

Effective Use of Blended Learning and Assessment Strategies amidst and Post-COVID-19 Dispensation

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Abstract: No doubt, prior to the outbreak of COVID-19 pandemic, the use of technology for education delivery and instruction is already synonymous with teaching, learning and assessment processes. The strategy, which blends traditional education model of face-to-face in-classroom instruction with the use of technology and digital media afford students the opportunity of interacting in real-time in peer-groups or with instructors and even participate in lectures virtually if the need arises (such as the total lockdown). For the fact that Nigerian education system has no adequate facilities to go virtual in teaching and learning amidst COVID-19 pandemic (during schools lockdown), it is hereby concluded that effective use of blended teaching-learning and assessment strategies should be adopted. Part of the recommendations was that teachers and students should acquire necessary skills for the use of blended learning tools. Governments and relevant agencies should provide supportive facilities for e-Learning (online and offline) needed for effective use of blended learning and assessment. Also, parents and guidance should collaborate for effective use of blended teaching-learning strategy. This will help our education system to surmount the impact of the pandemic on teaching and learning, and be on the global pedestal in post-COVID-19 dispensation.

Keywords: Blended assessment, Blended learning, Blended learning tools, COVID-19 dispensation, Instructional delivery, Tech-savvy.

1. INTRODUCTION

Education sector, like economy was not only been affected during COVID-19 pandemic, but still battling with persistency and resurfacing of the pandemic. Penultimate in the month of April, Europe and Asia entered into third wave of COVID-19 pandemic, though Nigerian government and other African countries have to take decisive and proactive measure. The teaching and learning environment is compelled to embrace and adopt a number of innovations which are off-shot technological advancement. One major purported innovation in education sector is the adoption of blended learning, and assessment strategies. Even prior to pandemic dispensation, the innovative pedagogical strategy has been embraced rapidly as a result of its inherent advantages, though its effectiveness has quite a number of underlying factors that pose challenges, most especially in the developing countries like Nigeria (Kintu, Zhu & Kagambe, 2017). The greater challenge facing the use of technology in teaching-learning and assessment may be attributed to the fact that majority of our teachers (most especially in public schools) are not tech-savvy, that is, they lack skills in navigating various application required for blended learning.

Blended learning and assessment strategies have become issues of topical discussion in the education industry. However, fewer educationists and generalists know very little about this interactive and engaging teaching-learning and assessment strategies? Fewer people know that the learning strategy in question is not an emergent of twenty-first century. The

antecedents of blended learning, and assessment strategies as captured by Pappas (2015) was segmented into six stages as follow: First Distance Course (1840's), Mainframe Computer-Based Training (1960's to 1970's), TV-Based Technology (1970's to 1980's), CD-ROM Training and Rise of LMS (1980's to 1990's), First Generation of Web- Based Instruction (1998), and Blended Learning Integration (2000 till date).

The trend is dated to when Isaac Pitman launched the first distance education course, though computers and mobile devices weren't involved. In the 1960's through 70's, mini- computer and mainframe training for workers within an organization without having to rely on printed materials and face-to-face instruction emerged. Then, the next face was characterized as the beginning of more engaging and interactive learning. Though, learners were to watch the instructor on television yet they could communicate with their peers. Also, learners could send mail to their instructor either collectively or on individual basis on issues bothering on effective teaching and learning. In the 1980's through 1990's, learning becomes more blended through the use of technology, schools and educational institutions began to make use of CD-ROMs for more interactive teaching-learning process. Hence, the era marked the beginning of 'Learning Management System' (LMS). In 1998, the first generation of web-based instruction began.

Educational institution made advancement beyond distributing CD-ROMs to learners, learning materials, eLearning assessments, and assignments could be uploaded via the web, and learners could access them with a click of a mouse button. Finally, a full blown of blended learning and assessment strategies began in year 2000 (Pappas, 2015). Penultimate to COVID-19 global pandemic, blended learning (including assessment) becomes a better avenue through with education would continue to thrive.

