

ORIGINAL ARTICLE

Effect of Jimma University Libraries System Usage and Contributions to Quality Education in Jimma University, Ethiopia

Lawrence Abraham Gojeh¹, Worku Jimma²

Abstract

This study was initiated with the main aim of finding out the effect of Jimma University Libraries System usage and contributions to quality education. It used a cross-sectional research method with both qualitative and quantitative data collection approaches. The result of this study showed that the available library materials, both hard and soft copies were underutilized by the instructors and students. The services provided by the library system were found not meeting the needs of majority of the respondents, being a factor that impact negatively on quality education in Jimma University. Thus, the study strongly recommends the use of library to its full potential in order to deliver quality education. It also, strongly recommends that the library system improves its services, upgrading the library system's facilities and transform the library to the 21st century library and provides all services to its patrons as it is the era where the demand for information is so high.

Key words: Quality education, Jimma University library system, library resource, library service, library facility, library staff

INTRODUCTION

Ethiopia is among the middle income countries that expects by 2024 to expand its educational provisions to achieve UNESCO's standard of teacher-student ratio of 1:20 along with improving and ensuring the quality; and backed by the country's extraordinary efforts to have expanded educational provisions at all levels (Jebessa, 2012).

¹*Department of Information Science, College of Natural Science, Jimma University*

²*Department of Information Science, College of Natural Science, Jimma University*

The author clearly stated that if quality is not there, the gain with all the efforts made is solely quantitative at the expense of quality education. It is clear that the expansion of tertiary level education plays a vital role in economic and social developments.

In Ethiopia, the numbers of higher education institutions, both governmental and private, are increasing tremendously. However, there are numbers of problems and issues at stake regarding the teaching-learning and research process. Lack of facilities such as computer laboratories, experimental laboratories and lack of libraries with up-to-date resources are the main ones. For example computer science laboratories are not up to the standard and equipped with latest machines and software. It is common to observe old and non-functional or damaged personal computers occupying the room. According to the Ethiopian report magazine, the number of devoted and experienced lecturers who are determined to improve the situation is on the decline; as a result, the students graduate before they acquire the expected skill and knowledge (Ethiopian reporter, 2012). The author also listed other shortcomings of higher institutions, such as lack of sport centers for the students, lack of information networks where by the learning institutions are sharing experiences and getting feedback from the alumni, traditional way of administration system than practicing stakeholders/customers centered way.

Nega (2012), observed that the recently established universities in Ethiopia (such as

Jigjiga University); as lacking the very basic facilities and student support services. The author cited one of his interviewees on the misuse of the budget allocated for universities as: “It is common to see many Land Cruisers [expensive SUVs—the author] in university campuses, while students are running shortage of facilities and support services and thus it is difficult to curve this situation unless there comes a miracle”. Thus, it is unwise to expect quality when basic facilities and services are absent. Report on quality education in Ethiopian university, Nega went further to stress that Ethiopian universities, particularly student learning, is threatened by problems abounding quality of educational inputs, processes and outputs in the universities considered during their research work that include, Addis Ababa University and Mekelle University. The author also emphasized that problems abounded to quality of education in universities are attributed to the lack of a well organized and functioning internal quality assurance system with appropriate policies, structures, methods and instruments. But Drennan (2001), concern was on professional development of lecturers and other learning support staff in the newly established universities; that consideration was being given as to how the infrastructure of universities could better meet the needs of students, because the new universities are sending the teaching staff for further studies within very short time. This shows that a lot is yet to be done to improve quality of education in Ethiopian Higher Institutions in general and particularly in the new universities.

The Jimma University Library System (JULS) was established in 1999 and commissioned to promote instructions, research and public service goals of the entire university community through the expert provision of information, resources and services. In its attempt to achieve the

mission and objectives of the University, the JULS sets out deliberately to function as follows: develop and manage collections; identify and provide learning resources to teachers, researchers, and students; manage available resources efficiently, effectively and economically; establish an environment conducive to study which caters for multiple learning styles; liaise with users to establish their needs and to cooperate with management and other university services to meet these needs; train users and staffs to develop their information exploitation skills for efficient and effective utilization of information resources; carry out appropriate development work in library and information professionalism with the aim of improving libraries' multiple purpose services and maintain effective links with other systems at domestic as well as international level (Gojeh et al., 2012).

