

# Effect of Assignment and Socratic Methods on Students' Achievement in Business Mathematics among Colleges of Education in North-Western Nigeria

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## Abstract

The aim of the study was to find out the effect of assignment and Socratic methods on students' achievement in business mathematics in Colleges of Education in North-west Zone Nigeria. The research design adopted for this study was quasi-experiment design. The population for the study comprises of 684 business mathematics students for 2022/2023 Academic Session. Purposive sampling technique was used in the selection of the three colleges for the experiment. Mean, standard deviation and mean difference were used to answer the three research questions. Independent t-test was used to test all the null hypotheses. Students taught business mathematics using Socratic method performed better than those taught using lecture teaching method. (P-value 0.000). Students taught business mathematics using assignment method performed better than those taught using conventional teaching method. (P-value 0.002). Students taught business mathematics using Socratic method performed better than those taught using assignment teaching method. (P-value 0.000). The findings revealed that Socratic method is the more effective method of teaching business mathematics than the assignment and conventional teaching methods had significant effect on students' achievement in business mathematics. Based on the findings, it was recommended that teachers of business mathematics should adopt Socratic method in their classes because the method is capable of improving students learning outcomes.

**Keywords:** Academic Performance, Assignment Teaching Method, Business Mathematics, Socratic Questioning Teaching Method.

## 1. Introduction

Business mathematics is a core subject offered by students of business education department for two semesters in their one hundred level at colleges of education. Business mathematics according to Sutar (2017) is mathematics used by commercial enterprises to record and manage business operations. Russell (2018) views business mathematics as a subject that helps individual to know the financial formulas, fractions; measurements involved in interest calculation, hire rates, salary calculation, tax calculation and depreciation which help complete business tasks efficiently. Seidel (2019) expressed that understanding business mathematics is important to maintain profitable operations and accurate keeping of records. This paper pointed out that knowing how to add, subtract, multiply, divide, round-up and use of percentages and fractions is the minimum knowledge needed to price a product and meet a budget.

One of the objectives of business education at NCE level, is to provide students with the necessary skills, knowledge and information needed to engage in the life of work in the office or as an entrepreneur. This objective can only be achieved through an effective teaching and learning processes. Teaching involves many activities, behaviour and processes. Smith (2016) remarked that, teaching is the process of attending to students' needs, experiences and feelings with the aim of assisting them in learning

particular concepts and subjects. According to Smith a successful teaching is a product of effective and efficient teaching process that brings about learning. Learning, according to Connie (2020) is a transformative process of taking in information that when internalized and mixed with what we have experienced changes what we know and builds on what we do. From the foregoing, this study expressed that, learning is an experience gained from interactions, it involves activity or process of gaining knowledge or skills by studying, practicing, being taught, or experiencing something.

Teaching methods are techniques adopted by the teacher in order to impact the learners with the necessary skills and knowledge required to achieve the goal of the lesson or subject. Donche (2013) explained that, teaching method comprises the principles and techniques used by teachers to enable students learn. Albaqami (2016) outline teaching methods of teaching business education courses which include role play method, case study method, project based on research, lecture method, learning in team, group discussion method, Socratic (questioning) method, assignment method, problem-based method, seminars and workshops. Two of these instructional methods are the central focus of this study and this is discussed with particular reference to assignment and Socratic methods.

In a Socratic method of teaching, the teacher asks questions to guide and direct the discussion, with students actively answering and participating in the lesson and finally students articulate their own thought. Rouse and Ashlyann (2015) noted that, questioning technique is an easy way to improve learners' ability to understand information on their own and that when applied properly, students do benefit immensely from the use of self-questioning- techniques. This statement is supported by Moss (2017) who stated that, question and answer method is a process of passing instructions to learners, that asking question, and allowing the students to respond to the question or to dominate session based on the topic or issue under review, is an effective way for all students to participate in the learning process whether they are introverts or extroverts. Umoru and Oluwafemi (2020) affirmed that questioning method is a participatory teaching strategy that leads learners to fact and concept that the teacher intends to teach.

Looking at the definitions closely it is observed that, one of the goals of the Socratic questioning method is to help students process information and engage in deeper understanding of topics, and that, the teacher can easily know through the questions whether the students have really understood the topic or not. Conventional method involves the teacher talking to students about a subject matter within a specific period of time, while the students listen passively. Modebelu and Duvie (2012) described conventional method of teaching as a process by which teachers send information to students, projecting a one-way channel of communication model.

