Undergraduate Student's Readiness Toward The Adoption of Study Technology for Learning in Kwara State, Nigeria

Amos Ochayi Onojah^{1*)}, I O Abimbola², Motayo Olabo Obielodan³, Charles Olubode Lumorin⁴, Adenike Janet Aderogba⁵, Christianah Adeyanju⁶

1,2,3,4,5,6,7 Department of Educational Technology, Faculty of Education, University of Ilorin, Ilorin, Nigeria

Abstract

Study technology is the technology of learning it all, knowing it all, using it all and recalling it all. In this study, the researcher examined the undergraduate students' readiness toward the adoption of study technology for learning. The research adopted a cross-sectional studies descriptive research of the survey type. The sample comprised of four hundred and fifty undergraduate students. A structured questionnaire was utilized in collecting data while percentage and mean were used to answer the research questions, independent t-test was used to analysed the data collected. The results of the study revealed that undergraduate students are ready to adopt study technology for learning. There was no significant difference between male and female undergraduate students readiness towards the adoption of study technology for learning. Recommendation were however made that learning environments in schools should be equipped to enhance the readiness of undergraduate students to learn effectively and that the federal and state ministries of education should make appropriate plans to increase the extent of readiness for both male and female students to adopt study technology learning style in their studies

Keywords: Undergraduate Students, Readiness, Adoption, Study Technology, Learning

1. Introduction

Everyone has a unique style adopted while studying to learn effectively. This learning techniques have influence on individual's performance. The future of this planet is in the hands of the future generations being well equipped to carry the society forward. The success with which children are being educated for the role and responsibility of moving the society forward has not been met to satisfaction from all indications (Church of Scientology International, CSI 2019). Governments have tried findings on how educational problems can be solved using different measures (Olawale, 2019). Yet, the intended expectation had not reach a satisfactory level due to some factors which include resource inputs, class size, genotype, intelligence, socio-economic variables and so on.

CSI (2019) remarked that some of the students leaving or graduating from high school lack the reading and writing skills required by the minimum demands of

E-mail: haymoresonojah@yahoo.com

daily living. Since no country can claim to be educationally advanced unless technology is used to facilitate her educational activities. Increasing graduation rates and levels of educational attainment will accomplish little if students do not learn something of lasting value, yet efforts over the last several years have focused much more on increasing the number of students who go to college than on improving the education they receive once they get there (Derek, 2017). There is need to transit from the information society into the emerging global knowledge economy on how people use technology to aid their knowledge. Technology is the judicious application of knowledge to boost whatsoever knowledge is set to accomplish.

Graduates are expected to have tremendous impact on the Nation after their graduation as stated in the goals of tertiary education in Nigeria (Federal Republic of Nigeria, FRN, 2013). The poor performance of many Nigerian graduates always require that a retraining program be organized to make them perform in any employment after graduation (Oladipo, Olowoye, & Adenaike, 2010). One of the roles of the Federal Government as noted by Omoniyi (2009)

^{*)} Corresponding Author.

include funding of curriculum development projects and setting up of commissions and boards to suggest solutions to observed educational problems. It is essential to adopt an appropriate instructional delivery method during the process of learning. Lecture method is the method of instructional delivery mostly used in the University system.

Meanwhile, the goal of every instruction is that learning should be achieved. If this expectation has not reached a satisfactory level, there may be the need to diagnose the instructional mode being utilized (Oladipo, Olowoye, & Adenaike, 2010). Study technology is a student centred learning techniques that helps a learner to learn successfully by overcoming all barriers or problems encountered in the process of studying. Newman (2017) also stated that there is a significant difference in the academic performance of university students in a course of study when study technology was used in place of lecture method. Overfilled classrooms, underachieving students and learning disorders are common and this have generated libraries full of educational theories, but the problems persist (Applied Scholastic International, ASI, 2015).

Being a successful student requires more than just a willingness to learn, pitfalls do exist and student must know how to effectively learn in other to overcome such learning difficulties (CSI, 2019). The factors responsible for students' challenges in learning effectively need to be sought. Students fail to learn because no one ever taught them how to learn, that is, how to identify the barriers to learning and how to overcome those barriers (ASI, 2015). These barriers and how to overcome them are the components of study technology. This resources or components may help anyone improve their ability to learn. It will enable one to learn the barriers that lie between individual and his education and how to overcome them (CSI, 2019b). This technology will enable students to learn any subject with skill and confidence.

