



## **Flexible Learning System as a Tool for Improving the Quality of Instructional Delivery in the 21<sup>st</sup> Century Business Education Programme in Tertiary Institutions in Anambra State**

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### ***Abstract***

The study determine the role of the flexible learning system in improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions. two research questions guided the study and one hypothesis was tested at .05 level of significance. The descriptive research design was adopted for the study. The population of the study comprised 109 business educators. A structured questionnaire that was validated by three experts was used to collect data for the study. The application of Cronbach Alpha on the data collected yielded a coefficient values of .82 and .88 for clusters 1 and 2 with an overall reliability coefficient of .85. mean, standard deviation and t-test were used to analyze data for the study. Findings revealed that that flexible learning system would help in improving the quality of instructional delievery in business education in tertiary institutions in Anambra State because it facilitates increased access to business education programme and allows students to determine the sequence of content according to their desire among others. Findings also showed that clearly identifying the objectives of the flexible learning course and ensuring that assessment is aimed to transfer student's newly constructed knowledge to learners' future learning through sharing their work with their peers and the instructor are some of the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State. Business educators did not differ in their mean ratings based on the years of experience.

The researcher recommended among others that tertiary institution administrators should support the implementation of flexible learning systems because it is an excellent chance to rethink teaching and learning and harness technology to modify old-fashioned paradigms for educating students for the future.

**Keywords:** Flexible Learning, Quality, Instructional Delivery, 21<sup>st</sup> Century, Business Education

## Introduction

Advancement in technology has impacted instructional delivery practices in tertiary institutions in the 21<sup>st</sup> century. Instructional delivery is a way of facilitating learning that is intended to modify the learner's behaviour. Instructional delivery according to Wordu and Akor (2018), is the teacher's ability to actively use his training, knowledge, skills and value to modify the learner's behavioural behaviour. Ekpeyong (2017) stated that instructional delivery is anchored on the method of teaching and the quality of instructional materials used for lesson deliveries. To increase student performance and teachers' efficiency, quality instruction delivery is a crucial instrument for teaching and learning. It improves learning by making it more engaging, applicable, realistic, and appealing. Additionally, it makes it possible for both lecturers and students to actively and productively engage in class. It allows for the growth of abilities, knowledge, and self-actualization of individuals (Ekpeyong).

Sadly, the quality of instructional delivery in academic programmes especially the business education programme in tertiary institutions in Nigeria appears to have failed in equipping students with learning experiences that will impact the needs of society. Kayi and Dambo (2018) decried the failure of business education lecturers to adopt contemporary instructional resources like technology to improve the quality of instruction in business education. Changes emanating from technological advancement have further increased the need for more technologically driven educational practices. According to Bates (2018), the two biggest changes were the rise in non-traditional students, whose learning requirements rely primarily on collaboration and integration, and the development of instructional technology, which presents difficulties for teachers in terms of how they deliver instruction.

Consequently, the failure of business education programmes to produce

students who are independent and innovative thinkers has been blamed on too much focus on the traditional learning system. This has improved the call for the adoption of flexible learning. In general, flexibility is believed to entail providing options in the learning environment so that a course of study better suits the specific needs of students (Huang, Liu, Guo, Yang, Zhao, Wei, Knyazeva, Li, Zhuang, Looi & Chang, 2020). Flexible Learning (FL) is a teaching and learning strategy that employs a variety of student-centred teaching and learning techniques and resources. This educational strategy responds to the demands of a diverse student community, in that students are individually and socially driven to strive and learn (Cassidy, Fu, Valley, Lomas, Jovel & Riseman, 2016). Flexible learning is not a replacement for conventional teaching techniques, but rather an extension of face-to-face training that allows students to pace their learning and choose their learning resources. Although the use of information and communication technology is not required for flexible learning, it is often regarded as a crucial component in enabling student-centred learning and boosting educational quality (Huang, Spector & Yang, 2019). Learner-centred flexible learning encourages increased freedom and autonomy on the part of the learner. Its philosophy is to assist and empower learners, giving them greater control over their learning and encouraging them to become more self-directed. It broadens the range of options accessible to both students and instructors (Orlando & Attard, 2015). Flexibility also refers to the admissions and enrollment processes, as well as the examination and assessment periods. Introducing or enhancing flexibility is not always a 'positive' thing to do. The most important problem is how it affects student learning and the quality of that learning experience. It is all about enhancing learning outcomes and increasing student engagement via the use of suitable learning methodologies. According to Cassidy et al. (2016), flexible learning is a pedagogical method that allows for flexibility of time, place, and audience, including but not limited to the use of technology. Furthermore, introducing flexibility fosters increased self-reliance and the development of abilities for lifelong learning. As a result, flexible teaching and learning investigate many modes of online instructional delivery. Adedoyin and Soykan (2020) defined synchronous and asynchronous online learning. During the epidemic, institutions modified online learning in the form of synchronous, real-time lectures and time-based outcomes evaluations, as well as asynchronous, delayed-time activities such as pre-recorded video lectures and time-independent assessments (Joaquin et al., 2020). The demands of the teachers and learners drive the

