Scientific Research Publishing

Skills Evaluation with Regard to Transformative Education among Library Personnel in Four State Universities in Cameroon

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Abstract

This study investigated the readiness (skills) of library personnel in four (4) state universities in Cameroon, namely University of Dschang (UDs), The University of Bamenda (UBa), University of Yaoundé I (UYI) and University of Yaoundé II (UYII) in embracing new technologies in service delivery to users. Library personnel as information providers must move with the digital evolution as user expectations have become challenging and complex. Against this backdrop, two research objectives guided the study: to investigate whether library personnel possess requisite skills to provide quality services, and, to investigate strategies that can enhance skills of library personnel towards bridging the digital divide. A cross sectional non-random sampling research design was used. The skills (readiness) of library personnel in the provision of services in university libraries under study and strategies to enhance readiness were investigated. A population of 97 personnel was used with 100% return rate. Research instruments were questionnaire and interview guide. Data were analyzed using descriptive statistics and the Statistical Package for Social Sciences (SPSS) version 2.7 software. Thematic analysis was used in analyzing interview items. The findings presented using a hedonic scale (insufficient to very sufficient skills) revealed that in the Circulation, Reference and Preservation Sections of the libraries 53% and 55% respectively of the respondents had insufficient skills. In the Collection Development Section 56% also had insufficient ability decreasing to 55% in the Cataloguing and Classification Section. Strategies identified to enhance readiness include on-the-job training, seminars/workshops especially designed to train on e-library resources and attend library schools. Challenges faced were inadequate equipment, staff, power supply, budget, and internet.

1. Introduction

As digital technology is fast becoming an integral aspect of the 21st century life, libraries are facing increasing demands from users for digital services. Most libraries nowadays are responding to digital technologies by setting up digital libraries and digital repositories especially in academic libraries (Kim, Warga, & Moen, 2012). Digital libraries are libraries with collections stored in digital formats, and users can get access to these collections using computers and the internet (Sharifabadi, 2006). In the 21st century, libraries are trying to keep up with the digital world and the new generation of users who are used to having instant information (Haris, 2016; Modal, 2020). This is the result of increasing availability of e-resources. Libraries are changing dramatically adopting new means of technology in all activities from print to e-environment (Wagayan-Alicmas & Ramos, 2015).

An academic library is one attached to an institution of higher learning and serves two complementary purposes: supporting the curriculum and; supporting the research of the university faculty and students. According to Becher's Organizational Theory and Kabir, an academic library is an organization within a larger organization, which is an academic institution and its faculties and schools. Higher education has adopted digital libraries as a response to user-centred requirements in education. Digital libraries in the 21st century are expected to have a considerable positive impact on education as it implies sharing of learning resources in support of distance education, online learning, and on-campus and independent discovery-based learning (Kalinichenko & Christochevsky, 2003). Hesrcu-Klusta (2019) is also of the view that the world has become computerized so do learning and teaching, this distance education, e-learning and online learning. All these are in the area of transformative education. The library being the major stakeholder in education (transformative) must move along with this technology, hence digitalization.

Digital libraries are changing the concept of the librarian, the library, their collections and services. New terms as digital libraries, digital librarian, libraries without walls, virtual libraries, hybrid libraries, have emerged to describe the rapidly changing digital library footprint (Kalpalatha, 2015; Singh, 2018). The aim of the Library and Information Science (LIS) profession has always been to provide users access to the right information at the right time. Librarianship is a noble profession. A librarian derives his joy by seeing the dawn of joy in the faces of readers helped by him to find the right book at the right time. The role of the library is rapidly changing, thanks to digitalization.

Libraries today are therefore expected to digitize their information resources and make instantly available these information resources to users. Pearson opines that the present libraries should do away with physical boundaries between the users and the electronic resources. These resources should be updated and preserved in digital formats. Khan (2021) says libraries should provide user-friendly interfaces, access to network over intranet and internet, multimedia information besides the text. Library users should have the right information, at the right time in the right format and in the right place. Consequently, library personnel are expected to possess requisite competencies; knowledge, skills and positive work attitudes. They have to use the changing technology to provide the best access to information resources and services to users. They should have the knowledge of digital information resources.

The overarching aim of this study is to investigate if library personnel in State universities in Cameroon are ready to provide quality services to users and would-be users. This is a very important area of research against the backdrop of the important roles of the library in Higher Education Institutions (HEIs). It is also an important question because answers can be used to develop and implement actions aimed at increasing the ability of library personnel to perform in desired directions. The readiness of personnel in libraries is of vital importance to the student population, lecturers, and other library users especially in this digital age. This is because readiness of personnel will enhance quality delivery, access and usage of library facilities. Library personnel are the image-makers or public relation officers of the library and Higher Education Institution (HEI) and thus should possess the necessary skills.

Steps taken towards the advancement and development of the services provided by State university libraries in Cameroon have positively influenced research activities leading to increased demand of user-focused information services. In an effort to improve the various library services, the Ministry of Higher Education (MINESUP) in Cameroon encouraged the creation of a Consortium of Cameroon University and Research Libraries (COCUREL), which enables member libraries to have access to a variety of licensed electronic resources. The brain behind this was the International Advocacy for Scientific Publications (INASP) (Bawack, 2019). Most library personnel attend massive online training through Webinars and other media. Some have done so through their membership in the Association of African Universities (AAU), which organizes such training for its member universities.

Another step taken is enabling library users to have access to electronic and online resources through free internet, and via free Wi-Fi, using the various codes of the libraries. Institutions' theses and dissertations are made online using the PMB, KOHA and other software. The government of Cameroon, in order to boost library services, donated laptops to undergraduate and postgraduate students in various universities. This enhances library use from anywhere, thus advancing research and boosting library services.

1.1. Statement of the Problem

In Cameroon, most universities, albeit at different rates, are embracing new technologies in the delivery of services within the context of rapidly increasing expectations and massification. New methods of academic activities expect a change of library services from analogue to digital, and with the crucial role of academic libraries in research and scholarship, the library personnel who are the information providers, must move with the digital age. A key problem is whether library personnel in State universities in Cameroon have the requisite skills to provide effective and efficient services to users?

