the biggest challenges supported by their responses; *"Norwegians always seem busy and it feels like it will be a bother if you ask, then also the language barrier"*, *"Language has been a major challenge"*, *"Language is a barrier plus Norwegians are too quiet such that you can't even approach them"*, *"Language barrier and that the Norwegian culture is on an individual to know and learn things on their own"* and *"The major thing here is language barrier."*

The respondents were further asked - How much instruction do you receive in the Library/Learning Centre website and what impact does it have on your use/search of electronic resources in SFUC Library/Learning Centre? The responses varied; *"The instructions are not enough for one who is learning to follow"*, *"I have never used online help yet, but the class we had on how to use E resources has made research much easier because there is so much information available and it's not so difficult to find"*, *"I keep on teaching myself and ask from*

*friends where I am not sure", "Not much because of language barrier" and "I have much instruction which I receive in the library website and it is very useful"*

All the respondents needed help from the librarians at one time or another especially with printing, photocopying and borrowing books. *"I needed help locating a hard copy after checking on the computer, was helped by a librarian. Also got helped by a librarian when I wanted to loan a book but had forgotten my student ID card,"* stated one of the respondents. *"I needed help when I failed to upload my assignment and I was helped by a librarian", "I needed help to borrow a book and was helped by a librarian and my Norwegian friend who is also a student" and "I find it difficult to locate books in the library using a computer but my friends and the librarians help"* stated others.

Responding to the question on what impact the learning/teaching methods in their home country had on their utilization of the library at SFUC, one respondent who is a teacher by profession stated *"we are used to teacher centered education back home hence we often don't take initiative compared to our Norwegian friends."* Another teacher responded *"we come from a different system and background."*

All the respondents expressed satisfaction with the overall library services at SFUC and commented on the most positive aspects of the staff assistance they received. *"The staff are friendly, welcoming and very helpful"* said one of the respondents. However one respondent said *"Those that don't use/know much English, it takes re-phrasing sentences several times to understand my question."* Another respondent said *"Communicating is difficult because of the language barrier, sometimes the librarians seem so busy that I feel asking for more help would be a bother."* *"I find it inconveniencing to ask for help all the time concerning the same issue so I would rather not ask the librarians again"* stated another student.

When asked what specific challenges they experienced in relation to the use of electronic resources in the SFUC Library/Learning centre, the following responses were given; *"Language.....some articles are only written in Norwegian and some parts of the data bases are in Norwegian", "The computers are in their language and I find it difficult to use Fronter", "My major challenge is language because sometimes the electronic devices are not able to translate to English", "The whole process is complicated, checking results, opening journals.....", "Language.....When I try to access an electronic resource, I am taken to a page completely*



*unrelated to the resources or user interface is distorted in some way" and "Commands written in Norwegian makes navigation difficult."*

The students were asked to identify problems that could be the cause of the challenges they experienced and the most common causes were technology, lack of experience and language supported by the following responses; *"I think it's because of the language and lack of orientation", "I didn't start using computers at an early age therefore lack of access to computers back home and lack of instruction and difficult language here in Norway have contributed....."*

One student said *"Technology keeps changing all the time and I feel shy to ask for help because they will think I don't know anything."* Others said *"Because I cannot read and understand Norwegian", "Because we come from a different system or background" and "Being a Zambian makes it difficult to be in the library because people use a different language and sometimes I think they are talking about me even when they are not, especially if they talk and laugh while looking at me."*

Most of the students asked could not state their rights regarding ICT and some did not know that having a student ID card meant they could access the library even at night and weekends. Those who were able mentioned the right to access the library and information of interest or pertaining to the courses they were studying as some of their rights.

