

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

March 2021

ADOPTING FLIPPED CLASSROOM MODEL FOR EFFECTIVE LIBRARY USER EDUCATION IN NIGERIAN UNIVERSITIES: CHALLENGES AND STRATEGIES

Jude Chidike Onah

jude.onah.194132@unn.edu.ng

Ebubechukwu Arinze Okonkwo

University of Nigeria Nsukka

Nwando Ogochukwu Eseni

National Library of Nigeria

Fatima O. Momohjimoh

University library, Federal University Lokoja

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

Chidike Onah, Jude; Okonkwo, Ebubechukwu Arinze; Eseni, Nwando Ogochukwu; and Momohjimoh, Fatima O., "ADOPTING FLIPPED CLASSROOM MODEL FOR EFFECTIVE LIBRARY USER EDUCATION IN NIGERIAN UNIVERSITIES: CHALLENGES AND STRATEGIES" (2021). *Library Philosophy and Practice (e-journal)*. 5028.

<https://digitalcommons.unl.edu/libphilprac/5028>

ADOPTING FLIPPED CLASSROOM MODEL FOR EFFECTIVE LIBRARY USER EDUCATION IN NIGERIAN UNIVERSITIES: CHALLENGES AND STRATEGIES

Onah, Jude Chidike, CLN
Postgraduate student,
Department of Library and Information Science
University of Nigeria, Nsukka
Jude.onah.194132@unn.edu.ng

Okonkwo, Ebubechukwu Arinze, CLN
Lecturer
Department of Library and Information Science
University of Nigeria, Nsukka
ebubechukwu.okonkwo@unn.edu.ng

Eseni, Nwando Ogochukwu, CLN
Librarian
National Library of Nigeria,
Enugu State Branch
esenindo@gmail.com

Momohjimoh, Fatima O.
Librarian
University library, Federal university, Lokoja
Fatyhafsy12@gmail.com

Abstract

The paper discussed adopting flipped classroom model for effective library user education in Nigerian universities with special emphasizes on web Tools, challenges and strategies. The paper started with an introduction which highlighted the issues that necessitated the need to adopt flipped classroom model for effective user education programme in Nigerian universities, one of which is the librarian-students ratio in our universities which have made user education programmes to be ineffective due to heavy workload as well as lack of accommodation. Flipped classroom model was discussed conceptually while identifying its benefits as identified by literature. The paper identified and discussed web technologies, tools and application (app) for flipping library user education programmes most especially “use of library” course which NUC made mandatory for all undergraduates to pass. The paper also, identified and discussed some challenges that might inhibits the adoption of flipped classroom

model for effective library user education as well as strategies to enhance the adopting of flipped classroom in Nigerian universities.

Keywords: flipped classroom model, library user education, Nigerian universities, challenges, Web Tools, web technologies.

Introduction

A Chinese proverb says that “if you give a man a fish, he will have one meal, but if u teach him how to fish, he will be fed for life” the above proverb vividly illustrate the indispensable need to educate library user on the skills and competences to independently effectively use library resources services with little or no assistance from the library rather more the librarian providing guidance on the use of library resources to the user always. Assisting users in the use of library resources is like “giving a man fish”, because the next time the user will still seek for assistance from the librarian, whereas educating the user on how to independently use the library resources is the same as teaching a man how to fish” because such user acquire the skills to effectively use library resource and services with little or no assistance for his life time. Apart from acquiring adequate skills to access and use library information resource, library user education increase library usage by users, promote positive image of the libraries and librarianship, serves as means of preservation and promote the use of adequate information for decision making. Thus, for effective use of university libraries, user education is indispensable and imperative.

University libraries is the heart and the information nervous system of the university, it is the center of information and have the mandate to provide adequate information resources and services to support the teaching, learning and research objectives of the parent institution. According to Gbuuslu and ubwa (2018) university libraries are indispensable in the actualization of the teaching, learning, research and community/public service objectives of the University system, because it is responsible for making information available and accessible for supporting these four fundamental objectives of the University. According to According to Onah, adayi, Okonkwo & Onyebuchi (2020) University Libraries are the heart of the university education, because it provides information in various formats to support the teaching, learning and research objectives of the institution of learning. Uzoigwe and Onwubiko (2014) stated that university libraries are central to the functions of the universities and contribute to the overall development

of the society through its provision of relevant information resources and services that are necessary for sustaining the teaching, learning, research and public service. The university library is an academic library that is located in a university to serve primarily the students, staff and the community at large. The main aim of university libraries is to acquire information resources in different formats, in various fields of human knowledge and to process, organise, disseminate and provide access to them and to use the resources for provision of library services to the library users.