Hubbard, (1972) discovered that there are three definite barriers which prevent a person's ability to study and thus his ability to be educated. If one knows and understand what these barriers are and how to handle them, his ability to study and learn will be greatly increased (CSI, 2019). Study technology developed by Hubbard, (1972) is a workable methodology that makes it possible for a person to recognize and handle the barriers to successful study. Study technology is not just another method of study. It allows a person to learn any subject successfully (ASI, 2015).

Study technology are tools and techniques that can be employed to improve students' learning rates. These same tools and techniques can be used by students themselves to improve their ability to understand and to use the materials they read and study (ASI, 2015). The techniques includes the use of physical objects like real objects, pictures, models or illustrations; seeking dictionary for unfamiliar words; and going through a course material step-by-step. Study technology was approved by the Florida school board as a supplemental education programme (Harwell, 2012).

In study technology concept, the three major barriers that prevent students from learning are: absence of mass, too steep a gradient, and the misunderstood word. Each barrier will produce a response in the student physiologically, such as yawning or feeling bored or frustrated. In accordance with Hubbard's beliefs, the school avoids all psychiatric conditions, including any learning difficulties (Robert, 2007). Gail and John (2009) stated that absence of mass is the idea that abstractions must be illustrated physically before they can be fully understood: learning about trains is accelerated if the student can see a train or a representation of one. Learning is connected to stimulus and response and learners receive information through senses, mainly sight and hearing (Onasanya & Adegbija, 2007).

Too steep a gradient in study occurs when the student tries to learn too quickly, in which case the teacher directs the student back to the point where he last demonstrated understanding (Harley, 2009 & ASI, 2015). When a student goes through a course material in a rush, some important words might be skipped. Abimbola, (2013) stated that the sophistication of a concept is contingent on the degree of its enhancement for learning purposes. The misunderstood word is what is referred to the misunderstood definition or the not comprehended definition, or the undefined word. Misunderstood word occurs when a student does not fully understand word(s) as used in a statement. It might also be that the student misinterprets such word(s). Undergraduate students need to be sentient of the study technology learning techniques.

Readiness is the state of being prepared for or willingness to engage in a particular activity. Fisseha (2011) identifies factors that affect learning readiness to include attitude, motivation, anxiety and self-efficacy. There cannot be a successful study if the learner is not ready or willing to learn regardless of the learning resources being put in place. Therefore students need to be in a state whereby the willingness to use this technology can be acquired. Readiness implies a degree of concentration and eagerness. Edward Thorndikes' law of readiness reveals that individuals learn best when they are physically, mentally, and emotionally ready to learn, and do not

learn well if they see no reason for learning (Wikimedia Foundation, Incorporation, WFI, 2015).

Getting students ready to learn, creating interest by showing the value of the subject matter, and providing continuous mental or physical challenge, is usually the instructor's responsibility. In other words, when students are ready to learn, they meet the instructor at least halfway, simplifying the instructor's job (WFI, 2015). Since learning is an active process, students must have adequate rest, health, and physical ability. Basic needs of students must be satisfied before they are ready or capable of learning since exhausted or in ill health' students might not learn much. Distraction from outside, responsibilities, interests, or worries, overcrowded schedules, or other unresolved issues, affect students' interest in learning. Readiness also influences the enthusiasm of undergraduate students.

Undergraduate students as used in this study refers to university or college student studying for their first degree. While parents try their best in ensuring all fees and resources needed for their student to learn are being provided, the teachers or lecturers plays their role by developing the best strategy and method which if employed would guarantee achievement of behvioural objectives. The school administrators and management make and execute policies that will help both the teacher and the learner in the transfer of knowledge and the government also make schools available for all learners. The habits which undergraduate employ in their study vary on individual. These habits during study is the study habit.

Study habit can be referred to the common or often adopted practices that learners employ in their study. This study habit helps learners to learn at ease. The study habit, even though expected to influence learning comprises different styles. Factors such as conducive environment, state of the learner, facilities available and use and so on have effect on the learning rate of the learner. The sole responsibility of the student is to study to ensure academic success, hence many students develop studying habits or routines that would enrich their academic pursuit (Onuoha & Subair, 2013). The study habit which is generally adopted by masculine might be different from the ones aroused by the feminine.

Gender has been identified to be a strong predictor of attitudes and behaviour in information seeking and a demographic factor that strongly influences behaviour (Weiser, 2000). If gender influences behaviour, then it might determine the readiness and motivation of undergraduate students to adopt the study technology techniques. Macpherson (2004) discussed that understanding gender differences permits us to develop a better approach in assisting individual learner to

acquire needed information and contribute to better learning experiences and academic success.