2. CONCEPTS OF BLENDED LEARNING AND ASSESSMENT STRATEGIES

What could be regarded as blended learning and is not synonymous with any of eLearning, online-learning, but an amalgam of the diverse approaches in addition to face-to face classroom, outside classroom or field with intention to teach, learn and to assess teaching-learning process. Poquet et al. (2015) added that this model of education requires that students be present for regular in-classroom instruction. As such, the model can be seen as inequitable for those who may have competing demands and priorities that make regularly scheduled on-campus attendance difficult, if not impossible. While distance education can be seen as a model in which learners have an opportunity to undertake programs of study without presence or regular attendance at the institution of learning for course instruction, content, and assessment, the combination of the two models is known as blended teaching-learning strategy.

Whitelock and Jelfs (2003) identified three definitions of blended learning as follows:

- a. The integrated combination of traditional learning with web-based on-line approaches.
- b. The combination of media and tools employed in an e-learning environment.
- c. A combination of a number of pedagogical approaches, which is not necessarily dependent on the use of learning technologies.

In the actual sense, blended learning is not a new concept in the teaching learning process. 'Tele-classes' is one form of this type where students watch a lecture on closed-circuit television and the same can be said for self-paced learning (Rao, 2019). Blended learning (also known as hybrid learning strategy or multichannel learning process) is a method of teaching and learning that integrates the use of technology and digital media with traditional teacher-led classroom teaching-learning and assessment activities, giving students more opportunity to learn at their own pace with greater experiences (Panopto, 2017). One may tend to perceived blended learning as a concept that would be hard to define. However, Rao (2019) explained that blended learning is increasingly used to describe the way e-learning is being combined with traditional classroom methods, as well as independent study to create a new methodology termed 'hybrid teaching'. Yet, blended learning is an approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods which requires the physical presence of both teacher and student, with some elements of student control over time, place, path, or place. It is a crystal fact that traditional mode of learning is the hall-mark of blended learning.

Rosell (2020) said blended learning is an approach mostly adopted in formal education programme that is made up of in-person classroom time as well as individual study online using e-learning software. It is therefore a type of multichannel method that incorporates tutor-led activities, images, video, digital tasks and face-to-face interaction between teacher and students and among students.

Assessment is a key component of any education systems. As succinctly put by Janier and Shafie (2009), blended assessment is a combination of using technology specifically the Wiley Plus and MOODLE and the traditional paper and pencil written tests. Assessing learning is difficult process at both face-to-face courses and online courses use variety of techniques to assess student learning outcomes, but, there are some differences among them (Yukselturk & Curaoglu, 2010). Online technologies allow for a wide range of assessment techniques that can be used to assess student performance in online courses such as: selected response assessments, constructed response assessments, virtual discussions, concept mapping, e-portfolio assessment, writing, field experiences, individual and group projects, informal student feedback, peer assessment, and self-assessment (Benson, 2003; Reeves, 2000) cited in (Yukselturk & Curaoglu, 2010). Major benefits of online assessment as it may be included in blended learning are; immediate feedback which helps in waking learners from their slumber, and system of evaluation which becomes more formative, transparent, fast, reliable, objective and acceptable to learners (Lalima & Dangwal, 2017).

3. JUSTIFICATIONS FOR BLENDED LEARNING AND ASSESSMENT STRATEGIES

The major justification for blended learning according to Cleveland-Innes and Wilton (2018) is that it does not synonymous with adding technological element to an existing course of learning but it is rather an integrated plan to effectively combine both face-to-face and online learning for attainment of best results. Also, Kian, et al (2016) stressed that blended learning meant to improve students' performance, highly cost effective and personalized learning among students. Teaching and learning in the four walls of classroom (known as the traditional mode of teaching) though has few shortcomings, yet it provides a much needed human touch to the teaching learning process. Certain traits such as teachers' personality and behaviour have greater influence on future development including personality of the students. The development of social skills among learners such as: cooperation and team spirit, sharing of knowledge, self-expression and respect for other peoples' opinions are aided in traditional mode of teaching (Lalima & Dangwal, 2017). The followings are shortcomings of traditional mode of teaching:

