

**Exploring the potential benefits of Virtual learning Environment
for capacity building of Authors and publishers in Nigeria:
National Library Experience**

**By
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Abstract

This study proposed the implementation of Virtual Learning Environment (VLE) for capacity-building in National Library of Nigeria (NLN), stressing its potential benefit to service delivery. The paper also emphasized the need for collaborative engagement of NLN and publishers in an environment devoid of barriers with the view of promoting quality of materials listed in National Bibliography Nigeria. This paper concludes that improved capacity-building, adequate funding and whole-organizational support for ICT based initiatives are key factors to successful implementation of this project.

Keywords: Virtual Learning Environments, Capacity-Building, National Library, National Bibliography, ICT

Introduction

The potential of Virtual Learning Environments (VLE) in national development especially in developing countries where funding of the educational sector has continued to fall short of the internationally acceptable standard, cannot be overemphasized. The Nigerian government as part of measures to forestall the impact of the global economic meltdown recently suspended overseas training in public service; virtual learning environments could help to fill the void the action of government would create in meeting the human resources development.

Advances in information technology have resulted in the developments we now call technological learning environments. Technology has paved way for interchange of ideas between tutors and learners, creating room for dialogue. Today, VLE involved the combination of distant learning and traditional classroom setting with the view to having a more robust and conducive environment for learning when jobs' demands and family commitments prevent individuals from undergoing vocational training. Dillenbourg et al (2000) viewed VLE as designed information and social space, not restricted to distance learning where it is easy to integrate VLE into traditional face-to-face classroom to support learning and teaching.

Studies have also shown that virtual environments make students to be actors and contributors of social and information space. In the opinion of the researcher, this does not in any way take anything away from the expected roles of a teacher as a guardian, transmitter, mentor, facilitator and coordinator of the learning

environment because the researcher intend to agree with many who see advances in technology as tools for teachers and not as substitute.

It is obvious that learning in the virtual world has the potential to encourage professionals and adults undergo training and retraining courses relevant to their field of specialization because it is convenient, allows acquisition of updated knowledge and promotes efficiency on the job. Online education will reduce the burden of traveling to attend courses away from home, thereby reduce the cost of transportation and other living expenses such as accommodation and at the same time have the opportunity to attend to family and job responsibilities.

The researcher therefore, proposed the development and implementation of a virtual learning environment for Nigerian authors and publishers. This is an easy and economically viable way of bringing this category of professionals and expose them to new trends in book publishing which is through an organized online training programme with the view to ensuring which materials listed in the Nigerian Bibliography of Nigeria (NBN) meet international standards.

Production of the National bibliography is the statutory function of National Libraries world- wide. The quality of materials listed in the National Bibliography varies from nation to nation and it is usually, influenced by technological development, definitions of listed material, and the level of awareness on copyright laws. It is also, influenced by the type and adequacy of resources available to authors and publishers, and the technical competence of bibliographers.

It is imperative for any National Library that wants to keep pace with developments in book publishing to constantly review, its bibliographic production process in order to meet the dynamic demand of its patrons, especially in this information age that the barriers of space, distance and time to access information are daily being eliminated.

Therefore, a framework for an effective online mode of learning based on the use of appropriate learning tools and resources applicable for the Nigerian situation is been proposed with adequate attention paid to the quality of NBN produced at National Library of Nigeria.

It is therefore, obvious that piracy has hampered the development of the publishing industry and it has created a situation where we have more self-published work listed than materials published by established publishers. The debate is on in the country as many contend that authors who cannot meet or whose work cannot meet the acceptable standard in the industry resort to self-help by being author-publisher. However, others are of the opinion that lack of confidence in the established publishers by authors as regards royalty is responsible for the recent domination of the publishing industry by the author-publishers. The question is how many of the author-publishers have the pre-requisite training in the art of publishing especially book production and design or electronic- book publishing.

The advent of home video, computer games, and internet access to multimedia resources has affected the reading culture among our youth and it influences the patronage the publishing industry enjoins. It is also important to note that the decline in the purchasing power of an average Nigerian has equally contributed to the reliance on photocopies of educational materials rather than the outright purchase of original published materials.

