



EFFECTIVENESS OF PEER TUTORING AND LECTURE METHODS ON ACADEMIC PERFORMANCE OF OFFICE TECHNOLOGY AND MANAGEMENT STUDENTS IN ENTREPRENEURSHIP EDUCATION

Dr. (Mrs) Abimbola Olunike Adegbenjo (MABEN)

abimbolanikeadegbenjo@gmail.com
Office Technology and Management Department,
The Federal Polytechnic,
Ede, Osun State, Nigeria

Abstract

This study investigated the effectiveness of peer tutoring and lecture methods on the academic performance of Office Technology and Management (OTM) students in entrepreneurship education in Polytechnics in Osun State. Three hypotheses were tested at .05 level of significance. A quasi-experimental research design was adopted for the study. The study population comprised 253 ND 1 students in the three public Polytechnics offering Office Technology and Management programme in Osun States. 139 OTM students in two selected institutions were exposed to peer tutoring and lecture methods. The instrument consisted of a pre-test and post-test, which the researcher developed. The hypotheses were tested using t-test, ANCOVA and ANOVA. The study found, among others, that there was a significant effect of treatment on the students' academic performance in entrepreneurship education but that the peer tutoring teaching method was more effective than the lecture method and that there was no significant interaction effect of methods and sex on OTM students' academic performance in entrepreneurship education. It was concluded that peer tutoring was more effective than the lecture method. It was recommended, among others, that OTM lecturers should adopt the peer tutoring method in teaching entrepreneurship education in Polytechnics.

Keywords: *Academic performance, Entrepreneurship development, Lecture method, Office Technology and Management Programme, Peer tutoring*

Introduction

Entrepreneurship education in Nigeria plays a vital role in economic growth and development; based on this, the summit of the International Labour Organisation (ILO) in the 1990s recommended the inclusion of entrepreneurship education into the Business Education curriculum (Adebayo, 2018). Introducing entrepreneurship education into the curriculum of higher institutions in Nigeria was a strategy to achieve the Millennium Development Goals (MDGs), which ended in 2015. Specifically, goal eight (8) focused on developing a global partnership for development and implementation strategies for decent and productive work for the youths in developing countries, Nigeria inclusive. The government intended to reduce the increasing unemployment rate among the Nigerian youths. This prompted the Federal Government of Nigeria to direct all tertiary institutions to include entrepreneurship education in the curricula. This directive made entrepreneurship education a compulsory course in every academic programme in tertiary institutions because entrepreneurship education has been identified as one of the critical factors in developing students' intentions to start a business (Karimi et al., 2016; Tantawy et al., 2021). Despite this, the rate of unemployment among Nigerian youths seems persistent. For instance, World Bank reports revealed that youth unemployment referred to the share of the labour force ages 15-24 without work but available for and seeking employment. According to the reports, in 2019 unemployment rate was 12.59%; that is 0.43% increase from 2018. In 2020, it was 14.35%, which is 1.76% increase from 2019. In 2021, the youth unemployment rate was 13.65%, representing 0.7% decline from 2020, while in 2022, the unemployment rate was 13.44%, which is 0.21% decline from 2021 (Macrotrends, 2023).

Meanwhile, every effort of the government to reduce the unemployment rate has remained insignificant. The Government of Nigeria has introduced several entrepreneurship-oriented schemes at all levels, such as the National Directorate of Employment (NDE) programme and Youth Entrepreneurship Support (YES). However, the outcome of the programmes was not felt by the citizenry. Introducing entrepreneurship education into the tertiary education curriculum is toeing the line of previous failed interventions except done differently..

Despite introducing entrepreneurship education into the Polytechnic curriculum by the National Board for Technical Education (NBTE) in 2004, the high unemployment rate among Nigerian graduates is



increasing daily. This could be a result of the methods of teaching adopted by the lecturers handling entrepreneurship education. Most lecturers adopted conventional teaching methods, such as lecture methods, to impart entrepreneurship skills to the students. The conventional method (Lecture method) needs more room for adequate mastery of the principles and skills development required for self-employment in the graduates. Also, the poor academic performance of students in entrepreneurship education may be linked to the method of teaching adopted by the teachers or lecturers and hinder the achievement of the objectives of entrepreneurship education as specified in the Polytechnic curriculum. This suggests a gap in the entrepreneurship education curriculum, which seems not to contain the most effective teaching methods that may likely develop entrepreneurship skills required for self-employment. Therefore, it is necessary to identify the most effective teaching methods for developing entrepreneurship education skills in Office Technology and Management students to achieve the objectives of entrepreneurship education in Nigerian Polytechnic students.