#### **4.2.4 Advantages and disadvantages of electronic resources**

All the students expressed happiness with the fact that they were able to do much more than they could before coming to Norway in relation to electronic resources/devices. They now have an appreciation of electronic resources supported by the responses they gave as advantages such as; One student (a teacher) stated *"Electronic resources give variety of information, lessen work of looking through a lot of hard copies, they give adequate and correct information as they allow access to latest information. Electronic resources draw us near to one another as the whole world becomes one global village", "Saves time, one can save information easily and access world wide information....."*

Some of the disadvantages mentioned include *"It brings about laziness as some people just copy and paste information. Plagiarism is on the increase because learners don't put much effort in reading and can easily ask a friend and copy exactly instead of consulting different books."* Another respondent said *" instead of concentrating on the work they are given or what the teacher is teaching, others use electronic devices such as phones to do other things e.g. facebook*

while in class". "Viruses can infect one's device and may make one lose everything saved. Without electricity one has no access", "The information gathered may not be reliable" responded the others "It's an expensive way of getting information since one needs internet which has to be paid for"

#### **4.2.5 Students' suggestions as solutions to their problems**

The students were able to provide possible solutions to their challenges which included; "I think the librarians can do better if they can appear less like they are trying to get rid of you quickly because they are so busy, it prevents us from seeking full help.....should have a few more computers with English so as to make it easier for English speaking students to use. (perhaps put up a section for English computers and label it clearly)", "... provide a manual of instructions in English", "The orientation provided in the library should take place in the first weeks of the program and lasting at least a week instead of only 2 hours even when we are not so busy during the program" and "... more books in English and other languages on the shelves and label them in both English and Norsk to make it easy for international students to locate them on the computer".

#### **4.2 Findings from the librarians**

In order to determine the challenges experienced by international students and verify the data provided by the students, the researchers subjected two librarians to a questionnaire. Some of the problems raised by the librarians were similar to what the students had raised.

Both librarians reported that SFUC has an international strategy/policy but it was noted that an action plan was not available. However the librarians reported that the library interacts with the international office in the University College, academic departments, the students' union and other faculties or colleges in the country.

The librarians mentioned that there was no specific staff designated to supporting international students and delivering services to them instead as one mentioned "All the librarians give support to international students." It was difficult for the librarians to specify how many times per month they were involved in supporting students but indicated approximately 12 times for the national students and 1.5 for the international students.

It was also noted that no programs for staff development for library staff surrounding international student issues and services were available at SFUC. However the institution has specific library web pages for international students confirmed by the responses "We are

*currently working on this. The library web pages in English are being redesigned this spring."* and *"The pages are being redesigned these days....not published yet!"*. The library used to have pamphlets specifically aimed at international students but not anymore as the pamphlets that were there were outdated. One librarian responded *"We used to have one in English, but this is now outdated"* and the other responded *"not now."*

Reflecting on their experiences with the Zambian students, one librarian responded *"In general I think working with international students is interesting and that it gives new perspectives into things. Most international students we meet one to one in the library since they often study in different courses. The Zambian students we often meet as a group at least in the beginning of the semester or when they are about to start writing their assignment/thesis.....positive experiences working with the Zambian students both individually and as a group,.....very friendly and happy and often very grateful for the library service.....in general that the Norwegian students are more independent than international students, but this of course vary a lot. It is understandable since the international students very often meet language barriers because useful information only can be found in Norwegian. Here is potential for improvement in the library and at HiSF."*

Both librarians reported that the SFUC library provides brief orientation and information skills to international students when requested by the teachers or a specific department. They also said they provide one on one consultations, non Norwegian newspapers and magazines as well as computing support for English language. The librarians also listed; *interlibrary loan, Computers with English interface, Databases with English language and Self service check-out boxes with English language* as other services provided.