- a. It is failing to meet the individual needs of all the students in the class basically due to improper pupil teacher ratio.
- b. It is not adapting itself to meet the challenge of teaching physically challenges students □ Teachers are not trained for integrated classroom.
- c. It is not fit to meet the challenges put forward by the irregular students as attendance is must and evaluation system depends on the annual examination. If students fail to take the examination his whole year is a waste, due to rigidity the irregular students are in a way excluded from the main stream of school system.
- d. Similarly absence of professional counsellors and absence of right attitude of the teachers and dearth of follow up activities in the schools the children who discontinue the school for any reason do not get the chance for entering in the formal educational system again.
- e. School is not able to reach every child and so education for all is still a far sighted goal.
- f. Children from deprived groups, from the areas that are geographically isolated and medically unfit students are not able to gain benefit from this formal traditional mode of teaching.
- g. At the same time students have to suffer due to dearth of teachers, their learning has many ambiguities due to inefficient teachers.
- h. Course are not regularly revised, books are not updated and teachers are not interested in upgrading their knowledge and professional skills, the result is that our students are not well prepared to meet the demands of the modern market and professions (Lalima & Dangwal, 2017 pp. 129-130).

While online or offline learning mode may not provide same to the learners, it compliments for better improvement in teaching-learning process. Ali and Elfessi (2004) clarified that internet is used to supplement traditional classroom practices, though; it has become a major medium of instruction for open and distance learning. However, research findings are mixed about the effectiveness of the Web in learning. For instance, while the findings of Redding and Rotzien in 2001 revealed that the use of internet as medium of instruction improves learning, those of Gifford and Kincannon, 1998 and 2002 respectively contended its effectiveness. Also, Oliver and Trigwell (2005) painstakingly synthesized research into blended learning, having drawn from both the corporate sector and academia, they vehemently concluded that the notion of blended

learning is seriously misguided and that it must be rebuilt and grounded on learning theory, shifting the learning emphasis from teacher-centred to student-centred. Yet the following justifications were made for blended learning:

1. As a multichannel teaching-learning method, it offers the best of classroom and online learning all in an institution of learning.
2. The teachers having realized that each student has a range of different strengths and requirements, blended teaching-learning approach allows students to learn at own pace.
3. When the use different tools from both traditional and digital spheres, teachers are able to present necessary information in a range of different ways designed to suit the varying learning styles of their students (Rosell, 2020).
4. Blended learning offers the learner convenience and flexibility; they have the ability to control their learning pace and learn remotely.
5. Academic research suggests that blended teaching-learning gives learners a more comprehensive understanding of the course content.
6. Though blended assessment, it is easier to track exactly who has, or hasn't, completed a task, a course or training.
7. Because blended learning allows learners to interact with instructors and fellow learners, it supports social learning.

Lastly, in the area of assessment, blended learning can apply digital tools to create assessments which provide immediate feedback to both learners and teachers. Also, students are able to demonstrate their learning beyond the multiple-choice assessments. In online assessment mode with internet access, students are able to demonstrate and show what they know, the skills they possess by any of the following: recording an audio or video response using tools like Recap or Flip Grid, making an interactive presentation using Near pod, collaborate on a project using Google Docs or Google Slides, create a website or a blog (McCabe & Francis, 2020).

4. THE CHOICE OF TECHNOLOGY, MEDIA AND OTHER FACTORS

Blended learning provides opportunities for learning which is quite understood by both the educators and students due to its inherent features such as flexibility, ease of access, and integration of sophisticated multimedia and technologies which aid teaching-learning and assessment processes (Cleveland-Innes & Wilton, 2018). There are major factors to consider when choosing technology for blended learning. Some of these factors are: subject matter, assessment, and student access and success with appropriate technologies, software, and online strategies are the ongoing challenges of online teaching and learning (Contact North Supporting Rural & Remote Ontario, 2020). Other factors to consider include: power supply, learners' affordability of required technological gadgets, and software. The following questions would arise:

1. Which technologies and media are you using and what strengths and challenges do they present for blended or hybrid instructional delivery, assessment, student interaction, student support and feedback loop?
2. How affordable and accessible are those technologies and media to the teachers/tutors and the learners?
3. Can the choosing technologies and media ensure pace-learning among individual learners?

In Nigeria, two major factors that should guide the choice of blended learning tools are students' knowledge of and accessibility to those tools. A teacher must ensure that students who are major recipients of blended learning have both access and skills to utilize an intended tool. Other factors to consider for the choice of blended learning tools include: affordability (in term of cost), effectiveness, suitability, durability, as well as other environmental factors like power supply stability and availability of supportive technological gadgets.