However, it is the intention of this study therefore, to find out the effect of Jimma University Libraries System usage and contributions to quality education in Jimma University, Ethiopia. To achieve the objectives of the study, the following three research questions were addressed:

- 1 What was the usage of teaching, learning and research materials available in JULS?
- 2 Does Jimma University Libraries System usage by academic staff and students have effect on quality education and how?
- 3 What contribution do Jimma University Libraries System resources, services, facilities and library staff make to quality education in JU?

METHODOLOGY

The research method employed for the study was cross-sectional survey; because

of the numerous independent variables that cut across the academic staff that included librarians and information specialists and the undergraduate and postgraduate students of Jimma University; as well as the dependent variables that included the secondary data on services in terms of e-resources, books and other resources on loan, facilities and the e-resources downloaded.

Population for the study

This study was conducted in Jimma University and targeted on academic staff, regular undergraduate and postgraduate students of the academic year of 2013/2014 that numbered to about 25,849 of the target audience. The branch libraries were: Agriculture and Veterinary Medicine Library, Disability Library, Education Library, Business and Economics library, Female Library, Health Science Library, Law Library, Ophthalmology Library, Postgraduate Library, Social Science Library, Sugar Library and Technology Library. JULS was going to be the venue for secondary data collection.

Sample Size and Sampling Technique

The sample size for the study was 5% of the total population of 25849 (i.e., 5% of 25849 = 1292 of the study population) of the target population, namely the academic staff and students of all colleges and institutes of JU. A mixed sampling technique that includes purposive and simple random sampling was used for the study for the convenience of data collection and to include reasonable participants.

First, all colleges and institutes found in JU were selected and categorized according to their departments and libraries established to serve them. Their populations were also enumerated to identify the potential participants as reflected in Table 1 below:

Table 1: The sample size of 5 % from the target population

Institutes /Colleges	College	BECO	CSSL	CNS	JUCAVM	CPHM	JIT	IPED	Total
No. of Instructors	Pop. 5%	256 25	1333 133	416 41	91 9	170 17	160 16	20 2	2446 122
No. of post Graduate Students	Pop. 5%	817 81	1388 139	674 67	570 57	492 49	495 50	33 3	4469 223
No. of Under graduate Students	Pop. 5%	1555 155	2120 212	1878 188	1535 153	3557 356	8195 820	94 9	18934 947
Total allocated Sample Size									1,292

Data Collection

Both qualitative and quantitative data were collected for the study. Questionnaire and documentary sources were data collection instruments used for primary and secondary data collections from the seven branch libraries of the JULS and participants.

Data quality control measure

The users' questionnaire was prepared based on the basic research questions and objectives. Each item included in the questionnaire was critically and exhaustively examined by the researchers and experts drawn from the department of information science and the College of Natural Sciences' Research Review and Ethical Board for validity, reliability and appropriateness. The instrument was also examined for both their necessity and sufficiency.

As for the questionnaire, the items were modified in line with the experts' comments, observations and recommendations for face, construct and content validity before the instruments were administered to respondents for a pilot test, by involving (60) respondents

(i.e. 20 academic staff, 20 postgraduate and 20 undergraduate students).

Data processing procedures and analysis

The collected questionnaires were edited, coded and entered into SPSS Version 20. Different statistical analysis techniques (descriptive and inferential) were employed to answer the research questions. Such statistics as frequency, percentages as well as one-way ANOVA were used. Tables and figures were used to summarize the quantitative data collected.

RESULTS AND DISCUSSIONS**Response rate**

From the 1,292(100%) sample population of respondents, the response rate was 1,267(98.1%). Among them, 1064(84%) were males and 203(16%) were females. Majority of the respondents 832(65.7%) were undergraduate students, followed by postgraduate students 223(17.6%) and academic staffs 212(16.7%). However, figure 1 shows the response rate from the Colleges/Institutes; with majority from Institute of Technology 428(33.8%) and the least from Institute of Education and Professional Development Studies 3 (0.2%).