When asked what challenges they faced with Zambian students, both Librarians cited language and computer skills. One responded *"It might sometimes be language barriers, but not very often person to person. All the librarians speak English, but misunderstandings might happen. Most problems we face not necessarily connect to library issues. It is more the type of problem that the Zambian student (or any other international student) needs help with e.g. printing of a word-document and all the instructions on the screen is in Norwegian. We sometimes also experience that the Zambian students' computer skills vary quite a lot and might be challenging to each individual."*

One librarian further stated *"Our challenge is lack of time. International students are very few compared to the Norwegian students (and staff), so it is easier to give priority to the Norwegians."*

*Also the international students stay for only ½ or 1 year, they do not graduate here. Often it is when the students do their bachelor or master thesis that they really need the library services, because they have to learn how to search journals, articles etc themselves. Then we get the opportunity to get to know them."*

*To this the other librarian added "We are a quite small library that is close to our students and I hope the international students find it easy to come and ask for help when they need it. Most Norwegian students stay here for 3- 5 years and then the library staff get to know them very well. The library gives lessons to them the first year and the third year when they start writing their bachelor-thesis and then again if they continue to a master study...I think we have several good resources available in English for the international students, but they need to be presented better through our startpage on the web."*

*When asked how they dealt with the challenges experienced, one of the librarians responded "We try to be service-minded and help the students with their problems at once or if we cannot solve them ourselves, pass them on to the right person in the HiSF organization. Hopefully our coming new web-pages in English will be of better help for the international students."*

## **5. 0 DISCUSSION**

This study draws attention to the problems of international students experienced in their use of libraries and e-resources. The main purpose was to explore the challenges experienced by Zambian international students at SFUC in relation to the use of electronic resources/devices. As earlier stated ICT has a huge impact on academic and nonacademic activities of a student's life in the university especially in a developed country like Norway. Scandinavian universities and colleges now cater for a growing diversity among students leading to challenges in terms of language, culture, and academic background (Habib, Johannesen and Øgrim, 2013).

### **5.1 Language**

Language is important in day to day communication. The ability to effectively communicate allows individuals to interact with one another (Jensen, 2007). Culture however, influences how an individual perceives and responds to the world, solves life's problems and interacts with others thus differences in communication across cultures are evident in language, verbal and nonverbal behaviors and silence (Jensen, 2007). According to the information gathered in this

study, language is the biggest challenge that the students are facing and therefore it poses several challenges in the utilization of e-resources in the library at SFUC. The students pointed out that their failure to fully take advantage of the e-resources in the library was linked to their inability to read and understand Norwegian because most of the instructions given on the web pages were in Norwegian and at times could not be translated to English as one student responded “Commands written in Norwegian makes navigation difficult” and another said “Language....some articles are only written in Norwegian and some parts of the databases are in Norwegian”. As noted by Liu (1993), this could lead to other problems such as communication problems as students may lack confidence to ask for help. Problems with language could also lead to library and computer anxieties as the students in the study pointed out that they could not identify computers with English commands in the library at SFUC. These findings are in line with reports by several researchers such as Bradley & Russell (1997) and Liu, (1993). We asked the students about solutions to the problems raised and some suggested that the problems could be resolved by developing suitable pages with enough information in English and/or including some words mostly used on the students' web pages in the lessons the students have as they are taught the Norwegian language on arrival at SFUC. One student suggested that “they should have a few more computers with English so as to make it easier for English speaking students to use”. The librarians were aware of the language barrier the students faced and reported having a plan in place supported by the response “We are currently working on this. The library web pages in English are being redesigned this spring”.

## **5.2 ICT**

As suggested by Egberongbe (2011), ICT is a major challenge for new students generally but it is even more of a challenge to a student from the developing world accessing/experiencing advanced technology for the first. When asked why they faced challenges with ICT, one student responded "technology keeps on changing all the time....". Jackson (2005) was earlier quoted stating that “many surveys showed that international students lack the necessary exposure to computers, especially to computers in libraries, to effectively utilize the growing online resources in the 21st Century academic university library”. As pointed out by Egberongbe (2011), lack of information retrieval skills for exploiting electronic resources makes the level of usage of resources by students very low. Factors hindering the use of e- resources in Nigerian

