

**PRACTICE MODE AND SIMULATION MODE OF
INSTRUCTIONS AS CORRELATE OF STUDENTS ACADEMIC
ACHIEVEMENTS IN COLLEGES OF EDUCATION IN SOUTH-
EAST, NIGERIA**

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Abstract

This study examined the practice mode and simulation mode of instructions as correlate of students' academic achievement in colleges of education in South-east Nigeria. The study was guided by two research questions and two null hypotheses tested at 0.05 level of significance. The correlational research design was employed in this study. A set of structured questionnaire on practice mode and simulation mode of instructions (PMSMI) and the students' academic achievement scores in business education were employed to collect data. A total of 684 (95%) copies of the instruments were administered on the respondents whereas a total of 679 were retrieved and subjected to statistical analysis using appropriate statistical tools. The data collected were analyzed using Pearson Product Moment Correlation Coefficient (PPMCC). The findings of the study revealed that there was a positive and moderate relationship between the practice mode of instruction and academic achievements which entails that the usage of practice mode of instruction by students is not holistic in the teaching and learning process but yielded moderate result on their academic achievement. Finding also showed that the relationship between the simulation mode of instruction and academic achievement of Business Education Students was positive and moderate which implies that the students' usage of simulation mode of instruction was moderate. Based on the findings of the study, the following recommendations were made; teachers should strive to use practice mode of instruction and the simulation mode instruction to improve teaching and

learning process; Students should adapt to practice mode of instruction and the simulation mode instruction, to enhance academic achievement.

Keywords: Computer Assisted Instruction, Academic achievement, Business education.

INTRODUCTION

The teaching of business education and other academic disciplines by teacher has not been an easy task. This is because business education encompasses the learning and development of individuals in the skills and knowledge necessary for success in the business world. It equips individuals with the ability to understand, analyze, and manage business operations, whether in a specific industry or as a foundation for entrepreneurship. Business education is a course of study that imbibe in its recipients the adequate skills that will make them to be self-reliant, effective and efficient in the world of work without waiting for white-collar jobs. Business education is a programme designed to equip students with the necessary skills and competencies needed in the world of work (Nwogu et al., 2021). Edozpolor and Egbri in Amesi and Allison (2023) opined that the goals of Business Education is to prepare students for a specific career in office occupation; expose students with knowledge about business which include a good blend of computer technology that incorporates Information and Communication Technology, and as well equip students with the required skills for job creation and entrepreneurship. Egbri and Enang (2021) stated that Business Education lecturers prepare students to acquire practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of the economy and social life. Paul-Mgbeafulike and Onyeneke (2023) averred that business education as a discipline is an aspect of general education that builds in the students the needed skills, value and competencies required in the labour market. These needed skills, values and competencies are embedded in some subjects in the curriculum of business education.

Curriculum content in the business education programme is designed in such a way that provides a theoretical framework beneficial for understanding business management and, at the same time, provides undergraduates with the knowledge, skills, and techniques arguably indispensable to start up and manage businesses effectively and efficiently without depending on government for white-collar jobs. Dambo and Nwauzor (2023) averred that business education programme can prepare students with business skills that will enable them to create and develop new enterprises and also it has a way of shifting the focus of students from paid employment to self-employment, with sound knowledge of the programme. As a result of this, business education students upon graduation can compete maximally in the world of work even without the paid employment irrespective of what the nation is facing currently. Moreover, factors like student-teacher ratios, clear communication, and assessment practices can influence a student's academic achievement in business education (Ohaka, 2020). Eyenaka, et al. (2023)

opined that instructional delivery method plays an important role in learning, skills acquisition and meaningful interpretation of information to the learners when suitable teaching method is employed and also improve academic achievement. Nonetheless, the efforts of the government and teachers to make students learn has not been very commensurate with students' performance in examination as students' performance have not been commensurate with the resources, and facilities the government have placed on education.

Recent observation as reported by Okafor (2020) stated that the students' academic achievement in business education courses have not been very encouraging and impressive. A good number of them perform below expectations in internal and external examinations. The reason for this might sometimes be attributed to attitude of students, their background, inadequate student-teacher ratio and insufficient teaching resources.

Academic achievement refers to the extent to which a student has attained their educational goals, as measured by various assessments and indicators. It encompasses the knowledge, skills, and abilities acquired within an academic setting, often through formal schooling or higher education. Academic achievement is the outcome of how well a student is doing academically both in theoretical and practical aspect and is measured by continuous assessment and examinations. Jekayinfa, et al. (2023) opined that what a student should have learned at the end of a study period, as determined by a set of criteria, and made possible by a set of resources, is referred to as the academic achievement for that course of study. Academic achievements are more focused on what the students do as a result of participating in the course and they come in all sizes and may be anything from wide to narrow in form (Onwusa, 2021). Oguejiofor and Eya (2022) averred that academic achievement on the other hand refers to the height of formal education successfully attained by an individual in the course of pursuing a career. Since the field of academic achievement is very wide-ranging and covers a broad variety of educational outcomes; the definition of academic achievement depends on the indicators used to measure it. Among the many criteria that indicate academic achievement, there are very general indicators such as procedural and declarative knowledge acquired in an educational system, more curricular-based criteria such as grades on an educational achievement test, and cumulative indicators of academic achievement such as educational certificates.