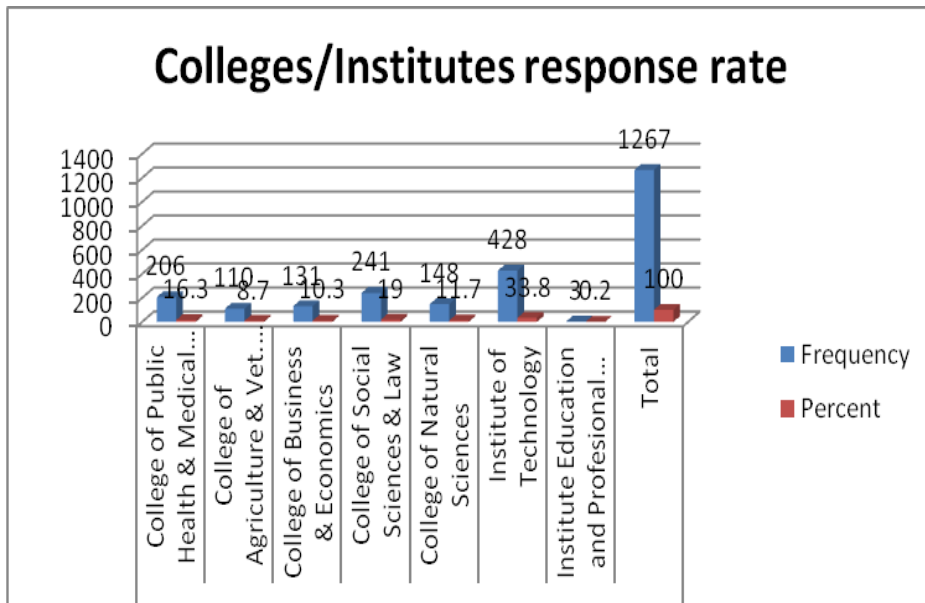


Figure 1: Respondents rate by Colleges/Institutes

The analysis revealed a good representation of the three categories of the study population (i.e. academic staff, postgraduate and undergraduate students; Colleges/Institutes and Departments), which could equally warrant balanced opinion from the respondents on the effect of library resources' usage on quality education that has to do with teaching, learning and research in Juimma University, Ethiopia.

Library materials usage and relevance

In this study, respondents were requested to indicate how often JULS was used and for what purpose. Since library materials provision in a library system are dependent on the information needs of the users or patrons and the trend of library system patronage (Tenopic, 2003). Figure 2 below, shows the frequency and percentage of respondents' use of the JULS by academic staff, postgraduate and the undergraduate students. It also shows the category of usage.

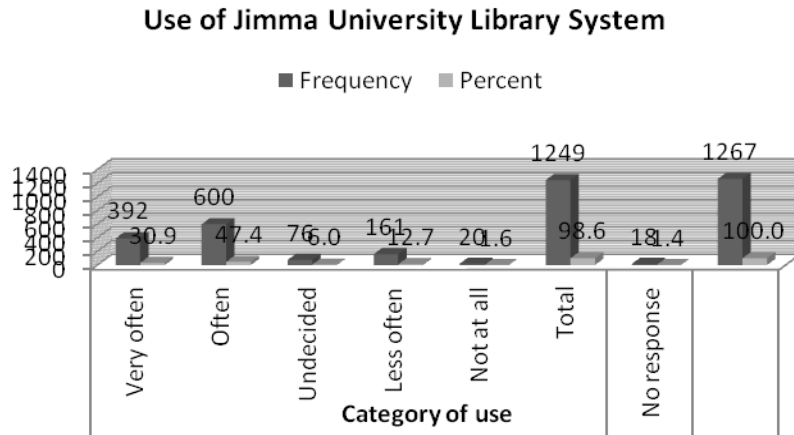


Figure 2: Use of Jimma University Library System

Of the 1267(100%) respondents to the questionnaire item, 600(47.4%) responded that they often use the JULS, while the least 20(1.6%) showed that they do not use at all and 18(1.4%) did not respond to the item of the questionnaire. This implies that a good number, 600(47.4%) of the respondents often used the JULS. The purpose of using the JULS is addressed in table 2 below that suggests some of the reasons for which users (academic staff, postgraduate and undergraduate students) use JULS.

