

MANAGEMENT OF LEARNING SPACE IN ACADEMIC LIBRARIES IN IMO STATE, NIGERIA: PROSPECTS, CHALLENGES AND SOLUTIONS

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ABSTRACT: *This study investigated the practice and adoption of management of library learning space in academic libraries in Imo State. The survey design approach was adopted with the use of questionnaire to elucidate responses from the respondents comprising the five (5) Heads of academic libraries. Results of the frequency Tables revealed that though the heads of libraries has high academic qualifications but were not exposed to current training on practice and adoption of management of library learning space hence the practice is low and unpopular. The prevalent conditions of library buildings without provisions for learning space, lack of formal management tool; lack of steady power supply; lack of financial support by the institutions' administration, among others, are responsible for the low practice and poor status of library learning space management. However there are indications that library building plans in the future has features that can be converted to learning space especially when solutions proffered to the identified challenges are strictly adhered to.*

KEYWORDS; academic library building, library learning space, library management, library space management

INTRODUCTION

The 21st century is rapidly changing the face of tertiary education in Nigeria and with it also the nature of academic libraries. There is a radical new approach in the manner academic libraries are responding to changing patterns of user needs and service delivery. Turner, Welch & Reynold (2013) opined that part of the changes taking place in academic libraries is the use of space to support learning, teaching and research mandate of their parent institution; adding that the nature of tertiary education is

undergoing massive change as the twenty-first century progresses and with it also the nature of academic libraries. The digital shift has greatly impacted how students find and use information and therefore the library must have to adjust the kind of services and facilities it offers to cope with these changes. Corroborating, Bailin (2011) stated that academic libraries have had to adapt to ensure that services remain relevant to users need, thus meeting users need in terms of space and place. Accordingly, the library as a space has emerged as a key concept, therefore, university libraries must have to transform their spaces into a new environment that supports the changing information need of the twenty-century students. According to Warwick (2019) space is considered as much a university resource as staff or a budget. The physical facilities of the university are an asset crucial to the operations of the campus. The conditions of university spaces help shape all aspects of campus programs and activities. Space is a university resource to be allocated in the most efficient and effective manner which best advances university priorities and goals. The university value flexibility and recognizes the continuously changing curricula, program and technologies. As a corollary, the library now offers spaces and services that support all types of learning on campus; collaborative learning space, individual study carrels, quiet areas and large computer labs, aimed at creating learning opportunities in the library (Seeholzer and Salem, 2010).

Academic libraries are essential to achieving the core mandate of higher institution across the nation, and its building plan should include active space management where information commons, learning/maker space, research-commons, group collaborative activities, etc, is given a pride of place. This is because space is a valuable resource, which can either become a hindrance or enhancement to the operational efficiency of the organization, depending on how effectively it is managed. The role of space planning is to allocate space according to organizational needs and objectives, provide a strong concept of use, manage the available space and provide easily established measure for assessing utilization. Udechukwu (2012) opined that effective use of space is also dependent on matching supply and demand, understanding the building stock, understanding users needs, establishing a building concept, articulating guidelines for a simple measures for success, planning with time in mind, continuous review, clarity of decision-making processes, providing incentives and establishing facilities management framework. In other words, management of library space is all about transforming libraries to centre's of active learning rather than a place of silence and independent study.

Space management according to Xia (2004) has become a frequent activity in academic libraries. Cohen (1979) cited in Ugwuanyi (2011), revealed that "it is necessary to understand how humans feel about space and how they act within it. With that behavioural (psychological) knowledge, it is possible to provide or rearrange space so that it works better for people and people work within it". Accordingly, Fraley and Anderson (1990), cited in Xia (2004), reported that "there are many situations in daily library operations that inspire consideration of space reorganization such as:

- Lack of collection growth space
- Lack of space for people
- Change in direction or mission of the university served by libraries and
- Introduction of new services.

Similarly, Strain (1979), citing Xia (2004), added that “in principle, it is a clear fact that space changes are unavoidable after the construction of a library and during its normal operations”. Ugwuanyi (2011) maintained that the academic library is the heart of any university both as a pivot of learning and research. The paradigm shift in information resources from print to electronic and services from manual to digital, calls for critical examination of the concepts, principles and features of library as a learning space and place rather than an information reservoir. This will no doubt position the present and future library in line with current trend.