1.2. Objectives of the Study

The main objective of this study was to examine the readiness of library personnel in State universities in Cameroon in the context of digitalization in terms of possession of required skill. This includes an examination of strategies that can be used to enhance readiness of library personnel in State universities in Cameroon within the context of digitalisation.

1.3. Research Questions

- How skillful are library personnel in Cameroon State universities in the provision of services within a digital context?
- What are the strategies that can be used to enhance readiness of library personnel in Cameroon State universities within the context of digitalisation?

2. Review of Related Literature

Generally, skill can be defined as a learned ability that results in predetermined results alongside maximum certainty. Skill is being able to perform a task, expecting certain results within a particular period with individual efforts. An individual puts into action the knowledge s/he has so as to achieve a given goal (Kassema, 2019). These skills are unique but sometimes differ from one library operation to another.

Lewin's Theory of Change states that change involves creating the perception that there is a need for change, then movement towards the new desired behaviour and implementing the new behaviour as a norm. With the continuous change in Information and Communication Technologies (ICTs), library personnel in all sections in the library have to move in the same direction of change. Library personnel, in order to be effective and efficient in their services to present day users of the library, must possess requisite skills to move along with modern technology. Different authors have carried out research on requisite skills for library personnel in the various sections of the library.

The rationale of this study is to ascertain the skill level of the personnel in order to prepare staff capacity schemes for them on digital libraries.

2.1. Requisite Skills for the Reference Section

There is a high expectation for the reference librarian to be very qualified in of-

fering qualitative and needed services to today's library users. Within the digital context, s/he should possess skills in electronic resources and demonstrate high professional skills to the satisfaction of the 21st century library users. Gaby (2012) and Larsen (2007) carried out research with similar objectives of investigating the various skills that reference library personnel need for effective and efficient services to all categories of users. The online questionnaire (Gaby, 2012) and personal conversations and attendance in meetings (Larsen, 2007) were data collection instruments. The findings revealed some skills for reference library personnel: online searching, customer service, communication (verbal, listening and written), search skills, virtual reference service, web design, social media, teaching and instruction, electronic resources, reference interviews, evaluation of sources of authority, ICT, information retrieval, marketing and project management. Their findings are in line with the present study that seeks to find out if reference library personnel in The University of Bamenda possess the skills revealed in their findings.

Koganuramath and Angadi (2000), and Indeed Editorial Team (2023) carried out surveys investigating skills required of reference library personnel in university libraries. Their findings revealed skills for professional competences, management, teamwork and networking of prior importance. Other personal skills include: non-verbal communication, negotiating, basic listening skills, and competence in the presentation and explanation of information.

2.2. Requisite Skills for the Circulation Section

Circulation in library terminology is checking out and returning library documents to and from users. With the advancement of modern technology, the manual operation has been replaced with computers whereby the library is in possession of a web-based catalogue, which shows the entire collections of the library (Onuoha & Obialor, 2015).

Stover (2004) and the IFLA Reference and Information Services Section (2014) carried out some surveys on the required skills for personnel in the circulation section of the library. Their findings revealed supervision skills, training other staff, working independently, effective communication (oral, written and online), research skills, electronic information resources, social media, software packages, multi-tasking, interviewing skills, databases and online and telephone interviews. The above authors recommended training of library personnel for effective services to library users. This is consistent with this paper which is investigating if library personnel in the circulation section of the library under study possess the skills found out by the above authors. Training and retraining is required because of the ever-changing technology.

2.3. Requisite Skills for Cataloguing and Classification Section

Personnel in the cataloguing and classification section of the library need requisite skills to enable them be effective and efficient in offering services to library

users. They must catalogue and classify electronic information resources for effective use by users onsite and online. Many researches have been carried out on the required skills needed by cataloguers in the ICT context.

Inyang and Agwunobi (2016), Akidi and Okezie (2018), Barnise, Oluwaniyi and Igbeneghu (2019), Sibiyi (2017), carried out various investigations on the required skills that library personnel in the cataloguing and classification section need for effective services to users. The findings revealed the following required skills: use of electronic tools for copy cataloguing, ICT, subject heading, online use of cutter, social networking and resource sharing, sending and receiving data through blogs, use of web 2.0, electronic data transfer, marketing cataloguing through webinar toolkits, computer, internet, online cataloguing, software and hardware packages, interpersonal communication, cataloguing standards, Integrated Library Systems (ILS), electronic resources, problem solving, foreign languages, metadata, web technology, project management, staff training and creativity. MS Office Suite, emails, communication, multi-tasking, organisation skills, ability to work independently, teaching and training, ability to interpret policies and procedures, Machine Readable Catalogue (MARC), database maintenance, online catalogue, are some of the requisite skills needed. The required skills from the findings of the above authors, are relevant to this study to enable cataloguers in The University of Bamenda be aware of the skills required of them for effective services.

2.4. Requisite Skills for the Collection Development/Acquisition Section

Some experts have written on skills requirements of the collection development librarian. Oyedokun, Oyewuni, Akanbi and Laaro (2018), carried out a study to assess the ICT competences of library personnel in selected universities in Kwara State, Nigeria. A descriptive survey was used and the data collection instrument was a questionnaire. The findings revealed the need for the following skills: effective communication, flexibility, interpretation of data from various sources when analysing users' needs, computer, hardware and software packages.

LibGig (2022) and Zippia (2020) and team carried out various surveys to bring out the lists of skills for collection development/acquisition. The methodology was compiling lists of most important skills required. Their findings revealed the following needed skills: ability to work collaboratively, proficiency with library catalogues and online ordering tools, able to work under pressure, interpreting data in analysing collection needs, communication, flexibility in collaboration with vendors, and computer skills. Other skills included library services, literature, Hyper Text Markup Language (HTML), electronic resources, information literacy, database, online order and purchase, interlibrary loan, training, reference and ascertaining information needs of library users, and web services. The findings recommended adequate training of staff for the acquisition of necessary skills. The above findings are in line with this study as they guide the researcher to know the relevant skills needed by collection develop-

ment/acquisition library personnel in The University of Bamenda, Cameroon.

2.5. Requisite Skills for the Preservation and Conservation Section

Odutola and Alegbeleye (2019) and Hisle (2002) opine that, if information resources are not adequately preserved and conserved, library users will not be able to retrieve vital information for academic and research purposes. The concerns of the present day academic libraries are to preserve and conserve information resources.