The Office Technology and Management (OTM) programme is an aspect of the Vocational and Technical Education programme designed to develop skills in the recipients to be self-employed or sustained. Coupled with entrepreneurship education as a course in the OTM programme, the recipients are expected to establish self-owned businesses instead of joining the leagues of unemployed youths searching for white-collar jobs. Unfortunately, the method of teaching adopted by Polytechnic lecturers in teaching entrepreneurship education affects the graduates' skill acquisition adversely.

Thus, teachers adopt various methods in teaching entrepreneurship education: lectures, demonstrations, play ways, problem-solving, inquiry, self-directed, and peer-tutoring, among others. Amidst these methods are teacher-centred and student-centred approaches to teaching. A student-centred approach is based on constructivist paradigms, where the students or learners are at the centre of the educational practice instead of the teacher. This can be achieved when students are responsible for their learning and actively involved in constructing their knowledge instead of the teacher. This approach is characterised by a switch over from students being passive in the classroom to active members of the classroom; this is based on Social Cognitive Theory (Bandura, 1986), which asserts that exposing students to learning within a particular social setting shapes personal cognitive processes and capacities (Tantawy et al., 2021). This social setting is the focus of the peer-tutoring teaching method. Peer tutoring is a collaborative strategy that pairs students with expected educational outcomes (Burakova, 2021; Moliner & Alegre, 2020; Topping, 2018; Bowman-Perrott et al., 2013). It is a method of instruction that involves students teaching other students; that is, a system of instruction in which students assist one another to learn by teaching one another in a classroom setting. This is achieved by making the learners responsible for their learning and having them actively and autonomously construct their knowledge (Macht & Ball, 2016). Seo and Kim (2019) asserted that peer tutoring positively influenced their communicative and collaborative competencies. Benefits of peer tutoring, among others, include a sense of responsibility, dedication, and commitment, the development of interpersonal, communication and higher-order critical thinking skills in the tutors, and the building of confidence level of the tutors (Ali, Answer & Abbas, 2015; Muazam, Majeed & Khattak, 2021). On the other hand, teacher-centred strategies are being criticised for inhibiting students' innovative capacities, lack of deep intellectual thinking, rote memorisation, poor knowledge, poor retention and high dependence on teachers by students (Tella, Indoshi & Othuon, 2010; Kompa, 2012).

Only some scholars have conducted studies on peer tutoring; among them are Olodi and Adeyemi (2020), whose study examined the effectiveness of field trips and peer-tutoring learning strategies on Junior Secondary School Students' achievement in Social Studies in Osun State. The study found a significant relative effectiveness of field trips and peer tutoring on students' academic achievement in Social Studies ($F = 11.738, p < .05$). The study concluded that both field trips and peer tutoring learning strategies were found to be effective means of raising students' academic achievement in Social Studies of Junior Secondary School students. Taiwo, Olugbenga and Ernest (2020) investigated the effectiveness of the peer tutoring instructional strategy in improving students' academic achievement in financial accounting concepts and found that peer tutoring instructional strategy is more effective in improving students' academic achievement in financial accounting concepts than the conventional lecture method.

The moderating variable of this study is gender since it is perceived to be one-factor affecting students' overall academic performance. Scholars found significant differences in students' cognitive, affective and psychomotor skills and academic performance due to gender. Kyei and Apam (2011) found that male students performed better than female students in mathematics examinations. Parajuli and Thapa (2017) found that female students outperformed their male counterparts in their academic performance.



Thus, none of the scholars studied peer tutoring and students' academic performance in Entrepreneurship development, and none used Office Technology and Management students in Polytechnics. These are the gaps filled in the study. Hence, this study examined the effectiveness of peer tutoring and lecture methods on the academic performance of Office Technology and Management students in Entrepreneurship development.