Statement of the problem

Academic libraries are now transforming to centre of active learning space rather than mere provision of information resources. The in-thing is management of library learning space as learning now occupies the centre stage in academic libraries’ planning, management and operations. Managers of academic libraries are adjusting to the changing order by reorganizing the existing library spaces or building new ones to align with the new teaching pedagogies and students learning styles and need. The pertinent question to answer is whether the academic libraries in Imo State are working in tandem with the new order? Or how are the managers of academic libraries in Imo State in particular and Nigeria as a whole adapting to management of library learning spaces?

Although few works relating to this topic have been carried out in Nigeria but it focused mainly on the need and importance of library space. Some assessed space utilization, planning of new library building, renovation and remodeling of existing ones with a view to creating additional spaces or improving the environment, but none seems to have assessed the management of library learning space in Imo State in particular and the South-East, Nigeria as a whole. This work is set out to fill this gap and its finding will complement the existing knowledge on management of library learning space and as well provide useful indices of academic libraries in Imo State, Nigeria.

Objectives of the study

The Broad objective of this study is to assess the management of learning space in academic libraries in Imo State with a view to ascertaining its impact on academic activities.

Specifically, the study seeks to:

1. Ascertain the level of awareness and practice of library space management in academic libraries in Imo State.
2. Asses the level of adaptability to management of learning space(s)

3. Ascertain the current status of the libraries with regards to management of learning space
4. Ascertain the management tools used in creating and maintaining learning space
5. Find out the various types of learning space management adopted in the libraries.
6. Identify the challenges and solutions proffered to management of learning space(s) in academic libraries in Imo State, Nigeria.

Research questions

1. What is the level of awareness and practice of learning space in academic libraries in Imo State?
2. What is the level of adaptability to management of learning space?
3. What is the current status of the libraries with regards to learning space?
4. What are the management tools used in managing learning space?
5. What are the various types of learning spaces adopted in your library?
6. What are the challenges and solutions proffered in the management of library learning space(s)?

LITERATURE REVIEW

Adeyemi (2017) carried out a study on assessment of space usage in Kenneth Dike's Library, University of Ibadan where he identified libraries' space needs to include: Meeting spaces, Study spaces, Reading spaces, Research spaces, Coherent spaces, Flexible spaces. While not discussing Stack or Shelving space, he acknowledged "it isn't going away" and constitutes one of the reasons why Libraries will continue to need more physical space in future. Walton (2006) cited in Adeyemi (2017) stated among other things that "learning space is one of the reasons for using the library." Similarly, Cannel (2007) stated that learning space such as carrel (which are sound proof), study rooms (which may be noisy), rooms for serious work and group work/assignment are provided by the library. Submitting earlier, Freeman (2005) posited that modern library has become a place that promotes social interaction, relaxation, group study and countless other services outside the purview of traditional setting.

Learning space in academic libraries

For the past two decades, academic libraries have been dramatically reinventing their physical spaces. The traditional model of enlarging reading rooms and dark warrens separated by stacks of books is incompatible with the digital age (Bennett, 2009). Nowadays, as maintained by Head & Eisenberg (2011), the very core of the academic library mission is under scrutiny. Librarians find themselves continuously asking how they can provide facilities that both foster learning and meet the ongoing changing needs of students and faculties. Sinclair (2007) opined that, the library of today and tomorrow must provide flexible spaces that support a wide range of users' learning and research activities while accommodating rapid advances in information technology. Walton (2006) maintained that people make use of the library to access resources; use learning space to benefit from the environment while Cannell (2007) is of the view that the library learning space is used as a place to

find books/electronic resource, celebrate research and meet together; a convenient place for students to revise for examinations, study course work and research. Learning spaces of varying purposes are provided which make the learning environment in the library attractive enough to study better than the home environment. In addition, Sens (2009), stressed that academic library has evolved into a forum for students to collaborate, enjoy fellowship, engage in healthy debate, create and challenge ideas and experience learning and discovery in a multitude of meaningful ways. It is only a well designed academic library building with learning space that supports these activities.

