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Article

Adoption of e-learning among instructors in higher institutions in Nigeria: A case study of Obafemi Awolowo University, Ile-Ife, Nigeria

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Adoption of E-Learning among Instructors in Higher Institutions in Nigeria: A Case Study of Obafemi Awolowo University, Ile-Ife, Nigeria

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Abstract: The study investigates the attitude of faculty members towards the adoption of the e-learning among instructors in Obafemi Awolowo University, Ile-Ife, Nigeria. It also investigates instructors' preference for face-to-face, full online and blended approach. Sixty six faculty members whose departmental courses were among the first set of course to be mounted online were used for the study. An adapted and validated questionnaire instrument was used to obtain data from the respondents. The results show that 43.1 percent of the respondents would want to adopt e-learning, while 13.8 percent shows a negative disposition, and 43 percent were neutral. In preference among online, blended, and face-to-face; 40 percent would prefer face-to-face, 41.5 would prefer online, while 50.7% would prefer a blended approach. Out of those who prefer blended approach, 63.7% prefer 70% online, 30% face-to-face; 42% prefer 40% online, 60% face-to-face; and 33.3% prefers 50% online, 50% face-to-face. The results show that instructors have positive disposition towards adoption of e-learning, but there is load of skepticism as reflects in high number of respondents who chose a neutral option. Though there seems to be positive disposition to adoption, blended approach seems to be a preferred option than full online. Finally, there is no significant difference in their attitude towards adoption of e-learning in terms of gender and age.

KEY WORDS: Attitude, Adoption, E-learning, Blended Learning

Introduction

The landscape in higher education is undergoing much change as it transforms its systems and processes to meet the challenges of the modern world. E-learning is one of the changes in education sector that has transformed education system. The traditional brick and mortar classroom system is clearly limited in some sense. The brick and mortar traditional classroom system does not allow flexibility in learning and the challenge of modern workforce who needs to gain additional competence in which case they would not need to leave their jobs. The introduction of Learning Management System (LMS) and other ICT facilities give room for synchronous and asynchronous delivery methods is reasonably provoking solutions to these limitations. In a sense technology is being adopted and adapted to address some of these limitations and in the process completely alter and transform the face of education delivery (Gambrill, 2003; White, 2003; Dania and Enakrire, 2012). Even in third world countries the practices of face-to face teach are transitioning as institutions look to incorporate open and distance education utilizing modern technologies.

The idea of distance education commenced with correspondence studies using text, and later followed by the use of electronic devices such as radio and television. At present, the use of electronic devices such as computer linked with internet has ushered another form of distance education (Anderson & Simpson, 2012). These methods of distance education are being adopted by higher education institutions, however, incorporating technology with effective teaching and learning is challenging as educationalists strive to effectively engage students in the learning process (Garrison & Kanuka, 2004). In the case of Africa there are myriad of challenges facing institutions which is detrimental to successful application of technology. The adoption of e-Learning captures the thinking of

stakeholders in terms of cost, technology and electric power supply (Ahmed and Nwagwu, 2006), and whilst to some the task is insurmountable, but empirically it is not (Oyeleke, 2012).

In the developed world, the number of applicants in online institutions shows a steady increase in enrollment over the years. The emergence of for-profit institutions has accelerated the phenomenal increase. Globally, the practices are on increasing scale to the extent that the number of students in online programmes far outnumbers those in physical face-to-face classrooms (Hanna, 2013).

The term e-learning is often used synonymously with distance education and invariably the reference to e-Learning often means distance education (Juhary, 2007). In Nigeria, the establishment of National Open University of Nigeria, and the mandate of dual mode of delivery to some institutions by the National Universities Commission (NUC) - a body responsible for regulating the affairs of universities in Nigeria, largely stimulated a shift from face-to-face part-time education to technology driven e-learning. It should be noted that distance learning takes a form of part-time arrangement where learners congregate within the school premises during holiday period or weekends. Some institutions such as Obafemi Awolowo University and University of Ibadan embarked on transiting some of their programmes to e-learning modes. There were some challenges associated with the transition to the e-Learning environment especially attitudinal mindset of instructors and insufficient facilities

Statement of the Problem

Developing an online program in our institution faced many hurdles.. Some are attitudinal, some out of genuine consideration for reality and experience on ground. Statements such as: “it is not possible”, “it is a crazy idea”, “and it can’t be effective” were commonly spoken among faculty members and administrators. It is noteworthy to state that most of instructors in our institutions are trained and had dutifully carried out their teaching career on the platform of traditional

classroom system. Some of them are “immigrants” (Pranks, 2001) in the world of information and communication technology with a good number especially the older generation who may not know how to use computer. The challenge of affordability and accessibility of required technologies to successfully initiate and implement e-learning are critical hence some of the issues facing institutions wanting to adopt e-learning are questions such as if they will readily embrace it or display resistance. Would they prefer a gradual transiting in form of blended learning or will prefer absolute change? Currently in Nigeria, this conjecture is at best speculative in the absence of known empirical study to substantiate the attitude of principal stakeholders in education industry. An empirical investigation will provide data to answer these questions (Baker, 1989).