Statement of the Problem

Some scholars linked poor academic performance of students to wrong or ineffective teaching methods (Adebayo, 2018; Ali, 2014). Nebo (2012) stated that the conventional method of teaching needs to recognise the uniqueness of the inquiry-based teaching strategy and the learner's individuality, thus failing to encourage creative thinking in the learner, leading to poor achievement of students.

It was observed that most lecturers used the lecture method to teach students in tertiary institutions, including polytechnic. Entrepreneurship education is taught with traditional methods such as the lecture method; this seems to have yet to enhance students' academic performance in entrepreneurship education. The researcher saw the need for innovative teaching methods, such as peer tutoring, to confirm if they may enhance students' academic performance in entrepreneurship education. The imperative question is: Will teaching entrepreneurship education using peer tutoring improve students' academic performance? The problem of this study was poor academic performance in entrepreneurship education, which was observed from students' examination results. This is the worry of the researcher. Hence, students' academic performance with innovative teaching methods such as peer tutoring, self-directed learning, and inquiry-based learning, among others, in teaching entrepreneurship education at Polytechnic needs to be empirically tested; hence, this study.

Hypotheses

The following null hypotheses were tested at .05 level of significance

1. There is no significant difference in the mean scores of students taught entrepreneurship education using peer tutoring and those taught with lecture teaching methods.
2. There is no significant difference between the mean scores of male and female students taught entrepreneurship education using the peer-tutoring method.
3. There is no significant interaction effect of the teaching methods (peer-tutoring and lecture method) and sex (male and female) on OTM students' academic performance in entrepreneurship education.

Methodology

This study adopted quasi-experimental research design using pre-test and post-test non-randomised with a 2 x 2 factorial design. The various factors were treatment (Teaching Methods), which exist at two levels: peer-tutoring and lecture teaching methods; the moderating variable was sex (male and female). The study's design was quasi-experimental because intact classes were used for the experimental and the control groups.

The study population comprised 253 ND 1 students in the three public Polytechnics offering Office Technology and Management programmes in Osun States. The population distribution by institutions was as follows: Federal Polytechnic Ede had 97 students; Osun State Polytechnics, Iree, had 114 students; and 42 students in Osun State College of Technology, Esa-Oke. Out of the three Polytechnics, students in two Polytechnics, Federal Polytechnic Ede and Osun State College of Technology, Esa-Oke, were used as subjects in the main study. In contrast, the Osun State Polytechnics Iree students were used for pilot testing. Since the study used intact classes, the 139 (56 male and 83 female) OTM ND 1 students in the Federal Polytechnic Ede and Osun State College of Technology, Esa-Oke, were used as samples. A purposive sampling method was used to determine the two institutions where the experiment was conducted and the treatment type they received. Forty-two students at Osun State College of Technology, Esa-Oke, were used for the experimental group, while 97 students at Federal Polytechnic Ede were used for the control group.

The study used two sets of instruments: Instructional and measuring tools.

The instructional tools consisted of peer tutoring and lecture teaching methods used for the teaching and learning of entrepreneurship education during the experiment for this study. The scheme of work and lesson plan were used to present the instruction to the students. A measuring tool was used to establish students' academic performance in entrepreneurship education before and after the treatment. This



comprised the Pre-test Entrepreneurship Education Performance Test (PREEEPT) and Post-test Entrepreneurship Education Performance Test (POSTEEPT).

The researcher developed the first measuring instrument for data collection and tagged the Pre-Entrepreneurship Education Performance Test (PREEEPT). It covered the following selected topics in the Introduction to Entrepreneurship (EED 126) course outline: the concept of entrepreneurship and other related terms; comparison of wage employment and self-employment with entrepreneurship; evaluation of Strengths, Weaknesses, Opportunities and Threat (SWOT) Analysis; Identification of business opportunities and business plans. Forty (40) objective questions with one correct answer and four distractors were given to the students, and the time duration of the test was forty (40) minutes. This was used to determine the students' academic performance before the treatment was given. The second measuring instrument, tagged Post-Entrepreneurship Education Performance Test (POSTEEPT), was developed by the researcher from the same selected course outline with the same number of objective questions given to the participants after eight (8) weeks of application of the treatment. The post-test was used to ascertain the level of academic performance of the participants after the treatment.