Academic achievement is the accomplishment of a given task measured against preset standards. Academic achievement refers to what students achieve in their studies and how they cope with different learning experiences given to them by their teachers. Academic achievement, as observed by Shaibu (2017) in Adamu (2021), is the exhibition of knowledge attained or skills developed by a student in a subject designed by test scores assigned by teachers. This study described academic achievement as the ability of the learner to study, remember facts and be able to explain them verbally or put them down in writing. According to Shaibu, academic achievement is influenced by a number of factors such as instructional strategies employed among others.

The researcher observed a downward trend in academic performance of students in business mathematics in Colleges of Education in the area of grades obtained, 2019/2020 results revealed poor

performance of students in business mathematics. College of Education, Kano, the 2019/2020 results revealed the percentage of A, B, C, D, E and F grade earned in business mathematics to be 14%, 18%, 25%, 18%, 20%, and 5% respectively. College of Education, Katsina, the 2019/2020 results revealed the percentage of A, B, C, D, E and F grade earned in business mathematics to be 5%, 9%, 11%, 11%, 22%, and 42% respectively. The researcher posits that poor performance by students in business mathematics could be as a result of the teaching methodology used by the teacher. Eze et al. (2015) maintained that poor performance of students could be linked to deficiency in the methods of teaching adopted by the teachers which might create frustration, learning difficulties and in-active participation in students. In support of the above points, Keziah (2015) pointed out that, poor academic performance is an indication of teaching and learning problems, of which methodology is a primary source. Oladebinu et al. (2018) expressed that students' academic performance might be affected by several factors which might include students' learning skills, parental background, peer influence, teachers' quality, learning infrastructure among others. It is in the light of these problems that the study was carried out. This study therefore, seeks to examine the effect of assignment and Socratic methods on students' academic achievement in business mathematic in College of Education in North-west Zone Nigeria.

## 2. Literature Review and Hypotheses Development

There are several studies which were conducted on the effects of Socratic questioning and assignment teaching methods. Hadassa (2015) conducted a study to determine the effects of Socratic questioning method on student's art performance in secondary schools in Kaduna Metropolis, Nigeria. The study was a quasi-experimental design where pre-test and post-test control and experimental group were used. The findings obtained revealed that, students performed better in fine art when taught using Socratic method as compared to the conventional method. Also, in another study conducted by Agbowuro et al. (2019) on effects of Socratic questioning teaching strategy on the achievement of public secondary schools' Biology students in Langtang North, Plateau State. The research design adopted for that study was the quasi-experimental design, pre-test, post-test of the non-equivalent control-group design was adopted and intact groups were used. The results indicated that Socratic questioning teaching strategy was significantly better than conventional method in improving students' achievement on the concept of habitat in Biology. The previous researchers made very good efforts in their research though, their studies covered only two teaching methods and one state. The researchers would have used at least three teaching methods for comparison and to determine the most effective method of teaching. Additionally, the scope of their studies was limited to specific state rather it would have been extended to other state that will cover a geo-political zone for generalization of their results.

A study was conducted by Umoru and Oluwafemi (2020) which aimed at determining the effect of questioning teaching method and gender on the academic achievement of students in business studies in Oyo State, Nigeria. Quasi-experimental research design was used. The findings of the study showed that, questioning teaching method had positive effects on students' academic achievement in business studies, and that, if teachers can use the method in the teaching learning process, students will acquire and possess in-depth knowledge and skills to help them demonstrate the concept for good achievement in test and examination, as well as, in daily practical activities. Despite focusing on only two teaching methods and a single state, previous researchers made significant contribution to the field. Though, the research would have extended to cover more teaching methods and state, providing a more comprehensive understanding of the issue.

Furthermore, Havivah (2020) conducted a research on the effect of using Socratic questioning method on the students' achievement in speaking at junior high school mtsn 1 bandar masilam. The research was quasi-experimental, the results revealed that students taught using Socratic questioning method performed better than those taught using conventional method. Additionally, Adamu (2021) carried out a study on the effect of Socratic questioning technique on academic performance of upper basic science students of different cognitive styles in environmental hazard concept in Zaria Education Zone, Kaduna State, Nigeria. The design of the study was quasi-experimental design. Findings of the study revealed that, there was statistical significance difference between the experimental and control groups in favour of the experimental group taught using Socratic questioning method. The researcher, thus, concluded that, Socratic questioning technique was found to be helpful in changing students' academic performance. The studies conducted by Havivah (2020) and Adamu (2021) provide evidence for the effectiveness of Socratic questioning methods in improving students' achievement and academic performance. However, the studies were conducted in specific contexts, the findings may not be generalizable to other educational settings, cultures and population. Adamu study did not explore how cognitive styles interacts with the effectiveness of Socratic questioning method.