University libraries acquire, process, organize, disseminate, store as well as preserve information resources and services. However, the relevance of any university library is the extent at which its information resources and services are accessed and utilized by the user community (Students, Staff and researchers in the University). For effective and judicious usage of University library resources adequate knowledge and skills in information use, retrieval, access and utilization as well as preservation is required, these set of skills can only be acquired through library user education.

Library user education involves the teaching-learning process where user of the library are taught on how to make proper, effective, adequate and maximum use of library resources and services with little or no guidance from the librarian for life-long learning and meeting his/her information need for proper decision making. According to Ihaturu (2012) user education can be defined as a process in which potential patrons of the library are educated on how to make efficient and effective usage of the library resources and services through the acquisition of skills and competences in identifying, locating, retrieving, access as well as utilization and exploitation of information resources and services. Similarly, Gbunshi and Ubira (2018) User education is the process of teaching library users the skills to effectively and efficiently use the library resources and services through the acquisition of the unique skills of identification, location, retrieval, search as well as usage of library information services and resources to meet their information needs.

Library user education includes library tour, library visit and orientation programme, bibliography instruction, information literacy programme, and so on. Nwachukwu and Asiegbu (2014) identified library orientation, visit/tours, lecture method, use of assignments, provision distribution of handout/ flyers, displays, advertisements and demonstration, as some of the

traditional methods used in user education delivery in libraries. One form of library user education that is common in Nigerian Universities is use of library, course which NUC made compulsory for every Undergraduate student to pass before graduating. This course is taught by libraries in most Universities in Nigerians. A preliminary examination through personal observation have revealed that the proliferation of admission in Nigerians Universities have widen the student librarian ratio which have affected how use of library course is been delivered by the librarians, in most Universities one librarian might be teaching 500 undergraduates or more depending in the numbers of departments, faculties as well as colleges in the university, this heavy work load coupled with unconducive learning atmosphere, inadequate teaching facilities as well as duration of the course have led to inefficient delivery of use of library course in Nigerian Universities.

Following success achieved through the use of flipped classroom model in teaching-learning process, this paper seeks to suggest the adoption of flipped classroom model to bridge the gap, and make user education more practical, effective as well as evident-based which will make the students not to only pass the course but fully acquire the basic knowledge and skills required to identify, locate, retrieve, access and use information resources in whatever medium to meet their information needs as excel in their academic pursuit. flipped classroom model is the kind of teaching –learning process where the student learn about the subject in pr-class video, text, audio etc. before coming to the class, where the class time is used for practical oriented problem solving activities, this will motivate the students and enable then to watch and re- watch the video so as to fully internalize the topic.

How exactly does flipped classroom model work? What web technologies or tools are available for flipped classroom? And how can librarians adopt it for effective user education? What are the challenges associated with flipping user education programmes in Nigerian universities and lastly, what are the strategies to enhance effective flipping of library user education in Nigerian university libraries. These questions and more will be answered in this paper.

Flipped Classroom Instructional Model: Conceptual Overview

Flipping the classroom is a pedagogical education model that reverses the modalities of lecture and homework, where students are given short video, text or even audio to view at home before coming to class, then class time is used for practical oriented problem solving as well as question and answer. According to Jantakoon & Piriyasurawong (2018) In a flipped classroom model students have access to educational contents related to new topics they will learn through such materials as lecture videos out-of-class prior to face-to-face interactive learning then, students work on assimilating the new material they learned through such video, audio or text as project work activities in the classroom, cooperative learning, and group discussions. flipped classroom is an emerging pedagogical model in which traditional lecture is moved outside the classroom via technology and assigned as homework while in-class time is spent on collaborative inquiry-based learning (Bergman & Sams, 2012; Johnson, Becker, Estrada & Freeman, 2014; Lage, Platt, & Treglia, 2000; Stone, 2012; Tucker, 2012). According to Bishop and Verleger (2013) flipped classroom is a novel instructional technique, which employs asynchronous video lectures and practice problems as homework, and active, group based problem solving activities in the classroom. Similarly, Long, Cummins & Waugh (2016) opines that, flipped classroom is an instructional model in which the education content is not presented during the in-class time but rather is learned by students prior to the classroom meeting through various forms such as short video, text, audio, chart, cartoon etc.

