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Reprographic Services: Availability and Effective Accessibility of University Library Materials to Students in Enugu State University of Science and Technology

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Abstract

Adequate resources in Libraries are not an indication of a good or well-organized Library, as availability of resources does not guarantee full accessibility. Many a time, users of University Libraries find it difficult to effectively access and reproduce the available resources in the library, owing to either complete absence or shortage of reprographic facilities, which as a matter of fact, is of great concern. The purpose of this study was to investigate the role of reprographic services in enhancing the availability and accessibility of library resources to students in University Libraries, a case study of Enugu State University of Science and Technology, Nigeria. Questionnaires and observation checklist were used for the survey. 2000 students selected using stratified random sampling constituted the sample size out of a population of 35,000 students. Data collected was analyzed using descriptive statistics. Results revealed that reprographic services were not fully utilized despite its importance in enhancing the accessibility and availability of information resources, this was owned to some factors that may limit the effectiveness of reprographic services such as unskilled staff, erratic power supply and scarcity of machine spare parts. Effective and efficient library management was the most rated factor to improve this.

Keywords: Reprography, Resource Availability, Information Reproduction, Reprographic services, Library use efficiency.

Introduction

University libraries are the nerve center of the activities of the universities. They are charged with the responsibility of providing materials for teaching, learning, and research. It is imperative that these libraries provide materials in all formats for the actualization of the objectives of the parent body. University libraries have vital roles in achieving quality education as envisaged by the national policy on education (Oyelude, 2004). The Library is a center of academic activities. Effective use of its resources is as compelling as it is necessary. It is the largest single source of knowledge and information within the academic institution. The objective of University Libraries is to support the instructional, research and public service programs of the institution by making its resources available to students, faculty and staff for their curricular, research and general information needs. The Libraries participate in appropriate local, state, regional, national and international information programs that directly or indirectly support the Libraries' mission. University libraries continually seek to identify their roles in contributing to institution outcomes and objects in the areas of research, teaching and learning (Ubogu, 2006). From the above definitions of the library, it is worthwhile saying that books and other materials in a library are

brought together mainly for use. "The library is a very natural component to academic support services now complementing tutoring, career decision making and writings across the curriculum" (Orgeron, 2005). The acute shortage of textbooks which the University libraries in Nigeria have been contending with for some time now has reached an alarming rate. This situation has necessitated the urgent need for reprographic services in University Libraries and the need for University Libraries to render reprographic services if they desire to serve and satisfy the needs of their clients.

Availability should be viewed from both national and institutional levels in relation to the availability of information sources relative to the steady proliferation of universities in federal, state and private sectors, along with increasing number of students and faculties, and the diversification of courses and academic research programs (Aguolu and Aguolu, 2002). Availability and the use of library materials have grown to both political and social responsibility. The daily growth of information first rings from problem of location, acquisition, organization, dissemination and the problem of making it easily available to the potential users of the information at the right time.

Access is defined as a means of approaching, entering or coming in contact with something. Abioye (2002) opined that access refers to the terms and conditions of availability of records or information The availability of an information source does not necessarily imply its accessibility, because the source may be available but access to it is prevented for one reason or the other (Aguolu and Aguolu, 2002). Accessibility of library materials may be *conceptual*, bibliographic and physical. Conceptually, books are said to be accessible if they are of relevance to the student's need and can easily be understood. Bibliographically, accessibility pertains to the provision of effective means of identifying the needed materials and locating them whether in Nigeria or abroad. Physically, accessibility connotes the ability to lay ones hands physically on the materials once bibliographically identified and located (Aluju, 2006). The information resources and services available in institutional information systems must be capable of supporting research activities among the students and faculty members (Popoola, 2008). Ugah (2008) saw the relationship between availability, accessibility and use of library materials. He further observed that information sources are not readily available to users either due to fact that they have not been acquired or are waiting in the processing unit of the library.

Eames (named after Charles Eames), was one of the first American libraries to add reprographic service to the library. In 1912 Eames, the then head of librarians of Lenox library at the New York public library, photo-duplicated rare books, manuscripts, and pamphlets in small editions and distributed them at a normal fee to libraries and historical societies. Reprography has enhanced the use of library materials. Users can now have access to copies of materials even in a situation where somebody is using the original, photocopies could be made for others.