The educational standard of this nation had not reach a satisfactory level due to some difficulties being faced by students in learning. Ajayi and Ogunyemi (1990) detected that Nigerian education system has not been productive over the years. Oladipo, Olowoye, & Adenaike, (2010) established that most undergraduate students in Nigerian universities lack effective study techniques and facilities for teaching them coupled with shortage of library materials and equipment. That may allow students to learn effectively. Ojogwu and Alutu (2009) noted that the deplorable situation of the physical facilities in Nigerian higher institutions affect learning.

Likoko, Mutsotso and Nasongo (2013) stated that lack of adequate physical facilities for teaching and learning have negative effect on the quality of graduates produced. These facilities are educational inputs that have strong relationship with high academic performance of students. Study habits promotes learning. However, facilities and learning style also influence learning. Therefore, the classrooms and lecture halls should be facilitated with adequate infrastrucure needed for learning.

Study technology is a system that teaches people how to learn. Study technology helps students develop critical thinking skills, it motivates and improves the ability of students to learn and achieve proficiency in the subject being studied. Study technology opens the door to learning and helps students of any age to successfully apply good study habits (ASI, 2015). Study technology is relevance and essential in education because its knowledge helps learners to rapidly comprehend what is studied.

Oladipo, Olowoye, & Adenaike, (2010) conducted a research on comparative study of the effect of study technology mode of instruction and lecture method on the academic performance of university students. The researcher established that study technology had a significant positive impact on students' academic performance, but the study was only resticted to one university. The study technology is a learning techniques that if appropriately adopted is capable of transforming the intellectual capability of student.

There are some studies focusing on study technology in Nigeria. However, based on the literature available to the researcher, none of the studies addressed the undergraduate students' readiness towards the adoption of study technology for learning. Hence the researcher wished to carry out this study in other to bridge the gap created by previous researcher.

2. Research Method

A cross-sectional descriptive research of the survey type was used for this study. It was targeted at undergraduate students' readiness towards the adoption of study technology in kwara State, Nigeria. This method was deemed the most appropriate design for this study because it involves selecting a chosen sample from a large population. The target population for the study comprise of all the undergraduate students in the selected universities in kwara state. The instrument for this study was researcher-designed questionnaire titled undergraduate students' Readiness towards the adoption of study technology for Learning in Kwara State, Nigeria. The questionnaire contains two sections (sections A&B). Section A focused on undergraduate students' demographic information including the name of institution as well as the gender of the respondents. Respondents filled the blank space with the name of their respective institutions and were also required to tick the appropriate options for their gender attributes, age range, department and level of study in their respective institutions.

Section B dealt with the undergraduate students' extent of readiness to adopt study technology. Ten items were generated to elicit information from the respondents on their level of readiness to adopt study technology for learning in their study. 4-Likert scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (D) was used as options for the respondents to choose their extent of readiness towards the adoption of study technology The questionnaire was validated by five lecturers from the Department of Educational Technology, Faculty of Education, University of Ilorin. The experts made necessary corrections and constructive criticisms which were useful in the preparation of the final draft of the questionnaire. The research instrument was tested for validity and reliability using crombach's alpha method.

The reliability of the research instrument, was determined by trial-testing it on 20 students of Ladoke Akintola University of Technology, Ogbomoso in Oyo State which was not part of the study sample. Thereafter the data was subjected to statistical analysis using Crombach's Alpha to determine the reliability of the research instrument at 0.05 significant level and the value on readiness was 0.79. This shows that the instrument was reliable. Respondents consent were sought before the administration of the instrument, other ethical issues were also observed before, during and after the questionnaire administration. The respondents were not coherced to participate in the study and their information were only used for the purpose of this study. The researchers personally administered 450 copies of questionnaires to the respondents and was able to retrieve 397 at a return rate of 88%. The obtained data was analyzed using descriptive and inferential statistics, in analyzing the data obtained, descriptive statistics such as simple percentage, and mean was employed to answer the research questions while t-test was used to test the hypothesis. The following research questions were generated and answered in this study to what extent are undergraduate students ready to adopt study technology for learning? And Does gender have influence on undergraduate students' readiness towards the adoption of study technology?

3. Result and Discussion

From the data analysis there is no significant difference between the readiness of male and female undergraduate students' readiness towards the adoption of study technology was not rejected. The implication of this is that readiness of female undergraduate students towards the adoption of study technology is not different from the male undergraduate students' awareness towards the adoption of study technology. The changes in the mean might not be due to chance but independent variable manipulation.