higher institutions (which is an environment similar to the Zambian) include a lack of consistent training for users in new ICT services (Chisenga, 2004 cited by Egberogbe, 2011). Some of the Zambian international students were not accustomed to using e-resources and/or devices before coming to SFUC and among those that could use them, most were not using them as much for academic purposes because they had graduated from colleges or university several years back. One of the respondents mentioned problems with the user interface which could lead to frustration. Failure to book study rooms, fill in the electronic library form to make appointments with the librarians and operate automated machines for self service in a foreign language may be as a result of what Bradley & Russell (1997) termed “Task anxiety” which is fear of not understanding computer jargon, of getting stuck, or of not knowing where to start”. In line with findings by Habib, Johannesen and Øgrim (2013), this study also suggests digital literacy of some international students as being a possible source of frustration amongst these students. This is evidenced by reports from the librarians saying their experience was that the Zambian students' computer skills varied quite a lot and might be challenging to each individual. As earlier noted, Ogunsola & Okusaga (2006) stated that many countries especially the developing countries currently do not have email, fax, telephone and computer based library services. Patton (2002), as earlier cited stated that “using library specific technology such as online catalogue, electronic databases, microform reader/printers, and self-service photocopies ranked as the greatest anxiety producer in both native English and Non-native Speaking English”. When asked why they faced challenges with ICT, one student responded “I didn't start using computers at an early age therefore lack of access to computers back home and lack of instruction.....here in Norway have contributed. If I knew that using a computer was a must maybe I would have tried to learn a bit before coming here”. Responses such as these suggest the need to inform the students of the need for computer literacy as they are identified and informed of their admission to the university so that they start learning basic computer skills as they prepare for their travel to Norway.

### **5.3 Cultural differences and educational background**

As earlier mentioned, culture influences how each individual perceives and responds to the world, solves life's problems and interacts with others (Jensen, 2007). International students encounter many problems adjusting to the new environment due to their background. These

differences influence their expectation of library services and their adjustment to the new academic, cultural and library environment. In a publication titled “Taking Culture seriously: ICTs, Cultures and Development”, Westrup, Al Jaghoub, El Sayed and Liu, (2002 ) say “The notion of culture is becoming and should become an important part of the stock in trade of those researching the development and use of ICTs and of those engaged in the processes of embedding ICTs in differing situations”. The fact that culture also affects people’s perception of reality and their behaviour can be seen from some responses for example “being a Zambian makes it difficult to be in the library because people use a different language and sometimes I think they are talking about me even when they are not especially if they talk and laugh while looking at me”.

Literature reviewed shows that students from a traditional, behaviouristic, high context society like Zambia may be used to waiting for instructions from higher authorities or superiors while those from a high modern, constructivistic, low context society like Norway are used to being independent and initiating learning activities on their own (Neuliep, 2009; Pritchard, 2009 and Freire, 1993). This is supported by students’ responses such as “we are used to teacher centered education back home hence we often don't take initiative compared to our Norwegian friends” and “we come from a different system and background”. On the other hand, the librarians also noted “Maybe we could say in general that the Norwegian students are more independent than international students.....”.

According to some students interviewed in this study, having to repeatedly ask for help from the librarians made them feel they were a burden while the librarians noted that some Zambian students were shy to ask for help. These are students who report being used to being served by the librarians in their home country and the self service at SFUC could be strange and otherwise scary to some especially that they come from school systems where mostly students are told what to do by their teachers instead of taking initiative on their own. Learning in this situation is more teacher centered which Freire described well in the banking concept in his book “Pedagogy of the oppressed” (Freire, 1993) and confirmed by one respondent who said “we are used to teacher centered education back home hence we often don't take initiative compared to our Norwegian friends”.