online teaching and learning process. This is regarded as the advancement of online learning via the use of technology since it provided cost savings for learners, teachers, and the institution, enhanced flexibility in teaching and learning and improved access to education (Kirkwood & Price, 2014). However, there are concerns about allowing learning to be flexible in education. As the popularity of online learning has grown, several academics have expressed concerns about the Internet and the delivery of education over the Web (Phillips & Trainor, 2014). Educators are sceptical about its feasibility. Learners are sceptical about desirability. Its Impact is being questioned by researchers. However, much of the research into the role, impact, and influence of these learning opportunities has thus far focused on practical outcomes rather than more theoretical or policy-driven perspectives (Yilmaz, 2018). The theoretical perspectives contribute critical insights and debate about how online, open, and flexible learning education environments operate to balance an increasingly technology-dominated education context. There is a need to develop new conceptual and theoretical frameworks to guide our understanding of the future educational potential of online and flexible learning contexts. There is a lot to learn about how student learning processes evolve and adapt to changing environments (Giami, 2020). All of these viewpoints are crucial to consider when it comes to the usage of the flexible learning system in the business education programme for education. Because the concept and concepts connected with flexible learning systems are relatively new, many learners and instructors may not have experience in functioning in this sort of learning environment. It is against this that the researcher sought to determine the role of the flexible learning system in improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions. The study specifically;

1. Ascertained the role of the flexible learning system in improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State.
2. Determine the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State.

## **Research Questions**

The following research questions guided the study:

1. What is the role of a flexible learning system in improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State?
2. What are the the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State?

### **Hypothesis**

The null hypothesis was tested at 0.05 level of significance:

There is no significant difference in the mean rating of experienced and less experienced business educators on the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State.

### **Method**

The descriptive survey research design was adopted for the study. The study was carried out in Delta State. The population of the study comprised 109 business educators from the five tertiary institutions offering business education programme in Anambra State. The instrument for data collection was a researcher developed questionnaire. The instrument was titled “Questionnaire on Flexible Learning as a Tool for Improving the Quality of Intructional Delivery (QFLTIQID)”. The Instrument contains 16 items on skills required of graduates of business education for business operation. The instrument was structured on a 4- point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The instrument was validated by three experts in the Department of Technology and Vocational Education, Nnamdi Azikiwe University, Awka. The instrument was pilot tested on 10 business educators in Delta State.

The application of Cronbach Alpha on the data collected yielded a coefficient values of .82 and .88 for clusters 1 and 2 with an overall reliability coefficient of .85. The researcher administered the questionnaire by on the spot and the respondents were given enough time to complete the questionnaire. However, for those who could not complete the questionnaire, an appointment was made for the retrieval of the instrument. Out of the 109 copies of questionnaire administered, 98 copies were returned in good condition and were used for the collection of data for the study. The

mean value was used to answer the research questions while the standard deviation was used to ascertain the homogeneity or otherwise of the respondents' ratings. In analyzing the mean value, any item with mean rating between 2.50 and above was regarded as agreed while any item below 2.50 was regarded as disagree. T-test was used to test the null hypothesis at .05 level of significance. If the p-value is equal to or greater than the alpha value of 0.05, it means that there is no significant difference. The hypothesis was accepted. Consequently if the p-value is less than the alpha value of 0.05, it means that there is a significant difference, therefore the hypothesis is not accepted.