The need to encourage collaboration of Nigerian authors and publishers in the virtual world cannot be overemphasized in view of the statutory responsibilities of National Library. Nigerian authors and would-be authors in any part of the world can learn and share their knowledge and experience on current trends in publishing in the comfort of their homes and offices. It can be expected that when authors and publishers have updated knowledge on publishing and copyright protection, the quality of materials listed in the National Bibliography will improve in terms of technical depth and originality.

Statement of the Problem

Over the years, experience has shown that participation at face-to-face conferences, seminars and workshops organized by National Library on book publishing and legal depository obligation have neither been very encouraging nor resulted in the desired improvement in the quality of work listed in NBN. The attendance of the professionals at these training programmes is usually influenced by distance, participants' job demand and other engagements. A real-time online training programmed has the potential to address these problems since participants can learn both formally and informally through interaction with others.

Objectives of the Project

- To create opportunities where publishers and authors could learn new ideas, interact, collaborate and dialogue on issues that affect publishing industry
- To create awareness among the various stakeholders in the publishing industry to appreciate the need for listing in the NBN materials of rich content, original and of international standards;
- To stimulate the interest of participants in the recent developments on book publishing and copyright laws;
- To create a forum where stakeholders in the publishing industry can take advantage of the feedback system the training will provide the publishers and authors to continuously interact, collaborate and dialogue with National Library.
- To enable the processes of capacity building in publishing and production of books in Nigeria, and by exploring the possibilities of the use of virtual learning environments for collaborative knowledge building.

Research Questions

- How viable is VLE to the capacity building of Nigerian authors and publishers?
- How can we create enabling virtual environments for collaborative knowledge building and dialogue?
- What are the likely constraints to the effective implementation of VLE in Nigeria?

Significance of the Study

The study will help to fill the gap created by inadequacy of data on the development and implementation of e- learning and the general application of ICT to learning and teaching in Nigeria and National library in particular, stressing the impact of e- learning on its capacity to discharge her statutory responsibilities in the development process.