Since expectations for library resources and physical facilities have changed, stake holders have been called upon to transform campus libraries in innovative ways. Therefore, what is at stake for every academic library today is transforming the long standing model of housing collections into an open-ended learning hub and technology. The ideal thing for most librarians is meeting the physical and virtual learning, research, and teaching needs of the university community today and for years to come (Sinclari, 2007). Yunliang (2001), Sinclair (2007), Head & Eisenberg (2011) pinpointed the guiding principle to a good /standard academic library building as:

- **Collaborative:** An academic library space is designed for users to work together and use technologies to access information and share ideas, brainstorm, innovate and practice presentations and work together on projects. Collaborative learning spaces are often manifested in configurable furnishings, small group meeting rooms and active learning classrooms.
- **Flexibility:** It can have multiple meanings because spaces can be configurable and have moving furnishings to support changing needs of users as they may define them at a moment's notice.
- **Interdisciplinary:** Spaces, equipment, and services supporting a range of interdisciplinary needs across the library.
- **Functional:** Functional design that involves a set of practices guided by principle that produce positive outcome that work well to help users perform their assigned tasks.
- **Welcoming:** Warm, friendly, initiative and inviting spaces within a library, often at the point of entry and in other areas for collaborative learning.
- **Open:** Large areas with uninhibited sight lines in order to minimize physical barriers thereby removing enclosed rooms or private offices so as to encourage collaboration and information instructional opportunities
- **Social: mixed use-space:** Use-space where conversation, collaboration and informal learning are encouraged, facilitated and expected. A social space is also intended to support academic and leisure activities and events, coffee bars, maker spaces and art galleries.
- **Agility:** A space that is designed to be rapidly and easily transformed often, so that a broad range of user needs, both anticipated and not, are supported and served. Flexibility is a prerequisite for agility.

Furthermore, Heads & Eisenberg (2011) maintained that librarians and architects while planning on library space design should put into consideration how the level of noise in different areas of the library will be managed. They suggested that spaces should be provided for individuals' quiet study, groups gathering and loud conversation with noise-proof facilities. More so, provision of enough power to support user owned IT devices for today and into the future should be made possible. In addition, the Library Incubator (2016) posits 'that library can show a better return on investment for digital knowledge resources by offering different types of learning space'. While Sonia, Fransen & Nackerad (2013) pointed out that, learning space fosters sharing of ideas, in order to find solution to pressing issues or finding answers to questions thrown up in a group discussion. Eke-Okpala (2016) introduced such active space as a maker space which he described as a nascent technology in libraries geared towards facilitating group learning, adding that learning environments in libraries have gone beyond solitary engagement to collaborative engagement.

Learning-space management systems in academic libraries

A powerful space management tool can help academic libraries increase the efficiency and effectiveness of their daily operations. It is the goal of every library to 'develop an efficient and harmonious balance of all the elements that make up a library' (Fuller, 1991 in Xia, 2004). In practice, majority of academic libraries in Nigeria lack an automated space management system in their daily operations. In most cases, if space reorganization is planned, librarians launch investigations to get feedback through interviews and questionnaires from library users, or seek to discover user behavior through personal observations, in order to analyze the utilization of physical space and facilities. This data, which may be summarized through statistical analysis, serve as the basis for librarians to make decision about space reconsideration. Pothoff (2000) & Xia (2004) pointed out that many researchers have made great efforts to develop a 'good method' to enhance the credibility of their investigation. For example, Pothoff and her colleague used the role repertory grid procedure, a method derived from psychological methodology for working with the settings of urban planning, to collect what they hoped to be scientific data on patron perceptions.

An attempt to incorporate computer technology into learning space management has been made by some libraries. This endeavor immediately showed its great values and makes computers an effective tool for manipulating complex objects in academic library space design. The Merriam library on the campus of California State University at Chico was among the pioneers (Fuller, 1991 in Xia, 2004). Hake (2003) noted that some standardized planning tools have recently been introduced to the management of library facilities. Computer-aided design (CAD) has become the choice of the automated learning space management tool for some libraries. Compared to early computed software in library space planning, CAD is superior for its ability to draw objects and also capable of creating three-dimensional views of library objects and structures, thereby dramatically enhancing planning

visualization. The Michigan State University (MSU) main library has implemented a CAD system in its learning space management and plans to update and review space changes on a regular basis.