Flipped classroom entails turning teaching-learning process upside down. According to Shi-Chun, Ze-Tian & Wang (2014) flipped classroom has become increasing widespread in higher education, and more traditional courses will likely adopt the components of the flipped classroom to complement out-of-class work with video presentations. Also, the geometric development of mobile devices is capable of putting rich educational resources into students' hands at any time and place via required devices as well as technical knowledge. Chung & Khe (2017) stated that, the underlying motive of flipped classroom model is to provide the teacher's lectures prior to class through online videos, audio, text or chart in order to free-up the in-class time for active learning and problem solving activities. These pre-class educational resources give to students may be prepared by the teacher or downloaded online. They are many online sites for educational videos, audios as well as electronic information resources that might be of relevance to a particular course.

Adopting flipped classroom model have the ability to motivating students to be active learners, increase their creative skills, enhance their problem solving capability, as well as encourages collaborative learning as well as team work/discussion. Jantakoon & Piriyasurawong (2018) stated that, flipped classrooms often require students to properly process and then critically assimilate information from different sources for knowledge construction as well as student-centered in active learning. Ansori & Nafi' (2018) emphasized that, flipped classroom model gives priority to students through engaging students in learning, and the teacher becomes the “guide on the side” and not “the sage on the stage”. Flipped classroom model encourages students’ active participation, promotes support from teacher and peers to handle homework and allows more free time in class (Milman, 2012). According to Santikarn & Wichadee (2018) flipped classroom helps foster learner autonomy through online video lessons and class activities at school. Researchers have also argued that flipped classroom model helps students to build high self-esteem, positive self-concept as well as confidence which helps to improve the academic performance of students.

No doubt adopting flipped classroom for library user education delivery will help the students who are majorly digital savvy as well as native to achieve maximum learning through the use of technology which will make learning fun for them, thereby maximizing understanding as well as practical applicability of the knowledge acquired through user education for long-life learning.

Technologies, Tools and Web Applications for Flipping Library User Education in Nigerian Universities.

Countless of tools and web application are available are flipping Library User Education in Nigerian Universities, some of these tools web application include but not limited to Edmodo, Edpuzzle, Facebook group, WhatsApp group, Telegram, Google classroom, Kahoot, Padlet, Piktochart, Socrative Application, Google cardboard, Poll everything, Loom, Doceri, ShowMe, Hippo video, PlayPosit, Kiddom, Nearpod, ClassFlow, Khan Academy, TES Teach with Blendspace, Clarisketch, Ted-Ed, Duolingo, Explain Everything, BrainPoP, Symbaloo, Bookwidgets, and so on.

Edmodo: Edmodo is a social online learning application launched on the 1st September, 2008 by Nic Borg, Jeff O'Hara, Crystal Hutter. Librarian should sign up and create account with Edmodo, and also download the application from Google playstore. The librarian should also instruct the students to also download the Edmodo app from Google playstore and register. The librarian should then invite the students through their email address or sending the link online for the students to click. Text, videos, audios, cartoons etc. can be posted on Edmodo platform for students to view, watch, listen to and download

Edpuzzle: Flip the classroom with Edpuzzle, an easy and effective way to deliver videos in your classroom or outside your classroom. It's not just a video distributor: with Edpuzzle, you can make the video come to life by adding audio-notes and questions. Edpuzzle makes it easy to add comments to videos, and the questions make the video more interactive. When should you use Edpuzzle? You can use it to empower critical thinking when students watch a video. Perfect to use in a flipped classrooms. Students can download the app and receive video-assignments directly with questions, so they can check their understanding through the video.

WhatsApp group: WhatsApp (or any other social media platform that allows communication, such as a secret Facebook group for your course) can also help when it comes to flipping your classroom. When students have to go through subjects by themselves, they might get stuck. A social media platform offers your students a way to communicate with each other and ask questions about their homework. That way, they don't have to bother the teacher all the time.

ShowMe: ShowMe lets you create video lessons on whiteboards where you literally *show* your students. You can use this tool to write, draw, talk and record your voice. You can use it with any age group because it is open ended. Librarians can use this tool to create flipped classroom instructions, and students can use it in the classroom to explain an assignment about a certain topic they were taught at home.

Telegram: with telegram account the librarian can send instant message to the students, engage in video-telephony as well as voice over internet protocol (IP) with the students. The librarian can create telegram group for various class where information specific to the class will be posted. Video-telephony using data or even voice over internet protocol (IP) is cheaper than normal call with airtime.

