Motivating use of Audio – Visuals in a Nigerian Technological University Library

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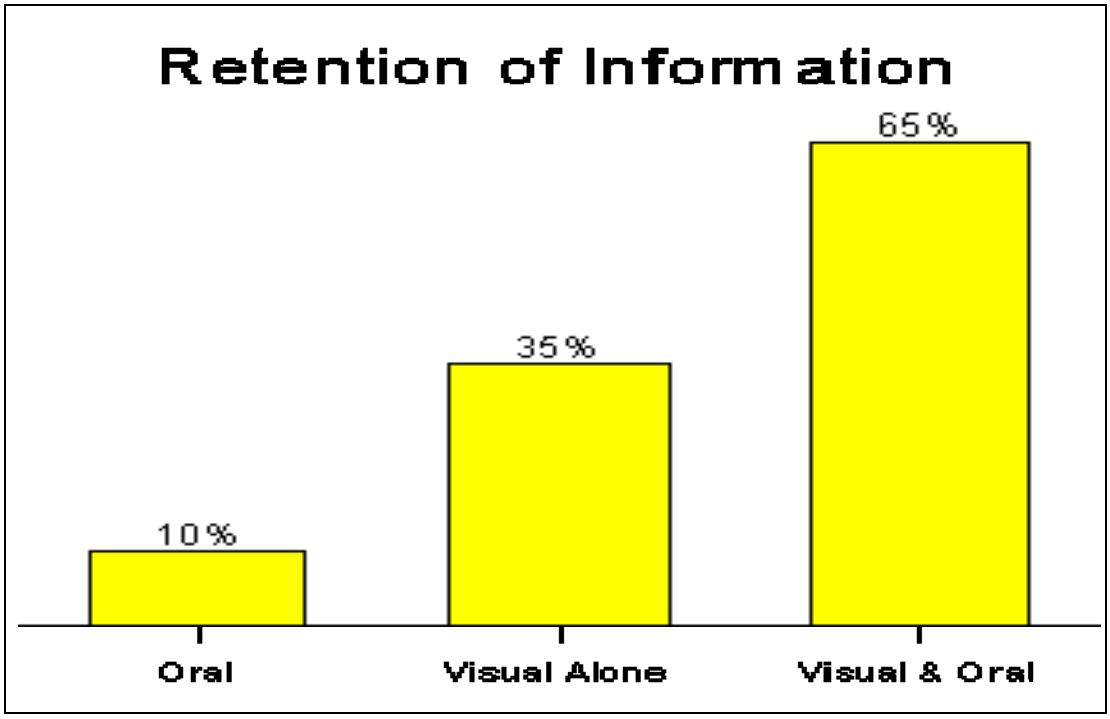
Abstract *This study employed the questionnaire to determine factor inhibiting the optional use of the Audio-visual unit of the Abubakar Tafawa Balewa University (ATBU) Library, Bauchi and what would motivate greater use of the facilities of the Unit. The study revealed that lack of current software packages, non-awareness that the unit can be put to personal use, tight lecture schedule, inability to operate the hardware and inadequate infrastructural facilities inhibited the effective and optional use of the unit. On the other hand, the use of audio-visual aids to deliver lectures, the regular advertisement of new audio-visual and the provision of improved infrastructural facilities will motivate better patronage.*

Keywords: *audio-visual, library, university*

1. Introduction

Use of audio-visuals in Universities has become an integral part of education, business presentations and even services offered by University libraries (Swank, 2011, Lichtenauer, Jeroen and Valstar, Michel and Shen, Jie and Pantic, Maja, 2009; Goldstein, 2011, Clarke, 1999; http://www.libraries.psu.edu/ digital/finding aids/88.htm). Literature is replete with studies on the use of audio visuals in a University classroom and the University Library (Kannappanavar and Vijayakumar, 2001). In most studies, it involved learning to make its use a rewarding experience and promote qualitative education (Wong, 2009, Hallett and Faria, 2006; Laskowski and Bergman, 2004; Mcnaught, 2007; Moreno and Ortegano-Layne, 2008).

The International Federation of Library Associations and Institutions (IFLA, 2007) defined "Audio-Visual" as "ppertaining to sight and/or sound" and audiovisual materials as "Any recorded sound and/or moving and/or still image items". Unwin and McAlease (1988) in the same vien described the word "Audio-Visual" as an adjective which connotes instructional materials that uses a combination of sound and vision. Other synonymous words with audio-visual are: educational instructional media, visual aid, and learning resources. Audio visuals appeal to more than one sense at the same time, thereby increasing a student's a thoughtful and retention level. The chart below shows its effectiveness (Presenting Effective Presentations with Visual Aids, http://www.osha.gov/doc/outreach training/htmlfiles/traintec.html).