Based on the attitudinal scores of respondents on the purpose for which JULS was used; library materials were said to have been used and on what purpose? The

items of library materials usage were measured on a five point scale, using an equal interval of mean 0.10. Thus, the guideline below was used for interpreting the attitude scores of respondents on purpose for which library materials were used in JULS. A mean score was considered strongly disagreed (SD), if it falls within the range of 0.10 - 0.20; a mean score within the range 0.20 - 0.30 was taken as Disagreed (DA); a mean within the range 0.30 - 0.40 was considered undecided (UD), while a mean score within the range 0.40 - 0.50 was taken as Agreed (A); and a mean score within the range 0.50 - 0.60 and above; was considered strongly Agreed (SA) for positive items.

Table 2: Responses according to purpose of library materials' used in JULS

Purpose of materials' used in JULS	% respondents	Mean	Std. Deviation	Decision
For teaching	282(14.4%)	.23	.420	DA
For learning	834(42.8%)	.67	.469	SA
For research	226(11.5%)	.18	.386	SD
For personal development	187(9.5%)	.15	.359	SD
To provide assignments to students	198(10.1%)	.16	.367	SD
To do assignment from class lectures	222(11.3%)	.18	.384	SD
Total	1949(100%)			

However, before we analyzed table 2 above, it is pertinent to note the differences that exist among library materials for “teaching” and those for “learning” as referred in this project. Researchers refer to “materials for teaching” as library materials specifically acquired to help academic staff to teach students of their course outlines of their specific subjects. Such materials could be books, periodicals, pdfs, power points and other e-resources of the subject areas (Lang, 2008). “Materials for learning” on the other hand, here referred to library materials that do not only help teachers but also students in their learning processes. These cannot be in the subject disciplines they happen to be teaching or pursuing their course/subject of learning in the institution but also other general learning materials that could enhance their favorable living standard. Such materials may not only be books, periodicals, pdfs, power points, e-resources but also reference materials, and others that could be regarded as general learning materials that may include fiction materials (Metha & Young, 1995).

Of the 1949(100%) respondents of the table 2 above and of the questionnaire item, 834(42.8%) strongly agreed that they use the JULS materials for learning purposes; with mean of 0.67 and standard deviation of 0.469. The respondents 282(14.4%) with mean of 0.23 and standard deviation of 0.420 disagreed on using the materials for teaching. However, respondents strongly disagreed for using JULS materials for research, personal development, providing assignments to students and doing assignments from class lectures respectively. These multiple responses were made by academic staff, postgraduate and undergraduate students, which implied that JULS was used mostly for learning purposes. But what relationship does use of JULS has on the purpose for which the library materials were used in the JULS? This question was answered by using a Bivariate Pearson Correlation Coefficient; with a two-tailed test of significance of 0.01 as shown in table 3 below.

Table 3: Relationship of JULS use and the purpose for the library materials use

Purpose of Library materials' used in JULS	Pearson Correlation	Use of Jimma University Library System
Materials for teaching	Pearson Correlation	-.075**
	Sig. (2-tailed)	.008
	N	1230
Materials for learning	Pearson Correlation	-.109**
	Sig. (2-tailed)	.000
	N	1232
Materials for research	Pearson Correlation	.015
	Sig. (2-tailed)	.602
	N	1234
Materials for personal development	Pearson Correlation	-.011
	Sig. (2-tailed)	.699
	N	1231
Materials to provide assignments to students	Pearson Correlation	.040
	Sig. (2-tailed)	.158
	N	1232
Materials to do assignment from class lectures	Pearson Correlation	-.039
	Sig. (2-tailed)	.174
	N	1232

