

Interaction effects of teaching methods and gender on students' achievement and interest in Microsoft Word

Uchenna Favour Muogbo¹, Chinwe Juliana Enemu²

^{1,2}Department of Science Education, Chukwuemeka Odumegwu Ojukwu University, Nigeria
E-mail: uf.muogbo@coou.edu.ng; cj.enemu@coou.edu.ng

ABSTRACT

This study examined the interaction effects of teaching methods and gender on students' academic achievement and interest in learning Microsoft Word among senior secondary school students in Anambra State, Nigeria. A quasi-experimental pretest–posttest non-equivalent group design was adopted using 196 SS2 students selected from four secondary schools in the Nnewi Education Zone. Data were collected using the Computer Studies Achievement Test (CSAT) and Computer Studies Interest Scale (CSIS), with reliability coefficients of 0.90 and 0.89 respectively. Mean, standard deviation, and Analysis of Covariance (ANCOVA) were used for data analysis. The findings revealed that experiential learning significantly improved students' achievement and interest compared to the conventional lecture method. Female students exposed to experiential learning achieved higher academic performance gains, while male students demonstrated greater increases in learning interest. The study also established significant interaction effects between teaching methods and gender on both achievement and interest in Microsoft Word. These results indicate that experiential learning promotes active participation, enhances digital literacy skills, and creates more engaging classroom experiences. The study concludes that experiential learning is a more effective instructional strategy for computer studies and recommends its integration into secondary school curricula to support inclusive and technology-oriented learning environments.

Keyword: experiential learning; microsoft word; gender interaction; academic achievement; student interest

Corresponding Author:

Uchenna Favour Muogbo,
Chukwuemeka Odumegwu Ojukwu University,
P.M.B.02 Uli. Ihiala L.G.A. Anambra State, Nigeria
Email: uf.muogbo@coou.edu.ng



1. INTRODUCTION

The teaching method and gender are important factors that affect students' academic achievement and interest in learning. The quality of teaching influences students' knowledge, participation, creativity, and retention. Effective teaching approaches can enhance these aspects, whereas ineffective methods may reduce students' motivation and academic performance. In addition, differences in socialization, expectations, and opportunities associated with gender influence how students learn, participate in classroom activities, and achieve educational outcomes. Therefore, teaching methods and students' gender play significant roles in determining students' achievement and the development of their interest in learning at school.

The teaching approach significantly influences students' learning outcomes and interests because it affects classroom interaction, motivation, and knowledge retention. Modern learner-centered approaches, including experiential learning, collaborative learning, and the integration of ICT and AI, have proven to be more effective in improving students' participation and performance than traditional lecture methods. Experiential learning strategies, as reported by Muogbo et al. (2025a) and Muogbo and Okafor (2025), enhanced students' academic achievement and stimulated both male and female students' interest in computer studies. Similarly, Muogbo and Obiefoka (2022) concluded that the use of ICT expanded entrepreneurial opportunities among students, while Nnoli and Muogbo (2025) found that ICT integration in chemistry instruction enhanced students' understanding and active participation. Enemu and Muogbo (2023) also reported that the use of Zoom technology improved the effectiveness of teaching and learning among lecturers in colleges of education.

However, when technology is not properly managed, it may negatively affect academic performance. Muogbo and Nnoli (2025) observed that excessive exposure to ICT negatively affected the academic performance of junior secondary school students in Anambra State. Furthermore, Enemuo et al. (2025) identified differences in students' computer competencies, which have implications for achievement and interest in learning. Likewise, Enemuo and Muogbo (2025) argued that the digital divide significantly affects access to learning opportunities and ethical learning experiences. The effectiveness of instructional methods is also related to teachers' competence. Okigbo and Enemuo (2021) emphasized the importance of computer literacy for lecturers in effective teaching and research, while Enemuo and Muogbo (2024) indicated that students' perceptions of lecturers' computer literacy skills are important in the teaching and learning process. In addition, Muogbo et al. (2026) suggested that teachers' readiness to integrate AI-based teaching tools enhances classroom instruction and students' learning experiences.