A study was conducted by Ehsan et al. (2011) on impact of graded assignments on academic performance of economics students of a Small Canadian University. The research design adopted was a survey design, instruments for data collection were questionnaires and interview. The result of the study showed that graded assignment has positive influence on students' academic performance in economics. The author's contribution to existing literature on teaching and learning strategies is significant, but the study employed a survey design, which may not be the most effective method for examining the impact of graded assignment on academic performance. Survey designs are often limited to self-reported data, which can be subject to biases and may not accurately reflect students' actual performance. The study relied on questionnaires as a primary data collection method. Questionnaire may not be able to capture the complexity of students' experiences and perceptions.

Likewise, Adebule (2014) investigated the effect of homework assignment on mathematics achievement of secondary school students in South-West Nigeria. The study was an experimental research design that employed the pre-test and post-test control groups. The results showed that there was a significant difference between the academic achievement of students exposed to homework assignment and those not exposed to homework assignment. Although the study employed an experimental design, which is a strength, it may not have been possible to control for all extraneous variables that could influenced the results. Another study carried out by Oluwafemi et al. (2019) investigated the effects of assignment teaching method on academic achievement of students in business studies in Oyo State, Nigeria. Quasi-experimental design was used for the study, findings from the study revealed that, students taught business studies using assignment teaching method achieved better with higher post-test mean score than those taught using conventional teaching method. Oluwafemi et al contribute to the existing literature on teaching methods by demonstrating the effectiveness of assignment teaching method in improving academic achievement in business studies, several limitations warrant consideration. Firstly, quasi-experimental design, although appropriate for this study, may not have fully controlled for extraneous variables, potentially impacting the internal validity of the findings. Additionally, the study's generalizability may be limited due to its geographical focus Oyo state, Nigeria, the study would have been extended to other state within a geo-political zone.

- H1: *There is no significant difference in the post-test mean academic performance of students taught business mathematics using assignment method and those taught using conventional methods in Colleges of Education in North-west, Nigeria.*
- H2: *There is no significant difference in the post-test mean academic performance of students taught business mathematics using Socratic method and those taught using conventional method in Colleges of Education in North-west, Nigeria.*
- H3: *There is no significant difference in the post-test mean academic performance of students taught business mathematics using assignment method and those taught using Socratic method in Colleges of Education in North-west, Nigeria.*

### **3. Methodology**

Quasi-experimental design was used for the study. The population of the study comprises of six hundred and eighty-four (684) business mathematics students of five Federal Colleges of Education that offered business mathematics in North-west Nigeria during the 2022/2023 academic session. The whole business mathematics students (402) of three Federal Colleges of Education were used in the study. Purposive sampling technique was used to select Federal College of Education, Katsina, and Federal College of Education, Kano, as the experimental institutions, while Federal College of Education, Zaria was used as the control group. Federal College of Education, Katsina, was used as experimental institution A (group A) with business mathematics students of forty-two, while Federal College of Education, Kano with business mathematics students of two hundred and twenty-one, was used as experimental institution B (group B). Federal College of Education, Zaria with business mathematics students of one hundred and thirty-nine students, was used as the control group.

The instrument for data collection was Business Mathematics Achievement Test (BMAT) which was in two parts. The first part consisted of pre-test items while the second part consisted of post-test items. The pre-test contained twenty (20) objective questions, centered on fractions, approximations and percentages while the second part consists of two post-test items. The instrument and the marking scheme were validated by three experts, two from the Department of Science Education and one from the Department of Vocational and Technical Education, both of the Faculty of Education, Ahmadu Bello University, Zaria, and the validators were not below the rank of Professor. The pre-test was administered on both experimental and control groups after which students in the control group were treated using conventional method, students in experimental group A were taught using Socratic questioning teaching method and students in experimental group B were taught using assignment teaching method.