Adentula and Osunride (2016) carried out a research examining the preservation and conservation of library and information resources in university libraries in South-West Nigeria. Ijantiku, Chahari and Ladu (2020) also carried out a study examining the application of ICTs in the preservation of library and information resources in Federal College of Education, Yola. The above authors adopted a descriptive survey in their studies, with questionnaires as data collection instruments. Data collected was analysed using descriptive statistics of simple percentages, frequency and tabular presentation. Kavishe and Dulle (2016) also carried out a study examining the preservation skills and strategies of electronic information resources in the digital era in the University of Kwazulu-Natal libraries. Quantitative and qualitative approaches were used in analysing the data. The findings revealed a need for skills for personnel in the preservation and conservation section as follows: technical skills, metadata skills, skills in migration, emulation skills, bit preservation skills, conceptual skills, communication (verbal, written, online), able to work with persons with disabilities, and finally skills in creativity. The above findings are relevant to this study as the researcher will understand better skills requirements for this section of the library.

The findings of the above authors in various sections of the library are consistent to this study as all indicated skills of library personnel. The difference is that the present paper seeks to find out if library personnel in The University of Bamenda possess the skills indicated by the authors cited.

2.6. Training of Library Personnel as a Strategy in Enhancing Skills

Larsen (2005) conducted research on continuing professional development: trends and perspectives in the Nordic context. One of the objectives of the study was to investigate the type of training and development programs that can support staff to overcome the challenges they face in the hybrid library. The population of the study was all the Danish research library directors. Questionnaires and interviews were used for data collection. The findings suggested external and in-house activities for continuing professional development as follows: external activities (participation in professional networks, formal continuing educational programs, projects across institutions, conferences and seminars, job exchange, external training courses, study visits, new formal partnerships);

in-house activities (in-house training/instruction, knowledge exchange among colleagues, job rotation, mentoring programmes, action learning/learning by doing, reading, trial and error, supervision, good management, testing new products/services, benchmarking). The study recommended training of library personnel.

Oyedokun, Oyewumi, Akanbi and Laaro (2018) assessed ICT competencies of library staff in selected universities in Kwara State, Nigeria. One of the objectives of the study was to examine the sources of acquisition of ICT skills by library personnel. The population of the study was 191 but a sample of 122 was drawn from it. The instrument for data collection was the questionnaire. 109 respondents (89.3%) completed and returned the questionnaires. The findings revealed the sources of skills acquisition as follows: library schools (75.2%); on-the-job training (51.4%); web-based tutorial (webinar, YouTube, 79.8%); workshops and seminars (67%); personal training/self-study (62.4%); computer training centres (78.9%); friends and colleagues (82.6%); qualification in computer science (37.6%). The study recommended staff development and training through LIS schools, workshops and seminars. This present study is related to all as it is deemed necessary that library personnel should have continuous training and retraining because of the continuous changing technologies.

3. Methodology

The research design employed was the non-random cross-sectional case study survey research design in gathering data using questionnaires and structured interviews. The population of the study comprised more than one hundred (100) library personnel in State universities in Cameroon and the sample of the study was ninety-seven (97) library personnel in the universities of Dschang, Bamenda, Yaounde I and Yaounde II. Ninety-seven questionnaires were distributed among the ninety-seven library personnel of the universities of Dschang, Bamenda, Yaounde I and Yaounde II. Five different questionnaires were designed corresponding to the different job descriptions of the library. The questionnaire was designed in English and translated to French language to aid comprehension of the library staff in Yaoundé I, Yaounde II and Dschang. The questions were weighted on a four-point Likert scale which ranged from very high ability (VHA) = 4, high ability (HA) = 3, low ability (LA) = 2, Very low ability (VLA) = 1. The returned rate was 100%. The staff interviewed were selected using a non-random cross sectional survey. However, every section of each library investigated was sampled.

4. Data Analysis

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

4.1. Results and Discussions

4.1.1. Results

The results of findings in this paper are classified according to the various sections of the library. This is because the personnel in every section of the library are indispensable to the satisfaction of users' needs in the digital context.

This study examined the following socio-demographic variables: gender, age, marital status, and highest qualification. Majority of the library personnel sampled for this study were females 52 (54%) while 45 (46%) were males. Majority 42 (43%) of the library personnel sampled in the various universities were within the age range of 46 - 50 years, 19 (20%) were within the age bracket of 51 - 55 years, 12 (12%) respondents were aged 56 and above, 6 (6%) were within the age range of 36 - 40 years. Moreover, 5 (5%) respondents said they were within the age range of 31 - 35 years and finally, 4 (4%) respondents were aged 26 - 30 years. Majority 53 (55%) of the respondents were married, while 35 (36%) were single. However, 9 (9%) were widows. Majority 46 (47%) of those sampled were Master degree holders, 36 (37%) were holders of Bachelor degree, 3 (3%) were PhD holders with 2 in library science and 1 in another discipline, while 7 (7%) held Diploma certificates and 5 (5%) said they had other qualifications

Analysis of respondents' responses according to the objectives of the study.

This section is structured according to the various services in the library in response to the key indicators of the research objectives. For each library service, the skills of library personnel were analyzed. These data are summarized in Tables.

The data for the reference sections of the four libraries are summarized in Table 1.

From Table 1 it was found out that 9 (45%) of library personnel in the Reference section have requisite skills to render effective and efficient services to library users while 11 (55%) do not possess the required skills.

The data for the circulation sections of the four libraries are summarized in Table 2.

Table 2 indicates that 9 (47%) of library personnel in the circulation section of the libraries under study do possess sufficient skills to render effective and efficient services to library users, while 10 (53%) say they have insufficient skills to render services to the library users.

The data for the preservation sections of the four libraries are summarized in Table 3.

Majority 11 (55%) of the library staff in the preservation section possess insufficient skills in the use of modern technological equipment while 9 (45%) have the required skills in using modern library equipment.

The data for the collection development sections of the four libraries are summarized in Table 4.

The table above shows that 8 (44%) of the library personnel in the collection development section possess requisite skills to offer effective and efficient services

Table 1. Skills on reference section in the libraries examined in this study.