Objective of the Study

This section describes the objectives and underpinning research of a study towards adoption of e-learning in one Nigerian institution. The specific objectives of the study are to;

1. Investigate the attitude of instructors/facilitators towards adoption of e-learning in Nigeria.
2. Investigate the instructors’ preference among online, face-to-face, and blended delivery mode to engage learners.
3. Investigate the interaction effect of gender on the adoption of e-learning; and
4. Examine the effect of age on the adoption of e-learning

Research Questions

The study will employ the following research questions to carry out the research;

1. What are the instructors’ attitudes towards the adoption of e-learning as mode of educational delivery in Nigeria?
2. Would instructors’ prefer full online, face-to-face or blended approach?

Research Hypotheses

1. There is no significant difference in the attitude of male and female instructors towards the adoption of e-learning.
2. There is no significant difference in the attitude of instructors towards the adoption of e-learning across different age category

Review of Literature

Institutions adopt e-learning for various purpose. Such factors include the phenomenal breakthrough in the realm of Information and Communication Technology (Gulbahar and Guven, 2008), the ‘the institutional drives to generate funds, potentials to attract large audience globally; and solution to the problem of large classes (Abdul Karim and Hashim, 2004; (Zheng, Zhao, Zhao, and Nomamaker, 2004), flexibility in learning (Donoghue, 2006), individual learners differences and opportunity for self-pacing style (Arkorful & Abaidoo, 2014); and the potential capacity of technology to enhance teaching for learning (Dania & Enakrire, 2012;).

The pedagogy of online learning is rooted in the theory of Constructivist Social Learning where learners are active participants in the construction of knowledge. The thought that is gaining wide following among online instructors is that technology is not sufficient without a corresponding knowledge of pedagogy (Sheaver, 1999; Govinsadamy, 2002; Yelland and Tsemba, 2008). The key to success in e-learning is not mere transference of content to the available technology, but in addition to the technology, incorporation of pedagogical principles in the designing of e-learning and availability of competent instructors who are well grounded in the science and art of online teaching. Subsequently, successful online learning rests on, the use of technology to enhance teaching for learning; instructors’ possession of fundamental basic skills on the use of technology; availability of required technology and enabling environment to enhance maximal functioning; instructors’ possession of adequate communication skills; ability to motive learners to reduce drop-outs as research has shown that there is high rate of attention in online teachings (Moody, 2004).

In spite of benefits institutions derive from e-learning, there are other factors that mitigate its acceptance. The number of years a lecturer has been teaching has tended to influence their use of technology, with computer literacy more prevalent in younger lecturers (Tuparova Ivanov, Karastronoa & Reneva; 2006; Margaryan, Littlejohn, & Vojt, 2011). Perceived ease of use is another factor (Ahmed, 2013; Venkatesh, 2001) though this could be a function of users' evaluation which however may not be universally objective (Venkatesh, 2000).

Research findings have shown that educational institutions are less willing to adopt e-learning compare to business organizations (Concamon, 2005) and resistance to e-learning is not peculiar to African (Clay, 1999; Al-alak and Alnawas, 2011) where technology is at infant stage. Aside of technological constraints, the supportive infrastructure services such as power supply, computer technicians are apparently insufficient and ineffective (Olaniyi, 2006). In Nigeria, facilities in some institutions are at poor state emanating from poor funding and lack of improper maintenance culture. The challenge facing Nigerian institutions is how to motivate and convince administrators and lecturers to adopt the practice of e-learning over face-to-face in distance learning programme which usually takes part-time structure.