The experts subjected the measuring instruments, PRETEEPT and POSTEEPT, to face and content validity. Test-retest was used to determine the reliability of the instrument using ND 1 students in Osun State Polytechnic, Iree, Osun State, who were not part of the participants of the main study, and the scores generated from the first and second administrations were analysed using Pearson Product Moment Correlation Coefficient formula which yielded a value of 0.72. The result indicated that the instrument was moderately reliable.

The treatment procedure was in four (4) phases and lasted eight (8) weeks. The first week was used for the training of the research assistants; the second week was used for the administration of the pre-test; the third to seventh weeks were used for the application of the treatment on experimental and control groups, while the eighth week was used for the administration of the post-test).

In the first week, the researcher followed the experimental procedure outlined by Eze et al. (2016), which included briefing the research assistants on what to do before the commencement of the experimental activities. In the second week, the pre-test was administered to the participants in the experimental and control groups by the research assistants to determine the student's abilities before the experimental activities started. The treatment lasted for seven weeks. Teaching was conducted during the regular school period using the school timetable. The students were taught once a week for five weeks for two hours per week. In the eighth week, a post-test was administered to the subjects participants in the two groups by the research assistants to reduce the Hawthorne effect, which would be introduced if the researcher personally administered the test. The pre-test and post-test scores served as the data collection and were used to test the hypotheses formulated in the study.

Peer-tutoring teaching method for the experimental group; treatment for the experimental group involved the following steps:

Step 1: The teacher presented the topic to be taught to the students.

Step 2: The teacher paired the students in groups, and a peer among the students served as the tutor in the group.

Step 3: The tutor in each group taught and explained the topic to other members under the teacher's supervision.

Step 4: The teacher gave questions on the topic to the students in order to know the extent they have learnt from the tutor.

Step 5: Students answered the questions individually without assistance from the tutor.

Step 6: The teacher summarised the lesson.

Step 7: The teacher evaluated the students.

Step 8: Students were given a take-home assignment

Conventional Instructional Strategy (Control Group). The control group was taught using the following steps:

Step 1: The teacher presented the lesson as a lecture.

Step 2: Students listened to the teacher's explanation and noted the critical points.

Step 3: Students asked questions on areas of the topic that could be clearer.

Step 4: The teacher summarised the lesson.

Step 5: The teacher evaluated the students.

Step 6: Students were given an assignment.



The data gathered for the study was the scores obtained from the students' pre-test and post-test. The researcher administered a pre-test of two hours to the experimental and control groups a week before the treatment through the assistance of the lecturers teaching Introduction to Entrepreneurship in the two institutions. After the treatment, the post-test was administered to the participants in experimental and control groups. The question papers and answer scripts were handed to the researcher for marking and recording. The two separate scores were recorded and served as the data used for the study.

The Analysis of Covariance (ANCOVA), t-test and Analysis of Variance (ANOVA) statistics were used to test the hypotheses. Therefore, in analysing the academic performance of the two groups, the teaching method with the higher mean score was considered more effective. Meanwhile, the decision rule for testing the hypotheses was based on the P-value, such that when the probability value is greater than the alpha value of 0.05, the null hypothesis was retained. However, the hypothesis was rejected when the P-value was equal to or less than the alpha value of 0.05.

Results

Hypothesis 1: There is no significant difference in the mean scores of students taught entrepreneurship education using peer tutoring and those taught with lecture teaching methods.

Table I: Analysis of Covariance (ANCOVA) test of the difference between mean scores of students taught entrepreneurship education using the two methods based on post-test controlling for the effect of pre-test score

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Decision
Corrected Model	2643.312	2	1321.656	96.994	.000	.484	
Intercept	1058.286	1	1058.286	51.001	.000	.273	
Pretest	363.988	1	363.988	17.541	.000	.114	Sig
Group	1885.904	1	1885.904	90.885	.000	.401	
Error	2822.069	136	20.751				
Total	56216.000	139	205.471				
Corrected Total	5465.381	138					

Source: Field Work (2023)

Data in Table I shows the ANCOVA results of the students' academic performance using peer tutoring and those taught using lecture teaching methods. The results showed that the effect was significant [F (1,136) = 90.885; p = .000 $\eta^2_p = .401$] between the groups. The effect size ($\eta^2_p = .401$) revealed that the experimental group received a significant and relatively large effect of the treatment than the control group. The null hypothesis is therefore rejected. This indicated a significant difference between the mean scores of students taught entrepreneurship education using peer-tutoring and lecture teaching methods. This result established that the peer-tutoring teaching method was more effective than the lecture method of teaching entrepreneurship education.