In Nigeria, previous studies identified deterrents to the effective use of audio-visual in Nigerian university libraries, which include: inadequate funding (Ibegwam, 1995), total neglect of libraries in government policies (Obaka, 1991), lack of infrastructural facilities, especially, the supply of uninterrupted electricity (Woakes, 1986), inadequate training of the user to maximize the use of the library (Ogunleye, 1987 and Kaniki, 1994), high production cost of instructional media (Mabawonku, 1992), lack of maintenance of faulty equipment (Anaba, 1994) difficulty in locating material in the catalogue by clientele (Hodson, 1979), reluctance to change (Odinni, 1990), and others calling for "restructuring" (Adio, 2007, Ibegbulam and Olorunsola, 2001).

Recent developments in the field of education and technological development has led to calls for dramatic changes in concepts and practices such that education is now student-centred and learning has become a dynamic and interactive process Adio (2007). Consequently, these days, curriculum can be adjusted to new situations which allow the student to learn in hi own pace. The goal is to create an environment that is rich in learning stimuli from which the student can actively and independently learn, and to establish conditions for developing a spirit of creative enquiry, in which the student is given more autonomy and more responsibility with respect to his own learning (Enright, 1972).

2. Background to the Study

The Abubakar Tafawa Balewa University (ATBU), Bauchi is a technological institution, established in 1980 in order to frog-leap Nigeria technologically. Whereas ATBU Library came on stream in 1981 to provide the necessary bibliographical support for the teaching, study and research programmes of the University, the Audio-Visual unit was established in June 1995 to complement information embodied in printed formats.

The impetus for establishing the Audio-Visual unit was the high failure rates in the basic sciences (Biology, Chemistry, Mathematics and Physics) in ATBU and the attendant high student attrition (Wastage) occasioned by withdrawal from the university. The issue generated heated arguments at the Senate, the only arbiter on academic matters in the Nigerian university system, yet the problem remains intractable. The problem was always attributed to the poor science background of the students just making transition from the secondary school to the university, the increased number of students granted admission yearly to accelerate

manpower development in the science as opposed to limited infrastructural facilities, occasioned by over-crowded classrooms, and the use of junior Lecturer (graduate assistants and assistant lecturers) who are also grappling the their Master's/Ph.D. degrees to teach the students. Consequently, the Senior author being the head of the University Library in Acting capacity then took up the challenge of remedying the situation by establishing the Audio/Visual unit.

Our approach was centred on the recording of lecturers to allow for video and audio play-backs. This has the advantage of reinforcing learning since students are granted unlimited access to the recorded Lectures which if need be are dubbed for them at token price for home use. This initiative was supported by the university administration and has yielded, and still yielding fruitful dividend by reducing failure rates among first year undergraduates.

3. Objective of the Study

The Audio-Visual unit of ATBU Library has blossomed over the last five years. Though the audio-visual project was applauded as monumental by the academic community, yet it has not been fully embraced by all lecturers despite repeated appeals.

This study is therefore aimed at assessing the usefulness or otherwise of the Audio-visual unit of ATBU Library, with a view to discovering how best users could be further motivated to optimized the use of the audio-visual facilities provided to promote qualitative education and research.

4. Methodology

Two hundred (200) questionnaire were randomly administered to students, and lecturers from the twenty (20) academic programmes (departments) in four of the five schools (faculties), namely: Agriculture, Engineering, Environmental Technology, Science and Science Education (see table 2).

Whereas 40 questionnaire each was distributed randomly to students and staff of the schools of Agriculture, Engineering, Environmental Technology, this number was doubled (80) for the oldest and the largest school, the School of Science and Science Education, because its share of students and teaching staff constitutes one-half of those in the other schools. The fifth school, school of Management Technology was excluded because it came on stream barely two years. The random sampling of the users of the Audio-Visual unit of the ATBU library was therefore fairly representative. The distribution of the questionnaire was easy because users have to show their library identify before they are allowed into the Audio-Visual unit.