Perceived usefulness as defined by Davis (1989) is the extent to which a user believes that certain system will inspire positive influence on productivity and preference. Al-alak & Alnawas (2011) report that, users who believe in a positive use-performance relationship readily accept the use of technology to teach than those who do not believe. Ahmed (2013) discovered a positive correlation between perceived usefulness and adoption of electronic learning devices. Tun & Chang (2008) find that when learners perceive e-learning to be useful, they are likely to accept and learn online

The factors relating to why instructors resist online teaching are explained by Clay (199) who also details the strategies to overcome the resistance. These strategies are shown in Table 1.

Table 1: Reasons Instructors Resist E-Learning

Problems	Strategies to Overcome them
Increased workload	Set a reasonable class size between 20-25
Altered role of the instructor	Let them recognize there is a paradigm shift from teaching to learning.
Lack of technical and administrative support.	Provide adequate software training and technical support. Set up help desk for both the students and staff
Perceived reduction in course quality	Determine sound educational theory and principles; integrate online learning into programme evaluation and outcome assessment.
Negative attitudes of other faculty	Support innovation to serve as role models and reward innovation. Encourage voluntarily participation.

Other strategies that can be used to solve initial resistance include: using inducement as a means of recruitment; using a minute groups who are interested to act as agent of change by offering encouragement to others. In the initial training sessions to maximize the effectiveness of training it is necessary to organize adequate mentoring to ensure that training is put into practice and that training is motivating (MacKeogh & Fox, 2008). Resistance to technology adoption can stem from poorly organized and demotivating training as well as practitioners who do not put the training to immediate use. Findings on the failure to adopt e-learning initiatives in Jordanian Universities (Al-alak & Alnawas, 2011) include the following; the improper deployment of the necessary infrastructure and equipment for sparking the growth of e-learning; lack of specific training at all levels particularly teachers, students and trainers; the absence of the necessary conditions for the development of quality educational contents and services; and lack of networking and cooperation at the national level. In a bid to ameliorate these challenges, the researchers recommend a range of strategies to support academic staff of the institutions. These strategies include provisions of required infrastructures; collaborate and communicate with instructors to reduce their fear; efforts for staff training on the use of e-learning technologies, offer clarification on the benefits of e-learning, the use of experience staff to act as catalyst of change among unwilling and inexperience ones.

Accepting Change is always Difficult

Generally speaking people naturally resist changes (Fine, 1986). The fear of unknown, the benefits of existing comfort zone, and the privileged of current position in power relations structure could be attributed to this phenomenon. In any organization, there are various dispositions people express towards change. Gateshead Council (2009) identified five categories.

1. A five percent (5%) that will never change.
2. Twenty percent (20%) will change when there is no other option.
3. Fifty percent (50%) will wait to see what happens and go with the flow
4. Another twenty percent (20%) will embrace change at the first opportunity.
5. A five percent (5%) who will lead the change.

According to Gateshead Council (2009), the first two groups will actively resist change and were termed ‘terrorist and blockers’. The last two groups will actively welcome change and are termed “champions”.

Gateshead Council (2009) itemizes various reasons why people resist change. They are as follows: when the vision is not clear; what change will mean for them in practice has not been outlined; communication is poor; low levels of involvement and engagement; they don’t stand to gain or they stand to lose something; they have experience badly managed change; there is initiative overload; it is too complex; they have no focus of control; self- interest; they are in their comfort zone; it is a threat to skill or competence; it constitutes threat to power base, status, or autonomous; it will lead to unintended consequence elsewhere; it is too sudden; there is reluctance to experiment; they are experiencing a change shock; and they are actually think there is a better way.

Baker (1989) attributed resistance to change to the following factors: general uncertainty about the efforts of change; uncertainty about job performance; fear of change due to social consequence; resistance because of failure to prove change is needed; failure to commit sufficient resources to the change; and resistance due to failure to create a climate conducive to change.

There is a positive side to resisting change. It gives ample time for people to adjust by reducing the space or the speed of innovation process (Fine, 1988). Indicators that people are resisting change include increased absenteeism, increased employees impatience, frustration and sabotage (Plate & Stone, 1974; Veneer, 1974 in Baker, 1989).

Competent executives should be able to manage resistance; otherwise the organization will remain stagnant. Cateshead Council (2009) offers the following suggestions; print a compelling vision of the future; print pictures for people of what change means for them in practice by involving them in looking at where they are now, where they want to be, how they can get there; what will be the same / different thing people will be doing? create a burning platform for change; help people make the paradigm shift required, bring in experts who have delivered something similar very well; communicate like never before to scotch rumor; get people involved, get their ideas and give them a role to play; create an empowered culture where everyone can communicate and explore change and make the parameters clear; most people want to connect with others, build coalition and networks; make time to hear concerns, and reduce anxiety; if possible allow people to hang onto their identity; negotiate effectively- know what your bottom line is and be prepared to give up something; allow people time to move through the change curve; give them the skills they need to succeed; live by the values and give them support; use peer group pressure, and change champions to get people on board; pay real

attention to managing the transition; celebrates quick wins; mark the ending and say goodbye to old ways of doing things.