Hypothesis 2: There is no significant difference between the mean scores of male and female students taught entrepreneurship education using the peer-tutoring teaching method.

Table 2: Independent sample t-test of post-test mean scores of male and female students taught entrepreneurship education using peer-tutoring method of teaching

Method	Male			Female			t	df	P	Decision
	N	X	SD	N	X	SD				
Peer-tutoring	15	26.40	5.680	27	24.63	4.642	1.093	40	.281	Not Significant

Source: Field Work (2023)

The result in Table II revealed that the t-test analysis was not significant (t = 1.093; p= .281 > .05) between entrepreneurship education of male and female students taught using the peer-tutoring method of teaching. The null hypothesis was retained since the p-value was more significant than 0.05. This implied



that there was no significant difference between the mean scores of male and female students taught entrepreneurship education using the peer-tutoring teaching method. This result equally indicated that males and females performed when taught with peer-tutoring teaching methods in entrepreneurship education. This result showed that this method of teaching is not gender biased.

Hypothesis 3: There is no significant interaction effect of the teaching methods (peer-tutoring and lecture method) and sex (male and female) on OTM students' academic performance in entrepreneurship education.

Table 3: Analysis of Variance (ANOVA) test of the interaction effect of the teaching methods and sex on OTM students' academic performance in entrepreneurship education

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2728.893	3	909.631	33.407	.000	.499
Intercept	1013.853	1	1013.853	49.646	.000	.270
Pretest	362.875	1	362.875	17.769	.000	.117
Group	1887.102	1	1887.102	92.407	.000	.408
Gender	3.361	1	3.361	.165	.686	.001
Group * Sex	55.750	1	55.750	2.730	.101	.020
Error	2736.489	134	20.422			
Total	56216.000	138				
Corrected Total	5465.381	137				

Source: Field Work (2023)

Data in Table revealed the interaction effect of the experimental treatment and sex. The results showed that the relative effects on the group [$F(1, 134) = 92.407$; $p = .000$; $\eta^2_p = .408$] was significant, and sex [$F(1, 134) = .165$; $p = .686$; $\eta^2_p = .001$] was not significant. The interaction effect was insignificant [$F(1, 134) = 2.730$; $p = .101$; $\eta^2_p = .020$]. The null hypothesis of no significant interaction effect was retained. The result showed no significant interaction effect of the teaching methods and sex on Office Technology and Management students' academic performance in entrepreneurship education.

Discussion of Findings

Hypothesis one revealed that the peer tutoring teaching method was more effective than the lecture method on students' academic performance in entrepreneurship education. This is consistent with the study of Adebayo (2018), who found that the students taught with experiential learning strategies (problem-based and guided discovery) performed better than the students taught with the conventional teaching method (lecture method). Corroborating this, Aghayani and Janfeshan (2020) found that the self-directed learning method had significant effects on the pre-intermediate and intermediate students' performance of English writing ability. These findings are in line with Social constructivism, which advocates that individuals make meanings through interaction with each other and with the environment they live.

Hypothesis two established no significant difference in male and female mean scores of students taught entrepreneurship education with the peer-tutoring teaching method. This implied that male and female students taught using peer-tutoring methods have no significant difference in their academic performance in entrepreneurship education. This is in consonant with the findings of Aina (2019), who found that male and female students taught using Computer Assisted Instruction (CAI) technique have no significant difference in their performance in keyboarding. Buttressing this, AbdulRaheem, Yusuf and Odutayo (2017) found no difference in the performance of students exposed to peer tutoring in economics in Ilorin based on gender; that is, peer tutoring had no gender bias concerning improving students' academic performance in economics, which means that peer tutoring did not favour male over female or vice-versa. The improvement in the performance of students exposed to peer tutoring cannot be traced to gender, as both male and female students got better grades in economics. Contrary to these findings, the study of Wrigley-Asante, Ackah, and Frimpong (2023) found that the academic performance of males was better than females at the senior high school level, whilst, at the tertiary level, the academic performance of females appeared to have improved relative to that of males.