Google classroom: The librarian can create Google classroom and use the online platform to disseminate library resources to the students. The librarian should sign up with Google classroom to create an account, after which he can invite the students to join the class. This platform can be used for passing information as well as marketing the library resources and services.

Loom: Loom is a screen capturing software that allows you to make instructional videos. Capture your screen or your front-facing camera and narrate it all at once, then instantly share it with your students with a simple link.

Hippo video: Create engaging videos with Hippo Video. Record a digital whiteboard explainer, classroom, interview through webcam or just screen record an entire web browser screen and include audio to boost student engagement. Hippo videos can be made available anywhere and anytime to all the students, a great advantage when you're flipping your classroom.

PlayPosit: PlayPosit is an online learning environment in which Librarian can create and share interactive video lessons. Librarian begin with any online video they made or found (screencasts, Khan Academy, TED, etc.) and transform the passive content into an active experience for students, with time-embedded activities. PlayPosit is designed for K-corporate, flipped, and blended environments.

Nearpod: With Nearpod, you can create interactive presentations. Add slide by slide or choose a special Sway template you can adjust. All those slides make an amazing interactive presentation, especially if you add activities like quizzes, open ended questions, BookWidgets exercises, polls, draw questions and others.

ClassFlow: With ClassFlow, Librarian can deliver interactive lessons that increase the depth of student and teacher engagement. ClassFlow provides the collaborative use of classroom devices, digital curriculum and assessments for learning. Students can access the lessons from home and start learning.

Khan Academy: Khan academy started out with its famous YouTube videos. Now, you can just go to their website and search for a learning video about the topic you want to teach. Choose between subjects such as Math, Science & Engineering, Computing, Arts & Humanities and

Economics & Finance. By signing up, you can create a classroom, and invite your students to take some video lessons and to take a quiz afterwards.

TES Teach with Blendspace: With TES teach you can create digital lessons in a few minutes. Engage your students by creating interactive lessons. TES Teach with Blendspace makes it easy to plan, build, and deliver a lesson by integrating content from YouTube, TES resources, your own files, and other digital media somewhere on the internet. Just drag and drop the material on the TES teach dashboard. You can even add links from BookWidgets so your students can get activated by interactive and fun widgets.

Clarisketch: Clarisketch is an app that enables you to create animated sketches. Combine speech, drawing and photos to clarify your intentions or instructions. How could you use it in your classroom? Well, there are a few possibilities: Create flipped classroom videos, Explain a complex process, illustrate a given topic, clarify what exactly students have to study or do for homework, and give students feedback by talking. It's clearer to the students than some weird icons and unreadable notes on paper.

Explain Everything: With Explain Everything, you can really explain everything. It's an educational app that enables you to make your own interactive tutorials and presentations. The principle is simple: Explain Everything is an interactive screen casting whiteboard. This means that you can make a presentation, and record everything you are drawing and saying. Draw, add pictures, highlight and write text. You even have a nice red pointer.

BrainPOP: BrainPOP creates animated resources that support Librarians and engage students - in school, at home, and on mobile devices. Their content includes movies, quizzes, games, mobile apps, activity pages, and much more. The content covers hundreds of topics. Use their resources so students can watch and interact with their fun and clear videos at home. BrainPOP allows students to take some actions after seeing the explainer video, such as "write about it", "draw about it", "play a game" and much more

Symbaloo: Symbaloo helps you organize your web (or classroom) resources in one place. These resources are stored on a dashboard in the form of buttons. This dashboard can be set as your homepage, so you can find all the resources you need immediately. It gives you the possibility to personalize the dashboard. For Librarian, Symbaloo has a special section that gives you the possibility to create your own learning paths or lesson plans. Just share the link or classroom code with your students, and let them discover the learning path independently. You can add videos, links, BookWidgets exercises, and more to the Symbaloo tiles.

Bookwidgets: BookWidgets allows you to make interactive lessons. BookWidgets provides strong digital templates of all kinds of interactive exercises. You just have to add your own content. BookWidgets integrates amazingly with learning management systems like Google Classroom, Canvas, Moodle, Schoology and Apple Schoolwork.

Challenges inhibiting the adoption of flipped classroom model for library user education in Nigerian Universities.

Adopting flipped classroom model for in Nigerian Universities for library user education might be inhibited by such challenges as lack of awareness of flipped classroom among librarians, technophobia, lack of policy on adopting flipped classroom, inadequate technological skills to adopt flipped classroom among librarians, low internet bandwidth, erratic power supply, lack of functional ICT laboratory to support students without necessary devices etc.