The Study

The study was undertaken in a higher education institution in the southwestern region of Nigeria. The institution has about sixty lecturers participating in online programme and three hundred online students. The programmes that are running in online include Nursing Science and Accounting, while Education programme is yet to commence. Purposive sampling procedure was used to select the study sample. The technique was used because of the limited number of the participating lecturers and all them were used. For data collection instrument, a self-design but validated questionnaire tagged “E-learning Adoption Scale in Nigeria” (ELASIN) was used. The instrument was validated using test-re-test reliability by administering the items to non-participating lecturers in face-to-face programmes over a period of two months.

Questionnaire items were administered to lecturers while they were at the Centre for Distance Learning to record teaching before being uploaded in the Learning Management System. The questionnaire items were collected on the spot immediately each lecturer finishes video recording of course content. The study is a qualitative study and adopts descriptive analysis. Simple percentage, Analysis of Variance (ANOVA) and t-test were employed to analyze the data obtained from the respondents.

Results and Findings

Objective 1: Investigate the attitude of instructors towards the adoption of e-learning. The objective seeks to investigate the instructors perception of online platform if they will readily

adopt it while it's being introduced. The items were also negatively reworded as shown in the tables below:

Table 2: Instructors' Attitude toward Adoption of E-Learning

		Positive (%)	Negative (%)	Neutral (%)
	Adequate Technology to Support E-learning	36.9	33.8	29.2
	Acceptance because of Institutional Policy	15.4	6.2	78.3
	Personal Interest	30.8	12.3	56.9
	Perceived Usefulness	49.2	7.7	43.1
	Rejection out of Personal idiosyncrasies	46.2	3.1	50.8
	Rejection out of the Reality of African Technological Development	44.6	6.1	49.2
	Existence of Workable Technology	18.8	4.6	40.0

The table above shows that instructors have a positive disposition towards e-learning, even though a substantial percentage expresses neutrality.

Table 3: Attitude of Instructors towards adoption of E-learning

Attitude	Frequency (f)	Percent (%)
Negative	9	13.8
Indifferent	28	43.1
Positive	28	43.1
Total	65	100.0

Table 3 shows the attitude of the instructors towards the adoption of e-learning. It can be observed that 13.8% of the instructors demonstrated a negative attitude towards the adoption of

e-learning, 43.1% of them were indifferent while 43.1% demonstrated a positive attitude towards the adoption of e-learning. This shows an indication of certain measure of skepticism as demonstrated with high rate of neutral response towards the adoption of e-learning.

Objective 2: Investigate instructor's preference among online, face-to-face and blended delivery mode. The focus of the objective is to investigate the delivery mode instructors would prefer as institution transist from face-to-face, part-time programme to online delivery.

Table 4: Preference among Instructors

		Positive	Negative	Neutral
	Full Online	40	21	38
	Face-to-face	41.5	15.4	43.1
	Blended Learning	50.7	18.5	30.8

Table 4 shows the responses of the instructors about their preference among online, face-to-face and blended delivery mode. As shown in the table, 40.0% of the instructors indicated that delivery should take the form of face-to-face, while 21.5% of them thought otherwise whereas, 38.8% of them were undecided. Also, 41.5% of the instructors want ODL to take full online, 15.4% indicated otherwise while 43.1% were undecided. Furthermore, 13.8% and 36.9% of the instructors strongly agree and agree that blended approach would be preferable to full online, 30.8% were neither agree nor disagree while 12.3% and 6.2% of the instructors respectively disagree and strongly disagree.

Among those who were favourably disposed to blended approach (i.e. 31 instructors), the nature of hybrid was further sought. The result indicated that 36.4% and 27.3% of them respectively strongly agree and agree that it should be 70% Online & 30% face to face, 18.2% and 24.2% favoured 60% Online & 40% face to face while 9.1% and 24.2% were in favour of 50% Online & 50% face to face.