Student's academic achievement is influenced by so many factors such as motivation, locus of control, resilience, self-efficacy, study habits and method of teaching of all these psychological variables, self-efficacy and method of teaching seem to be underreported by scholars. The need to improve students' academic achievement has promoted the need for practice mode and simulation mode of instruction in school.

Practice mode of Instruction (PMI) focuses on reinforcing previously learned concepts through repeated practice. It presents students with exercises, evaluates their responses, and provides feedback, aiding in

skill development and memorization. This mode is particularly effective for building fluency and automaticity in skills. Practice mode of instruction is an instructional technique that promotes learning a concept or skill through constant practice (Aniodoh & Eze, 2022). Ambily and John (2018) opined that practice provides opportunities for students to repeatedly practice the skills that have previously been presented and that further practice is necessary for mastering the tools. Practice significantly benefits business education students by enhancing skill development, improving retention, and promoting mastery. It helps students remember concepts, become proficient in skills, and develop habits through repetition and practice. This approach is particularly useful for building foundational knowledge and skills in areas like accounting, marketing, and office management and technology. Practice strategy provides practice structured for students to increase their interest and learning outcomes in certain subjects (Susanti, 2021; Yusuf et al., 2023). To create a comprehensive learning experience, especially when designed to complement each other, it becomes imperative to combine practice with simulation mode.

Simulation-based instruction, often referred to as simulation instruction, involves using simulations to teach and enhance learning. Simulating real-world processes or scenarios allows students to practice skills and make decisions in a safe, controlled environment. Overall, simulation-based instruction offers a powerful tool for enhancing learning and developing important skills in various educational settings. It can be particularly effective for subjects that involve complex processes or require hands-on practice. However, it is important to consider the potential challenges and ensure that simulations are used effectively and appropriately. Dale and Barrett (2017) opined that simulation is an experiential instructional method that teachers create to imitate or replicate actual events, problems, procedures, or skills to achieve the desired instructional results. Dale and Barrett further stated that students experience the situation and apply learned skills and knowledge, think critically, and gather meaning from the practice. Simulations provide students with an opportunity to practice problem – based- learning through a specific task, issue or problem (Adesoji, 2021). Moraes and Plasezweski (2023) advocated that simulation as a teaching methodology provides real-life experiences, in which participants can act authentically, seeking to improve their conduct, in situations of self-assessment and self-correction under the guidance of a facilitator. Simulation-based learning offers a way to enhance business education by providing hands-on, real-world experiences that complement traditional classroom methods. By creating simulated business scenarios, students can apply their knowledge, develop critical thinking and problem-solving skills, and learn from their mistakes in a safe and controlled environment. Simulation-based learning is a valuable tool for enhancing business education by providing experiential learning, developing essential skills, and promoting improved learning outcomes.

It is against this background that the researcher sought to empirically determine the practice mode and simulation mode of instructions as correlates of academic achievement of business education students in colleges of education in south-east, Nigeria.

Statement of the Problem

Academic achievement among business education students has remained a concern to teachers, students, parents and the society due to persistent poor performance and inadequate acquisition of practical skills. This ugly situation has been linked partly to the teaching methods used for instruction, especially the continued reliance on traditional teaching methods.

Practice mode and simulation mode of instructions has been introduced to enhance learning through technology integration, however its relationship with students' academic achievement remains unclear, particularly among business education students. Therefore this study sought to examine practice mode and simulation mode of instruction methods as correlate of academic achievement among business education students.

Research Questions

The study was guided by the following research questions.

1. What is the relationship between practice mode of instruction and students academic achievement.
2. What is the relationship between simulation mode of instructional method and student's academic achievement.

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance.

1. Practice mode of instruction has no significant relationship with student's academic achievement in colleges of education.
2. The simulation mode of instruction has no significant relationship with business education student's academic achievement in colleges of education.

METHOD

The study adopted a correlational research design. The correlational design is considered most appropriate because the study sought to examine the relationship between practice mode and simulation mode of instructions and student's academic achievement without manipulating the variables under investigation. The study was conducted in the public colleges of education in the south east, Nigeria.

The population of the study was 684 students in the eight colleges of education in the study area. The eight colleges are Nwafor Orizu college of education Nsugbe, Ebonyi state college of education, Ikwo, Federal college of education, Iheamufu, Federal college of education, technical Umunze, Imo state college of education, Ifite Uboma, Abia State college of

education (Technical) Arochukwu, Enugu State college of education, Enugu
 Federal college of education Isu-onicha, Ebonyi state.

The sample of the study consisted 684 of the population of the study using stratified random sampling technique. The stratification was based on gender. This sampling technique showed adequate representation of the respondents. The instrument used for data collection was a structured questionnaire. This instruments assessed student's exposure to and use of computer-assisted instruction. The instrument has 29 item with a response format ranging from strongly agree to strongly disagree. The students' academic achievement was measured using the students' academic performance records in Business Education obtained from the respective institution, selected for the study.