A pilot test of the instrument was conducted at Federal College of Education (Technical), Bichi, Kano State. Twenty-five male and twenty-five female business mathematics students were used in the pilot test. The students had similar characteristics and background with the population of the study. The data collected from the pilot test were subjected to statistical analysis using Pearson Product Moment Reliability. The reliability coefficient obtained was 0.74. This indicated a positive and high reliability coefficient. Hence, the instrument was adjudged reliable and stable. This is in line with the view of Muogbo (2016) who stated that for a scale to be considered reliable it should have a value between 0.50 and 1. Intact classes were used for the study. The data collection phase lasted for five (5) weeks, with the assistance of three research assistants. At the end of the treatment, post-test was conducted on the three groups to determine the differences in the academic achievement.

Independent t-test was used to test null hypotheses of the study. All the null hypotheses were tested at 0.05 level of significant. A null hypothesis was rejected when the p-value was less than the alpha value ( $P < 0.05$ ). A null hypothesis was accepted when the p-value was greater than the alpha value ( $P > 0.05$ ).

#### 4. Results and Discussion

This section presents the summary statistics of the study. The results are presented in Tables 1-3.

##### *Null Hypothesis One*

There is no significant difference in the post-test mean academic performance of students taught business mathematics using assignment method and those taught using conventional method in Colleges of Education in North-west Nigeria

**Table 1: T-test results on students' academic performance**

Variable	N	$\bar{x}$	SD	DF	t-cal	Sig. (2-tailed)
Assign. Method	221	52.59	20.142	358	3.092	0.002
Lecture Method	139	45.63	21.845			

Source: Field Work, 2023.

The study hypothesised that there is no significant difference in the post-test mean academic performance of students taught business mathematics using assignment method and those taught using conventional method in Colleges of Education in North-west Nigeria. From Table 1, the result independent t-test was used to compare the difference between the mean academic performance of students taught business mathematics using assignment method and those taught using conventional method in colleges of education in North-west Nigeria. The t-calculated was 3.092 and the p-value was 0.002.

Since the p-value of 0.002 was less than the alpha-value of 0.05, this implied that significant difference existed between the academic performance of students taught business mathematics using assignment method and those taught using conventional method in colleges of education in North-west Nigeria. As a result, the study failed to retain null hypothesis one which states that assignment method has no significant effect on the academic performance of students in business mathematics in colleges of education in North-west Nigeria.

##### *Null Hypothesis Two*

There is no significant difference in the post-test mean academic performance of students taught business mathematics using Socratic method and those taught using conventional methods in Colleges of Education in North-west Nigeria.

**Table 2: T-test results using Socratic and conventional methods**

Variable	N	$\bar{x}$	SD	DF	t-cal	Sig. (2-tailed)
Socratic Method	42	71.52	14.928	179	7.186	0.000
Lecture Method	139	45.63	21.845			

Source: Field Work, 2023.

The study hypothesised that there is no significant difference in the post-test mean academic performance of students taught business mathematics using Socratic method and those taught using conventional method in Colleges of Education in North-west Nigeria. From Table 2, the result

independent t-test was used to compare the difference between the mean academic performance of students taught business mathematics using Socratic method and those taught using conventional method in colleges of education in North-west Nigeria. The t-calculated was 7.186 and the p-value was 0.000.

Since the p-value of 0.000 was less than the alpha-value of 0.05, this implied that significant difference existed between the academic performance of students taught business mathematics using Socratic method and those taught using conventional method in colleges of education in North-west Nigeria. As a result, the study failed to retain null hypothesis two which states that Socratic questioning method has no significant effect on the academic performance of students in business mathematics in colleges of education in North-west Nigeria.

### *Null Hypothesis Three*

There is no significant difference in the post-test mean academic performance of students taught business mathematics using Socratic method and those taught using assignment methods in Colleges of Education in North-west Nigeria.

**Table 3: T-test results using Socratic and assignment methods**

Variable	N	$\bar{x}$	SD	DF	t-cal	Sig. (2-tailed)
Socratic Method	42	71.52	14.928	261	5.792	0.000
Assign. Method	221	52.59	20.142			

**Source:** Field Work, 2023.

The study hypothesised that there is no significant difference in the post-test mean academic performance of students taught business mathematics using assignment method and those taught using Socratic method in Colleges of Education in North-west Nigeria. From Table 3, the result independent t-test was used to compare the difference between the mean academic performance of students taught business mathematics using assignment method and those taught using Socratic method in colleges of education in North-west Nigeria. The t-calculated was 7.186 and the p-value was 0.000.

Since the p-value of 0.000 was less than the alpha-value of 0.05, this implied that significant difference existed between the academic performance of students taught business mathematics using Socratic questioning method and those taught using assignment methods in colleges of education in North-west Nigeria. As a result, the study failed to retain null hypothesis three which states that there is no significant difference between the academic performance of students taught business mathematics using Socratic questioning method and those taught using assignment methods in colleges of education in North-west Nigeria.