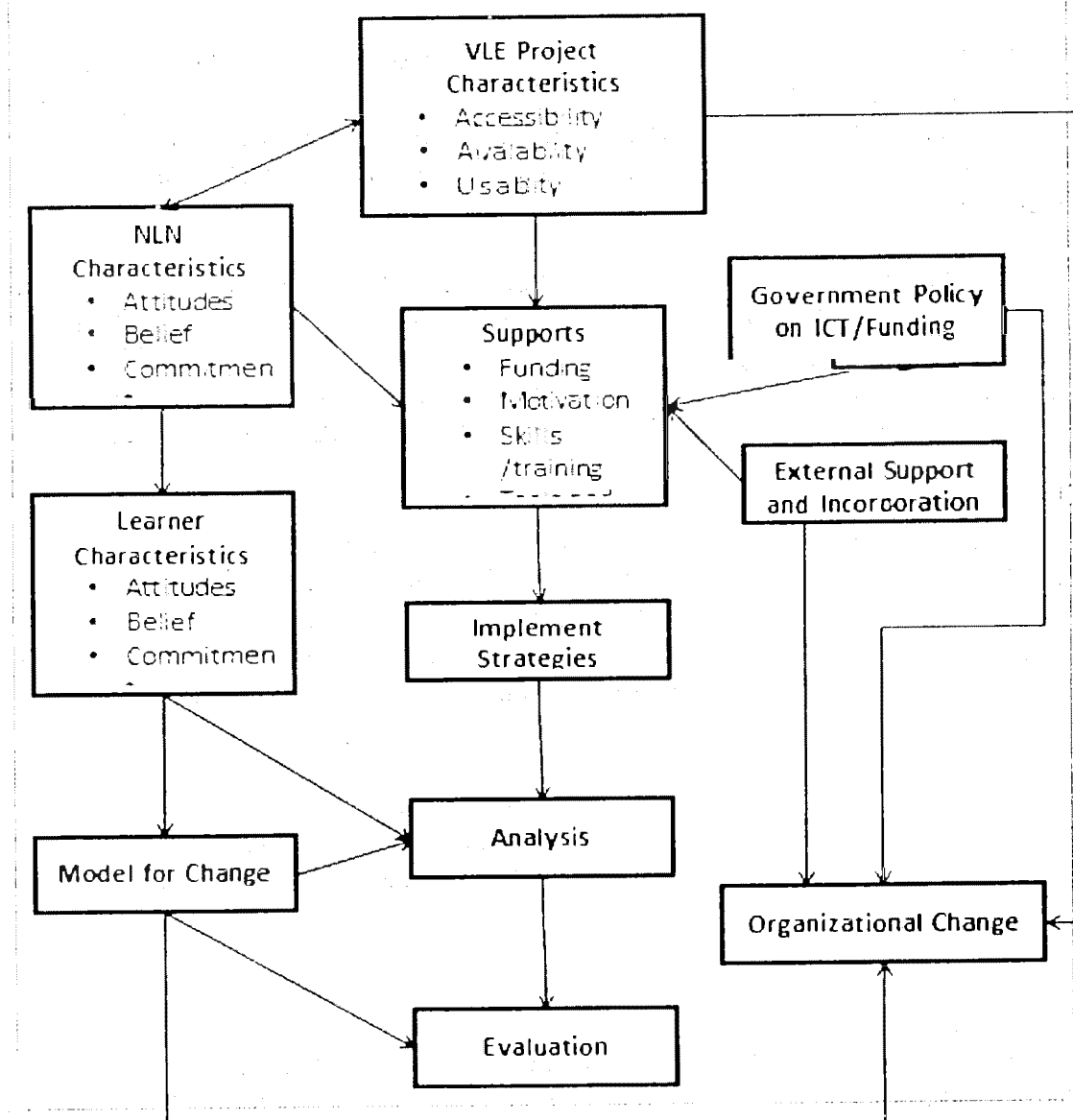
It is belief that the findings of this study will be of value in determining the appropriate virtual learning environment that could suit our immediate needs and that would be compatible with our level of technological development.

Finally, it will equally contribute to the body of knowledge on impact of E-learning to capacity building of professionals and stakeholders in book publishing in developing countries and Nigeria in particular.

Limitation of the Study

The study does not attempt to teach authors how to write but rather create a forum for discussion and exchange of ideas on how best to produce books in conformity with international standards in book publishing.

Conceptual framework for a VLE project initiative in National Library of Nigeria



LITERATURE REVIEW

Virtual Learning Environment (VLE) defined

The term Virtual Learning Environment (VLE) is used to describe a set of teaching and learning tools designed to enhance students' learning experience by including computers and the Internet in the learning processes. It serves as an environment for students to engage in a wide range of discussion on topics with peers and leading authorities, thereby creating a broader audience for interaction with others than with their instructor McLellan (1997).

Researches have shown that VLE facilitates collaborative learning among learners and between a wider academic and non-academic community Hiltz, (1995). Bouras et al, 2002; Lee and Geller, 2002). This underlines the importance of internet in the education system as learners can participate in learning activities irrespective of their location.

Virtual Learning Environments (VLE) allow democratization of learning process as participants have equal control and most importantly; the freedom of expression it offers has collaborative and cooperative tendencies. Dillenbourg et al (2000) viewed VLE as designed information and social space, not restricted to distance learning. In this case, it is easy to integrate VLE into traditional face-to-face classroom setting to support learning and teaching.

However, VLE should be seen as complementing traditional mode of learning as its impact could be great when combined with the 2f classroom setting as experience in a MAICT and Education programme at the University of Leeds. Students are active participants in the learning process provided by the online text-based chat session. Although, participation in the online session is paramount, its influence on the f2f classroom setting is significant.

Proponents of VLE have argued that the environments can potentially eliminate the barriers to effective learning in the traditional environment by providing convenience, flexibility, currency of materials, student retention, individualized learning and feedback system.