## Results

### Research Question 1

What is the role of a flexible learning system in improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State?

**Table 1: Respondents Mean Ratings on the Role of Flexible Learning System in Improving the Quality of Instructional Delivery in the 21<sup>st</sup> Century Business Education Programme in Tertiary Institutions**

| S/No. | Item Statement  | Mean | SD  | Remarks |
|-------|---|------|-----|---------|
| 1.    | Facilitates increased access to business education programme  | 3.12 | .91 | Agree   |
| 2.    | Ability to link resources in many different formats   | 3.03 | .95 | Agree   |
| 3.    | Resources can be made available from any location and at any time   | 2.71 | .76 | Agree   |
| 4.    | Provides a useful source of supplementary material to conventional programmes   | 3.42 | .82 | Agree   |
| 5.    | Enhances the interaction between teachers and students with the help of the platform function   | 2.63 | .86 | Agree   |
| 6.    | Some flexible learning platforms can record the video/audio for students to play back after the classes, which is convenient for students' review | 2.57 | .97 | Agree   |
| 7.    | Encourages group learning among students  | 3.45 | .88 | Agree   |
| 8.    | It allows students to learn at their own pace   | 3.22 | .92 | Agree   |

|   |             |      |              |
|---|-------------|------|--------------|
| 9. Encourages project based learning which stimulates students critical thinking skills | 3.55        | 1.01 | Agree        |
| 10. Avails teachers and students with varieties of tools for learning                   | 2.60        | .96  | Agree        |
| 11. Allows students to determine the sequence of content according to their desire      | 3.50        | .95  | Agree        |
| <b>Cluster Mean</b>   | <b>3.07</b> |      | <b>Agree</b> |

Data in Table 1 reveal that the respondents rated all the items (1-11) with mean ratings ranging from 2.57 to 3.55 and standard deviations ranging between 0.76 to 1.01 on the role of a flexible learning system in improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State. The cluster mean of 3.07 reveal that flexible learning system would help in improving the quality of instructional delievery in business education in tertiary institutions in Anambra State because it facilitates increased access to business education programme; provides a useful source of supplementary material to conventional programmes, enhances the interaction between teachers and students with the help of the platform function and allows students to determine the sequence of content according to their desire among others.

**Research Question 2**

What are the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State?

**Table 2: Respondents Mean Ratings on the Strategies for Enhancing the use of Flexible Learning System for Improving the Quality of Instructional Delivery in the 21<sup>st</sup> Century Business Education Programme in Tertiary Institutions**

| S/No. | Item Statement   | Mean | SD   | Remarks |
|-------|--|------|------|---------|
| 12.   | Clearly identifying the objectives of the flexible learning course.                              | 2.90 | .87  | Agree   |
| 13.   | Creating a blended learning course outline and syllabus to keep learners motivated and on-track. | 3.21 | 1.02 | Agree   |
| 14.   | Determining the level of interactivity for the flexible learning course                          | 3.10 | .83  | Agree   |

|   |             |      |              |
|---|-------------|------|--------------|
| 15. Integrating group collaboration activities in learning tasks.   | 3.11        | .73  | Agree        |
| 16. Developing communication and feedback guidelines  | 3.22        | .98  | Agree        |
| 17. Compiling a list of resources and references  | 3.44        | .80  | Agree        |
| 18. Creating effective assessment plans.  | 3.18        | .97  | Agree        |
| 19. Defining the task by learners themselves through using their knowledge  | 3.29        | 1.00 | Agree        |
| 20. Ensuring that assessment is aimed to transfer student's newly constructed knowledge to learners' future learning through sharing their work with their peers and the instructor | 3.32        | .95  | Agree        |
| 21. Create virtual meeting environments that allow participants at different locations to see and interact with one another   | 3.14        | .83  | Agree        |
| <b>Cluster Mean</b>   | <b>3.19</b> |      | <b>Agree</b> |