Readiness of undergraduate students toward the adoption of study technology for learning was investigated in research question two. The research question was stated to examine the extent of readiness of undergraduate students to adopt study technology. Such readiness includes willingness of undergraduate students to adopt abbreviations, memory aids, cues, dictionary, games and simulations, pictures, acronyms and son on. The resulting mean score established that undergraduate students are generally ready to adopt study technology for learning with a grand mean above the benchmark of 2.0. The successful incorporation of any technology depends not only on its awareness and availability but also the extent to which students are ready to adopt it.

This findings is in support of Murugan, Sai and Lin (2017) who established through research finding in this study which showed that most of the UiTM students have the technological readiness to use mobile phones. The findings agree with the findings of Chiang, Ahmad, & Wong, (2010) which established that students are ready to use mathematics portal based on their technical skills. When undergraduate students are ready to adopt the study technology techniques, then little effort will required for them to study effectively. The interest of undergraduate students in the use of games and simulations, Instructional materials, memory aids, steady process of going through a course materials and so on while studying will boost their learning. This implies, undergraduate students are ready to adopt study technology for

learning, what is needed now is encouragement and environment that will transform the reverie into reality and to fit it in to the digital trend.

The influence of gender on undergraduate students' readiness toward the adoption of study technology for learning was examined using research question 6 and hypothesis 3. The findings revealed that there is no significant difference between the readiness of male and female undergraduate students toward the adoption of study technology for learning. This support the findings of Lone, Ahmed and Bashrat (2018) who established that there was significant difference in the preferences on the used of Goggle search engine based on gender, male preferred Google search engine than female. Similarly, Anyira (2013) reported that there was significant difference between male and female lecturers on preference and utilization This implies that both male and female undergraduate students are ready to facilitate learning by adopting study technology in their studies. Therefore, the study technology should be made available for both male and female undergraduate students.

4. Conclusion

Learning situation or context determines the method and technology that is most appropriate to any learning. The researcher explored the differences between undergraduate students' readiness towards the adoption of study technology for learning in Kwara state. The result obtained from data gathered and analyzed in this study indicated that undergraduate students are ready to adopt study technology for learning. There was no significant difference between male and female undergraduate students' readiness toward the adoption of study technology for learning in Kwara state.

References

- Abdur, R., Hafiz, A. B., Ayesha, S., Nadia, B., & Asma, N. (2014, January). The Role of Motivation in Learning English Language for Pakistani Learners. *International Journal of Humanities and Social Science*, 4(1), 6-11.
- Abimbola, I. O. (2011). Study technology: A new teaching and learning tool for higher education in Nigeria. In D. O. Durosaro, & A. A. Adegoke, *Higher Education and Globalization* (pp. 59-69). Ibadan: Stirling-Hordan Publishers Ltd
- Abimbola, I. O. (2013, February). The Misunderstood Word In Science: Towards A Technology of Perfect Understanding for All. *The One Hundred and Twenty Three (123rd) Inaugural*

- *lecture*. Retrieved from http://www.unilorin.edu.ng/UIL/123.pdf.
- Anyira, I. E. (2013). Gender implication in awareness and use of search engines by private universities lecturers in South-South Nigeria. *Library Philosophy and Practice, (e-journal)*.1029, 1-14. Available at http://digitalcommons.unl.edu/libphilprac/1039
- Applied Scholastic International. (2015). what is study technology? Retrieved from Applied Scholastic: http://www.appliedscholastics.org/study-tech.html.
- Church of Scientology International. (2015). *L. Ron Hubbard Study Technology: Effective Learning and Education*. Retrieved from L. Ron Hubbard Study Technology site: http://www.scientology.org/tmnotice.html
- Church of Scientology international. (2015b). the scientology handbook. In L. R. Hubbard, *the scientology handbook* (pp. 2-10). Los Angelels: Bridge publication. Retrieved from http://www.scientologyhandbook.org.
- Derek, B. (2017). Improving the Quality of Education. Retrieved from https://www.insidehighered.com/views/2017/09/21/how-improve-quality-higher-education-essay
- Murugan, A. A., Sai, G. T. B., Lin, A. L. U (2017).