5. Result, and Discussion of Findings

5.1 Profile of the Abubakar Tafawa Balewa Universtiy (ATBU) Bauchi

The profile of ATBU, Bauchi is presented in Table 1 below, giving a brief resume of the year of establishment, student and staff population, schools (faculties) with year commenced in parenthesis. Library stock and library personnel.

Table 1. Profile of ATBU, Bauchi

Date Established: 1980	
Specialisation: Science and Technology	
Staffing:	Number
Academic teaching –	249
Administrative/Technical	751

Student Population:	Number
Undergraduate	4000
Postgraduate	1000
Library Stock:	Number
Books/Monographs	48,200 vols
Journals	1277 titles
Special collections	6450
A-V	1200
Library Staffs:	Number
Auxiliary:	43
Para-Professionals	04
Admin/Technical	05
Professional	17
Schools (faculties):	Year
Agriculture	(1983)
Engineering	(1983)
Environmental Tech.	(1990)
Science and Science Education	(1980)
Management Technology	(1983)

5.2 Benefits of Audio-Visuals to Respondents

In addition to providing recorded Lectures to aid students to learn at their own pace, extension services are provided for seminars, Lectures, workshops and conferences. However, to ensure improved services, it was deemed necessary to evaluate the benefits accruable to users.

Table 2: below shows that about one-third (74 or 37.%) of the respondents confirmed that audio-visuals made learning easier and more interesting to them, while 26.5% of the sample asserted that a-v promoted a better understanding of courses. These findings are in agreement with the results of earlier studies by Mbawonku (1993) and Ibegwam (1995). 15.5% of 31 respondents affirmed that audio-visuals assisted them to learn at their own pace while 20 or 10% of the sample said that the a-v unit provided them a very serene environment devoid of noise and other distractions to do their reading. Finally, 18 of 9% of the sample claimed that with the use of audio-visual materials they performed better in their studies. This conclusion I in the tune with Fusoro's (1969) that "every learnere will achieve optimum realization or his/her ability while the teacher would have fulfilled his own part of the teaching-learning process effectively".

Table 2. Benefits of Audio-Visual Materials to Respondents

Benefits/Advantages	No. of Respondents	Relative Frequency
Audio-Visuals made learning easier and more interesting	74	37.0
a-v promotes a better understanding of course	57	28.5
a-v assists a learner to learn at his/her own pace	31	15.5
a-v unit provides non-distractive env. for study	20	10.0
Use of a-v aids better performance in studies	18	9.0
TOTAL	200	100.0

5.3 Factors Inhibiting Optimal Use of the Audio-Visual Unit

Respondents were asked to list factors inhibiting them from using the a-v unit optimal. The problems identified are ranked in table 3. Lack of current software packages such as slides, video-tapes recorded educational cassettes, etc was rated most (64 or 32%) as an impediment to the optimal use of the a-v unit while one-fourth (50 or 25%) of the respondents ranked their lack of awareness of the opportunity for personal use of audio-visual resources as a deterrent to adequate patronage. This lack of knowledge was peculiar to the new students at 100 and 200 levels respectively who had late admission and consequently missed both the orientation programmes organized for them and the accompanying library tour/orientation.

Some of the respondents (19 or 9.5%) confirmed tight lecture schedule (lack of time) as a problem while 15 or 7.5% of the sample complained of the inability to operate the audio-visual equipment on their own. It was baffling that despite repeated notices advertising the services of the audio-visual unit, including in the university's bulletin and on the Library's two notice-boards located conspicuously and despite lectures on audio-visuals to 200 level students as part of the two-units credit earning "use of Library" course, 12 or 6% of the respondents claimed that they were unaware of the existence of the unit. Finally, irregular power supply and lack of adequate seating accommodation were mentioned as inhibitors to the regular patronage of the unit.

Table 3. Inhibitors to the Use of the Audio-Visual Unit

Problems	No. of Respondent	Relative Frequency
Lack of current software packages e.g. slides, cassettes, etc	64	32.0
Not aware that materials of the unit can be put to personal use	50	25.0
No time (tight lecture schedule of users)	19	9.0
Irregular power (electricity) supply	16	8.0
Can't operate equipment	15	7.5
Unit usually under lock and key	13	6.5
Inadequate seats	11	5.5
Not aware that unit exists	12	6.0
Total	200	100.0

The expensive and delicate nature of audio-visual equipment and materials accounted for their being put under lock and key(closed access) as opposed to textual materials (books and journals) that are in the open shelves and are loaned to users with minimal or no restrictions at all.