Students' achievement and interest in learning are also influenced by gender, as male and female students often respond differently to instructional methods and classroom experiences. Onwuka, Nwokolo, and Achebe (2022a) posited that gender dimensions may affect interpersonal interaction and participation within educational institutions, which can manifest in classroom behavior and engagement. Achebe and Onyemaechi (2023) also identified gender as a predictor of behavioral tendencies among adolescents. Nevertheless, inclusive and participatory teaching approaches can help reduce learning gaps between male and female students. Muogbo and Okafor (2025) demonstrated that experiential learning positively influenced the interest of both male and female students and contributed to reducing achievement gaps.

In addition, students' academic achievement and interest are influenced by psychological and social factors. Nwokolo et al. (2022) highlighted the role of psychological empowerment in promoting positive behavior and performance, while Onwuka, Nwokolo, and Achebe (2022b) emphasized the importance of development programs in increasing participation and productivity. Onyemaechi et al. (2025a) also reported that social support helps individuals cope with psychological problems, whereas Onyemaechi et al. (2025b) noted that psychosocial conditions influence behavioral outcomes and adjustment. These findings suggest that supportive and gender-sensitive pedagogical approaches motivate students to become more active and interested in learning.

The influence of culture and media on students' interests and social orientation should also not be ignored. Cultural expressions contribute to identity formation and participation (Utoh-Ezeajugh & Ume, 2025), while social issues and awareness of child rights shape attitudes and behavior (Agoha et al., 2024). Similarly, Agoha et al. (2026) investigated gender relations in media representations and demonstrated how societal perceptions of gender influence students' self-confidence and classroom participation. Ilukwe and Ume (2026) further showed that creative teaching approaches, such as theatre for development, positively affect students' awareness of social and educational issues. Moreover, Muogbo, Muogbo, and Enemuo (2025b) found that entrepreneurial education equips learners with problem-solving skills and social awareness, thereby enhancing students' interest in learning and achievement.

This study was motivated by the persistent discrepancies in educational outcomes in technical subjects such as Computer Studies. Although several teaching approaches have been investigated, debates still exist regarding the interaction between gender and instructional methods. This study seeks to address some of the gaps identified in recent studies. For example, Gatissa (2026) noted that gender-biased early educational experiences significantly influence students' interests, making it necessary to determine whether experiential learning can reduce gender bias in software training. Furthermore, although Sumra et al. (2026) identified gender as a moderating factor between learning aspirations and institutional support, it remains unclear whether this moderating effect also applies to direct hands-on learning strategies in the context of Microsoft Word instruction.

Similarly, Anyima, Ikwuka, and Akudolu (2026), as well as Kassim, Han, and Hong (2026), found complex relationships between gender representation and peer-based instructional strategies in improving learning achievement, although their findings differed across subject areas. Britwum et al. (2026) also proposed that there are relationships between students' satisfaction, engagement, and learning styles. Therefore, this study aims to develop a more comprehensive pedagogical model for computer literacy by examining whether experiential learning benefits all genders equally or favors one gender more than the other.

The objectives of this study were to determine the interaction effects of teaching methods and gender on students' mean achievement scores and mean interest ratings in Microsoft Word. Specifically, the study sought to examine how experiential and lecture methods interact with gender to influence students' academic achievement and interest in learning Microsoft Word.

The study was guided by the following research questions: What are the interaction effects of teaching methods and gender on students' mean achievement scores in Microsoft Word? What are the interaction effects of teaching methods and gender on students' mean interest scores in Microsoft Word?

The following null hypotheses were tested at the 0.05 level of significance: There is no significant interaction effect of teaching methods and gender on the mean achievement scores of students taught Microsoft Word. There is no significant interaction effect of teaching methods and gender on the mean interest scores of students taught Microsoft Word.

2. RESEARCH METHOD

The research design adopted for this study was a quasi-experimental design using a non-randomized pre-test and post-test control group approach. This design is appropriate when random assignment of participants is not feasible, particularly in educational settings where intact classes must be maintained. The study involved students within a formal school environment; therefore, the use of intact classes was necessary to preserve the normal school structure. The quasi-experimental model was considered suitable because educational authorities may not permit disruptions to existing school schedules, thereby ensuring ecological validity. The experimental group received a pre-test (O1), treatment through experiential learning strategy (X1), and a post-test (O2), while the control group received a pre-test (O1), treatment through the conventional lecture method (X2), and a post-test (O2). In this notation, O1 and O2 represent the pre-test and post-test assessments respectively, while X1 and X2 denote the experiential learning strategy and the conventional lecture method.