S/N	SKILLS ON REFERENCE	Stretched responses				Collapsed responses	
		VHA	HA	LA	VLA	SA	IA
1	Ability to use various communication technologies to provide services to library users	2	5	10	3	7 (35%)	13 (65%)
2	Effectively search for information required by library users (retrieving required information through the computer from online databases for users)	1	5	11	3	6 (30%)	14 (70)
3	Ability to use various computer hardware in the library	2	3	9	6	5 (25%)	15 (75%)
4	Ability to use various computer software packages	2	5	9	4	7 (35%)	13 (65%)
5	Ability to use various electronic resources to satisfy the needs of library users	5	9	4	2	14 (70%)	6 (30%)
6	Ability to diagnose the needs of various library users	5	11	3	1	16 (80%)	4 (20%)
7	Ability to use online library information resources	3	5	8	4	8 (40%)	12 (60%)
8	Effectively communicate with others to ensure customer satisfaction	1	4	12	3	5 (25%)	15 (75%)
9	Effectively solve problems ensuring customer satisfaction	1	4	10	5	5 (25%)	15 (75%)
10	Effectively demonstrate patience ensuring customer satisfaction	1	5	12	2	6 (30%)	14 (70%)
11	Effectively understand customers ensuring their satisfaction	3	5	10	2	8 (40%)	12 (60%)
12	Ability to listen effectively to library users to give adequate responses to their needs	5	9	3	2	14 (70%)	6 (30%)
13	Ability to satisfy the needs of various library users	3	5	8	4	8 (40%)	12 (60%)
14	Ability to respond to the various electronic resource needs of various library users	3	12	3	2	15 (75%)	5 (25%)
15	Ability to use various electronic resources	5	10	3	2	15 (75%)	5 (25%)
16	Able to work with colleagues as a team to achieve the library's mission	5	11	3	1	16 (80%)	4 (20%)
17	Conduct telephone interviews	3	5	10	2	8 (40%)	12 (60%)
18	Conduct face-to-face reference interviews with library users	5	10	3	2	15 (75%)	5 (25%)
19	Able to conduct virtual reference with online users anywhere and at any time	1	5	4	10	6 (30%)	14 (70%)
20	Work effectively with little or no supervision	3	5	8	4	8 (40%)	12 (60%)
21	Carry out or perform assigned tasks in a timely manner	1	4	12	3	5 (25%)	15 (75%)
22	Web application (able to use information space through which documents can be accessed through the internet	1	6	9	4	7 (35%)	13 (65%)
23	Ability to manage and supervise other library personnel	2	4	11	3	6 (30%)	14 (70%)
24	Able to effectively plan activities	5	9	5	1	14 (70%)	6 (30)
25	Ability to use search engines for online search	3	4	11	2	7 (35%)	13 (65%)
26	Ability to provide assistance to online library users on their search for information	1	6	9	4	7 (35%)	13 (65%)
27	Ability to identify and respond to problems faced by library users	6	9	3	2	15 (75%)	5 (25%)
28	Ability to communicate effectively in writing	11	5	3	1	16 (80%)	4 (20%)

Continued

29	Ability to express yourself effectively orally	10	6	4		16 (80%)	4 (20%)
30	Ability to communicate effectively using various online resources/tools	1	5	6	8	6 (30%)	14 (70%)
31	Ability to motivate library users to be more regular users of the library	2	5	11	2	7 (35%)	13 (65%)
32	Ability to provide needed guidance to various library users to locate information they need	3	5	9	3	8 (40%)	12 (60%)
33	Ability to assist various library users on the use of electronic resources	5	8	5	2	13 (65%)	7 (35%)
34	Ability to view change as part and parcel of library work	3	10	5	2	13 (65%)	7 (35%)
35	Ability to treat each library user as an individual	2	5	9	4	7 (35%)	13 (65%)
36	Ability to treat each library user with respect	5	8	4	3	13 (65%)	7 (35%)
37	Ability to be perceived as being courteous by all library users	1	4	11	4	5 (25%)	15 (75%)
38	Ability to be perceived by all library users as being dependable	2	5	10	3	7 (35%)	13 (65%)
39	Ability to view change as part and parcel of library work	5	10	3	2	15 (75%)	5 (25%)
40	Ability to solve problems faced by library users	2	4	9	5	6 (30%)	14 (70%)
41	Ability to be innovative	1	4	9	6	5 (25%)	15 (75%)
42	Ability to be proactive	3	2	10	5	5 (25%)	15 (75%)
43	Ability to solve reference problems faced by library users.	2	5	9	4	7 (35%)	13 (65%)
44	Ability to work effectively with persons with disabilities	1	4	4	11	5 (25%)	15 (75%)
45	Ability to identify the needs of persons with disabilities		3	5	12	3 (15%)	17 (85%)
46	Ability to address the library information needs of persons with disabilities	2	5	11	2	7 (35%)	13 (65%)
47	Ability to effectively use various social media to address the needs of various library users	3	4	11	2	7 (35%)	13 (65%)
	Total					9 (45%)	11 (55%)

VHA = Very High Ability, HA = High Ability, LA = Low Ability, VLA = Very Low Ability.

Table 2. Skills of library personnel in the circulation section of the four public universities examined.