Some of the challenges highlighted in this study are challenges that students can resolve on their own with help from their friends and the librarians for instance problems with logging in and

using Fronter, automated machines, self service check-out boxes and locating books in the library and therefore these do not need intervention from the institution. Why then do they continue to face these challenges? Thomas et al (2005) report social structures, temporal structures, values and communication (e.g. communication forms, patterns/expectations and low context vs. high context cultures) as factors that influence the adoption and usage of ICT. According to Yoo & Huang (2011) and Thomas et al (2005), these factors are also said to influence an individual's capability in various senses, to use ICTs, their interest in and familiarity with ICTs, the symbolic meaning of ICTs, the nature of relationships to other people through the use of ICTs and the nature of communication through ICTs. The lack of initiative in students used to teacher centered education may also be a cause of failure to resolve these problems as suggested by some of their responses above and literature by Rahman (2011) and Heffernan, Morrison, Basu, & Weeney (2010).

Problems with the user interface, language, culture and inexperience in use of electronic resources may be beyond them. As previously noted, it is important that universities revisit and solves problems with user interfaces and create multilingual user interfaces in the provision of services to non Norwegian speaking foreign students (Rahman 2011). During the interviews, respondents who mentioned differences in educational and cultural background as a route cause of their challenges suggested it could also be important for the librarians and lecturers to have workshops or orientation programs in important aspects of culture that could make them realize/appreciate the cultural/educational differences and needs among Norwegian and foreign students. This in turn could also improve their understanding of behaviors of and relationships with these students as well as the digital divide between countries as supported by Thomas et al (2000). Most of the respondents expressed dissatisfaction with the quick library orientation taking only two hours to go through a number of issues at once evidenced by responses such as *"the orientation provided in the library should..... (be) lasting at least a week instead of only 2 hours even when we are not so busy during the program"*. On the other hand, the librarians mentioned that they did not spend more time with international students as most of them stay only six months or one year at SFUC. The students suggested that it would be important for the learning centre/library to schedule trainings or orientation programs that would enable the students grasp the unfamiliar content being given to them as they learn how to use



both electronic devices and resources at the same time without rushing through. This notion is supported by Rahman (2011).

After analyzing our data, we could see that students who were mainly raised in rural areas and those who had never used computers in the library experienced more challenges than their friends. It could also be seen that librarians expected students to ask for help hence they took it for granted that all students would/could approach them despite the distinctions of independent/dependent learning, low context/high context and constructivistic/behaviouristic learning previously discussed.

#### **5.4 CONCLUSION**

For many years libraries in the developed world have adapted to digital changes while those in the developing world lag behind. This poses challenges to students who move from the developing to the developed world whether for ordinary studies or student exchange programs. The authors of this paper were looking at challenges Zambian international students faced in the use of electronic resources at SFUC. All the questions were answered and findings were reported followed by a discussion reflecting on findings from other studies.

This study shows that despite the fact that the students get help from their friends and the librarians, they still face challenges related to language, ICT, culture and to some extent the education systems in their home country make them dependent on their superiors to initiate activities. Responses from the data analyzed also point toward the nonexistence of a student webpage that can meet all the needs of English speaking students in their search for information as suggested by the response from one of the librarians “It is understandable since the international students very often meet language barriers because useful information only can be found in Norwegian. Here is potential for improvement in the library and at HiSF.”

Having highlighted a number of challenges that foreign students face the study also provides possible solutions to the challenges. The findings suggest that not all the problems the students encounter need direct help from the institution however, problems such as language and the user interface need the library to ensure that they have a multilingual interface while both staff and students needed orientation on aspects that could improve use of e-resources such as culture and ICT. The fact that culture and ICT have an effect on each other as previously noted could to some extent explain why some students still experience challenges even when access to ICT is

not restricted at SFUC nevertheless, these students should be receptive to change and learn to take initiative if they are to adapt properly to university life in a high context society like Norway.

## 5.6 RECOMMENDATIONS

Based on the findings and the literature review, the following recommendations were arrived at.