The study was conducted in the Nnewi Education Zone of Anambra State, Nigeria. The area was selected because it is densely populated and contains many public and private secondary schools equipped with computer laboratories. Furthermore, the proximity of the zone to industrial centers such as the Innoson and Ibeto Groups provides a technological environment relevant to computer studies, as students with technological skills may benefit from employment opportunities within these industries.

The population of the study consisted of 10,829 Senior Secondary School Two (SS2) students from 49 public secondary schools. A multistage sampling technique was employed in selecting the sample. First, the Nnewi Education Zone was selected through stratified sampling. Subsequently, two Local Government Areas (LGAs), namely Nnewi North and Ihiala, were selected. Four schools were then purposively selected based on the availability of functional computer laboratories and qualified computer studies teachers. The final sample comprised 196 students, consisting of 78 males and 118 females, drawn from eight intact classes.

Two instruments were used for data collection: the Computer Studies Achievement Test (CSAT) and the Computer Studies Interest Scale (CSIS). The CSAT consisted of 50 multiple-choice questions related to Microsoft Word, while the CSIS was a four-point Likert scale designed to measure students' interest and engagement in computer studies. The instruments were subjected to face and content validation by three experts from Chukwuemeka Odumegwu Ojukwu University to ensure their validity and appropriateness. The experts evaluated the instruments based on linguistic clarity, alignment with Bloom's Revised Taxonomy, and suitability of the marking guides. Reliability testing was conducted through a trial test in the Awka Education Zone. The Computer Studies Achievement Test yielded a Kuder-Richardson (KR-20) reliability coefficient of 0.90, while the Computer Studies Interest Scale produced a Cronbach's Alpha reliability coefficient of 0.89, indicating high reliability for academic research.

A pre-test was administered before the intervention to establish baseline data on students' achievement and interest levels. Regular classroom teachers were trained for one week as research assistants to familiarize them with the experiential learning procedures. The experimental groups were taught using experiential learning strategies, whereas the control groups were taught using the traditional lecture method. Several extraneous variables were controlled to ensure the internal validity of the study. Teacher-related variables were controlled through standardized training and regular supervision to maintain uniformity in instructional delivery. To minimize the testing effect, the post-test items were reshuffled before administration. The Hawthorne effect was controlled by using the students' regular classroom teachers within their normal classroom environment so that students would not alter their behavior because of the researcher's presence. In addition, interaction between groups was minimized by conducting lessons in separate locations to prevent the exchange of ideas among participants.

The collected data were analyzed using mean scores and standard deviations to answer the research questions. Analysis of Covariance (ANCOVA) was employed to test the hypotheses at the 0.05 level of significance. ANCOVA was considered appropriate because it adjusts for pre-test differences between non-randomized groups and provides a more accurate comparison of the instructional treatments. The null hypotheses were rejected whenever the calculated p-value was less than or equal to 0.05.

3. RESULTS AND DISCUSSION

A. Research Question 1

What are the interaction effects of teaching methods and gender on the mean achievement scores of students in Microsoft Word?

Table 1. Mean and standard deviation of students' pre-achievement and post-achievement test scores in Microsoft Word by teaching method and gender

Method of Teaching	Gender	N	Pre-achiv. Mean	Pre-achiv. Standard Deviation	Pre-achiv. Mean	Pre-achiv. Standard Deviation	Mean Gain
Experiential	Male	37	22.51	7.78	70.21	10.92	47.70
	Diff in Mean		1.34		5.02		
Lecture Method	Female	56	23.85	8.72	75.23	9.44	51.38
	Male	41	20.39	6.94	44.34	7.70	23.95
	Diff in Mean		1.65		3.28		
	Female	62	18.74	5.67	41.06	8.66	22.32

Table 1 presents the interaction effects of teaching methods and gender on students' achievement scores in Microsoft Word. Male students taught using the experiential learning strategy obtained a pre-achievement mean score of 22.51 with a standard deviation of 7.78 and a post-achievement mean score of 70.21 with a standard deviation of 10.92, resulting in a mean gain of 47.70. Female students taught using the experiential learning strategy recorded a pre-achievement mean score of 23.85 with a standard deviation of 8.72 and a post-achievement mean score of 75.23 with a standard deviation of 9.44, resulting in a mean gain of 51.38.