### *Findings*

The study established that:

- i. Students taught business mathematics using Socratic method performed better than those taught using lecture teaching method.
- ii. Students taught business mathematics using assignment method performed better than those taught using conventional teaching method.
- iii. Students taught business mathematics using Socratic method performed better than those taught using assignment method.

### *Discussion of Findings*

The study hypothesised that there is no significant difference between the mean academic performance of students taught business mathematics using assignment method and those taught using conventional method in Colleges of Education in North-west Nigeria. The t-calculated was 3.092 and the p-value was 0.002. Since the p-value of 0.002 was less than the alpha-value of 0.05, this implied that significant difference existed between the academic performance of students taught business mathematics using assignment method and those taught using conventional method in colleges of education in North-west Nigeria. Finding of this study is in agreement with that of Oluwafemi et al (2019) which indicated that students taught business studies using assignment teaching method achieved better with higher post-test mean score than those taught using conventional teaching method, which signifies that assignment method had significant influence on students' academic performance in business studies. Similarly, this finding is in agreement with Adebule (2014) that indicated that there was a significant difference between the academic achievement of students exposed to homework assignment and those not exposed to homework assignment in mathematics. Those exposed to homework assignment performed better than those not exposed to homework assignment. This finding is also in line with that of Ehsan et al (2011) who expressed that, graded assignment has positive influence on students' academic performance in economics.

The study hypothesised that there is no significant difference in the post-test mean academic performance of students taught business mathematics using Socratic method and those taught using conventional method in Colleges of Education in North-west Nigeria. The t-calculated was 7.186 and the p-value was 0.000. Since the p-value of 0.000 was less than the alpha-value of 0.05, this implied that significant difference existed between the academic performance of students taught business mathematics using Socratic method and those taught using conventional method in Colleges of Education in North-west Nigeria. This finding is in line with that of Adamu (2021) who observed that there was statistical significance difference between the experimental and control groups in favour of the experimental group taught using Socratic method. The researcher, thus, concluded that, Socratic questioning technique was found to be helpful in changing students' academic performance. Likewise, this finding is in agreement with that of Agbowuro et al. (2019) whose result revealed that Socratic questioning strategy was significantly better than conventional method in improving students' academic achievement in biology. Furthermore, this finding is as well in agreement with that of Hadassa (2015) who reported that students performed better in fine art when taught using Socratic method as compared to the conventional method.

The study hypothesized that there is no significant difference in the post-test mean academic performance of students taught business mathematics using assignment method and those taught using Socratic method in Colleges of Education in North-west Nigeria. The t-calculated was 7.186 and the p-value was 0.000. Since the p-value of 0.000 was less than the alpha-value of 0.05, this implied that significant difference existed between the academic performance of students taught business mathematics using Socratic method and those taught using assignment methods in colleges of education in North-west Nigeria. This finding is in agreement with Havivah (2020) who observed that Socratic questioning method had significant effect on student learning outcomes. Notably, this finding is as well in agreement with Umoru and Oluwafemi (2020) who reported that questioning teaching method had positive effects on students' academic achievement in business studies.



## 5. Conclusion and Recommendations

Following the analyses of the data collected as well as the findings of the study, it was concluded that, Socratic method has positive effects on students' academic performance in business mathematics hence it had the highest mean of performance when compared with assignment and conventional methods and that if teachers can use the method in the teaching learning process, students will acquire and possess in-depth knowledge and skills that will enhance their academic performance in the subject. Improvement in students' academic performance could reduce the rate of failure in examinations. Similarly, assignment method can equally be used concurrently in teaching business mathematics since the findings revealed that the method had significant effect on the academic performance of business mathematics students in colleges of education North-West Nigeria.

Based on findings from this study, the following recommendations are hereby proffered:

- i. Teachers of business mathematics should adopt Socratic questioning method in their classes because the method is capable of improving students learning outcomes.
- ii. Business mathematics teachers should adopt assignment method in their classes because the method can stimulate learners thinking habits.