Data in Table 2 reveal that the respondents rated all the items (12-21) with mean ratings ranging from 2.90 to 3.44 and standard deviations ranging between 0.73 to 1.00 on the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State. The cluster mean of 3.19 indicate that clearly identifying the objectives of the flexible learning course, determining the level of interactivity for the flexible learning course, integrating group collaboration activities in learning tasks and ensuring that assessment is aimed to transfer student's newly constructed knowledge to learners' future learning through sharing their work with their peers and the instructor are some of the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State.

### Hypothesis

There is no significant difference in the mean rating of experienced and less experienced business educators on the strategies for enhancing the use of flexible



learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State.

**Table 3: Summary of t-test Analysis of Mean Ratings of Experienced and Less Experienced Business Educators on the Strategies for Enhancing the use of Flexible Learning System for Improving the Quality of Instructional Delivery in the 21<sup>st</sup>-Century Business Education Programme**

| Variable                     | N  | $\bar{X}$ | SD   | df | $\alpha$ | p-value | Decision        |
|------------------------------|----|-----------|------|----|----------|---------|-----------------|
| L. Experienced Business Edu. | 38 | 3.03      | .97  | 96 | .05      | .38     | Not Significant |
| Experienced Business Edu.    | 60 | 3.21      | 1.00 |    |          |         |                 |

Data in Table 3 showed that the p-value of .38 is greater than .05 alpha level of significance. This means that there is no statistical significant difference in the mean ratings of experienced and less experienced business educators on the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State. The hypothesis was therefore accepted.

### Discussion

Findings of the study revealed that flexible learning system would help in improving the quality of instructional delivery in business education in tertiary institutions in Anambra State because it facilitates increased access to business education programme; provides a useful source of supplementary material to conventional programmes, enhances the interaction between teachers and students with the help of the platform function and allows students to determine the sequence of content according to their desire among others. This finding is in agreement with Cassidy, Fu, Valley, Lomas, Jovel and Riseman (2016) who reported that the application of flexible learning environment offer higher education platforms for improving the quality of instructional delivery. In the same vein, Kirkwood and Price (2014) averred that the adoption of flexible learning approach would help to promote the integration of technology in the higher education system. This means that flexibility in learning would encourage the use of synchronous and asynchronous technologies. This

according to Cassidy, et al (2016) would increase access to higher education as well as saves cost for students.

Finding also revealed that clearly identifying the objectives of the flexible learning course, determining the level of interactivity for the flexible learning course, integrating group collaboration activities in learning tasks and ensuring that assessment is aimed to transfer student's newly constructed knowledge to learners' future learning through sharing their work with their peers and the instructor are some of the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State. This finding is in agreement with Huang, Liu, Guo, Yang, Zhao, Wei, Knyazeva, Li, Zhuang, Looi and Chang (2020) who reported that successful integration of flexible learning system in higher education programme depends on the instructor's ability to utilize multiple technologies and tools to reorganize the teaching and learning process. Phillips and Trainor (2014) stated that teachers should assist students in understanding the nature, regularity, and intrinsic relationships of objects. Learning, according to constructivism, is the process of creating an internal psychological representation of the world while interacting with the environment. Context, discourse, cooperation, and meaning-making are the fundamental principles of constructivism. Thus it becomes imperative that Universities are creatively utilizing new technology to assist instructors in changing their teaching techniques in order to cope with the massive changes caused by unexpected events (Gordon, 2014). Teachers are increasingly required to use a range of technology-based tools, participate in online forums and collaborative authorship, and use active learning approaches such as project-based and problem-based learning. With students gaining greater influence over their learning, instructors are now functioning as mentors and facilitators. Furthermore, findings of the study revealed that no significant difference in the mean ratings of experienced and less experienced business educators on the strategies for enhancing the use of flexible learning system for improving the quality of instructional delivery in the 21<sup>st</sup>-century business education programme in tertiary institutions in Anambra State.