Reprography, as explained is a term that is now used in place of photo duplicating, photocopying, duplicating, printing, document reproduction or documentary reproduction (Anyanwu, 2008). Reprography serves many roles in libraries and these roles amongst others include dissemination of information on a large scale among libraries and between libraries and their patrons, reproduction and catalogue preservation of records, security, storage of important documents, securing the protection of information in rare and important texts, extensive

republications of information of unique collection of data, out of print books, manuscript, volumes of periodicals and saving of space in the library. Reprographics services are the reproduction of graphics through mechanical or electrical means, such as photography or xerography (Popoola, 2008).

Literature Review

Types of Reprographic Services

Reprographic services encompass such services that aim at making printed materials more easily available such as xerographic printing, which involves a photographic process that is completely dry, using no solutions or fumes, and permanent copies can be produced from the original document within a few minutes (Philips, 1986). Other forms of reprographic services according to Igbeneghu (2009) are Microscopy, Photocopy, Duplicating and in-plant printing (Office printing).

Need for Reprographic Services in the University Libraries

Anyanwu (2008) highlighted the importance of reprography in library services to include saving at space, helping in the preservation and conservation of library materials, assisting in the reproduction of rare books, of print and archival materials for the purposes of storage and use, promoting inter-library corporation resources and sharing, enhancing the use of library materials and facilitating the reproduction of exact copies of document.

If Nigeria is to advance and the young people are to grasp the opportunities now open to them, they must be given access to books, periodicals, technical data and opinion, which will bring them into contact with cultural, scientific, technical and social ideas. Library resources when adequately provided and used would produce great critical thinkers and well-taught graduates in Nigerian Universities. Most Nigerian undergraduates view libraries as places to borrow books and read lecture notes but they were unaware of the rich content they can access through libraries when these resources are available. Even though library users may make limited use of library resources, they continue to trust libraries as a reliable source of information for their academic pursuits. Though the use of electronic resources like the Internet is gaining wide recognition among Nigerian undergraduates, printed library resources occupy an indispensable position in the academic environment (Ajayi and Adetayo, 2005).

Olubusuyi (2005) reported that librarians in University libraries duplicate an average of over 700 textbooks or library materials annually. Out of this number, 773 copied pages are protected by copyright. He stressed that while textbooks amount to 53 percent of all the materials duplicated and copied, newspapers, magazines and encyclopedias take the remaining 47 percent. However, a significant proportion of the materials duplicated could not be accounted for with regards to the origin, as the copied materials did not have adequate bibliographical data.

Challenges to Effective Reprographic Services in the University libraries

Reprographic services require the use of machines which, must be maintained or serviced from time to time to enhance its efficiency. Reprographic gadgets are not often maintained as and when due until they are finally broken down, then dumped outside. Bassey and Iyisho (2007) in their study stated that the quantity and quality of reprographic facilities available (on commercial bases) in University libraries investigated, does not meet the demands by the users and this is not encouraging.

Igbegher (2009) observed that the problems associated with reprographic services include a lack of spare parts and funding. Funding plays a very important role in the discharging of reprographic services; this is because when a library is underfunded, every activity is on standstill which can pose a serious problem, as the library needs money to run efficiently and effectively. The problem of funding becomes more acute now that the acquisition of materials in libraries leaves much to be desired.

Limitations to effective utilization of reprographic services in University Libraries

In spite of the challenges often faced in the discharge of reprographic services in libraries, it's role in information reproduction and dissemination cannot be overemphasized, as information centers cannot do without it. Funding is one of the major limiting factors to reprographic services in Nigeria. Aside the cost incurred in acquiring reprographic gadgets, funding is also needed for maintenance of the machines and replacement of damaged parts. Regular maintenance of reprographic equipment by trained technical services operators, help to control the release of contaminants from poorly managed equipment.

Methodology

The study was carried out at the Enugu State University of Science and Technology (ESUT), Enugu State, Nigeria. ESUT was selected because it is a University Library that also carries out reprographic services. Questionnaires and observation checklist were used for the survey. The Questionnaire was formulated per the research question and administered to library users; observation checklist was carried out by the researcher and scored based on the reprographic tools seen or noticed during the research. 2000 students selected using stratified random sampling, constituted the sample size out of a population of 35,000 students (comprising diploma, undergraduate, masters and Ph.D students). Stratified random sampling technique was adopted for data collection to avoid bias in the distribution of the questionnaires to the respondents in ESUT.

RESULTS

Research question 1

Which of these facilities are frequently used in your library?

