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# Impact Assessment of e-Learning Initiatives at the University of Jos and the Role of Information Literacy in Teaching and Learning

Vicki Lawal University of Jos Library, lawalv@unijos.edu.ng

Stephen Akintude University of Jos Library, akins@unijos.edu.ng

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Impact Assessment of e-Learning Initiatives at the University of Jos and the Role of Information Literacy in Teaching and Learning



By

Vicki Lawal (PhD) and Stephen Akintunde (PhD) University of Jos Library Jos, Plateau State 930001 Nigeria Email: <u>lawalv@unijos.edu.ng; ladilaw@gmail.com</u> <u>akins@unijos.edu.ng; sakintun@gmail.com</u>



# Map of Africa showing Nigeria







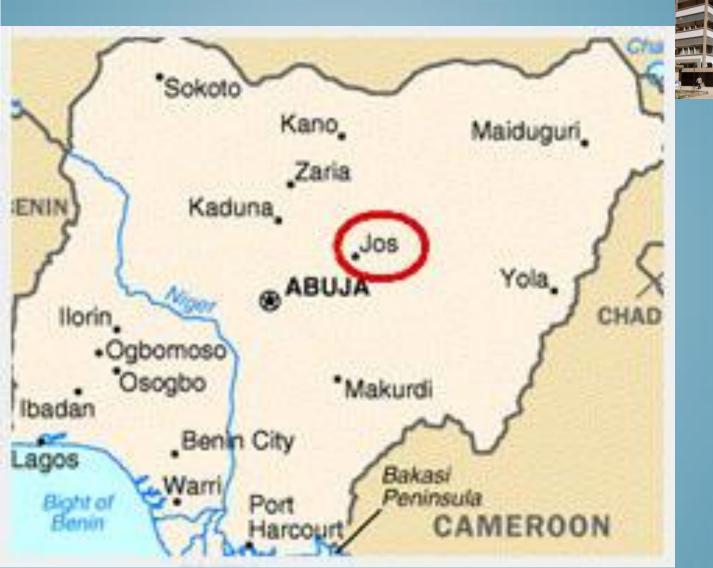
# Plateau State, Nigeria





### From: http://www.plateaustategov.org/history/geoinfo.html

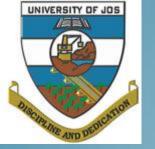




From: http://www.plateaustategov.org/visit/jos.html







# **University of Jos**



- Public university established in 1971 as a campus of University of Ibadan
- One of about 140 universities in the country
- University of Jos (Unijos) moving from "conventional" status to "modern" university
- Disciplines offered at undergraduate & postgraduate levels in 9 Faculties
- Academic staff: 1058
- Student population:
  - 19,816 FTE undergraduates
  - 2192 FTE postgraduates



# Introduction



**ICT** and the changing context of the information society

E-learning in higher education institutions (HEIs) - Focus on the quality of learning has also placed greater emphasis on the pedagogic role that e-learning plays in transforming the nature of course instruction in the use and application of e-resources (Kiliç-Çakmak, 2010: 192)

**E-learning and HEIs** in Nigeria.



# **Context of the study**



## University of Jos

E-learning initiatives and partnerships with other institutions (Liverpool & others, 2009: 1)

- Internetwork for International Development (Intlinet), University of Iowa.
- Knowledge Environment for Web-based Learning (KEWL). University of the Western Cape.

Learning Management System –

• Modular Object-Oriented Dynamic Learning Environment (Moodle).





# **Context of the study (***Contd.***)**

### **Information literacy (IL) at the University of Jos**

- Role of the library: Encouraging excellence in teaching, learning and research and has actively participated in the Community of Practice for e-learning initiatives.
- Earlier methods of user education General Studies course offered as a compulsory credit-earning course (Idiodi, 2005).
- E-learning/ IL and the instructional role of the library: Library staff engaged staff and students in the use of library resources by undertaking continuous information literacy (IL) skills training and awareness programmes to all faculties and departments of the institution-better collaboration towards integrating IL.
- Challenges: Developing more efficient strategies for integrating concepts of IL to the e-learning process in ways that can improve student learning at the university.



# **Research Questions**



- 1. What are the challenges and opportunities provided for the library from changes in the learning environment at the University of Jos?
- 2. How is the University of Jos responding to the challenges posed by the growth in e-learning?
- 3. How can e-learning be supported through information literacy instruction at the University of Jos?
- 4. How best can library resources be integrated to E-learning processes at the University of Jos?