S/N	SKILL ON CIRCULATION	Stretched responses				Collapsed responses	
		VHA	HA	LA	VLA	SA	IA
1	Ability to use various information technologies to provide services to library users		3	11	5	3 (16%)	16 (84%)
2	Ability to use different communication technologies	1	2	10	6	3 (16%)	16 (84%)
3	Ability to use various computer hardware in the library		4	12	3	4 (21%)	15 (79%)
4	Ability to use various computer software packages	2	5	9	3	7 (37%)	12 (63%)
5	Ability to use various electronic resources to satisfy the needs of library users		4	13	2	4 (21%)	15 (79%)
6	Ability to diagnose the needs of various library users	3	9	4	3	12 (63%)	7 (37%)
7	Ability to use online library information resources	2	5	8		7 (37%)	12 (63%)
8	Ability to carry out computer programming	1	5	3	10	6 (32%)	13 (68%)

Continued

9	Ability to design effective PowerPoint presentation	2	3	12	2	5 (26%)	14 (74%)
10	Ability to identify and respond to problems faced by library users	5	10	3	1	15 (79%)	4 (21%)
11	Ability to work effectively with persons with disabilities		4	2	13	4 (21%)	15 (79%)
12	Ability to use E-Readers		6	3	10	6 (32%)	13 (68%)
13	Ability to use E-Books	1	3	11	4	4 (21%)	15 (79%)
14	Ability to respond to the various electronic resource needs of various library users	4	10	3	2	14 (74%)	5 (26%)
15	Ability to use various electronic resources	6	9	3	1	15 (79%)	4 (21%)
16	Effectively search for information required by different library users	4	9	2	4	13 (68%)	6 (32%)
17	Conduct telephone interviews	4	12	3		16 (84%)	3 (16%)
18	Conduct face-to-face interviews	5	8	5	1	13 (68%)	6 (32%)
19	Conduct online interviews	1	4	9	5	5 (26%)	14 (74%)
20	Work effectively with little supervision	1	3	12	3	4 (21%)	15 (79%)
21	Carry out or perform assigned tasks in a timely manner		5	11	3	5 (26%)	14 (74%)
22	Carryout research to improve circulation services	4	9	5	1	13 (68%)	6 (32%)
23	Train other library personnel		6	8	5	6 (32%)	13 (68%)
24	Effectively supervise other staff	5	10	3	1	15 (79%)	4 (21%)
25	Do different things at the same time (multi-tasking)		4	13	2	4 (21%)	15 (79%)
26	Ability to satisfy the needs of various library users	1	5	11	2	6 (32%)	13 (68%)
27	Source for E-Books needed by library users		4	11	4	4 (21%)	15 (79%)
28	Ability to communicate effectively in writing	5	11	3		16 (84%)	3 (16%)
29	Ability to express yourself effectively orally	6	9	3	1	15 (79%)	4 (21%)
30	Ability to communicate effectively using various online resources/tools	2	4	10	3	6 (32%)	13 (68%)
31	Ability to motivate library users to be more regular users of the library	5	8	5	1	13 (68%)	6 (32%)
32	Ability to provide needed guidance to various library users to locate information they need	4	10	4	1	14 (74%)	5 (26%)
33	Ability to assist various library users on the use of electronic resources	6	10	3		16 (84%)	3 (16%)
34	Ability to provide library education to users	5	9	2	3	14 (74%)	5 (26%)
35	Ability to treat each library user as an individual	6	12	2		17 (90%)	2 (10%)
36	Ability to treat each library user with respect	3	12	4	1	15 (79%)	4 (21%)
37	Ability to be perceived as being courteous by all library users		2	12	5	2 (10%)	17 (90%)
38	Ability to be perceived by all library users as being dependable	1	12	4	2	13 (68%)	6 (32%)
39	Ability to view change as part and parcel of library work	3	11	5		14 (74%)	5 (26%)
40	Ability to solve problems faced by library users	1	5	10	3	6 (32%)	13 (68%)
41	Ability to be innovative	1	3	12	3	4 (21%)	15 (79%)
42	Ability to be proactive	1	4	9	5	5 (26%)	14 (74%)
	Total					9 (47%)	10 (53%)

VHA = Very High Ability, HA = High Ability, LA = Low Ability, VLA = Very Low Ability.

Table 3. Skills on preservation section in the library.

S/N	SKILL ON PRESERVATION	Stretched responses				Collapsed responses	
		VHA	HA	LA	VLA	SA	IA
1	Ability to scan documents using a scanning machine	10	4	2		14 (70%)	6 (30%)
2	Ability to transfer data from one device to another (uploading)	1	5	11	3	6 (30%)	14 (70%)
3	Ability to preserve digital information resources	4	2	9	5	6 (30%)	14 (70%)
4	Metadata	1	3	14	2	4 (20%)	16 (80%)
5	Ability to effectively manage the budget	3	4	11	2	7 (35%)	13 (65%)
6	Ability to digitise information resources	4	1	12	3	5 (25%)	15 (75%)
7	Ability to use various computer software packages	1	4	9	6	5 (25%)	15 (75%)
8	Manage digital materials	3	5	8	4	8 (40%)	12 (60%)
9	Ability to use different communication technologies	4	5	8	3	9 (45%)	11 (55%)
10	Migration (ability to transform digital resources from a software/ hardware generation to the next)	1	5	9	5	6 (30%)	14 (70%)
11	Ability to carry out emulation	5	3	8	4	8 (40%)	12 (60%)
12	Ability to do bit preservation	1	4	12	3	5 (25%)	15 (75%)
13	Ability to photocopy using a photocopying printer	10	5	3	2	15 (75%)	5 (25%)
14	Ability to carry out digital archiving	4	11	5		15 (75%)	5 (25%)
15	Ability to use various electronic resources	2	5	10	3	7 (35%)	13 (65%)
16	Ability to motivate library users to be more regular users of the library	5	9	4	2	14 (70%)	6 (30%)
17	Ability to guide various library users to locate information	3	2	11	4	5 (25%)	15 (75%)
18	Ability to assist various library users on the use of electronic resources	4	12	3	1	16 (80%)	4 (20%)
19	Ability to provide library education to users	2	13	5		15 (75%)	5 (25%)
20	Ability to treat each library user as an individual	3	9	6	2	12 (60%)	8 (40%)
21	Ability to treat each library user with respect	1	10	7	2	11 (55%)	9 (45%)
22	Ability to be perceived as being courteous by all library users	3	9	5	3	12 (60%)	8 (40%)
23	Ability to be perceived by all library users as being dependable	4	3	11	2	7 (35%)	13 (65%)
24	Ability to view change as part and parcel of library work	4	8	5	3	12 (60%)	8 (40%)
25	Ability to solve problems faced by library users	1	4	9	6	5 (25%)	15 (75%)
26	Ability to be innovative	2	4	12	2	6 (30%)	14 (70%)
	Total					9 (45%)	11 (55%)

VHA = Very High Ability, HA = High Ability, LA = Low Ability, VLA = Very Low Ability.

to library users while the majority 10 (56%) do not possess the requisite skills for effective and efficient services.