***. Correlation is significant at the 0.01 level (2-tailed).*

From the above table 3, we can see that the relationship between purpose of library materials and use of JULS have a strong, negative and significant relationship between materials for teaching and use of JULS ($r(1230) = -.075, p = 0.008$); as well as having a strong, negative and significant relationship between materials for learning and use of JULS ($r(1232) = -.109, p = 0.000$) because the correlation for both cases were significant at the $p < 0.01$ level at 2-tailed. This could partially account for the academic environment where both academic staff and students are involved in academic activities such as teaching and learning respectively. Hence, it could be adduced that JULS usage has effect on quality education as the library materials were used for learning purposes by the respondents (i.e. academic staff, PG and UD) involved. This result supports the “service excellence campaign” of the 2004 Centre for University Learning, Teaching and Development (CLTD), aimed at improving the service offered to internal and external clients of all the University’s services. These clients include members of staff, using services offered by support departments to meet the goal one of excellence of the University that include: teaching, learning and research practice to ensure that student success and adaptability in undergraduate and postgraduate education are of the highest quality, to grow the number of world-class research areas at University of the Witwatersrand, Johannesburg (Wits), to produce independent thinkers who will contribute, in a broad sense, to the intellectual status of the country, and to promote and defend the principles of academic freedom and tolerance.

Contributions of Jimma University Libraries System to quality education

The researchers wanted to know the contributions of JULS to quality education in Jimma University as responded to the

questionnaire items by the academic staff, postgraduate and undergraduate students.

The guideline below was used for interpreting the attitude scores of respondents on the contributions of JULS that were available in the Jimma University. In which case, a mean score was considered disagreed (DA), if it falls within the range of $<1.00 - 1.80$ and a mean score within the range $>1.80 - 2.60$ and above; was taken as Agreed (A) and considered as positive items. Analyses were carried out on items eight to eleven of the respondents’ questionnaire that indicated how agreed/good the contributions were provided by JULS for quality education of academic staff, postgraduate and undergraduate students (see appendix A, Table 1: Contributions of JULS to quality education). A One-way-ANOVA test was used to compare the respondents’ differences in responses to the items as well as a post Hoc test of significant difference was conducted to establish where the difference was from among the respondents respectively (see appendix B and C).

Respondents’ usage of contributions by JULS

The researchers were concerned with the respondents’ usage of contributions of JULS in terms of services, resources, facilities and staff for quality education in JU. Using the One-way ANOVA test of significant difference on the contributions, the researchers found the level of significant between and among the groups’ of respondents (i.e. academic staff, postgraduate and undergraduate students). One-way ANOVA test of significant difference showed that services, resources, facilities and staff were significant at 0.000 to ≤ 0.05 on the contributions that included services and types on: providing lending services; providing computer services; providing selective dissemination of

information; providing indexing services; providing disability students' services; providing current awareness services through TV on campus; providing community radio services in Amharic and Afan Oromo. On resources was: providing audio-visual materials. While on facilities were: providing enough tables, providing adequate air-conditioners/fans, providing enough seating capacity, providing conducive lighting in the library, providing cross ventilation in the library and providing communication systems such as telephones and provision of institutional repository. But under staffing, no contribution was significant (see appendix B, Table 2: One-way ANOVA tests of significant difference on the contributions of JUL).

However, tracing the difference to the groups of respondents (i.e. academic staff, postgraduate and undergraduate students), a Post Hoc Tests of multiple comparisons was applied using Tukey's honestly significant difference (HSD) on the contributions' availability for usage and types (see appendix C, Table 3: Post Hoc Tukey HSD tests for multiple comparison on contributions of JULS). These showed that the mean difference were significant on some items of the contributions at the 0.000 to ≤ 0.05 level of significant; among or between the groups of respondents (i.e. academic staff, postgraduate and undergraduate students). The significant differences were apparent between undergraduate students and academic staff at 0.008 on providing computer services; between graduate students and academic staff at 0.015 and between graduate and undergraduate students on providing selective dissemination of information; providing indexing services showed some significant difference between graduate and undergraduate at 0.026. Again, there was difference between graduate and undergraduate students on providing

current awareness services through TV on campus at 0.006. There was difference between graduate and undergraduate students on Community Radio services in Amharic and Afan Oromo at 0.019.

Significant differences were between graduate and undergraduate students on provide enough CD-ROMS in disciplines at 0.045 and constant Internet provision at 0.048. But providing audio-visual materials, there was difference between undergraduate students and academic staff at 0.013; as well as between undergraduate and graduate at 0.013 but not with graduate and academic staff. There was significant difference between academic staff and undergraduate students at 0.047 on providing enough braille resources for the visual disability students.