Importance of VLE in National development

Learner focus:

In a Virtual learning environment (VLE) there is a shift from teacher-centred system of learning to learner-centred as the role of both the teacher and the learner in the

learning process changes (Vrasidas & Glass, 2005; Mayer, (2008) Yip; Cheung; Sze, 2004). It has therefore, been argued that students achieve better performance because of the control they exercise in the learning process Chou & Liu, 2005; Williams, 1996. Implying that effective learning outcome is achieved.

In the researcher's opinion based specifically on her experience as e-learner, the opportunity of controlling the learning activities makes learning more effective and interesting when compared to the f2f classroom setting. This is because it is learner-centred and learners thus have control of the activities and resources to suit his styles and method.

Technology has influenced positively the learning process and succeeded in making it more challenging. Learners now have better access to resources; a tutor therefore, needs more confidence and zeal to cope with the dynamic role of learners in the learning process. the researcher therefore, believe VLE implementation will provide a good support to traditional teaching and learning, as was the case in some blended mode of learning (Miller et al., 2004; Dean, Silvester & Peat, (2001), Khine & Lourdasamy, (2003) Smith, (2001).

Adult participation In Learning:

Virtual learning environments are potentially viable in encouraging all categories of learners, especially adults whose desire to undergo training or take part in any form of life-long learning are being hampered by the exigencies of family and job demands. A VLE creates opportunities for learners to combine learning with social, political and economic activities at their own pace and preferred style of learning. According to Lyman, (1999) Internet-based learning has great potentials in encouraging adult participation in learning. It is obvious that online education will reduce the burden of travelling to attend courses away from home.

Cost effectiveness:

The cost of registration for an online course may not be necessarily cheaper when compared with attending course in the normal traditional classroom setting; however, the overall financial outlay makes it cost effective. For instance, cost of transportation and the person-hour loss spent in commuting from a location to another in major cities in Nigeria as a result of poor infrastructural facilities, like good road network affects productivity nationally. The amount organizations spend will equally be minimal compared to if they were responsible for other living expenses of the participants in f2f training.

A review of literatures on economic implementation of VLE project initiatives reveals cost saving and efficient resource allocation as the great benefits. The most readily quantifiable cost saving effects was in the area of e-assessment, use of e-portfolios and capacity to cope with large number of geographically distance students JISC,2008; Reigeluth ,1999.

However, in the opinion of the researcher on the economic efficiencies of online training is mixed. An online training is definitely bound to be more expensive at the initial stage in developing countries, like Nigeria where additional fund is required for provision of ICT infrastructural facilities and human capital development to use and manage the resulting change in the learning process. The implementation of virtual learning environment by National Library of Nigeria will therefore, require an additional cost of training professional staff on the application of the new technologies to learning and teaching, provision of ICT infrastructural facilities, and other logistics needed to enhance online training.

Creativity and self-development:

VLE has the potential of moderating the anxiety of learners with the use of available computer mediated communication (CMC) tools that provide learners the opportunity to think critically before posting his ideas. A learner is able to combine the knowledge gained from others to reflect on his own experience and make vital contributions. The effective social interaction with diverse group makes self-exploration and creative thinking easy for participants. Padmore, 2006; Lau, (2007; Vida, 2003) viewed the use of computers and internet in learning as helping any kind of creative thinking.

The VLE provides access to a wide range of information in different formats through the use of appropriate ICT infrastructural facilities without the limitation of time and space, thereby allows a learner to learn at his own pace and be creative in thinking. According to Lau (2006) ICTs provides flexible learning environment without limitation in time and space creating sufficient time for relaxation that is crucial in creative thinking.

This is contrary to the situation in the traditional f2f where learners have little time to think critically before expressing his/her ideas to peers and the criticism to which his views may be subjected to may make him apprehensive and limit his capacity to think creatively.

Team building and Community of Practice (COP):

Virtual learning environment is potentially viable in creating a good avenue for collaborative and cooperative project. The influence of technology in bringing people of like minds together may eventually stimulate learners having similar interest to collaborate. It is common in chat sessions to create small group for effective discussion in the online environment. Collaborative tasks and projects is encouraged and facilitated in the virtual environment. Team building allows group relationships and shared sense of purpose VanDam, (2001). This would further encourage joint participation in business venture or pooling resources together to undergo joint project.