The data for the cataloguing and classification sections of the four libraries are summarized in Table 5.

According to the above table, 9 (45%) of library personnel in the cataloguing and classification section of the libraries under study possess requisite skills to offer services to users in the digital context, while 11 (55%) do not possess the required skills.

Table 4. Skills on collection development section in the library.

S/N	SKILL ON COLLECTION AND DEVELOPMENT	Stretched responses				Collapsed responses	
		VHA	HA	LA	VLA	SA	IA
1	Ability to create digital contents (data, which is created by electronic devices like computers, communication devices)		5	10	3	5 (28%)	13 (72%)
2	Ability to manage digital information	1	3	11	3	4 (22%)	14 (78%)
3	Ability to use software package that manages and integrates library functions and services	2	3	9	4	5 (28%)	13 (72%)
4	Ability to use web technology (information space through which documents can be accessed through the internet)	3	4	8	3	7 (39%)	11 (61%)
5	Ability to use various electronic information resources (information resources provided through computer network and other electronic devices)	3	9	4	2	12 (67%)	6 (33%)
6	Ability to use digital library software	2	3	11	2	5 (28%)	13 (72%)
7	Ability to use various information technologies in the provision of services to library users	3	8	5	2	11 (61%)	7 (39%)
8	Ability to use library databases	1	9	5	3	10 (55%)	8 (45%)
9	Ability to diagnose the needs of various library users	2	11	4	1	13 (72%)	5 (28%)
10	Ability to select information resources in line with current trends in selection	1	5	9	3	6 (33%)	12 (67%)
11	Can order library and information resources in line with current trends in ordering process	2	3	9	4	5 (28%)	13 (72%)
12	Ability to understand current trends in vendor service	1	5	10	2	6 (33%)	12 (67%)
13	Ability to carry out collection development procedures	3	8	5	2	11 (61%)	7 (39%)
14	Ability to build digital collections effectively (online databases of digital objects)	1	3	9	5	4 (22%)	14 (78%)
15	Ability to use various electronic information resources	4	7	5	2	11 (61%)	7 (39%)
16	Ability to interact effectively with different authors	2	3	9	4	5 (28%)	13 (72%)
17	Ability to use various computer hardware in the library	1	4	10	3	5 (28%)	13 (72%)
18	Ability to use various computer software packages	2	5	9	1	7 (39%)	11 (61%)
19	Ability to follow current trends in acquiring electronic information resources	1	3	9	5	4 (22%)	14 (78%)
20	Ability to identify and respond to the objectives and mission of the library	4	7	4	3	11 (61%)	7 (39%)
21	Ability to effectively carry out financial activities (budgeting, accounting and purchasing protocols)	3	8	5	2	11 (61%)	7 (39%)
22	Ability to carry out marketing strategies (negotiation and maintenance of strong vendor relationships.	1	4	10	3	5 (28%)	13 (72%)
23	Ability to identify bibliographic sources of information (citation that tells one where information used was found)	1	5	9	2	6 (33%)	12 (67%)
24	Ability to carry out computer programming	2	4	10	2	6 (33%)	12 (67%)
25	Do different things at the same time (multi-tasking)	3	8	5	2	11 (61%)	7 (39%)

Continued

26	Ability to express yourself effectively orally	2	10	5	1	12 (67%)	6 (33%)
27	Ability to communicate effectively in writing	3	9	4	2	12 (67%)	6 (33%)
28	Ability to communicate effectively using various online resources tools	2	3	9	4	5 (28%)	13 (72%)
29	Ability to work effectively with persons with disabilities in the acquisition of relevant information resources		5	11	2	5 (28%)	13 (72%)
30	Ability to treat each library user as an individual	3	8	3	4	11 (61%)	7 (39%)
31	Ability to provide library education to users	2	8	6	2	10 (55%)	8 (45%)
32	Ability to treat each library user as an individual	4	7	5	2	11 (61)5	7 (30%)
33	Ability to treat each library user with respect	4	7	5	2	11 (61%)	7 (39%)
34	Ability to be perceived as being courteous by all library users	3	11	3	1	14 (78%)	4 (22%)
35	Ability to be perceived by all library users as being dependable	1	4	10	3	5 (28%)	13 (72%)
36	Ability to view change as part and parcel of library work	2	8	5	3	10 (55%)	8 (45%)
37	Ability to solve problems faced by library users	1	12	5		13 (72%)	5 (28%)
38	Ability to be innovative	2	3	9	4	5 (28%)	13 (72%)
39	Ability to be proactive	1	5	8	4	6 (33%)	12 (67%)
	Total					8 (44%)	10 (56%)

VHA = Very High Ability, HA = High Ability, LA = Low Ability, VLA = Very Low Ability.

Table 5. Skills of library personnel in the cataloguing and classification section.

SKILL ON CATALOGUING AND CLASSIFICATION	Stretched responses				Collapsed responses	
	VHA	HA	LA	VLA	SA	IA
Ability to use various information technologies to provide services to library users	2	4	10	4	6 (30%)	14 (70%)
Ability to use different communication technologies	5	9	4	2	14 (70%)	6 (30%)
Ability to use various computer software packages	1	5	10	4	6 (30%)	14 (70%)
Ability to use various computer hardware in the library	3	4	10	3	7 (35%)	13 (65%)
Ability to use various electronic resources to satisfy the needs of library users	4	9	5	2	13 (65%)	7 (35%)
Ability to use web application (network, HTML, XML, WWW)	1	4	5	10	5 (25%)	15 (75%)
Ability to use cataloguing tools and rules (able to describe a document)	2	11	5	2	13 (65%)	7 (35%)
Ability to use classification tools and rules (able to assign class numbers to a document)	3	10	3	5	13 (65%)	7 (35%)
Ability to use Anglo-American Cataloguing Rule (AACR)	2	4	3	11	6 (30%)	14 (70%)
Ability to use Dewey Decimal Classification (DDC) scheme	1	12	3	4	13 (65%)	7 (35%)
Ability to use Library of Congress Classification (LCC) Scheme	2	9	5	4	11 (55%)	9 (45%)
Ability to use Machine Readable Catalogue (MARC)		5	5	10	5 (25%)	15 (75%)
Ability to use Library of Congress Subject Headings (LCSH)	2	3	6	9	5 (25%)	15 (75%)
Ability to do subject analysis (subject of the work or tracings, identification of catalogue entry under specific subject headings)	4	10	4	2	14 (70%)	6 (30%)
Ability to do online copy cataloguing using electronic tools (able to use an electronic bibliographic database describing an information resource	1	3	4	12	4 (20%)	16 (80%)