Objective 3: Determine gender effect among instructors towards the adoption of e-learning. On the perception that gender may affect instructors' attitude to the use of computer and subsequently affect adoption of e-learning, this objective is set to test the hypothesis that "There is no significant difference in the attitude of male and female instructors towards the adoption of e-learning". The hypothesis is tested with t-test statistical method, and the result is shown in the table below:

Table 5: t-test of significant difference in the attitude of male and female instructors towards the adoption of e-learning

Gender	N	Mean	Std. Deviation	Std. Error Mean	t	df	P
Male	53	41.2642	5.54406	.76153	-.512	10.606	.619
Female	9	42.3333	5.83095	1.94365			

Table 5 shows the difference in the attitude of male and female instructors towards the adoption of e-learning. It can be observed from the table that there was no significant difference in the attitude of male ($M = 41.264$, $SD = 5.54$) and female instructors towards the adoption of e-learning, $M = 42.333$, $SD = 5.83$; $t(10.61) = -.512$, $p > .05$. Since the p-value is greater than .05 thresholds, we do not reject the stated null hypothesis. The result concludes that there is no significant difference in the attitude of male and female instructors towards the adoption of e-learning.

Objective 4: Examine difference in the attitude of instructors towards the adoption of e-learning across different age category. The focus of this objective is to investigate if differences in age will effect toward instructor's adoption of e-learning. The objective will be tested against the hypothesis 2 which states that "There is no significant difference in the attitude of instructors towards the adoption of e-learning across different age". ANOVA statistical method is used to test the hypothesis. The result is shown below:

Table 6: One-way analysis of variance test of significant difference in the attitude of instructors towards the adoption of e-learning across different age category

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	126.782	3	42.261	1.392	.255
Within Groups	1730.989	57	30.368		
Total	1857.770	60			

Table 6 shows a one –way between groups analysis of variance conducted to explore the difference in the attitude of instructors towards the adoption of e-learning across different age category. It can be observed that that there was a statistically non-significant difference in the attitude of instructors towards the adoption of e-learning across different age category as determined by one-way ANOVA ($F(3,57) = 1.392, p = .255$). This result concludes that there is no significant difference in the attitude of instructors towards the adoption of e-learning across different age category

Fig.3: Distribution of the Instructors by Gender

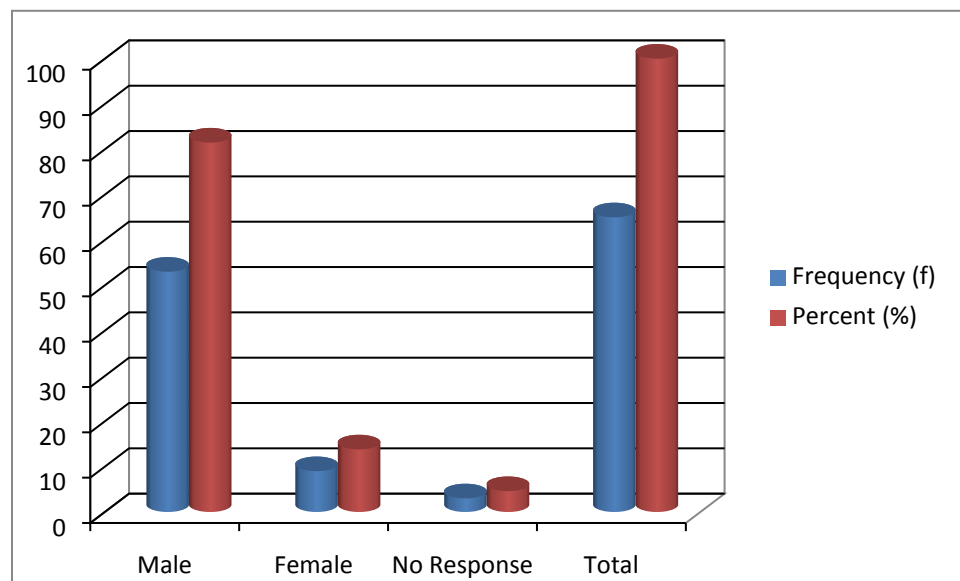
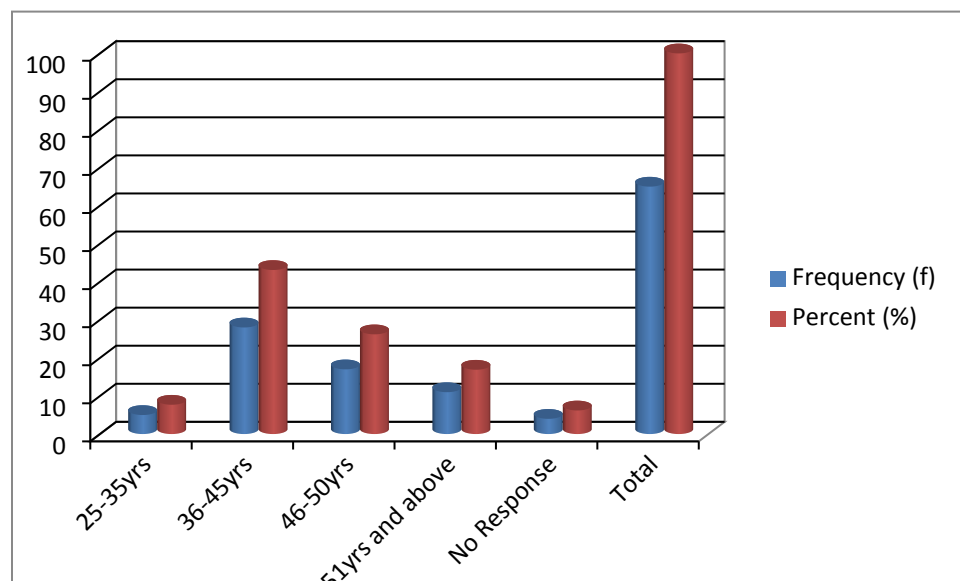