Table 1: students' response to the facilities frequently used in this library

| S/N | Item | \mathbf{AU} | NA |
|-----|------------------------------|---------------|-----------|
| 1 | Deintons | ما | |
| 1. | Printers | V | |
| 2. | Microfilm machines | | $\sqrt{}$ |
| 3. | Photocopying machines | $\sqrt{}$ | |
| 4. | Computers | $\sqrt{}$ | |
| 5. | Offset lithography machine | | $\sqrt{}$ |
| 6. | Letterpress printing machine | | $\sqrt{}$ |
| 7. | Electrostatic copier machine | | $\sqrt{}$ |
| 8. | Stencil duplicating machine | | $\sqrt{}$ |
| 9. | Duplicating machine | $\sqrt{}$ | |
| 10. | Facsimile machines | | $\sqrt{}$ |
| 11. | Carbon copying | $\sqrt{}$ | |
| 12. | Photography | $\sqrt{}$ | |
| 13. | Digital scanner | √ | |

From the data presented in Table 1 above, an observation checklist carried out by the researcher framed in line with the research question 1.

The result showed that printers, photocopying machines, digital scanner, computers and photography were available and regularly used Another category including scanning machines, duplicating machines, carbon copying machines were available but regularly used. While, microfilm machine, offset lithography machine, letterpress printing machine, electrostatic copier machine and facsimile machine were not available. In addition, it was observed that the libraries had a limited number of facilities in carrying out their services.

Research question 2

Which of these facilities are frequently used in your library?

Table 2: students' response to the facilities frequently used in this library

| S/N | ITEMS | VF ₄ | FU ₃ | RU ₂ | NU ₁ | X | Rank | DECISION |
|-----|----------------------|-----------------|-----------------|-----------------|-----------------|------|-----------------|----------|
| 1 | Computers | 800 | 800 | 200 | 200 | 3.10 | 1 st | FU |
| 2 | Printers | 400 | 960 | 440 | 200 | 2.78 | 2^{nd} | FU |
| 3 | Photocopying machine | 440 | 800 | 480 | 280 | 2.70 | 3^{rd} | FU |
| 4 | Digital scanner | 300 | 800 | 600 | 300 | 2.55 | 4 th | FU |
| 5 | Photography | 340 | 600 | 740 | 320 | 2.48 | 5 th | RU |

| 6 | Duplicating machine | 280 | 720 | 600 | 400 | 2.44 | 6 th | RU | |
|----|-----------------------------|-----|-----|-----|-----|------|------------------|----|--|
| 7 | Carbon copying | 400 | 440 | 720 | 440 | 2.40 | 7^{th} | RU | |
| 8 | Letterpress printing | 40 | 760 | 800 | 400 | 2.22 | 8 th | RU | |
| | machine | | | | | | | | |
| 9 | Microfilm machine | 160 | 440 | 840 | 560 | 2.10 | 9 th | RU | |
| 10 | Electronic copier machine | 250 | 450 | 500 | 800 | 2.08 | 10^{th} | RU | |
| 11 | Facsimile machine | 120 | 480 | 800 | 600 | 2.06 | 11^{th} | RU | |
| 12 | Stencil duplicating machine | 40 | 760 | 485 | 715 | 2.06 | $11^{\rm th}$ | RU | |
| 13 | Offset lithography machine | 160 | 440 | 660 | 740 | 2.01 | 13 th | RU | |

The results in table 2 above shows how often these reprographic facilities in the library are being used. The results revealed that most of these facilities are rarely used or not used at all.

Research Question 3 In what ways are reprographic services beneficial to your library?

| Table 3 : students' | response to the | benefits of | reprogran | hic services |
|----------------------------|-----------------|-------------|-------------|--------------|
| Tubic 5. Students | response to the | ochemic of | . reprograp | ine services |

| S/N | ITEMS | SA ₄ | A ₃ | SD_2 | \mathbf{D}_1 | X | Rank | Decision |
|-----|---|-----------------|-----------------------|--------|----------------|------|-----------------|----------|
| 1 | Reducing the incidence of theft and | 480 | 1200 | 80 | 240 | 2.96 | 1st | Accepted |
| | mutilation | | | | | | | |
| 2 | Retaining rare books in the library | 600 | 920 | 80 | 400 | 2.86 | 2^{nd} | Accepted |
| 3 | It enhances the currency of information | 400 | 1200 | 40 | 360 | 2.82 | 3 rd | Accepted |
| | resources | | | | | | | |
| 4 | Preservation of information resources | 520 | 1000 | 80 | 400 | 2.82 | 3^{rd} | Accepted |
| 5 | Supplementing the book scarcity | 600 | 800 | 40 | 560 | 2.72 | 5 th | |
| 6 | Reducing the overuse of library materials | 520 | 800 | 80 | 600 | 2.62 | 6 th | Accepted |
| 7 | Making information resources available at | 680 | 600 | 40 | 480 | 2.54 | 7^{th} | Accepted |
| | a cheaper cost | | | | | | | |
| 8 | As a source of income for the library | 600 | 400 | 200 | 800 | 2.40 | 8 th | Rejected |