In this project, learners are to collaborate with each other and with tutor as they participate actively in the learning process. The need for community of practice (COP) is therefore, imperative and requires people who share the same concern and passion for something they do and learn to do it better and solve common problem through regular interaction according to Wenger (1998).

Social interaction

Today a better medium of social interaction and sharing of ideas in this modern age is through computer-mediated learning such as chat, e-mail and forum because learners have the opportunity of interacting with people from different socio-ethnic, religious and geographical backgrounds. Text-based communication has the potential of removing barriers of shyness, gender, intimidation and intonation problems. However, within a social model for knowledge creation, the pre-requisite for genuine knowledge transformation to occur, knowledge has to move from individual

-Life-Long Learning:

Atwell (2007) opined that workers need continuous learning throughout their work-life to update their occupational skills, knowledge or learn new competencies. Computer mediated communication (CMC) provides learners the opportunity of a long-lasting relationship with tutors and their peers. This encourages a continuous learning even after the programme as learning is a life-long process that requires continued contact with institution, tutors and peers.

RESEARCH METHODOLOGY

In this study, the design, development and delivery of an online training course initiative is examined as a way of managing change in the service delivery to Nigerian authors and publishers on whom the quality of material listed in the NBN lies.

. Action Research Methodology

The primary purpose of action research is to bring about change in specific situations, local system and real-world environments with the view to solving real problem Berge (2001).

I started the action research by using series of theory-practice cycle to improve the circumstances of the people involved. It involved planning and implementation, and result obtained used to inform the next cycle of planning according to O'Brien (1998). It can also be described as what (Kotter, 2008; Parking, 2008) referred to as a strategy for implementing change based on systematic process of data collection, selection of change action based on what the analysed data indicate. Action research is therefore, advantageous as it is systematic, scientific, participative and collaborative.

Bate (2000) claimed that action research is inseparable from change management and specifically it is useful in relation to learning and knowledge. This implies that when introducing ICT into the teaching processes, commitment and involvement of all stakeholders is required in the management of the change process.

Studies have justified the appropriateness of action research as:

Situational: concerned with diagnosing a problem in a specific context and attempting to solve it in that context;

Collaborative and participatory: its partnership approach ensures that researchers negotiate their plans and interpret the situation with other involved individuals;

Evaluative: its cyclical nature means that modifications and changes are monitored continuously within the situation to make it flexible and adaptable in reflecting on practices that are dynamic according to Greenwood (1984)

Based on the above, the researcher embarked on an action research using a cyclic methodology. The information gathered through administration of questionnaires, observation and secondary data in the preliminary investigation into the viability of the project given the level of our technological development, was analysed and evaluated to follow the continuous cyclic process. However, action research being cyclic in nature makes amendment and modification possible and easy. This will allow flexibility in the implementation of a successful learning process.

Data collection and Questionnaire

The research instrument used was a structured questionnaire designed to explore the potential benefits of VLE in capacity building and identify what needed to be done to make an effective design and management of VLE for Nigerian publishers a reality. Adequate care was taken in ensuring that a reasonable sample size of 15 was considered from the population of authors and publishers since it will be difficult to serve questionnaires to all authors and publishers across the country. the researcher did a random sampling using the Publishers' Directory compiled by the National Library of Nigeria. However, prior to the random selections, the stakeholders in publishing industry have been categorized into three main categories: The Author; The Publishers and the Author/Publisher.

Therefore, based on the above criteria five members were selected from each category. This implies that fifteen questionnaires (15) were administered on Nigerian authors and publishers. The purpose of using these criteria is to avoid lop-sidedness in the number of authors and publishers selected. At National Library, seven questionnaires were administered (2-top management staff; 3-NBCD, 2 –training Department). A total number of 22 questionnaires were analysed in this preliminary study.