Fig.4: Distribution of the Instructors by Age Category



Discussion

The study seeks to investigate the attitude of instructors at Obafemi Awolowo University, Ile-Ife, Nigeria which is transiting some of her face-to-face programmes to online delivery mode. The following objectives were stated; investigate the attitude of instructors/facilitators towards adoption of e-learning in Nigeria; investigate the instructors' preference among online, face-to-face, and blended delivery mode; investigate the effect of gender on the adoption of e-learning; and examine the effect of age on the adoption of e-learning. They were tested against the following research questions and hypotheses; what are the instructors' attitudes towards the adoption of e-learning as mode of educational delivery in Nigeria?; would instructors prefer full online, blended approach or face-to-face?; there is no significant difference in the attitude of male and female instructors towards the adoption of e-learning; and lastly there is no significant

difference in the attitude of instructors towards the adoption of e-learning across different age category

The results show a cloud of confusion, level of unpreparedness and skepticism by the instructors, when consider the high percentage of undecided response among the respondents. The high percentage of neutral responses could only be explained by their state of unpreparedness. There are no clear cut rejection as positive responses is greater than negative responses, but in most cases at similar level with neutral option. As a key participant in our change project – converting to online platform, one is not taken aback for such responses. Though most of the programmes were running for distance education students, the face-to-face mode of instruction was being employed. Students come to school every weekend to receive lectures. The directives from the National Universities Commission changed the landscape and institution has to embark on online for their distance education courses. This result support the finding that students tend to perform better when they voluntarily chose online platform (Coates, Humphreys, Kane, Oswego, Vachris, Agarwal, and Day; 2001).

Statistically, the instructors have positive perception towards adoption. The neutrality expressed can easily be addressed. The necessary action that needed to be taken is to embark on enlightenment programme to all the stakeholders on the prospects of the changes and if they envisage challenges, they should shed light on how they can be overcome. If passive acceptance or passive resistance persists, the programme may suffer. This will affect staff output, commitment and general success of the project. The management should identify and concentrate efforts on the respondents who show positive disposition. When embarking on change, focus on the willing and consequently buy the commitment of others (Bender, 2012). For the fact that they do not have negative disposition suggests that they can easily be sway to positive side.

One major area that shows a positive direction towards adoption is the instructors' response on the perceived usefulness of e-learning. A good number of respondents (49.3%) would accept e-learning because of its usefulness while a low percentage of 7.7 % hold the contrary view, while the skepticism pervade with 43.1 %. This shows a positive direction as perceived usefulness has been found to have a positive relationship with adoption (Davis, 1989). Another positive pointer is that rejection of e-learning is borne out of instructor personal idiosyncrasies and attitude rather than decision out of scientific investigation. 46.2 % of respondents attest to this while 3.1 % hold contrary opinion and 50.1% were undecided. There has been a widespread concern about the quality of online when compared to traditional face-to-face, however, research findings have shown that there is no significant difference in students' academic performance when either face-to-face or online delivery mode is used (Anna, 2003; Daymont and Blau, 2008). The basis of academics is rationality, scientific and empirical investigation, and not personal idiosyncrasies.