Data presented in table 3 above shows the benefits of reprographic services in the library. Most of the itemized benefits of reprographic services were accepted.

Research Question4

What are the factors limiting the effectiveness of reprographic services in your library?

Table 5: students' response to the factors limiting the effectiveness of reprographic services

| S/N | ITEMS | SA ₄ | A ₃ | SD_2 | \mathbf{D}_1 | X | Rank | Decision |
|-----|---|-----------------|-----------------------|--------|----------------|------|-----------------|----------|
| 1 | Poor funding for reprographic services | 880 | 720 | 200 | 200 | 3.14 | 1 st | Accepted |
| 2 | Inadequacy of reprographic machines | 600 | 1080 | 280 | 40 | 3.12 | 2 nd | Accepted |
| 3 | Lack of efficient and effective manpower | 800 | 800 | 200 | 200 | 3.10 | 3 rd | Accepted |
| 4 | Poor publicity on the availability of reprographic services | 600 | 1000 | 200 | 200 | 3.00 | 4 th | Accepted |
| 5 | Erratic power supply | 600 | 800 | 400 | 200 | 2.90 | 5 th | Accepted |
| 6 | Copyright laws | 600 | 800 | 200 | 400 | 2.80 | 6 th | Accepted |
| 7 | Scarcity of spare parts of the machine | 400 | 1000 | 200 | 400 | 2.70 | 7 th | Accepted |
| 8 | Unskilled staff | 600 | 600 | 400 | 400 | 2.50 | 8 th | Accepted |
| 9 | Cost of machine maintenance | 40 | 1000 | 200 | 760 | 2.16 | 9 th | Rejected |

Data presented in table 4 above reveals the factors limiting the effectiveness of reprographic services in this library. Most of the factors were accepted to limit the effectiveness of reprographic services in this library.

Research Question 5

What are the strategies to remedy the challenges in your library?

Table 6 shows that the respondents accepted all the strategies listed as strategies to remedy the challenges of reprographic services in this library.

| S/N | | SA_4 | A ₃ | SD_2 | D_1 | X | Rank | Decision |
|-----|--|--------|----------------|--------|-------|------|-----------------|----------|
| 1 | Effective and efficient library | 1200 | 600 | 200 | 0 | 3.50 | 1 st | VA |
| | management | | | | | | | |
| 2 | The adequate power supply should be | 1100 | 660 | 240 | 0 | 3.43 | 2^{nd} | A |
| | made available for the smooth running of | | | | | | | |
| | the machines | | | | | | | |
| 3 | Provision of more machines to avoid over | 1000 | 800 | 40 | 160 | 3.32 | 3^{rd} | A |
| | laboring the few available machines | | | | | | | |
| 4 | Maintenance of facilities by reprographic | 1000 | 840 | 80 | 80 | 3.38 | 4 th | A |
| | operators through constant servicing | | | | | | | |
| 5 | Creating awareness services of the | 800 | 1000 | 160 | 40 | 3.28 | 5 th | A |
| | available reprographic services by the | | | | | | | |
| | library management | | | | | | | |
| 6 | Training and retaining of library staff on | 1000 | 600 | 200 | 200 | 3.20 | 6 th | A |
| | the use of machines | | | | | | | 7 |
| 7 | The government should provide policy on | 800 | 800 | 200 | 200 | 3.10 | 7^{th} | 'A |
| | reprographic services | | | | | | | |
| 8 | Improved funding by the parent institution | 800 | 600 | 360 | 240 | 2.98 | 8^{th} | A |

Table 5: students' responses on the strategies to remedy the challenges in the library

Summary of Findings

The major findings of the study include:

- 1. It was discovered that the needed reprographic facilities available were few in number such as printers, photocopying machines, computers, and photography. Some were very old to efficiently carry out the service such as carbon copying.
- 2. It was revealed that most of the reprographic facilities in this library were rarely used or not used at all such as scanning machines, digital printing, and photography etc. That is, well over 90% of the facilities were not used or rarely used to carry out reprographic services in this library.
- 3. Based on users' perceptions of the use of reprographic services to enhance the availability and accessibility of information materials, respondents of the university agreed on most of the items of which one is that reprographic services are functional in this library.