5. CHALLENGES AND CONSTRAINTS TO BLENDED LEARNING

Though there is enough literature on blended learning, specifically on the student experience, course design, adequate attention has not been given to how and why teachers balance the blend of online and classroom components. However, there is lack of access to educational technologies and innovations i. e., digital divide). Therefore, lack of evenly access to blended learning tools across demographic groups such as rural and urban may pose a great challenge to adopting blended learning (Dziuban, et al, 2018).

In attempt to capture the challenges, Cleveland-Innes and Wilton (2018) categorized the challenges to blended learning as follows:

- Technological requirements. Technological requirements include hardware, software and Internet access with appropriate bandwidth. These resource requirements can create systematic lack of access. Technology tools must be available, user-friendly, reliable and current for Internet use to support learning in a meaningful way.
- IT knowledge and skill. Termed IT literacy, preparation for use of technological tools is required. Lack of such knowledge and skill is a significant barrier to access in the first place and quality learning experiences thereafter. Access to technical support is a related and significant requirement.
- Lack of self-pacing and self-direction. Online learning both requires and encourages learner independence and management. For example, some researchers suggest that many students will watch multiple weeks' worth of video lectures at once rather than according to course structure. Students come to online learning with varying degrees of learning competence; supporting such learning self-management should be part of all online learning experiences (Cleveland-Innes & Wilton, 2018, pp. 31).

6. GUIDES TO ADOPT BLENDED LEARNING IN POST-COVID ERA

Lalima and Dangwal, (2017) gave the following as prerequisite for adopting blended learning: teachers should be well trained, teachers should have scientific attitude, Teachers should have wider outlook and positive approach towards change, availability of facilities like well-furnished computer lab, internet connection, provision for video chatting, students should have access to internet at their private computer, the system must be flexible, parents must be fully aware and agreed to its adoption, and there should be formative evaluation and continuous internal assessment.

The most impactful blended learning:

- follows training for teachers in using in-person activities and technology, and creating the right blend of activities for deep, meaningful learning, and
- includes opportunities for students to adjust to the online learning environment, and new principles for teachers to consider when thinking about teaching and learning, both online and in person (Cleveland-Innes, & Wilton, 2018, pp. 20)

7. CONCLUSION AND RECOMMENDATIONS

Blended learning is claimed to be an effective pedagogical approach that integrates classroom teaching-learning activities and those of technology enhanced ones, hence government should provide all facilities for e-Learning and online learning needed for effective use of blended teaching-learning and assessment may not be regarded as innovations in education sector as the approaches are naturally by-products of the digital domain creeping in the space.

Matheos, Daniel & McCalla (2005) asserted that the claimed made on the effectiveness of blended learning has not been substantiated with research findings. The conclusion was that blended learning lacks explicit definition, in that the term predominantly situated in the corporate sector and that it is more widely used by e-learning practitioners and writers than in the education system. This conclusion was apparently proved otherwise during COVID-19 lockdown when virtually all schools were completely closed but some resulted to adoption of online and offline teaching-learning and even assessment. In line with the opinion of Matheos, Daniel & McCalla (2005), an effective blended learning strategy should be laid on foundation of having rudiment knowledge and understanding of the requirements for its adoption, learners' preferences, available tools, choice of tools to support as well as feedback to complement the blending process.

Also, for effective use of blended learning, every requirement and constraint in terms of available gadgets and human resources, and even supportive facilities should be given a thoughtful consideration. Due to the inherent constraints of adopting blended learning in Nigeria, the following recommendations were made:

- a. The teacher should equip themselves with basic knowledge required to navigate the media applications to adopt for blended learning, they should **'tech-savvy'**.
- b. In adopting blended learning and assessment, consideration should be given to availability, affordability and accessibility of the blended learning tools as well as technological and media gadgets among learners in urban centres and those in rural areas.
- c. Governments and relevant agencies should provide supportive facilities for e-Learning (online and offline) needed for effective use of blended learning and assessment.

d. Lastly, as suggested by McCabe and Francis (2020), schools must consider several important pedagogical factors in adopting blended learning for better results; such components include building a community and fostering a positive culture, using strategies to establish and maintain motivation and engagement among students (and teachers), practicing effective communication with teacher clarity and effective feedback, personalize learning for students and incorporate principles of Universal Design for Learning (UDL) practicable in Nigeria in an effort to reach all learners.

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