5.4 Motivators for increased Patronage of Audio-Visual Unit

The audio-visual unit now records a user statistics of between 150 and 200 daily. In order to attract more users, the respondents were given a list of factors that could possible motivates them to increase their patronage to the unit. These factors and their frequency distribution are listed in Table 4.

One-third (61 or 30.5%) of the respondents indicated that the use of audio-visual materials/equipment for class lectures would greatly motivate them to use the audio-visual unit while the provision of regular information on new educational videos ranked second (26 or 13%) as a motivator. The provision of facility for group viewing and discussion was emphasized by one-tenth (23 or 11.5%) of the respondents. This finding tally with previous studies (Crooks, 1982 and Ogunleye, 1982) and the recommendation for users' empowerment by training them to operate audio-visual equipment of their own as this will boost their enthusiasm to use audio-visuals the more (Adio, 2007, Gao, 2001, Moran, 2001).

Other factors that would motivate increase in the use of audio-visual reported in a descending order are

improved infrastructural facilities, especially, uninterrupted power supply (7.5%), privilege to loan audio-visuals for home use (6.5%), provision of more seats (5.5%), and better ventilation at the unit (3.5%)

Table 4. Motivators for Enhanced use of the Audio-Visual Unit

Motivating Factors	No.	Relative Frequency
Use of Audio-Visual materials for lectures	61	30.5
Regular information on new materials	26	13.0
Provision of locally-sourced programmed instruction	24	12.0
Provision of facility for group viewing and discussion	23	11.5
More training on the use of A-V equipment	20	19.0
Improved infrastructure facilities	15	7.5
Borrowing of materials for home use	13	6.5
Provision of more seats	11	5.5
Improved ventilation in the unit	7	3.5
Total	200	100.0

5.5 Benefit of Externally-Sourced Educational Videos

The Britain Council Library, Kano provides monthly outreach services in Bauchi. Opposed to "ownership" of intellectual materials there is linkage with the Britain Council Library, Kano to take advantage of her educational video service. Consequently, the council's list of books and non-books is circulated to the programmes (departments) for them to select books, journals and videos best suited to their courses and research needs and these are joined for them. As beneficiaries of these services, respondents were asked to assess the benefit/satisfaction that they derive from it. A preponderance of the respondents (190 or 95%) that they derived maximum satisfaction from the educational video service of the British Council Library, Kano. This captures the sense of cost effectiveness suggested by Lichtenauer, Jeroen and Valstar, Michel and Shen, Jie and Pantic, Maja (2009) for muti-media capture.

6. Conclusion

The immense role of audio-visuals in assisting students to learn at their own pace and consequently make learning process meaningful stimulating and stress-free is in no doubt. The study highlighted these factors as inhibiting the optimal use of the audio-visual unit: lack of current software packages, non-awareness of the fact that the unit can be out of personal use, lack of time on the part of the audio-visual as teaching aids by lectures, regular and prompt advertisement of the materials, acquired as well as the provision of locally programmed instructions, among others, will spur them into making greater use of the facilities provided by the unit. The respondents also publicizing the activities of the unit, impairing the skills of operating the hardware to them and the provision of improved infrastructural facilities will motivate better patronage. According to The International Federation of Library Associations and Institutions (IFLA, 2007) "Librarians, as information providers, should be concerned with the provision of information in the formats most suited to the differing needs of various types of user, each of which must be clearly differentiated. A library exists to serve its community and consequently the needs of all members of that community must be accommodated – the old and the young, the able and the disabled, the gifted and the backward members of the society."

Finally, the negative attitude of majority of the lecturers to the video recording of lectures is denying most students the advantage of re-enforcing learning through repeated play-back of recorded educational videos. Better collaboration between the library and the academic is an essential ingredient for motivating greater use of audio-visuals.

References

Adio, F.W. (2007). "Restructuring User Services in Universities Libraries in Information Technology Era." International Library Movement. 29, 2:106-116 http://www.unilorin.edu.ng/publications/adio/chief%20afolabi%20'resructing%20use..'.pdf

Anaba, A. (1994) AV in African libraries: opportunities and Obstacle. Audio-Visual Librarian. 2 (1): 50 – 55

Crooks, R.O.S and plumbe, W.J. (1982). Audio-Visual/Library pernership. International Library Review . 14:137

Enright, B.T. (1972) New Media and the Library in Education. London: Bingley.