Discussion of Findings

The reprographic facilities available in ESUT library

From the observation checklist carried out by the researcher framed in line with the research question 1.

The regular use of printers, photocopying machines, digital scanner, computers, and photography could be attributed to its user friendliness, speed and efficiency with which they reproduce information resources while the irregular use of duplicating machine, and carbon copying could be lent to their obsolete nature, slow speed and relative inefficiencies in reproducing information. On the other hand, microfilm machine, offset lithography machine, letterpress printing machine, electrostatic copier machine and facsimile machine were not available and could be as a result of their manual use, difficulty in handling and shortage of skilled staff that can operate them.

The frequently used facilities for reprographic services in this library

It was observed that out of the thirteen reprographic devices sampled; only four were frequently used while the remaining nine were either rarely used or not used at all. The four most frequently used devices were computers, printers, photocopying machines and digital scanner, respectively. This has brought about reduced reprographic services which in turn affect students.

Users' perception of the use of reprographic services

Users' perception of the use of reprographic services emphasized the indispensability of reprography in the library. The most rated users' perception of the use of reprographic services to enhance information materials were reprographic facilities are functional in the library and

reprographic services are efficient in accessing library resources while the least revealed attitude (I am satisfied with the reprographic services in this library) revealed that majority of the students were not satisfied with the reprographic services in the library and as a result, majority of the students did not agree that reprographic services have helped the University library in increasing the volume of collection.

Benefits of reprographic services in the library

The essence of reprographic services is to make available sources of the library to users so that their information needs can be met. From the results obtained through the questionnaire distributed to the library; the major benefits are, it reduces the incidence of theft and mutilation, retaining the rare books of the library, it enhances the currency of information resource, and preservation of information resources.

Factors limiting the effectiveness of reprographic services

Reprographic services involve the use of both human and material resources to make it functional. As a result of this, a variety of huddle must be surpassed to make it functional with regards to the findings on the problems encountered in the use of reprographic services. Findings from this research showed that poor funding, inadequacy of reprographic machine, poor publicity on the availability of reprographic services, erratic power supply, scarcity of spare parts of machines, unskilled staff, and copyright laws were the major factors militating against the effectiveness of reprographic services in the University library with funding as the most rated.

Strategies to remedy the challenges of reprographic services

With regards to strategies to remedying the challenges of reprographic services for improving the accessibility of materials, the most rated strategies recommended were effective and efficient library management, adequate power supply should be made available for the smooth running of the machines, provision of more machines to avoid over laboring the few available machines, creating awareness services of the available reprographic services by the library management, adequate funding of the library, training and retraining of staff by the library through seminars, workshops and conferences, government should provide policy on reprographic services, maintenance of facilities by reprographic operators through constant servicing.

Conclusion

Reprographic services in a University library should enhance the availability and accessibility of information resources and should not be considered effective for only commercial usage. This study was carried out with the objectives of identifying the reprographic facilities available, the frequency at which they are used, the attitudes of users, the benefits to the library, the factors limiting the effectiveness and the strategies to improve them. The content scope given was limited geographically to the Enugu State University of science and technology. A stratified

random sampling technique was used as the method of data collection and the method of data analysis was also given. The major finding was that out of many reprographic facilities that would be used to enhance the availability and accessibility of information to students only a few of them were available and at use; these were printers, digital scanner, computers, and photocopying machine. It was discovered that poor funding, erratic power supply, unskilled staff, lack of efficient and effective manpower, etc were the problems limiting the availability and accessibility of information materials. Therefore, improved funding by parent institution, training and retraining of library staff on the use of the machine, effective and efficient library management, provision of more machines to avoid over laboring of the few available ones, maintenance of facilities by reprographic operators through constant servicing are the suggested strategies improving the carrying out of reprographic services. Nevertheless, in spite of the problems associated with the reprographic services, it remains an invaluable asset through which the availability and accessibility of library materials to the student can be enhanced. Reprographic services have to be an indispensable tool used in the generation and dissemination of information in University libraries. This is now an integral part of the library services through which documents can be reproduced and preserved, thereby enhancing the use of information resources in libraries.

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