Hypothesis three ascertained that there was no significant interaction effect of teaching method and sex on students' academic performance in entrepreneurship education controlling the effect of their pre-test scores. This finding agrees with the study of Taiwo, Olugbenga, and Ernest (2020), who found that students' gender had no interactive effect on the treatment of students' academic achievement in financial accounting concepts. Corroborating this, Ogundola (2017) established no significant interaction effect of treatment and gender on students' learning outcomes in technical drawing. This showed that the relative efficacy of peer tutoring was consistent across gender groups.

Conclusion

The study established a significant difference between peer tutoring and students' academic performance in entrepreneurship development compared with the lecture method. Based on the findings of this study, it was concluded that peer tutoring enhances the academic performance of Office Technology and Management students in entrepreneurship development than the lecture teaching method.

Recommendations

Based on the findings and conclusion of the study, the following recommendations were made:

- 1) The significant effect of the treatment on students' academic performance in entrepreneurship education revealed that peer tutoring teaching methods enhance students' academic performance in entrepreneurship education. Therefore, the lecturers should adopt the peer tutoring teaching method in the teaching and learning of entrepreneurship education to enhance students' academic performance and develop the required skills for self-employment.
- 2) Office Technology and Management students should develop an interest in using peer tutoring learning methods in the teaching and learning of entrepreneurship education since peer tutoring enables students to be active and learn independently in order for them to perform excellently in their academics.
- 3) On-the-job seminars should be organised regularly by the management of the institution to train and retrain Office Technology and Management lecturers on how to use peer tutoring teaching methods in the teaching and learning of entrepreneurship education in polytechnics in order for the lecturers to be effective and efficient in their job performance.
- 4) Office Technology and Management lecturers should always be encouraged to attend conferences, seminars and workshops where they can be exposed to different types of innovative teaching methods that can be used to teach entrepreneurship education and can enhance their professional careers in order for them to be relevant in their job performance.
- 5) The use of lecture methods by Office Technology and Management lecturers should be minimised in the teaching and learning of skill courses such as entrepreneurship education in order for the students to develop the required skills in entrepreneurship-related courses that will enable them to be self-reliant.
- 6) School management should provide all the necessary materials and facilities to enhance effective teaching and learning of entrepreneurship education to enhance the academic performance of Office Technology and Management students.

Limitation of the Study

In generalising the findings of this study, caution should be exercised because this study used only three public polytechnics in Osun States and restricted to only Office Technology and Management students. This indicated that the findings of this study can only be generalised to some students in other levels and categories of education if similar studies are conducted involving such students. This means that caution should be made in generalising the findings of this study to all the polytechnics in the South-West zone or the entire country.

References

- AbdulRaheem, Y., Yusuf, H. T. & Odutayo, A. O. (2017). Effect of peer tutoring on students' academic performance in Economics in Ilorin South, Nigeria. *Journal of Peer Learning*, 10;95–102.
- Adebayo, T. O. (2018). Effectiveness of experiential learning and lecture method on students' academic performance in entrepreneurship education in Nigerian Polytechnics. Thesis submitted to the School of Post Graduate Studies for the award of Doctor of Philosophy degree in Business Education, University of Benin, Benin City.
- Aghayani, B. & Janfeshan, K. (2020). The effect of self-directed learning EFL learners' writing performance. *International Journal of Research in English Education*, 5(3); 78-89.