Continued

Ability to plan cataloguing activities	3	11	3	4	14 (70%)	6 (30%)
Ability to organise cataloguing activities	3	10	5	2	13 (65%)	7 (35%)
Ability to supervise cataloguing activities	2	10	3	5	12 (60%)	8 (40%)
Ability to interpret library policies and procedures (framework for the delivery of library services)	2	3	11	4	5 (25%)	15 (75%)
Ability to train other staff	1	4	10	5	5 (25%)	15 (75%)
Ability to effectively supervise other staff	4	9	5	2	13 (65%)	7 (35%)
Able to automate library services (use of computer and networking technologies)	1	3	5	11	4 (20%)	16 (80%)
Ability to use library database (an electronic collection of information organised for use)	1	4	12	3	5 (25%)	15 (75%)
Ability to carry out computer programming		6	4	10	6 (30%)	14 (70%)
Can use the integrated Library systems (ILS) (Library Management System Software package that manages and integrates library functions and services)	3	4	9	4	7 (35%)	13 (65%)
Ability to use D-Space		4	5	11	4 (20%)	16 (80%)
Ability to use E-Prints	2	4	5	9	6 (30%)	14 (70%)
Ability to use Greenstone	2	4	6	8	6 (30%)	14 (70%)
Ability to use KOHA	1	10	6	3	11 (55%)	9 (45%)
Ability to use PMB	3	11	5	1	14 (70%)	6 (30%)
Ability to identify and respond to problems faced by library users	4	10	5	1	14 (70%)	6 (30%)
Ability to communicate effectively in writing	2	11	5	2	13 (65%)	7 (35%)
Ability to express yourself effectively orally	3	10	5	2	13 (65%)	7 (35%)
Ability to communicate effectively using various online resources/tools	1	5	10	4	6 (30%)	14 (70%)
Able to do advocacy (can market the objectives and mission of the library)	2	3	11	4	5 (25%)	15 (75%)
Ability to do different things at the same time (multi-tasking)	5	2	10	3	7 (35%)	13 (65%)
Ability to understand and use foreign languages (languages other than the indigenous language	3	2	3	12	5 (25%)	15 (75%)
Can plan and manage library projects	1	4	3	12	5 (25%)	15 (75%)
Ability to organise and manage information	3	5	9	3	8 (40%)	12 (60%)
Ability to carry out digitalization (conversion of text, sound, and pictures into digital formats	2	1	10	7	3 (15%)	17 (85%)
Networking (ability to use search engines in online searches)	3	5	10	2	8 (40%)	12 (60%)
Trends (ability to view change as part and parcel of library work)	3	10	5	2	13 (65%)	7 (35%)
Ability to provide library education to users	4	12	3	1	16 (80%)	4 (20%)
Ability to treat each library user as an individual	2	9	4	5	11 (55%)	9 (45%)
Ability to treat each library user with respect	3	11	4	2	15 (75%)	5 (25%)
Ability to be perceived as being courteous by all library users	3	11	5	1	14 (70%)	6 (30%)
Ability to be perceived by all library users as being dependable	2	11	7		13 (65%)	7 (35%)
Ability to be innovative	3	4	8	5	7 (35%)	13 (65%)
Ability to be proactive	2	3	10	3	5 (25%)	15 (75%)
Total					9 (45%)	11 (55%)

VHA = Very High Ability, HA = High Ability, LA = Low Ability, VLA = Very Low Ability.

To examine strategies that can be used to enhance readiness (skills) of library personnel.

The responses for the interview guide are summarized in Table 6.

The Chief librarian outlined a major strategy as a suggestion to enhance the skills of library personnel. This was training through seminars and workshops, and going to schools that offer library and information studies, conferences, on-the-job training, exchange visits to other libraries.

Table 6. Strategies that can be used to enhance readiness (skills) of library personnel. Binding and reprography and Acquisition services.

S/N	Interview Questions	Category	Themes	Code description	Quotation
1a	Is your library structured according to various departments and services?	Yes No	Library Structure	LS	library departments and services
1b	If yes, which are the divisions and services	Yes	Divisions and Services	DS	-Media Division -serials and copyright services -Readers/reference service -Faculty/school library and Media System services Administration, Archives/Museum Division -Archives, Museum and Administration services Acquisition/Technical services Division -Binding and reprography and Acquisition services -Cataloguing/classification service Printing Press and Publishing Division -Editing service and Production Service
2	How do your Personnel acquire skills that can enable them to be efficient and effective?		Skills acquisition	SA	-Seminars and workshops -On the job training -Going out on mission to see what colleagues in other universities are doing and implement such Zoom workshops Personal development
3	Do your personnel have relevant skills that do enable them to provide adequate services to users and your library	No	Inadequate skills	IS	Very limited skills
4	As a chief librarian suggest ways that the skills of library personnel can be enhanced		Improvement suggestions	IS	Organization of seminars, workshops involving other universities, coordinated, and sponsored by the Ministry of Higher Education, conferences, on-the-job training, library schools, exchange visits to other libraries.

4.1.2. Discussions

To investigate whether library personnel possess relevant skills to enable them to provide quality services to library users was the main objective of this study.

From the data analysis of skills possessed by personnel of the reference section of the State university libraries under study, the findings reveal that most of them have insufficient skills to render effective and efficient services to library users. They are unable to use various communication technologies in the provision of services to users, most are unable to use computer hardware and software, online information resources, unable to work with persons with disabilities. Having insufficient abilities to use the computer and online information resources in the digital context, is already a great problem. Library users will not be able to use the library from a distance, which is the characteristic of the digital context.