The questionnaires were sent to respondents as attachment to e-mails and followed-up with constant SMS to their GSM as a reminder. Electronic mailing was used because it is easy, flexible and convenient due to distance, economic and time constraint. In addition to the use of questionnaire, information was obtained from secondary data derived inform of statistical information, records and relevant documents in form of files and reports from the National library of Nigeria.

ANALYSIS/DISCUSSION

The VLE initiative project was discussed in line with the conceptual framework and the theoretical framework, both serve as a guide in the analysis. In theoretical framework, the importance of organizational characteristics, infrastructural facilities, and training featured in the implementation of VLE, corresponds with the findings from the case study. Therefore, the analysis of data on both stakeholders and the learners will be on the three factors.

For easy understanding and interpretations, conversion of information collected into percentages and illustrated with figures to present the data collected from twenty-two (22) respondents used as sample size of the population comprising the staff of the organization where the innovation is to take effect and the prospective learners in the VLE. Questionnaires designed and distributed to both groups with an impressive response from 98% of the sampled population.

Personal and Demographic Information

Analysis of the demographics information of the research participants revealed that 86% of the learners were between the age range of thirty five (35) and forty (40) while 14% were below the age thirty. This justifies the reason for the implementation of online education as participants are mostly adult with family and job responsibilities and thus will prefer to learn in VLE than in the traditional f2f. Findings from literatures on adult learning supports, learners' preference for distant and electronic learning to attendance of courses in the traditional school environments.

Therefore, respondents when asked to justify the need for VLE pedagogy and the potential benefits identified numerous affordances that made VLE relevant. Thus, to meet the needs of these learners as revealed from the data collected, both NLN staff and learner focus attest to the VLE implementation project as they view it as a problem- solving mode of learning. All respondents except one from the learner focus expressed concern for the traditional mode of training.

In practice, based on the percentage of research participants one could deduce that large number of adults are involved in publishing industry than the younger ones. This factor is one of the limitations of the research as there are a number of young Nigerian authors which the research has out of omission marginalized but due recognition will be given to them during implementation. The omission however could be that they are represented by their publisher. Nevertheless, age, gender, academic qualification and designation did not have any significance influence on

the way respondents view the adoption of VLE initiatives. However, length of service seem to have significant influence on the way respondents from National Library react to questions on management of change especially on training, motivation and support.

Organizational characteristics

The leadership, management and staff of the institution in the case study shows positive attitude to the acceptance of VLE project as revealed in the data collected. 79% indicate positive attitude towards the acceptance while 21% shows negative attitude and resistance. Adaptation, cooperation and collective commitment on the part of whole organization is recognized as a positive culture in favour of change and innovation Tearl (2008) while leadership may provide inspiration, vision, creativity and management addresses implementation through planning, coordination and monitoring according to Eliot-Kemp & Eliot- Kemp (1992). The respondents with negative attitudes were in the group of staff with long years of service with the belief that they will soon leave the service and as such not ready to accept any change that is too demanding.

Any institution ready for change must be prepared to invest in its staff both in resources and knowledge acquisition and the leadership must have confidence in his staff with words of encouragement and motivation. Papert (1991) observe that most ICT innovative project in schools failed because head teachers often show and express lack of confidence in their teachers which further discourages acceptance. Moreover, acceptance of the project is higher with lack of corresponding support and motivation for the project as expressed by another 70% whose comments were negative and 30% shows positive response to institutional support. This calls for attention as acceptance is quite different from commitment, as acceptance without necessary support and encouragement could hinder successful implementation.

Historically, National Library of Nigeria supports for innovative projects in the past is acknowledged by many who have in the past benefitted from different training programs through funding of both local and international courses. Negative, remarks from respondents, 23% staff indicate those people with higher length of service shows negative attitude due largely to inadequate supports and motivation from the institution in recent time. Many were even discouraged from presenting new ideas due to fear of being intimidated, unlike in the past when self-development projects and creativity is highly recognized.

On the part of the learner focus, individual learner characteristics relating to

learner's attitude, belief and perception of VLE project was with 100% positive response, as adequate supports, motivation and encouragement to participate received with readiness for the success of the project. The members of the professional body and stakeholders in publishing industry in personal discussions were enthusiast about the innovation and are equally ready to commit their time and resources to the training programme.