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## References

- Adamu, A. (2021). Effect of socratic questioning technique on academic performance of upper basic science students of different cognitive styles, Zaria Education-Zone, Kaduna State, Nigeria. Unpublished Dissertation. Ahmadu Bello University Zaria. Retrieved online from <http://kubanni.abu.edu.ng>.
- Adebule, S. O. (2014). The effect of home assignment on mathematics achievement of secondary school students in southwest Nigeria. *Journal of Education and Practice*. 5 (28), 52 – 55.
- Agbowuro, C., Banjuwuk, N., Ishaya, L. M; Mantu, L. M; & Oche, A . J. (Eds.). (2019). *Effect of socratic questioning teaching strategy on the achievement of public secondary school biology students in Langtan North, Plateau State, Nigeria*. *European Journal of Training and Development Studies*. 6 (1), 13 – 28.
- Albagami, T. (2016). Effective methods of teaching business education. *International Journal of Scientific and Engineering Research*. 7 (1), 1 – 7.
- Ashlyann, R. I. (2015). The effects on students' understanding when questioning techniques are used during the reading of information text. Unpublished Dissertation. The Rowan University. Retrieved from <https://rdw.rowan.edu/etd/574>
- Connie, M. (2020). Ten definition of learning. Retrieved online from <https://thelearningcoah.com>
- Donche, V. (2013). Differential Use of learning strategies in first higher education: the impact of personality, academic ratification and teaching strategies. *The British Journal of Educational Psychology*. Retrieved online from <http://pubmed.ncbi.nlm.nih.gov>.
- Ehsan, L. (2011). *The impact of assignments on academic performance of economic students of a small Canadian University, Canada*. *Journal of Economics and Economic Education Research*. 12 (3), 1 – 12.
- Eze, T. I., Ezenwafor, J. I., & Molokwu, C. (2015). Effect of meta-learning teaching methods on the academic performance of building trades students in technical colleges in south-east Nigeria. *British Journal of Education, Society & Behavioural Science*. 18 (2), 21 – 28.
- Hadassa, A. A (2015). Effect of socratic method on students' art performances in secondary school in Kaduna, Nigeria. Unpublished Thesis, ABU, Zaria. Retrieved online from <http://kubanni.abu.edu.ng>

- Havivah, H. R.A. (2020). The effect of using socratic method on the students' achievement in speaking English at the junior high school MTSN 1 Bandar Masilam. Unpublished Thesis. Islamic University of North Sumatera, Medan. Retrieved online from <http://respostory.unisu.ac.id/1328>
- Keziah, A. C. (2015). Predominant teaching strategies in schools: implication for curriculum implementation in mathematics, *Science and Technology Academic Journal*. 10 (15), 2096 – 2103.
- Modebelu, M. N., & Duvie, A. N. (2012). Innovation methods and strategies for effective teaching and learning. *Mediterranean Journal of Social Sciences*. 3 (13), 145 – 151.
- Moss, G. (2017). Central purpose of teaching. Can Med - Ipedia. The CORAL Concept as Online Resources for Accelerated Learning. Retrieved online from <https://en.m.wikipedia.org>
- Muogbo, O. (2016) Impact of Employee Motivation on Job Performance of Selected Firms in Finish Organization. *A Study of Employees in the Oulu Region, Finland*. Master's Thesis of Business Administration University of London.
- Oladebinu, T. O., Amos, A. A., & Oyediran, W.O. (Eds.). (2018). Factors affecting students' academic performance in colleges of education in Southwest, Nigeria. *British Journal of Education*. 6 (10), 43 – 56.
- Oluwafemi, P. A., Umoru, Oyedele, J. F., & Okereke, E. C. (2019). Effects of assignment teaching method on academic achievement of students in business studies in Oyo State, Nigeria. *Al- Hikmah Journal of Education*. 6 (1), 1 – 10.
- Russell, D. (2018). *What to know about business mathematics?* Retrieved online from [www.thoghts.com/business on 14/7/2019](http://www.thoghts.com/business-on-14/7/2019)
- Seidei, M. (2019). The importance of basic mathematics in business. Retrieved online from [www.smallbusiness.chron.com](http://www.smallbusiness.chron.com)
- Smith, M. K. (2016). What is teaching. Retrieved online from <http://infed.org/mobi/what-is-teaching/.com>.
- Sutar, S. (2017). *Advantage of Business Mathematics*. Retrieved from [www.cakart.com/form/ans](http://www.cakart.com/form/ans).
- Umoru, T.A., & Oluwafemi, P.O. (2020). Effect of questioning teaching method on the academic achievement of students in business studies in Oyo State, Nigeria. *KWASU Journal of the Business of Education*. 3 (1), 65 – 129. Retrieved online from <https://www.kwasujtbe.com.ng>.