Gaby (2012) in an online survey of Australian academic reference librarians found out that reference librarians need the following skills: online searching, virtual reference service, social media, and web design. He recommended library education to equip LIS professionals to function adequately. This study opined that library education be offered to reference personnel in State university libraries in Cameroon. This author saw a need for some skills like online searches, electronic resources, reference interviews, and evaluation of sources of authority and many more. Larsen (2007) study is related to this study whose objective was to investigate whether reference library personnel possess adequate skills to satisfy users. Kogamuramath and Angadi carried out a study on skills required of reference personnel in Goa university library. Their findings revealed other skills for reference personnel like communication, listening and networking. Reference library personnel in State universities in Cameroon, in the digital context, need to have relevant skills and training can be the only solution for them to offer adequate services to library users.

The library personnel in the circulation section of the library work directly with library users. With modern technology, the manual services have been replaced with the use of computers. The findings of this study revealed that most library personnel in this section have insufficient ability in rendering effective and efficient services to library users. The IFLA Digital Reference Guidelines (2014) identified skills needed in this circulation section as follows; interview (telephone, online, face-to-face) online searching skills, multi-tasking. This study investigated whether library personnel in the universities under study had these skills and others but found that they have insufficient skills.

Most personnel in the cataloguing and classification section of the library, according to the findings of this study, have insufficient skills to render effective and efficient services to users. Inyang and Agwunobi (2016) carried out a study in the University of Calabar, with one of the objectives being to explore types of ICT skills needed by cataloguers. Their findings revealed that cataloguers are wanting in many skills such as copy cataloguing, cataloguing analysis, use of web 2.0, metadata, electronic data transfer. Their finding is the same as in the present

study which revealed that cataloguers in State university libraries in Cameroon need more skills and should therefore be trained. Akidi and Okezie (2018) also carried out a study in the National Library of Nigeria with the main aim of investigating the extent of skills possessed. Their findings revealed low effectiveness of the use of ICT in cataloguing especially in online cataloguing and use of library software. This goes to justify the fact that cataloguers in the ICT era should be trained.

Collection development/acquisition personnel need some skill requirements in order to function adequately in this 21st century. Modern technology has affected all sections of the library. The findings from the study reveal that most library personnel in this section have insufficient abilities to function effectively and efficiently in satisfying the needs of library users. Oyedokun, Oyewumi, Akandi and Laaro (2018) carried out a study assessing the ICT competences of library personnel in selected universities in Kwara State in Nigeria. Their findings revealed a high level of ICT competency by staff including the collection development/acquisition section. They identified skills for the collection development personnel like effective communication, collaboration with branch libraries, effective work with distributors and vendors, interpretation of data when analysing users' needs, computer (email, internet). This study is in line with Oyedokun, Oyewumi, Akandi and Laaro as they also investigated or assessed relevant skills of the personnel in this section. Both studies recommended staff development and training. From the literature and the findings of this research, it can be justified that library personnel in the collection development/acquisition section of State Universities in Cameroon are wanting in skills to offer effective services to library users.

When library and information resources are adequately preserved and conserved, library users will have easy access to all information. The personnel of the preservation and conservation sections of the libraries under study were investigated if they possessed requisite skills on conserving and preserving library information resources. The findings revealed insufficient skills in crucial activities such as transfer of data from one device to another, preservation of digital information resources, metadata, digitization of information resources, migration, emulation, bit preservation and others.

Osunride and Adentula also carried out a similar study examining the preservation and conservation of library and information resources in university libraries in South-West Nigeria. Mubofu, Mambo and Samzugi study on academic libraries and information preservation strategies identified skills that library personnel need for effective preservation and conservation operations. The findings from the above authors revealed necessary skills as metadata, migration, emulation, Bit preservation, and conceptual (maintenance). The studies by the above authors are in line with the present study investigating whether library personnel possess requisite skills to satisfy their users. It can be said that library personnel in the preservation/conservation sections of State University libraries in Cameroon are trained so as to function effectively and efficiently in the mod-

ern technology era.

4.2. Strategies That Can Be Used to Enhance the Readiness of Library Personnel

From the responses on what strategies can be used in enhancing the readiness of library personnel in the context of digitalisation, the sole strategy suggested was training through conferences, seminars, workshops, on-the-job training, attending library schools, job exchange. Larsen (2005) and Oyedokun, Oyewumi, Akandi, and Laaro (2018) came out with the same findings in their various studies. This shows that with the insufficient skills possessed by library personnel in the universities understudy, training is very necessary.

5. Conclusion

The era of ICTs in State Universities in Cameroon has come to stay. The library personnel have the obligation to uphold the dignity and nobility of librarianship by utilising all aspects of ICTs in executing their functions. They can only render effective and efficient services to library users if they embrace the ever-changing technology having in mind that they are serving a community of users who are born and brought up by ICT itself. The library personnel should therefore possess the necessary skills and disclose the identity of librarianship through the provision of effective and efficient services to the various library users. To enhance the skills of library personnel in state universities in Cameroon, there is a dire need for training through seminars, workshops, conferences, on-the-job training and continuing education in library schools.

Recommendations

- It is therefore suggested that staff in the various sections take on training programmes in rotation. Their training needs have to be identified and the annual pedagogic seminars in public universities in Cameroon should add this aspect to its schedules.
- The LIS personnel in state universities in Cameroon should always upgrade their skills so as to serve library users effectively and efficiently. They should upgrade their skills in ICT and also understand changes taking place in other sectors due to globalization.
- State universities in Cameroon should always evaluate and strengthen their libraries' ICT structure as new tools and technologies motivate the younger generation to use the libraries adequately. Libraries could offer services like video conferencing, social networking, blogging, podcasting and others so that users from different geographical locations could use library services.
- Training of library personnel in state universities should be taken as a priority training and retooling library personnel should be seriously considered. The success or failure of a library service depends on the caliber of personnel (Larsen, 2007).

- Library professional organizations in Cameroon like COCUREL (Consortium for Cameroon Universities and Research Libraries) and ABADCAM should organize regular seminars and workshops to improve ICT knowledge, skills and professional dispositions/attitudes of library personnel (Oyedokun, Oyewumi, Akanbi, & Laaro, 2018).
- State universities in Cameroon should offer in-house training programs for library personnel. There should also be opportunities for practice-based training and short courses.

Acknowledgements

Conflicts of Interest

The authors declare no conflict of interest regarding the publication of this paper.

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