Technology is fundamental to e-learning. The respondents hold the opinion that there are not enough technology to drive e-learning (36.9 % negative response) while 33, 9 % belief the available technology within the institution is enough. As a raider to the availability of enough technology in the school, the respondents were asked if the available technology can still be used to drive e-learning. Only 18.8 % believe it is possible, while 4.6 % hold a contrary opinion, and 40 % remain neutral. Since there is perceived usefulness and instructors belief that rejection is not based on empirical investigation, but personal idiosyncrasies, one may reasonably infer that technology is the major restricting factor towards full embrace of online learning. There is no doubt that Africa is less developed technologically, but for how long, and why should the continent accepts a status-quo when other regions are moving forward? This calls for capacity building projects in Africa.

Other positive side is the acceptance of the fact that the challenges can be solved. The common sense analysis is that, if you have a problem, and you believe it can be solved, the problem ceases to be a problem with time! They believe the problem of internet accessibility, erratic power supply and academic dishonesty can be solve in online platform.

The logical conclusion about the study is that instructors demonstrate a high level of skepticism about full online, and at the same time seem to be weary of using face-to-face method of delivery for distance education learners, and would rather prefer a gradual transition than a drastic and sudden change. This is shown by acceptance of blended learning over full online and face-to-face modes. Full online has a positive score of 40%, followed by face-to-face (41.5 %), and blended approach (50.7%). Their opinion was sought on the preferred percentage. Their position favours arrangement of 70% online and 30% face-to-face. This position tallies with acceptable standard of what constitutes a blended learning (Simonson, Smaldino, Albright, Zvacek, 2008).

Finally, there is no significant difference in the opinion among male and female instructors, and curiously against expectation, there is no significant difference across the age of instructors.

Conclusion

The study shows that the instructors who participated in the study held a positive disposition towards the adoption of e-learning practice and these findings compare Edo (2016) who reports a poor attitude of academic staff in Rivers State in Nigeria to e-learning. The findings further demonstrated that participants would currently prefer a blended learning approach and this could be due to the state of technological resources as well as the technology support within the institution. On this basis of these findings, it is recommended that strategic enlightenment on the importance of e-learning, and how the perceived challenges can be ameliorated. As some of the challenges border on the access to and use of technology, instructors should be made to know

that it is the pedagogy with the available technology that drive e-learning and not a function of technology alone.

References

- Abdul Karim, M. R., & Hashim, Y. (2004). The experience of the e-learning implementation at the Universiti Pendidikan Sultan Idris, Malaysia. *Malaysian Online Journal of Instructional Technology*, 1(1), 50-59.
- Anderson, B., & Simpson, M. (2012). History and heritage in open, flexible, and distance education. *Journal of Open, Flexible and Distance Learning*, 16(2), [1–10.]
- Al-Alak, A., & Alneawas, I. A. M. (2011). Measuring the acceptance and adoption of e-learning academic staff. *Knowledge Management of E-learning. An International Journal*, 3(2), 201-221. <https://www.uop.edu.jo/> Retrieved 16/10/14
- Ajadi, T. O., Slawu, I. O. and Adeoye, F. A. (2008). E-learning and distance education in Nigeria. *The Turkish Online Journal of Educational Technology*, 7(4), 61-70.
- Ahmed, A., and Nwagwu, W. E. (2006). Challenges and opportunities of e-learning networks in Africa. *Development*, 49(2), 86-92.
- Arkorful, V., and Abaidoo, N. (2014). The role of e-learning, the advantages and disadvantages of its adoption in Higher Education. *International Journal of Education and Research*, 2(12), December 2014, 297-410.
- Baker, S. L. (1989). Managing resistance to change. *Library Trends*, 38(1), 53-61.
- Carman, J. M. (2005). Blended learning design: Five key ingredients. Agilant Learning <http://jackrabbitsuite.com/pdf/Blended%20Learning%20Design.pdf>
- Coates, D., Humphreys, B. R., Kane, J. Suny, O., Vachris, M., Agarwal, R., Day, E. (2001). “No