Lack of awareness of flipped classroom among librarians: Awareness of emerging technologies and how to adopt it for flipping library user education should be always be created among librarians through in-house training, workshop or seminar. The rate at which web technologies are changing daily, lack of adequate awareness will be a serious barrier to adopting it. Adequate awareness enables an individual to be aware of the existence of something, thus make effort to learn how to use it.

Technophobia: Technophobia is another major challenge to flipping library user education in Nigerian universities because majority of the librarians that teaches use of library course are digital immigrants who have high tendency to have technophobia. Technophobia is simply the fear or avoidance of new technologies, most especially advanced emerging technologies. It will

be difficult to adopt flipped classroom model when librarians in Nigerian university libraries are having fear or avoids the use of emerging web technologies for effective service delivery.

Lack of policy on adopting flipped classroom: Another challenge to flipping library user education in Nigerian university libraries is lack of policy mandating librarians to adopt flipped classroom model for library user education delivery. Most observably, even university libraries that have policy on the use of web 2.0 for library service delivery are not implementing such policy.

Inadequate technological skills to adopt flipped classroom among librarians: Lack of inadequate technological skills is another challenges because to adopt flipped classroom model the librarian must have skills of navigating the internet, downloading the web applications needed, skill of making short video or audio with his/her smart phone or laptop and how to send it to the students. Thus, ICT literally skill and competence is a pre-requisite for adopting flipped classroom.

Low internet bandwidth: Low internet bandwidth is yet one challenge through most Nigerian universities, especially federal universities have internet Access, the bandwidth is usually slow and low should make access to web and use of web services slow and sometimes frustrating. This might inhibit the adoption of flipped classroom for Library User Education.

Erratic power supply: Since the mobile device needed to effective adopt and use flipped classroom model for library user education are electronic gadget, thus, constant power supply is needed to power or charge the battery of the devices. It is important to note that watching video or audio using mobile devices consumes the battery storage easily, hence, erratic power supply will be a challenge to flipping library user education in Nigerian university libraries.

Lack of functional ICT laboratory to support students without necessary devices: Lack of functional ICT laboratory to support students who cannot acquire required mobile devices like laptop or even smart phone or money to subscribe to internet access is another challenge affecting the adoption of flipped classroom model for effective library user education in Nigerian university libraries. Most departments in Nigerian universities lacks functional ICT laboratory. This is a major barrier inhibiting flipping library user education.

Strategies to enhance the adoption of flipped classroom model for library user education in Nigerian Universities.

The following strategies when carefully implemented are capable of aiding effective adoptive of flipped classroom for library user education in Nigerian universities. These strategies includes but not limited to organizing training for librarians by the university library management, sponsorship to national and international conferences, workshops or seminars, formulating and enforcing policy on the adoption of flipped classroom for library user education in Nigerian universities, provision of constant alternative power supply in the university, provision of standard telecommunication infrastructures around the university environment, establishing and equipping a standard and functional ICT laboratory in every department for students' use and so on.

Organizing training for librarians by the university library management: The university library management should from time to time train librarians on emerging technologies which can be adopted for flipped classroom model. This training will create adequate awareness of such technologies among the librarians, consequently encouraging the adoption. Additionally, the training will enhance their skills and competences.

Sponsorship to national and international conferences, workshops or seminars: The university librarian management should endeavour to sponsor their staff to national and international conferences, workshops or seminar on information technology (IT) in library service delivery. These conferences will expose the staff to global best practices and consequently encourage them to adopt such technologies. Where there is no adequate fund to sponsor many staff, the library can sponsor just one or two staff that will be mandated to share with their colleagues upon return.

Formulating and enforcing policy on the adoption of flipped classroom for library user education in Nigerian universities: Every university library should formulate and strictly implement policy mandating librarians to adopt and use flipped classroom model for library user education programmes. This policy will encourage as well as mandate the staff librarians to adopt flipped classroom model. Also, committee should also be set up to ensure full compliance.

Provision of constant alternative power supply in the university: Due to the unstable nature of electricity supply in Nigeria, Alternative power supply should be provided around the university environment so that students and librarians will use it to power as well as charge their mobile devices which due to watching of video or audio online will consume power. Solar power or standby generator can be provided as alternative power supply.

Provision of standard telecommunication infrastructures around the university environment: Standard telecommunication infrastructures should be provided around the university environment, including students' hostels. Most especially high internet access should be made available and accessible in every department so that librarians can upload teaching materials with ease, also the students will download or watch the video, listen to audio or even read text online with ease.