The instrument was face and content validated by three experts in business education, educational psychology and measurement and evaluation drawn from Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus. The suggestions and correction of the validator were incorporated into the final version of the instrument. The reliability of the instrument was established through a trial test conducted among 20 students from college of education South-South which was outside the study area. Data collected were analyzed using cronbach alpha method and this yielded an internal consistency of 0.70 which was considered high to adjudge an instrument reliable and acceptable.

The questionnaire were administered and retrieved by the researcher and his research assistants. The process of data collection lasted for four weeks. The data collected were subjected to analysis using Pearson Product Moment Correlation Coefficient. All hypotheses were tested at 0.05 level of significance.

RESULTS

The data collected were statistically analyzed and presented in Table in accordance with the research questions and hypotheses that guided the study.

Research Question 1: What is the relationship between practice of mode of instruction and academic achievement of business education students in colleges of education?

Table 1: Correlation of relationship between practice mode of instruction and academic achievement of business education students in college of education

Source of variation	N	Practice of mode of instruction	Academic achievement	p-value
Practice mode of instruction	679	1	0.564	0.000
Academic achievement	679	0.564	1	

The result from Table 1 showed that the relationship between practice mode of instruction and academic achievement of business education students in colleges of education is south-east, Nigeria was positive and moderate ($r = 0.564$) which indicates that the usage is minimal.

Research Question 2: What is the relationship between simulation mode of instruction and academic achievement of business education students in colleges of education in south-east, Nigeria?

Table 2: Correlation of relationship between simulation mode of instruction and academic achievement of business education students in colleges of education in south-east, Nigeria.

Source of variation	N	Simulation of mode of instruction	Academic achievement	p-value
Simulation mode of instruction	679	1	0.556	0.000
Academic achievement	679	0.556	1	

The result from table 2 revealed that the relationship between simulation mode of instruction and academic achievement of business education students in colleges of education in south-east, Nigeria was positive and moderate ($r = 0.556$).

Test of Hypotheses

Hypothesis I: There is no significant relationship between practice mode of instruction and academic achievement of business education students in South-east, Nigeria

Table 3: Test of significance of Pearson's correlation coefficient between practice mode of instruction and academic achievement of business

Source of variation	N	Practice mode of instruction	Academic Achievement	P-value	Level of significant
Practice of mode of instruction	679	1	0.564	0.000	Positive significance
Academic Achievement	679	0.564	1		

Data in Table 3 showed that the relationship between practice mode of instruction and students academic achievement was significant ($r = 0.564$, $p = 0.000$). The null hypothesis was rejected since the p-value was less than 0.05 level of significance.

Hypothesis 2: there is no significant relationship between simulation mode of instruction and academic achievement of business education students.

Table 4: Test of significance of Pearson's correlation coefficient between simulation mode of instruction and academic achievement of business

Source of variation	N	Simulation mode of instruction	Academic Achievement	P-value	Level of significant
Simulation mode of instruction	679	1	0.556	0.000	Positive significance
Academic Achievement	679	0.556	1		

Table 4 indicated that there was a significant relationship between simulation mode of instruction and academic achievement of business education students in south-east. ($r = 0.556$, $p = 0.000$). The null hypothesis was rejected since the p-value was less than 0.05 level of significance.

Discussion of Findings

The findings of the study showed that practice mode of instruction significantly correlate with academic achievement of students of business education. The findings entails that the usage of practice mode of instruction by students is not holistic in the teaching and learning process but yielded moderately result on their academic achievement. Result of the study agree with Owena (2022) who reported that learners in mathematics in Cambantug Element Elementary School, Marida District, leyte division and was revealed on the table that the pre-test performance of Grade 3 learners in mathematics is moderate for the experimental and control group.

The outcome of the study revealed that the relationship between the simulation mode of instruction and academic achievement of business education students in colleges of education in south-east, Nigeria was significantly positive and moderate. The findings of this study contradicts the study of Adesoji (2021) who examined the relative effectiveness of computer simulation institutional package (CSI), four mode Application technique (4MAT) and lecture method (LM) in improving students' performance in chemistry in Akure North Local Government Area of Ondo state. The result of the study also agreed with Dania and Eluowa (2023) who observed that simulation instruction has effect on student's academic performance in social studies in Delta state. The findings of the first and second study showed that there was no consensus among scholars as it concerned with simulation mode of instruction and students academic achievement irrespective of the subject matter.

Conclusion

The findings of the study showed that practice mode of instruction and the simulation mode of instruction have a moderate relationship which contradicts the findings of the present study.

Recommendations

Based on the findings and conclusions made from the study, the following recommendations were made:

1. Teachers should strive to use practice mode of instruction and the simulation mode instruction to improve teaching and learning process.
2. Students should adapt to practice mode of instruction and the simulation mode instruction, to enhance academic achievement.

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