Finding Aid for the Pennsylvania State University. Audio-Visual Services Records. http://www.libraries.psu.edu/digital/findingaids/88.htm

Fusoro, J.F. (1969). The Library College: where the education technology is. Education Technology, 9: 20.

Gao, Z. (2001). "Position Restructuring at Perkin University Library". College & Research Libraries, March: 173 – 178

Goldstein, Harold. (2011). "The Importance of Newer Media in Library Training and the Education of Professional Personnel." http://www.ideals.illinois.edu/ bitstream/ handle/2142/ 6380/ librarytrendsv16i2i_opt.pdf?sequence=1

Guidelines for audiovisual and multimedia materials in libraries. (2007). http://www.ifla.org/ publications/guidelines-for-audiovisual-and-multimedia-materials-in-libraries

Hallett, T. L. And Faria, G. (2006). Teaching with multimedia: do bells and whistles

Help students learn? Journal of technology in human services 24(2/3): 167-79.

Hodson, Y.P. (1979). The school media centre: a conceptual model. Journal for librarianship. 20 (1): 37-41.

Ibegbulam, I.J & Olorunsola, R. (2001). "Restructuring Academic Libraries in Nigeria: Issues to consider." Library Management. 22 (8&9): 48

Ibegwam, A. (1995). Motivating greater use of the A-V media in Nigerian universities: a case study learning resources unit of the college of Medicine. Lagos Librarian. 16:6 – 12

Kannappanavar, B.U. & Vijayakumar, M. (2001). "Use of IT in University of Agricultural Science of Karnataka: A Comparative Study." DESIDOC Bulletin of Information Technology. 2, 1,1, January: 2 1.26

Kaniki, A.M. (1994). Community resources centre and resource centre in transformation and post transformation era in south Africa. African Journal of Library. Archives and Information Science, 4(1): 47 – 5

Laskowski, M. S. And Bergman, B. J. (2004). Academic media center collection

Development and circulation policies: a comparative analysis. College & university Media review 10(2): 85-118.

Lichtenauer, Jeroen and Valstar, Michel and Shen, Jie and Pantic, Maja (2009). "Cost-effective solution to synchronized audio-visual capture using multiple sensors." In: IEEE International Conference on Advanced Video and Signal Based Surveillance, AVSS '09, 2-4 September, Genova, Italy.

Mabawonku, I. (1992) Deterrents to the use of Infrastructural media in Nigerian Universities. African journal of Archives, and Information Science, 1(2): 119 – 126.

Mcnaught, A. (2007). Moving images and sound: inclusive and accessible. Moving image knowledge and access: the BUFVC handbook, edited by c. Grant and l. Mckernan. London: British universities film & video council. pp. 29-33.

Mether, Calvin E. Bullard, John R. Martin, Bill. (1989). Audiovisual fundamentals: Basic equipment operation, simple materials production. W.C. Brown Pub.,

Moran, B.A (2001). Restructuring by a University Library: A North American Perspective." Journal of Documentation. 57,1: 100-114.

Moreno, R. And Ortegano-Layne, L. (2008). Do classroom exemplars promote the

Application of principles in teacher education? A comparison of videos, animations, and Narratives. Educational technology research & development 56: 449-65.

Odinni, C. (1990). TheManagement of change in Library Service. Library Review. 39,4: 32.

Ogunleye, G.O. (1987/87). The effect of Library instruction programmes on the students' use of the library: a case study of Ondo State University. Lagos Librarian. Vol. 3 and 4:19

Presenting Effective Presentations with Visual Aids. http://www.osha.gov/doc/outreach training/htmlfiles/traintec.html

Reginald Clarke, (1999) "User education at the Main Library of the University of the West Indies, St Augustine: a historical chronicle." Library Review. 48,5: 242 – 250

Simpson, R.S. (1996). Effective Audi-Visual: A Users Handbook.

Unwin, D. and McAlease, R. (1988). The encyclopedia of education, media communications and technology. 2nd ed. P. 39.

Woakes, H. (1986). Recent development in the use of audio-visual materials in Nigeria: implications for librarians. Audio-Visual Librarian, 12(1): 26 -13

Swank, R.C. (2011). "The Educational Function of the University Library." http://www.ideals.illinois.edu/ bitstream/handle/2142/5455/librarytrendsv1i1E_opt.pdf?sequence=1

Wong, Shun Han Rebekah. (2009). Incorporating audio-visual materials in university teaching: Results of a faculty survey and corresponding actions of the Library New Review of Academic Librarianship. 15, 1: 35 – 52