Furthermore, male students taught using the lecture method obtained a pre-achievement mean score of 20.39 with a standard deviation of 6.94 and a post-achievement mean score of 44.34 with a standard deviation of 7.70, resulting in a mean gain of 23.95. Female students taught using the lecture method had a pre-achievement mean score of 18.74 with a standard deviation of 5.67 and a post-achievement mean score of 41.06 with a standard deviation of 8.66, resulting in a mean gain of 22.32. Overall, the post-achievement mean scores of both male and female students taught using the experiential learning strategy were higher than those of their counterparts taught using the lecture method.

B. Research Question 2

What are the interaction effects of teaching methods and gender on the mean interest scores of students in Microsoft Word?

Table 2. Mean and standard deviation of students' pre-interest and post-interest scores in Microsoft Word by teaching method and gender

Variables		N	Overall Preint.		Overall Postint.		Mean
Method of Teaching	Gender		Mean	Standard Deviation	Mean	Standard Deviation	Gain
Experiential	Male	37	43.18	4.68	80.48	18.13	37.30
	Female	56	43.89	5.85	63.92	18.91	20.03
Diff in Mean			0.71		16.56		
Lecture Method	Male	41	42.46	5.01	52.26	9.72	9.80
	Female	62	42.75	4.38	57.43	7.63	14.68
Diff in Mean			0.29		5.17		

Table 2 shows the interaction effects of teaching methods and gender on students' interest scores in Microsoft Word. Male students taught using the experiential learning strategy had a pre-interest mean score of 43.18 with a standard deviation of 4.68 and a post-interest mean score of 80.48 with a standard deviation of 18.13, resulting in a mean gain of 37.30. Female students taught using the experiential learning strategy obtained a pre-interest mean score of 43.89 with a standard deviation of 5.85 and a post-interest mean score of 63.92 with a standard deviation of 18.91, resulting in a mean gain of 20.03.

Similarly, male students taught using the lecture method recorded a pre-interest mean score of 42.46 with a standard deviation of 5.01 and a post-interest mean score of 52.26 with a standard deviation of 9.72, resulting in a mean gain of 9.80. Female students taught using the lecture method had a pre-interest mean score of 42.75 with a standard deviation of 4.38 and a post-interest mean score of 57.43 with a standard deviation of 7.63, resulting in a mean gain of 14.68. The findings indicate that students taught using the experiential learning strategy demonstrated higher post-interest mean scores than those taught using the lecture method.

C. Hypothesis 1

There is no significant interaction effect of teaching methods and gender on the mean achievement scores of students taught Microsoft Word.

Table 3. Analysis of Covariance (ANCOVA) of the interaction effect of teaching methods and gender on students' achievement scores in Microsoft Word.

Source	Type III Sum of Squares	df	Mean Square	F	Sig
Corrected Model	56768.763 ^a	4	14192.191	399.680	.000
Intercept	27887.325	1	27887.325	785.363	.000
PREACHIV	9377.023	1	9377.023	264.076	.000
GENDER	48.255	1	48.255	1.359	.245
GROUP	31181.906	1	31181.906	878.145	.000
Gender x Group	342.178	1	342.178	9.636	.002
Error	6782.191	191	35.509		
Total	700697.000	196			
Corrected total	56830.265	195			

R Squared = .893 (Adjusted R Squared = .891)

Table 3 presents the ANCOVA results for the interaction effects of teaching methods and gender on students' achievement in Microsoft Word. The analysis produced an F-ratio of 9.636 with an associated probability value of .002 for the interaction between gender and teaching method. Since the probability value of .002 is less than the 0.05 level of significance, the null hypothesis was rejected. Therefore, there was a significant interaction effect of teaching methods and gender on students' achievement in Microsoft Word.