- significant distance” between face to face and online instruction: evidence from principles of economics.* Paper presented at the meetings of the Allied Social Science Association, January 5-7, 2001, New Orleans, Louisiana.
- Dania, P. O. & Enakrire, R. (2012). The utilization of information and communication technology (ICTs) for effective teaching of social studies in secondary schools in Delta state. *Prime Research on Education (PRE)*, 2(10), 378-389.
- Davis F.D. (1989) Perceived usefulness, perceived ease of use, and user acceptance of information technology. *Mis Quarterly*, 13(3). Pp. 318-339.
- Donoghue, S. L. (2006). Institutional Potential for Online Learning: A Hong Kong Case Study. *Educational Technology & Society*, 9 (4), 78-94.
- Edo, B. L. (2016). Attitude of academic staff towards e-learning in tertiary institutions in rivers state Edo, Nigeria. *International Journal of Education and Evaluation*, 2(2), 1-11. Retrieved from www.iiardpub.org on 20th of May, 2016
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley
- Fine, S. F. (1986). Technological innovation, diffusion and resistance: A historical perspective. *Journal of Library Administration*, 7(Spring), 27-34.
- Gateshead Council (2009) Understanding and managing reactions to change. *Organizational Development*, Vol.1 Jan 2009
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The internet and higher education*, 7(2), 95-105.
- Gambrill, E. D. (2003). From the Editor: Evidence-Based Practice: Sea Change or the Emperor's New Clothes?. *Journal of social work education*, 39(1), 3-23.
- Govindsamy, T. (2002). Successful implementation of e-learning: pedagogical consideration. *Internet and Higher Education*, 4, 287-299.

http://uait.pbworks.com/w/file/fetch/53312858/govindasamy_elearning_pedagogical.pdf

Gulbahar, Y., & Guven, I. (2008). A survey on ICT usage and the perceptions of social studies teachers in Turkey. *Educational Technology and Society*, 11(3), 37-51.

Hanna, D. E. (2013). *Emerging organizational models in higher education*. In Moore, G. M. (Ed. 3rd Ed). *Handbook of Distance Education*. Routledge: New York, 684-694.

Margaryan, A., Littlejohn, A., & Vojt, G. (2011). Are digital natives a myth or reality? University students' use of digital technologies. *Computers & Education*, 56(2), 429-440.

MacKeogh, K., & Fox, S. (2008). Strategies for embedding eLearning in traditional universities: drivers and barriers.

Strategies for embedding eLearning in traditional universities:
drivers and barriers.

Meloncon, L. (2007). Exploring the electronic landscape: Technical communication, online learning, and instructor preparedness. *Technical Communication Quarterly*, 16, 31-53.

Moody, J. (2004). Distance education: Why are the attrition rates so high? *The Quarterly Review of Distance Education*, 5(3), 205-210.

Olaniyi, S. S. (2006). *E-learning technology; Nigeria experience*. *Shape the Change*; XXIII FIG Congress, Munich, Germany, 1-11.

https://www.fig.net/pub/fig2006/papers/ts84/ts84_03_salawudeen_0593.pdf

Pallof, R.M., & Pratt, K. (2011). *The excellent online instructor; strategies for professional development*. John Willey & Sons.

Sife, A. S., Lwoga, E. T., and Sanga, C. (2007). New technologies for teaching and learning: challenges for higher learning institutions in developing countries. *International Journal of Education and Development using ICT (IJEDICT)*, 3(2), 57-67

Sheaver, J. P. (1999). Electronic technology and the future of social studies in elementary and

- secondary school. *Boston University Journal of Education*, 181(3), 13-41.
- Simonson, M., Smaldino, S., Albright, M., Zvacek, S. (2008). *Teaching and learning at a Distance. Foundations of Distance Education*. www.pearsonhighered.com
- Tuparova, D., Tuparov, G., Karastranova, E., and Peneva, J. (2006). Teachers' attitude towards e-learning courses in Bulgarian universities. *Current Development in Technology-Assisted Education*, 1755-1759.
- Venkatesh, V. (2001). Determinants of perceived ease of use: integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342– 365.
- White, G. (2003). e-learning – key Australia initiates (An opportunity for all learners).
http://www.educationau.edu.au/papers/elearning_poland03pdf.
- Yelland, N., & Tsemba, S. (2008) *E-learning: issues of pedagogy and practice for the Information age*. In Kell, P., Vialley, W., Konza, D., & Vogl G. (eds) *Learning and the learner ; exploring learning for new times*. University of Wollong.
<http://ro.uow.edu.au/cgi/viewcontent.cgi?>
- Young, S. (2006). Student views of effective online teaching in higher education. *The American Journal of Distance Education*, 20(2), 65-77. DOI: 10.1207/s15389286ajde2002_2
- Zheng, D, Zhao, J. L., Zhao, L and Nomamaker, J. D (2004). Can e-learning replace classroom learning? *Communications of the ACM*, 47(5), 74-79