# Methods



### Case study method.

- Sampling: Purposive sampling
- Field methods: Administration of questionnaires to staff and students in three faculties.
- > Aspects investigated through the questionnaire included:
- The application and use of the learning management system (Moodle) adapted to the teaching and learning processes at the University.
- The use and application of e-resources such as the E-granary, the Institutional Repository and other electronic databases in the library.
- Instructional methods employed by the University library in the use of these resources.



# Methods (Contd.)



### > Participants:

- Faculty of Natural Sciences (Mathematics)
- Students (103), staff (9)
- ➢ Faculty of Law −
- Students (102), staff (7)
- Faculty of Arts (English)
- Students (101), staff (9)



# **Data Presentation & Findings**



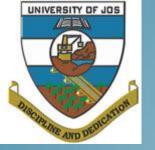
### Demographic characteristics:

### > Students

- Law: Male (52%), Female (46%)
- Mathematics: Male (80%), Female (17%)
- English: Male (60%), Female (40%)

### ≻ Staff

- Law: Male (86%), Female (14%)
- Mathematics: Male (78%), Female (22%)
- English: Male (60%), Female (40)





### ➤ Users of e-learning:

- Students: Law students constitute the highest percentage (63%) of users of the e-learning modules among the 3 groups, mathematics (49%) and English (49%).
- Staff: Mathematics (56%) are the highest users of e-learning in their course instruction modules, law (29%) and English (11%).
- Challenges in the use of e-learning: Law and mathematics students indicated problems of poor internet connectivity (89%) respectively and inadequate computers (67%) as their challenges in the use of Elearning. While for the staff 44% from mathematics indicated that challenges in designing, updating, managing and maintaining of the Moodle template.





> **Opportunities created for the library through e-learning:** 

> Training for staff and students in the use of library resources.

- The highest responses in the use of used of online resources in their studies were Law students (33%) followed by English students (28%).
- Among the staff, data in the use of online library resources for designing e-learning course modules include law (44%), mathematics (23%) and English (20%) respectively.

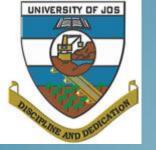




Findings from the study have also revealed a poor level of information

literacy (IL) skills of the students as shown in Table 1 below:

Table 1: IL skills rating	Average	Good	Average
	Law	Mathematics	English
	students	students	students
<b>a.</b> Formulating questions based on information needs	33	39	45
	(32%)	(38%)	(45%)
<b>b.</b> Identifying potential sources of information	40	38	47
	(39%)	(37%	(47%)
<b>c.</b> Developing successful search strategies.	29	28	45
	(28%)	(27%)	(45%)
d. Accessing sources of information	21	40	44
	(21%)	(39%)	(44%)
e. Evaluating information	30	36	41
	(29%)	(35%)	(41%)
<b>f.</b> Integrating new information into an existing body of knowledge	26	36	45
	(25%)	(35%)	(45%)
<b>g.</b> Using information in critical thinking and problem solving	30	38	35
	(29%)	(37%)	(35%)



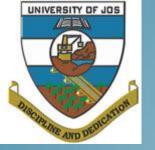


- Results from the findings in Table 1 shows that a greater percentage of the respondents rated their information literacy skills as good or average.
- These findings therefore indicate that greater emphasis needs to be placed on information skills training by the library in order to ensure development in students' ability to manipulate, analyze and critically evaluate information sources.



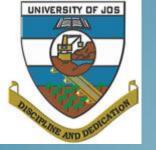


Table 2: Areas of emphasisfor library skills training	Mathematics staff N=9	Law staff N=9	English staff N=7
a. Communication skills	4 (44%)	2 (26%)	1 (14%)
b. Writing skills	5 (56%)	2 (26%)	2 (26%)
c. Evaluative skills	5 (56%)	2 (26%)	2 (26%)
d. Critical thinking skills	3 (33%)	4 (44%)	3 (60%)
e. Analytical skills	5 (56%)	3 (33%)	3 (60%)
f. Research skills	7 (78%)	3 (33%)	3 (60%)
g. Problem solving skills	4 (44%)	2 (26%)	3 (60%)
h. All of the above	5 (56%)	3 (33%)	1 (14%)





- Data from the column in Table 2 above reflect responses which indicate the opinion of the lecturers with respect to areas of needed emphasis in skills training by the library, from the table research skills (78%), critical thinking skills (60%) and problem solving skills (60%) rank as the highest areas of need for skills instruction.
- Even though more data is needed to clarify this issue, these findings help in establishing a link between skills training and the role that the library is expected to play in addressing challenges of skills deficiency among students.