 Technological Readiness of UiTM students in
 Using Mobile Phones in The English Language
 Classroom. *Malaysian Online Journal of*Educational Technology, 5(2), 34-50. Retrieved from
 - http://www.mojet.net/frontend//articles/pdf/v5i2/v05i02-03pdf.pdf
- Federal Republic of Nigeria. (2013). National Policy on Education, Yaba Lagos. *NERDC press 36*.
- Harley, G. M., & Kieffer, J. (2009). "The Development and Reality of Auditing," in James R. Lewis (ed.). Scientology. Oxford University Press, pp. 192–193.
- Harris, K. R. (1984). Teacher Characteristics as Related to Five Dimensions of Teacher stress, sex and age. Paper presented at the 68th Annual Meeting of the American Educational Research Association (New Orleans, LA, April 23-27).
- Harwell, D. (2012, May 26). Life Force Scores Suffer. . *Tampa Bay Times. 1A*.
- Hubbard, L. R. (1972, April 4). Ethics and Study Tech, Hubbard Communications Office Policy Letters.
- John, M. G. (2015). 10 Highly Effective Study Habits. Psychcentral journal Cyberpsychology, Behavior and Social Networking 21(12), 15-23.

- Jones, G. R., George, J. M., & Hill, C. (2000). Contemporary Management Boston, USA. MCGraw-Hill Higher Eduaction.
- Lake, S. (2003). *Barriers to study*. Saint Louis, MO 63138 but printed in the united States: Applied Scholastic International, 11755 Riverview drive.
- Likoko, S., Mutsotso, S., & Nasongo, J. (2013). The Adequacy of Instructional Materials and Physical Facilities and their Effects on Quality of Teacher. Retrieved from www.sciepub.com/reference/47804
- Lone, J. A., Ahmed, S. & Bashrat, M. (2018). Gender disparity in awareness and the use of search engines by college faculty: A survey of Baramulla District- J&K. *International Journal of Research in Humanities, Arts and Literature*, 6(9), 297-304
- Macpherson, K. (2004). Undergraduate Information Literacy: A teaching framework. *Australian Academic & Research Libraries*, 35(4), 226-241. Retrieved from http://goo.gl/81R2t2.
- Newman, N. (2019). Journalism, Media and Technology Trends and Predictions 2019. Business of Journalism Digital Media Online Journalism News Media. Retreived from https://reutersinstitute.politics.ox.ac.uk/ourresearch/journalism-media-and-technology-trends-and-predictions-2019
- oker, A. D. (2015). University Lecturers' Readiness and Motivation in Utilizing Online Technologies for Instructional Delivery in Kwara State, Nigeria. *M.Ed Research*.
- Oladipo, S., Olowoye, B., & Adenaike, A. (2010, 09 03). Comparative Study Of The Effect Of Study Technology Mode Of Instruction And Lecture Method On The Academic Performance Of University Students In Nigeria: Implication For Academic Staff Capacity Development. Academic leadership journal, 2-6. Retrieved from
 - http://www.academicleadership.org/459/compar ative_study_of_the_effect_of_study_technology
- Olagunju, A. M. (2003). An investigation into Teachers' Awareness and Extent of Utitlization of ICT for Effective Science Education. *Nigerian Journal of Computer Literacy (NJCL)*, 4, 82-101.
- Olagunju, A. M. (2003). An investigation into Teachers' Awareness and Extent of Utitlization of ICT for Effective Science Education. *Nigerian Journal of Computer Literacy (NJCL)*, 4, 82-101.
- Olawale, J. (2019). Problems of Education in Nigeria and their solutions Retrieved from

- https://www.legit.ng/1104678-problems-education-nigeria-solutions.html
- Olumorin, C. O. (2009). Preparation/Production and Use of Visualization & Non Visual/Instructional Materials & Media for Teaching and Learning. Paper Presented at Adebola College 2 Day Capacity Building Seminar for Secondary School Teachers, (30th July, 2009).
- Omoniyi, K. O. (2009). Fundamentals of Curriculum Process. Ibadan:. Foludex Press Limited.
- Onasanya, S. A., & Adegbija, M. V. (2007). Practical Handbook on Instructional Media. 2nd Edition. Indemac print media, Ilorin, Kwara state. Nigeria.
- Onojah, A. O. (2012). Design, Utilization, and Production of a Flex billboard that can be used to create awareness on Study Technology. Ilorin, Kwara State. Nigeria.
- Onuoha, U. D., & Subair , M. O. (2013, October). Study habits of undergraduate students in selected federal universities in South-west Nigeria. *International Research Journal*, *4*(10), 717-721. doi:http://dx.doi.org/10.14303/er.2013.088.
- Weiser, E. B. (2009). Gender Differences in internet use patterns and internet application preferences: A two sample comparison.