ICT Training and Development

Notable in the literature review is the influence of staff training and development to managing change, findings from the research revealed that 76% of the respondents have never been sponsored on any ICT related courses either formal or informal. Any organization ready for change should provide supports on both formal and informal training for all members of staff. Sponsorship to local, regional and international conferences and seminars must be open to all categories of professionals in the organization.

Analysis of data relating to training indicates that National library in recent time has not been paying adequate attention to staff training and development especially on formal training in ICT related courses. This attitude negates successful implementation of change relating to use of ICT, as most staff do not have relevant skills in ICT as they possess for other courses such as Librarianship, administration and education. Organizational structure of National Library of Nigeria were equally identified as being favourable to the successful implementation of the project as National library have branches all over the country, through these state branches its ICT facilities could be made available to the participants.

ICT Infrastructural Facilities at National Library of Nigeria

The importance of ICT infrastructural facilities in the implementation process calls for analysis as technology mediated learning require adequate and appropriate ICT enable resources. Findings from all the respondents indicate availability of website, internet connectivity, computers, telephone, and fax at the National library. However, for learning to take place effectively appropriate computer mediated technologies has to be in place. Comments on ICT infrastructural facilities indicate inadequacies and lack of CMC tools for learning but the presence of the available ICT structures would create easy opportunity for implementation of the project. The available CMC tool, the E-mail facility is currently used for personal and social functions as 76% of the respondents claimed its used for this purpose while 24% use

it for official purpose. Those that use it for official purpose, from the findings indicate staff from International Standard Serials Number (ISSN) and International Standard Book Number (ISBN). It is important to emphasize the use of CMC tools in VLE projects as there are no facilities such as chat and forum. These are essential CMC tools in the VLE but presently unavailable.

Table: 1 General Assessment of factors Influencing VLE Implementation Project for Nigerian authors and publishers

Questions	Response		Percentage P	Percentage N
Organizational	Positive	Negative	30%	70%
support and commitment	6	14	79%	21%
Attitudinal perception	18	2	60%	40%
ICT Infrastructure	12	8	35%	65%
ICT Skills and Training	7	13	20%	80%
Personnel to manage the training	4	16	30%	70%100%
Funding	6	14	-	-
External support	20	Nil	100%	
Total no. Of Respondents	20	-		

It is interesting to note that all the respondents were of the opinion that National library of Nigeria could not at this stage foot the funding of the project alone. This is evident in the case study with 100% response to inadequate funding and the need to source additional funding for the project from external bodies that might be interested in collaboration with NLN to implement the project. However, the researcher's view on inadequate funding is in contrast to the findings of the study, an organization of the status of National library of Nigeria have the well-witall to finance the program without subjecting to external funding which might not be forth-coming and could also delay the implementation process. The project is capable of sustaining itself if properly managed. It is also a source of income for the institution. Moreover, it will equally bring respect, pride and recognition of the responsiveness of National library commitment to quality of the Nation's intellectual output and knowledge economy.

Table: 2 Assessment of Respondents Justification for the Project

Questions	Responses PN	Percentage positive (P)	Percentage (N)
State of publishing in Nigeria	173	100%	15%
Need to update knowledge	20	85%	10%
Inadequacies of f2f learning environment	182	90%	20%
	164		
Cost effectiveness	20-	80%	10%
Barriers of time, place & attention to responsibilities	18 2	80%	35%
	137	80%	
	182		
Personalize learning		90%	10%
Social interaction		65%	
Team building and communities of practice		90%	

Conclusion

The use of information and communication technologies (ICTs) in the educational system has continued to pose great challenges to teaching and learning activities in Nigeria. This is because educational institutions and other relevant organizations in Nigeria are yet to take the advantage of the potentials inherent in the use of VLEs and e-Learning platforms. In this case study it is recommended that for successful implementation of these initiatives, the organization supports, improved capacity building, adequate funding and positive acceptance of ICT innovative projects be given priority amongst other impending factors.

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