- Aina, A. M. (2019). Effect of computer-assisted instruction on students' academic performance in keyboarding in Colleges of Education in Ondo and Ekiti States. Thesis submitted to the School of Post Graduate Studies for the award of Doctor of Philosophy degree in Business Education, University of Benin, Benin City.
- Ali, A. (2014). The effect of inquiry-based learning method on students' academic achievement in science course. *Universal Journal of Educational Research*, 2(1); 37–41. DOI: 10.13189/ujer.2014.020104.
- Ali, N., Answer, M. & Abbas, J. (2015). Impact of Peer Tutoring on Learning of Students. *Journal for Studies in Management and Planning*, 1(2); 61–66.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. NJ: Englewood Cliffs.
- Bowman-Perrott, L., Davis, H., Vannest, K., Williams, L., Greenwood, C., & Parker, R. (2013). Academic Benefits of Peer Tutoring: A Meta-Analytic Review of Single-Case Research. *School Psychology Review*, 42(1); 39–55. DOI: 10.1080/02796015.2013.12087490
- Burakova, A. (2021). *Peer tutoring: What is it? Is it good? Pros & cons*. <https://edureviewer.com/blog/what-is-peer-tutoring>
- Eze, T. I., Ezenwafor, J. I. & Obidile, I. J. (2016). Effects of problem based teaching method on students' academic performance and retention in financial accounting in technical colleges in Anambra State. *Scholars Journal of Arts, Humanities and Social Sciences*, 4(6); 634–639.
- Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., & Mulder, M. (2016). The impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of Small Business Management*, 54(1), 187–209. <https://doi.org/10.1111/jsbm.12137>
- Kompa, J. S. (2012). *Disadvantages of teacher-centred learning*. Retrieved from <https://joanakompa.com/2012/06/25/the-key-disadvantages-of-teacher-centeredlearning/>
- Kyei, L. & Apam, B. (2011). Some gender differences in performance in senior high Mathematics examinations in mixed high schools. *American Journal of Social and Management Sciences*, 2(4); 348–355.
- Macrotrends (2023). *Nigeria Youth Unemployment Rate 1991-2023*. <https://www.macrotrends.net/countries/NGA/nigeria/youth-unemployment-rate>
- Moliner, L. & Alegre, F. (2020). Effects of peer tutoring on middle school students' mathematics self-concepts. *PLoS ONE*, 15, (4). <https://doi.org/10.1371/journal.pone.0231410>
- Muazam, S., Majeed, F. & Khattak, S. M. (2021). Benefits of near-peer tutoring in small group discussions: A pilot study. *J Islamabad Med Dental Coll*, 10(1); 23-30. Doi: 10.35787/jimdc.v10i1.577
- Nebo, O. (2012). Effects of learning activity package on students' achievement in Biology in Enugu zone. *International Research Technology Research Journal*, 1(1); 1–2.
- Ogundola, P. (2017). Effects of peer tutoring strategy on academic achievement of senior secondary school students in technical drawing in Nigeria. *British Journal of Education, Society & Behavioural Science*, 19(1); 1–10.
- Olodi, K. C. & Adeyemi, B. A. (2020). Effectiveness of field trip and peer-tutoring learning strategies on Junior Secondary School Students' achievement in Social Studies in Osun State, Nigeria. *Journal of Educational System*, 4(II); 12-21.
- Parajuli, M. & Thapa, A. (2017). Gender differences in the academic performance of students. *Journal of Development and Social Engineering* 3(1);39-47. DOI: [10.3126/jdse.v3i1.27958](https://doi.org/10.3126/jdse.v3i1.27958)
- Seo, E. H., & Kim, M. J. (2019). The effect of peer tutoring for college students: Who benefits more from peer tutoring, tutors or tutees? *New Educational Review*, 58, 97–106. <https://doi.org/10.13189/ner.2019.580907>
- Taiwo, G. O., Olugbenga, A. I. & Ernest, O. U. (2020). Using peer tutoring to improve students' academic achievement in financial accounting concepts. *Hindawi Education Research International*, 1-10. <https://doi.org/10.1155/2020/8871235>
- Tantawy, M., Herbert, K., McNally, J. J., Mengel, T., Piperopoulos, P., & Foord, D. (2021). Bringing creativity back to entrepreneurship education: Creative self-efficacy, creative process engagement, and entrepreneurial intentions. *Journal of Business Venturing Insights*, 15, Article e00239.
- Tella, J., Indoshi, F. C. & Othuon, L. A. (2010). Relationship between students' perspectives on the secondary school English curriculum and their academic achievement in Kenya. *Journal of Educational Research*, (9), 382–389. <https://doi.org/10.1016/j.jbvi.2021.e00239>
- Topping, K. (2018). *Using peer assessment to inspire reflection and learning: Learning by judging and discussing the work of other students*. Routledge, Abingdon.
- Wrigley-Asante, C., Ackah, C. G. & Frimpong, L. K. (2023). Gender differences in academic performance of Science Technology Engineering and Mathematics (STEM) students at the University of Ghana. *SN Soc Sci*, 3(12). <https://doi.org/10.1007/s43545-023-00608-8>