On facilities, there was significant difference between graduate and undergraduate students on providing enough tables at 0.048; likewise academic staff and undergraduate were significant on providing adequate air-conditions/fans at 0.014; as well as graduates and undergraduates at 0.012. Also, there was significant difference at 0.000 between graduate and undergraduate students on providing conducive lighting in the library. On providing audio-visual materials, graduates and undergraduate showed significant difference at 0.015 but undergraduate and academic staff were significant at 0.012 on providing cross-ventilation. While graduate and undergraduate were significant on the provision of communication systems such as telephone services at 0.022; as well as the provision of institutional repository at 0.039.

Most of the significant differences were among UG and PG students. This is indicative of the much usage made of the library services that has called for the

attention of the library authority on specifics. This also could be attributed to awareness of the library functions on learning and research that the categories of students are being faced. It could also be gathered that academic staff were not frequenting the libraries but only go there for borrowing books, hence the observations of serious lack of books on disciplines. The lack of books on disciplines could be due to lack of awareness that books in JULS are on closed access, which means the books are stocked in an area and only to be requested from the library staff to be fetched by the library attendants and brought for loan to the reader.

From the knowledge of the researchers, the branch libraries of JULS houses lots of materials on various disciplines as per programs of study in the university. There is serious lack of awareness on the part of the students and academic staff on this stack, which could be said to be hidden. The library staff should not only create awareness of the collections but should as a matter of urgency make the collections on open access for browsing, access and borrowing by clients.

CONCLUSION AND RECOMMENDATION

Because of the strong, negative and significant relationship between purpose of library materials relevance and use of JULS as well as a strong, negative and significant relationship between materials for learning and use of JULS; partially accounted for by the academic environment where both academic staff and students are involved in academic activities such as teaching and learning respectively. Hence, it could be adduced that JULS usage has effect on quality education as the library materials were used for learning purposes by the respondents (i.e. academic staff,

postgraduate and undergraduate students) involved. The result of the finding on availability of resources seem to show that there was extensive resource provision and types in JULS for its users (i.e. academic staff, postgraduate and undergraduate students) for quality education in the Jimma University. But the resources and types as commented by the respondents were poorly managed by the library staff, which may be observed to be inexperienced of staff in providing the library and information services.

We are not only recommending an immediate statistical record keeping of the various services of the JULS but also library collections should be on open access for all library users' consultation through browsing and usage. This will help in no small way to improving the quality of teaching, learning and research for quality education in Jimma University.

The adduced quality of education in Jimma University could be overcome if instructors, students and Jimma University library system maximize the use of library services, resources, facilities and library staff of Jimma University library system.

ACKNOWLEDGEMENT

This research was conducted by using a fund provided by Jimma University. The researchers thus acknowledge the university. We would also like to acknowledge data collectors and all the study participants.

REFERENCES

- Drennan, L. T. and Beck, M. (2001). Teaching quality performance indicators – key influences on the UK universities' scores. *Quality Assurance in Education*, 9 (2): pp. 92 – 102 *Ethiopian Review* (2012),

- <http://www.ethiopianreporter.com/component/content/article/303-commentary/6804-2012-06-23-07-01-33.html>. Retrieved on 3/10/2015.
- Gojeh L.A., Bayissa G., Fentahun A., Telale B., Ayde A., (2012). Staff development and training impacts on turnover pattern and retention in academic libraries in Ethiopian Universities. An unpublished research report submitted to Jimma University, Ethiopia.
- Jebessa, F. (2012). Quality higher education for the implementation of the growth and transformation plan of Ethiopia: A requirements and actual conditions. Proceedings of the third annual research conference of Jimma University, organized by Jimma University, January 26-27, 2012, Jimma Ethiopia, pp. 49-68.
- Lang, J. (2008), Electronic Resources, <http://library.princeton.edu> (Retrieved 4, July, 2012)
- Metha, U & Young, V.E. (1995). Use of electronic resources: a survey of science and engineering faculty. Science Technology library; V15 (3):P43-54
- Nega, M. K. (2012). Quality and quantity assurance in Ethiopian Higher Education: critical issues and practical implication. PhD Dissertation.
- Tenopic, C.(2003). Use and Users of electronic library resources: An overview and analysis of recent research studies. Washington, Dc: Council on Library and Information Resources.