## **Conclusion**

Based on the findings of the study, the researcher concludes that flexible learning system would help to improve the quality of instructional delivery in the 21<sup>st</sup> century

business education programme business education programme in tertiary institutions in Anambra State. The adoption of flexible learning system would allow both students and lecturers to work in synergy in a conducive way. The use of technology will help to ensure that learning occur in a way that addresses the needs of the business education students.

## **Recommendations**

Based on the findings of the study, the researcher recommends that:

1. Tertiary institution administrators should support the implementation of flexible learning systems because it is an excellent chance to rethink teaching and learning and harness technology to modify old-fashioned paradigms for educating students for the future.
2. The Heads of Departments of Business Education programmes in tertiary institutions should organize conferences and seminars targeted at improving business educators knowledge of the application of different models of flexible learning.
3. Administrators of business education programme in conjunction with Information and Communication Technologies firms to provide funds, information and communication technology infrastructure for the implementation of flexible learning system in the business education programme

## **REFERENCES**

- Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*, 1–13. <https://doi.org/10.1080/10494820.2020.1813180>
- Bates, A. W. (2018). *Teaching in a digital age. Guidelines for designing teaching and learning for a digital age*. Tony Bates Associates Ltd.
- Cassidy, A. Fu, G., Valley, W., Lomas, C., Jovel, E., & Riseman, A. (2016). Flexible learning strategies in the first through fourth-year courses. *Collected Essays on Learning and Teaching*, 9, 83-94. <https://doi.org/10.22329/celt.v9i0.4438>.
- Ekpeyong, E. (2017). Quality instructional delivery services and academic performances of secondary school students in social studies in Calabar metropolis, Cross River State, Nigeria. *Journal of Research in Science and Technology*, 7(2), 98-105.
- Gordon, N. A. (2014). *Flexible pedagogies: Technology-enhanced learning. In The Higher Education Academy*. <https://doi.org/10.13140/2.1.2052.5760>

- Huang, R.H., Liu, D.J., Guo, J., Yang, J.F., Zhao, J.H., Wei, X.F., Knyazeva, S., Li, M., Zhuang, R.X., Looi, C.K., & Chang, T.W. (2020). *Guidance on flexible learning during campus closures: Ensuring course quality of higher education in COVID-19 outbreak*. Beijing: Smart Learning Institute of Beijing Normal University.
- Huang, R.H., Spector, J. M., & Yang, J.F. (2019). *Educational technology: a primer for 21st century*. Springer Nature Singapore Pte Ltd.
- Joaquin, J.J.B., Biana, H.T., & Dacela, M.A. (2020). The Philippine higher education sector in the time of COVID-19. *Frontiers in Education*, 5. <https://doi.org/10.3389/feduc.2020.576371>
- Kayi, N.E. & Dambo, B.I. (2018). Effect of blended learning approach on business education students' achievement in elements of business management at Rivers State University. *International Journal of Innovative Information Systems & Technology Research*, 6(1), 38-48.
- Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: What is 'enhanced' and how do we know? A critical literature review. *Learning, Media and Technology*, 39(1), 6–36. doi:10.1080/17439884.2013.770404.
- Orlando, J., & Attard, C. (2015). Digital natives come of age: The reality of today's early career teachers using mobile devices to teach mathematics. *Mathematics Education Research Journal*, 28, 107–121. doi:10.1007/s13394-015-0159-6
- Phillips, C. R., & Trainor, J. E. (2014). Millennial students and the flipped classroom. *Journal of Business and Educational Leadership*, 5(1), 102.
- Wordu, H. & Akor, V.O. (2018). Instructional delivery models and academic performance of agricultural science students in senior secondary schools in Rivers State, Nigeria. *International Journal of Education and Evaluation*, 4(9), 72-82.
- Yilmaz, A (2018). Distance and face-to-face students' perceptions towards distance education: A comparative metaphorical study. *Turkish Online Journal of Distance Education-TOJDE*, 20(1), 191-207.