Establishing and equipping a standard and functional ICT laboratory in every department for students' use: Due to the economic and socio-cultural situations in Nigeria, some students from less privileged home might not effort to acquire smart phone or laptop which is a prerequisite for adopting flipped classroom model, thus, it is suggested that standard, functional and well equipped ICT laboratory with adequate internet access be established in every department in the university so that students can visit and use it to view the video or audios sent by the librarian.

Conclusion

From our discussion, it is clear that adopting flipped classroom for effective library user education programmes in Nigerian universities will enhance the delivery of user education, enhance students' understanding of use of library resources and services as well as increase students' patronage. Flipping user education programmes will also be easier if the suggestion proffered by the paper is religiously followed and implemented by university library management. Since majority of undergraduates are digital natives and savvy, adopting emerging for flipping their user education classes will be a fun-full learning for them. To adopt flipped classroom the basic requirements are smart phone, internet access and technical skills. Extant research have revealed that all the web application (app) used for flipped classroom model are open and free online, thus, inadequate funding is not a major challenge. The paper conclude that flipping library user education will enhance user education programmes in Nigerian universities.

References

- Ansori, M. & Nafi', N. N. (2018). English teachers' perceived benefits and challenges of flipped classroom implementation. *JEELS*, 5 (2): 211-227
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. Alexandria, VA: International Society for Technology in Education.
- Bishop, J.L. & Verleger, M.A. (2013). The flipped classroom: A survey of the research, *American Society for Engineering Education (ASEE) National Conference Proceedings*, Atlanta, GA. Retrieved from <http://www.asee.org/public/conferences/20/papers/6219/view>
- Chung K. L. & Khe F. H. (2017). A critical review of flipped classroom challenges in K-12 education: possible solutions and recommendations for future research. *Research and practices in technology enhanced learning*, 12 (4): 1-22.
- Gbuushi, J. A. & Ubwa, T. T. (2018). Impact of Library User Education Program on Undergraduate Students in Benue State University, Makurdi, Nigeria. *European Scientific Journal*, 14 (7): 126-138.
- Iheaturu, A.M. (2002). Enhancing user education through Systematic evaluation. Nigerian library and information. *Nigeria library and information science Trend*, 1(1) 46-5.
- Jantakoon, T., & Piriyasurawong, P. (2018). Flipped Classroom Instructional Model with Mobile Learning Based On Constructivist Learning Theory to Enhance Critical Thinking (FCMOC Model). *Journal of Theoretical and Applied Information Technology*, 96(16), 5607-5614.
- Johnson, L., Becker, S., Estrada, V., & Freeman, A. (2014). *Horizon Report: 2014 Higher Education*.
- Lage, M.J., Platt, G.J. & Treglia, M (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. *The Journal of Economic Education*, 31(1), 30-43.
- Long, T., Cummins, J. & Waugh, M. (2016). Use of the Flipped Instructional Model in Higher Education: Instructors' Perspectives.

Milman, N. B. (2012). The flipped classroom strategy: What is it and how can it best be used? *Distance Learning*, 9(3), 85–87.

Nwachukwu, V. N. & Asiegbu, F. N. (2014). User education: an essential service of academic libraries in Nigeria. *International journal of educational research*, 13(1):197-210.

Onah, J.C., Adayi, I., Okonkwo, E. A. & Onyebuchi, G. U. (2020). Information retrieval skills as a correlate of undergraduates use of library information resources in a Nigerian university of education. *Journal of the social sciences*, 43(3)

Santikarn, B. & Wichadee, S. (2018). Flipping the Classroom for English Language Learners: A Study of Learning Performance and Perceptions. *iJET*, 13(9): 123-135.

Shi-Chun, D., Ze-Tian F. & WANG, Y. (2014). The Flipped Classroom—Advantages and Challenges. *International Conference on Economic Management and Trade Cooperation (EMTC 2014)*, 17-20.

Stone, B. B. (2012). Flip your classroom to increase active learning and student engagement. In *Proceedings from 28th Annual Conference on Distance Teaching & Learning, Madison, Wisconsin, USA*.

Tucker, B. (2012). *Online instruction at home frees class time for learning*. Retrieved from www.educationnext.org

Uzoigwe, K. & Onwubiko, A. (2014). The place of Information and Communication Technology (ICT) in the Library Services. *An International Journal: The Information Technologist* 5(1), 12-25.