1. Library orientation for international students be done as soon as possible when the semester starts and to take at least two days or more for them to grasp all the relevant information and skills provided.
2. Presentations or orientations on cultural and/or educational issues affecting international students be done for staff for them to appreciate the behavior and differences of foreign students and create a lasting relationship with them.
3. Ensure that all information is available in both Norwegian and English on the students' web pages with instructions clearly written for students to follow.
4. Reassure students on the availability of the librarians to assist them at all times regardless of their fears or anxieties.
5. International students should ensure that they ask for help whenever necessary instead of keeping to themselves.
6. Further research or studies should be conducted to explore the challenges other international students face as these findings cannot be generalized.

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**APPENDICES**

**APPENDIX 1; CONSENT FORM**

**INTRODUCTION**

We are nurses from Zambia doing global knowledge at Hogskulen i Sogn Og Fjordane, Faculty of Teacher Education. As part of our examination in global knowledge we are required to undertake a research Study and our topic is ‘challenges faced by Zambian international students in accessing Electronic Resource at Sogn Og Fjordane learning center in Sogndal Norway. For further information and/or questions you can contact us; Timothy Daka on 46350133 or Liseli Muyunda on 46350112 or our supervisor Ane Bergersen- ane.bergersen@hisf.no.

**CONSENT**

I understand that my participation in this study is entirely voluntary, and I may withdraw from the study at any time I wish. I understand that my participation in this study will not benefit me in terms of financial and material gains and that all information provided will be kept confidential. However, this information may be used in presentations and improvement of ICT services.

The study has been explained to me. I have read and understood this consent form and all questions have been clarified. I therefore, agree to participate.

.....

Signature of participant

Date

.....

Signature of investigator

Date

.....

Witness

Date



## **APPENDIX 2**

### **INTERVIEW SCHEDULE FOR INTERNATIONAL STUDENTS**

#### **Objective 1: To explore the challenges experienced by the students**

1. What challenges do you experience in relation to the use of electronic resources in the SFUC Learning Center/Library?
2. Why do you think you face these challenges?
3. Do you find sufficient instructions in the Library website to search for books/journals, and if no, what more do you need?

#### **Objective 2: To determine what international students manage in relation to the use of electronic resources at SFUC?**

1. What do you manage in relation to the use of electronic resources at SFUC?
2. Do you have problems accessing the following alone books or computers? What could be the reason (Is it because of size of the library, self service, or other)?

#### **Objective 3: To gather information on possible solutions/recommendations pertaining to challenges encountered with the use of electronic resources at SFUC.**

1. Do you have recommendations pertaining to the use of electronic resources at SFUC?
2. Describe how the library should be to suit your needs e.g. welcome, being followed to help.

#### **Follow up questions**

1. What are your rights in relation to ICT at SFUC?
2. What have you learnt in Norway about ICT that you didn't know before you came?
3. What benefits/advantages and disadvantages do you perceive in using advanced technology in academics?
4. How is your experience in accessing electronic resources from the campus and the hostels? What type of resources do you look for?
5. Do you think a user training or library orientation program on the use of the electronic resources in SFUC Library/Learning Centre is needed, if yes what do you need and why?

**Thank you very much for your time and participation.**

**APPENDIX 3****QUESTIONNAIRE FOR INTERNATIONAL STUDENTS****SECTION A: DEMOGRAPHIC DATA**

1. Which gender are you? .....
2. Which age group do you belong to? ( Tick the appropriate)
  1. Below 30,
  2. 30 – 39,
  3. 40 or older
3. Were you raised up in a rural or urban area?.....

**SECTION B: ACCESS TO AND UTILIZATION OF ICT**

4. Did you use computers in the library before coming to SFUC?.....
5. What is your understanding about electronic resources? .....
6. What previous experience do you have if any in using electronic resources in your home country?.....
7. When was the last time you used the electronic resources in SFUC Library/Learning Centre?.....
8. What was your experience that time?.....
9. How different are the library services in SFUC from your previous institution library in your home country?.....
10. What previous library experiences in your home country make it difficult to use SFUC Library/Learning Centre, especially with electronic resources?.....
11. What impact does your previous education system or teaching/learning methods have on your use of SFUC Library/Learning Centre, especially e-resources?.....