Greco (2003) maintained that only a few academic libraries have invested on computerized systems in their learning space and facilities management. The reason being that the concept of learning space management automation is relatively new in the library world. Its constraints include financial constraints, lack of computer experts and lack of recognition for the importance of an automated management system etc. Further, Hake (2003) & Xia (2004) identified and proposed a Geographic Information Systems Technology (GIS) as a learning space management tool that is superior in many ways over existing space management tools with the following outline advantages:

- GIS has the ability of performing spatial analysis by treating each individual library object as a unit and collecting the data of library operations associated with the units’.
- GIS can treat objects differently by categorizing them and placing each type of objects into individual themes.
- As part of a GIS package, spatial data analysis and visual presentation have become an integrated system.
- GIS can perform infrastructure management at very detailed level. This makes the maintenance of the system less expensive. The system can be implemented online so that operating it can be easy and controlled.
- Developing such a system costs almost nothing. The cost of developing the system is relatively low because of the simplicity of the development process.

Academic Librarians, Architects and Library Administrators should collaborate to ensure library space and place, - where convenient learning and research environment is provided. Adeogun (2008) opined that the abundance of information resources make the library a potential environment in the university. Academic library should provide multifunctional environment within the library space where individual users can identify and explore to achieve his/her set goals. It is believed that management of library learning space will contribute greatly to achieving optimal utilization and respond to current and emerging needs.

METHODOLOGY

The data for study is a primary data collected from the heads of the academic libraries in Imo State. A descriptive survey design was adopted using structured questionnaire to elicit responses.

A-4 Likert scale of Very high, High, Moderate, and Low was adopted for responses to Q1 to 3(a)-(d), where; Very high-3, High-2, Moderate-1 and Low-0. Yes or No was adopted for responses to Q4 to 7, where the code Yes-1 and No – 0. Similarly, Q8 to 11(a)-(e) adopted Yes-1, No-0.

Data collected were analyzed using frequency Tables. While the Analysis Sheet comprised the results collected from the respondents, the frequency Table analyzed the summary of responses by the surveyed population. The researchers personally administered the questionnaire on the Five (5) heads

of the libraries and had the opportunity for personal interactions and observation of the libraries under study.

The population of the survey is made up of the following academic institutions:

- Federal University of Technology, Owerri.
- Imo State University, Owerri.
- Federal Polytechnic Nekede, Owerri.
- Imo State Polytechnic, Umuagwo, Imo State
- Alvan Ikoku Federal College of Education, Owerri.

RESULT

Table1: Bio-Data of Respondents

Institution	Highest Qualification	Sex	Age Bracket	Years of experience
FUTO	PhD (Lib & Info. Sc)	F.	61	15+
IMSU	PhD (Lib & Info. Sc)	M.	59	15+
Poly- Nekede	MLS	M.	59	15+
Poly-Umuagwo	MLS	M.	60	15+
AIFCE	PhD (Lib & Info. Sc)	F.	58	15+

Result in Table 1, shows that all the respondents possessed a minimum qualification of Masters Degree in Library and Information Science, while 3 out of 5 had additional PhD qualification in the field of Librarianship. Majority are male (3 out of 5); but they are all in active working age of 58 to 61 and had had above 15 of years job experience. This follows that Heads of academic libraries in Imo States are well qualified and knowledgeable in library services.