## **Conclusion and Recommendations**



- In assessing e-learning initiatives at the University of Jos, it is seen from the findings that greater efforts need to be channelled towards skills training, sensitisation of staff and students and the provision of more efficient infrastructure for e-learning particularly with regard to ICT.
- ➢ It is seen also from the findings that the potential to implement effective e-learning strategy can only be achieved within a collaborative framework between the university library, the various faculties and other stakeholders of the institution.



### Impact assessment of e-learning initiatives at the university of Jos and the role of information literacy in teaching and learning

Vicki Lawal (PhD) and Stephen Akintunde (PhD) University of Jos Library, Nigeria.

#### Introduction

The study aims at providing an assessment of the impact of elearning at the university of Jos, Nigeria, particularly the response of the library. It seeks to examine how changes to the context of learning has emphasised the instructional role of the library in encouraging active learning processes in learning management systems through information literacy instruction.

#### Context of the Study

University of Jos

- E-learning initiatives and partnerships with other institutions– Internetwork for International Development (Intlinet), University of Iowa, Knowledge Environment for Web-based Learning (KEWL). – University of the Western Cape.
- Learning Management System –Modular Object-Oriented Dynamic Learning Environment (Moodle).
- The instructional role of the library.

#### **Research Questions**

- 1.What are the challenges and opportunities provided for the library from changes in the learning environment at the University of Jos? 2. How is the University of Jos responding to the challenges posed
- by the growth in e-learning? 3. How can e-learning be supported through information literacy

instruction at the University of Jos? 4. How best can library resources be integrated to E-learning

4. How best can library resources be integrated to E-learning processes at the University of Jos?

#### Methods

- Case study method.
- **Sampling –** Purposive sampling
- Field methods: Administration of questionnaires to staff and students in three faculties.
- Participants:
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#### Demographic characteristics -

Students:

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- English: Male (60%), Female (40%) Staff:
- Law: Male (86%), Female (14%)
- Mathematics: Male (78%), Female (22%)
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#### Study findings

- Law students constitute the highest percentage (63%) of users of the elearning modules among the 3 groups, while for staff, mathematics (56%) are the highest users of e-learning in their course instruction modules.
- Challenges in the use of e-learning: Forty four percent (44%) among the group of lecturers (mathematics) indicated that challenges in designing, updating, managing and maintaining of the Moodle template. While responses from law and mathematics students indicated problems of poor internet connectivity (89%) and inadequate computers (67%) as their challenges in the use of E-learning.
- 3. Challenges posed by the growth in e-learning has created greater opportunities for the library in terms of training for staff and students in the use of library resources. The highest responses in the use of used of online resources in their studies were law students (33%) followed by English students (28%). While among the staff, data in the use of online library resources for designing e-learning course modules include law (44%), mathematics (23%) and English (20%) respectively.
- 4. Findings from the study have also revealed a poor level of information literacy skills of the students as shown in Table 1 below:

Information literacy skills Law students Mathematics English Students N=103 Average Good  a. Formulating questions based on information needs (32%) (32%) (38%) (45%) b. Identifying potential sources of information 40 38 47 (39%) (37%) (47%) (47%) c. Developing successful search strategies. 29 28 45 (28%) (27%) (45%) d. Accessing sources of information 21 40 44 (21%) (39%) (44%)
In the information needs         N=102         Average           a. Formulating questions based on information needs         33         39         45           (32%)         (38%)         (45%)         (45%)           b. Identifying potential sources of information         40         38         47           (39%)         (37%)         (47%)         (47%)           c. Developing successful search strategies.         29         28         45           (28%)         (27%)         (45%)         (45%)           d. Accessing sources of information         21         40         44
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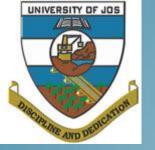
Poster presented at the 34<sup>th</sup> IATUL Conference 14-18<sup>th</sup> 2013, Cape Town, South Africa

#### Table 1: Information literacy skills self-rating





# **Thank you!**





# **Selected References**

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