**SECTION C: CHALLENGES EXPERIENCED**

12. What Norwegian linguistic and cultural aspects make it difficult for you to ask for help when using electronic resources in SFUC Library/Learning Centre?.....

13. What problems if any do you face in accessing electronic resources from the campus or hostel?.....
14. How much instruction do you receive in the Library/Learning Centre website and what impact does it have on your use/search of electronic resources in SFUC Library/Learning Centre?.....
15. What help have you needed while using the electronic resources in the SFUC Library/Learning Centre and who helped you?.....
16. Are there any sort of E-resources/databases you would like to access, but are not available at SFUC Library/Learning Centre?.....
17. Are you satisfied with the overall library services in the SFUC Library/Learning Centre, especially electronic resources?.....
18. Make comments on the most positive aspect(s) the staff assistance you get in the Library/Learning Centre has on your use of the library.....
19. Make comments on most negative aspect(s) the staff assistance you get in the Library/Learning Centre has on your use of the library.....
20. What challenges do you experience in relation to the use of electronic resources in the SFUC Learning Center?.....
21. Why do you think you face these challenges?.....

#### **SECTION D: RECOMMENDATIONS/SOLUTIONS**

22. Describe how the library should be to suit your needs e.g. welcome, being followed to help.....

**Thank you very much for your time and participation.**

## APPENDIX 4

### QUESTIONNAIRE FOR LIBRARIANS

<b>Section 1:</b>		
<b>1. Does the University have an International Strategy/Policy?</b>		
Yes:		
No:		
<b>2. Does the Library have an international strategy/action plan? (If "No", please go to Question 3)</b>		
Yes:		
No:		
<b>2.a. How is it articulated?</b>		
<b>3. If not already covered in a library policy, how does the library interact with other university departments/units/committees in the support of international students?</b>		
Academic Departments:		
International Office:		
Language Centre:		
International Students Associations:		
Students Union:		
Cross-Departmental Committees:		
Faculties or Colleges:		
Other ( <i>please specify</i> ):		
<b>4. Is there a designated member of staff or unit within the library supporting international students and delivering services to them?</b>		
Yes:		
No:		
<b>4.a. Approximately how many hours per semester are you involved in supporting the students?</b>		
<b>4.b. How many times with international students compare with time with national students in a Month</b>		
Please specify		
<b>5. Do you have staff development for library staff surrounding international student issues and services? (If "No", please go to Question 6)</b>		
Yes:		
No:		
<b>5.a. Please select if the staff development is provided</b>		
In-house:		
Brought-in:		
Mix of both:		
<b>5.b. What areas do you cover in the staff development training?</b>		
Cultural awareness:		
Language problems:		
Learning styles:		
Strategies to deal with problems:		
Staff communication skills:		

Customer care skills:		
Other ( <i>please specify</i> ):		
<b>6. Do you have specific library web pages for international students?</b>		
Yes:		
No:		
<b>6.a. Please provide the URL of the main web page in the box below</b>		
<b>7. Do you have any Library pamphlets aimed specifically at international students? (If No, please go to Question 8)</b>		
Yes:		
No:		
<b>7.a. Do you provide these pamphlets in languages other than English?</b>		
Yes:		
No:		
<b>7.a.i. In which languages do you provide the publications?</b>		
Please specify:		
<b>7.b. Will you be willing to share a copy (or copies) with us?</b>		
Yes:		
No:		
<b>8. What services do you provide for international students?</b>		
Brief orientation:		
Information Skills:		
One to one consultations:		
Non-Norwegian Newspapers and Magazines:		
Computing support for English languages:		
Other ( <i>please specify</i> ):		
<b>9. What are your experiences working with international students generally and Zambians specifically?</b>		
<b>10. What challenges do you face with the Zambian students?</b>		
<b>11. How have you dealt with the challenges?</b>		
<b>12. Do you have any other comments with regard to providing library support for international students?</b>		

**Thank You for Your Participation**