Table 2: Extent of Awareness, practice and current status of learning space

S/No	Q ₁	Q ₂	Q ₃	Q ₄	Q ₅	Q ₆	Q ₇
1	2	1	1	1	1	1	1
2	2	0	0	0	0	1	1
3	2	0	0	0	1	1	0
4	1	0	0	0	0	1	0
5	1	0	0	0	0	1	0

Table3: Management tools, types of learning space adopted

S/No	Q ₈ (a)	(b)	(c)	(d)	Q ₉ (a)	(b)	(c)	(d)	(e)
1	0	0	0	1	1	1	1	1	1
2	0	0	0	1	1	1	0	1	0
3	0	0	0	1	1	1	0	0	0
4	0	0	0	1	1	1	0	0	0
5	0	0	0	1	1	1	0	0	0

Table4: Challenges and solutions identified

S/No	Q ₁₀ (a)	(b)	(c)	(d)	(e)	Q ₁₁ (a)	(b)	(c)	(d)	(e)
1	1	1	0	1	0	1	1	1	1	1
2	1	1	0	1	1	1	1	1	1	1
3	1	1	0	1	1	1	1	1	1	1
4	1	1	0	1	1	1	1	1	1	1
5	1	1	0	1	1	1	1	1	1	1

Tables 2 to 4 are results collected from respondents and analyzed using frequency Table.

Table 5 ANALYSIS SHEET

S/ N o	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8 (a)	(b)	(c)	(d)	Q 9 (a)	(b)	(c)	(d)	(e)	Q 10 (a)	(b)	(c)	(d)	(e)	Q 11 (a)	(b)	(c)	(d)	(e)
1	2	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1
2	2	0	0	0	0	1	1	0	0	0	1	1	1	0	1	0	1	1	0	1	0	1	1	1	1	1
3	2	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	1	1	0	1	1	1	1	1	1	1
4	1	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	1	1	0	1	1	1	1	1	1	1
5	1	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	1	1	0	1	1	1	1	1	1	1

Table 6: Responses from the surveyed population to the questions

	Frequencies (f)																										
Response	Q 1	Q 2	Q 3	Response	Q 4	Q 5	Q 6	Q 7	8 a	8 b	8 c	8 d	9 a	9 b	9 c	9 d	9 e	10 a	10 b	10 c	10d	10 e	11 a	11 b	11 c	11d	11 e
0 - Low	0	4	4	0 – NO	1	3	0	2	5	5	5	0	0	0	4	3	4	0	0	5	0	2	0	0	0	0	0
1 – Moderate	2	1	1	1 - yes	4	2	5	3	0	0	0	5	5	5	1	2	1	5	5	0	5	3	5	5	5	5	5
2 - High	3	0	0																								
3 – Very High	0	0	0																								
Total	5	5	5		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

THE RESULT ANALYSIS

Results of the analysis in Table 6 showed that 3 respondent institutions had ‘high’ awareness while 2 had ‘moderate’ awareness. For ‘practice and adaptability of learning space’ only 1 institution had ‘moderate’ while 4 had ‘low’. The current status showed that only 1 institution had (1-Yes) a library building on ground that was designed for learning space while 4 had (0-No). Similarly, only 2 had library building plan that is flexible to accommodate learning space while 3 had 0. All the respondents 5 said ‘Yes’ for future space reorganization or restructuring while only 2 had future library building plan for learning space. Response to Q8(a-d) showed ‘0’ for use of formal management tools such as CAD, GIS, etc, while all had 5 for discretionary method. Similar result obtained for Q9(a-e) only 2 of institutions adopted all the learning space items specified; only 1 adopted social/games corner and maker space/learning commons. In Q10(a-d) all the respondents identified space constraint, lack of financial support by the administration, and lack of steady power supply as challenges coupled with lack of current training on library learning space management amongst the heads of academic libraries. However, solutions were proffered and all respondents agreed that provision of funds, restructuring the library building, erecting new library building- plans that accommodate learning space, retraining staff to adapt to management of library learning space and motivating students interest would ensure the practice and management of learning space in academic libraries in Imo State.

The results showed that there is high awareness amongst the respondents but the level of practice and adaptability to learning space model is low. However, the library building has rooms for space adjustments and re-organization in the future, but currently all except one is compliant to management of library learning space. The general assessment revealed that while the heads of library in Imo State are aware of management of learning space as the latest innovation in library services, they are yet to embrace and popularize its practice. However the result indicates that library building plans has features that can be converted to learning space in future especially when solutions to the challenges identified in objective No.6 are proffered.

In the same vein, further analysis revealed that the respondents do not adhere to any formal tool in the management of learning space in the library, rather personal discretion /informal method was employed in the management of learning space(s) as the need arises. This finding accounts for low practice and lack of compliant to current status of library learning space management in Imo State.

Similarly the types of learning space adopted as indicated table 3(9a-e) were the traditional/old-fashioned types; individual study space (noiseless/quiet reading rooms), collaborate study space (discussion area). Only two respondent adopted modern spaces for computer space and marker space/learning common respectively. It is evident that management of library learning space is not popular; hence informal tools and traditional type - arrangements are still prevalent in the libraries under studied

From the result, the entire respondent identified myriads of challenges ranging from space constraint, lack of financial support and lack of steady power supply. Added to these challenges was lack of sufficient training/knowledge on the management of library learning space. However solutions were proffered to these challenges and which if strictly adhered to would bridge the gap in the management and practice of library learning space in academic libraries in Imo state.

CONCLUSION

From the analyzed results of the study, awareness and current practice of management of library learning space is not popular in academic libraries in Imo State. Though heads of academic libraries have high academic qualifications but majority of them are not exposed to current training in the management of library learning space. The prevalent conditions of library buildings without provisions for learning space, lack of formal management tool; lack of steady power supply; lack of financial support by the institutions' administration, among others, are responsible for the low practice and poor status of library learning space management. However there are indications that library building plans in the future has features that can be converted to learning space especially when solutions proffered to the identified challenges are strictly adhered to.

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APPENDIX

For Qs 1 to 3 (a) – (d) enter 3 - Very high, 2 – High, 1 – Moderate, 0 - low

For Qs 4 – 7 enter 0 - No, 1 - Yes, in the box for each option provided.

For Qs 8(a) – (e) enter 0 - No, 1 - Yes, in the box for each option provided.

For Q 9(a) – (e) enter 0 - No, 1 - Yes, in the box for each option.

For Qs 10 (a) – (e) enter 0-No, 1-Yes, in the box for each option.

For Qs 11 (a) – (e) enter 0-No, 1-Yes, in the box for each option

For Qs 1 to 3(a)-(d), respondents were expected to enter 3-Very high, 2-High, 1-Moderate, 0-low

- 1 What is your level of awareness of library learning space? ☐
- 2 What is the level of practice of learning space in your library? ☐
- 3 What is the level of your library's adaptability to learning space? ☐

For Qs 4 – 7 enter 0 - No, 1 - Yes, in the box for each option provided.

4. Does your library building-design include learning-space(s)? ☐
5. Does your library building plan accommodate learning-space flexibility? ☐
6. Does your library plans for future space reorganization or restructuring? ☐
7. Do you have future library building plan for learning-space? ☐

For Qs 8(a) – (e) enter 0 - No, 1 - Yes, in the box for each option provided.

8. What management tools are you using in the management of library learning space? ☐
- (a) Computer aided design (CAD) ☐
- (b) Geographical information system technology (GIS) ☐
- (c) Repertory grid procedure ☐
- (d) Personal discretion ☐

For Q 9(a) – (e) enter 0 - No, 1 - Yes, in the box for each option.

9. What are the types of learning space management prevalent in your library?
- (a) Individual study space ☐
- (b) Collaborative study space ☐
- ☐

(c) Social/ games corner

(d) Technology space ☐

(e) Maker space/learning commons ☐

For Qs 10 (a) – (e) enter O-No, 1-Yes, in the box for each option.

10 What challenges does your library encounter in management of academic learning- space?

(a) Space constraint ☐

(b) Lack of financial support by the administration ☐

(c) Non-cooperative attitude of students to change ☐

(d) Lack of steady power supply ☐

(e) Insufficient knowledge of management of learning space ☐

For Qs 11 (a) – (e) enter O-No, 1-Yes, in the box for each option

11. How can these challenges be ameliorated?

(a) Soliciting the support of the Institutions' administration for library learning space ☐

(b) Restructuring the library building in line with learning space needs ☐

(c) Ensuring that new library building plans accommodate learning space ☐

(d) Aligning the library strategically with the institutions-wide vision and mission ☐

(e) Training and retraining library managers to adapt to library learning space. ☐