D. Hypothesis 2

There is no significant interaction effect of teaching methods and gender on the mean interest scores of students taught Microsoft Word.

Table 4. Analysis of Covariance (ANCOVA) of the interaction effect of teaching methods and gender on students' interest scores in Microsoft Word.

Source	Type III Sum of Squares	df	Mean Square	F	Sig
Corrected Model	20619.542 ^a	4	5154.886	27.190	.000
Intercept	2594.285	1	2594.285	13.684	.000
PREINT	2653.525	1	2653.525	13.996	.000
GENDER	1718.292	1	1718.292	9.063	.003
GROUP	12904.788	1	12904.788	68.069	.000
GENDER+GROUP	567.043	1	5679.043	29.955	.000
Error	36210.723	191			
Total	823956.000	196			
Corrected total	56830.265	195			

R Squared = .363 (Adjusted R Squared = .349)

Table 4 presents the ANCOVA results for the interaction effects of teaching methods and gender on students' interest in Microsoft Word. The analysis yielded an F-ratio of 29.955 with an associated probability value of .000 for the interaction between gender and teaching method. Since the probability value of .000 is less than the 0.05 level of significance, the null hypothesis was rejected. Therefore, there was a significant interaction effect of teaching methods and gender on students' interest in Microsoft Word.

E. Discussion

The findings from Table 1 revealed that experiential learning strategy produced substantial improvements in students' academic achievement in Microsoft Word among both male and female students. Male students taught using the experiential learning strategy obtained a mean gain score of 47.70, while female students recorded a higher mean gain score of 51.38. In contrast, students taught using the lecture method demonstrated considerably lower gains, with male students recording a mean gain of 23.95 and female students recording 22.32. These findings indicate that experiential learning is more effective than the traditional lecture method in enhancing students' academic achievement in computer studies. The result is consistent with the findings of Muogbo, Okafor, and Okafor (2025a), who reported that experiential learning strategies significantly improved students' academic performance in computer studies compared to conventional instructional approaches.

Furthermore, the ANCOVA results presented in Table 3 showed a significant interaction effect between teaching methods and gender on students' achievement in Microsoft Word ($F = 9.636, p = .002$). This finding suggests that gender influences the effectiveness of instructional methods in computer studies. The result supports the findings of Anyima, Ikwuka, and Akudolu (2026), who reported that gender and specialized instructional strategies jointly influenced students' academic achievement in government studies through peer-

tutoring techniques. Similarly, Kassim, Han, and Hong (2026) found that although learning environments contribute to students' academic performance in STEM-related subjects, the extent of achievement differences varies across gender and subject areas.

The findings from Table 2 also indicated a significant difference between the experiential learning and lecture method groups in terms of students' interest in Microsoft Word. Male students in the experiential learning group obtained a post-interest mean score of 80.48 with a mean gain of 37.30, while female students recorded a post-interest mean score of 63.92 with a mean gain of 20.03. In comparison, students taught using the lecture method demonstrated relatively lower interest gains. Male students in the lecture group recorded a mean gain of 9.80, whereas female students recorded a mean gain of 14.68. These findings demonstrate that experiential learning strategy significantly enhances students' interest and engagement in computer studies more effectively than the lecture method. This finding corroborates the study of Muogbo and Okafor (2025), who identified experiential learning as a strong predictor of students' interest in computer studies within the Nnewi Education Zone.

However, the difference in interest gains between male and female students indicates that male students benefited more from the experiential learning strategy in terms of interest development. This finding aligns with Gatissa (2026), who argued that deep-rooted gender biases and societal perceptions regarding technical subjects may influence female students' level of interest in technology-related courses. Such gender-related perceptions may partly explain why female students recorded lower interest gains compared to their male counterparts despite demonstrating strong academic achievement.

In addition, the ANCOVA results for students' interest presented in Table 4 revealed a significant interaction effect between teaching methods and gender ($F = 29.955, p = .000$). This finding suggests that the effectiveness of instructional methods on students' interest varies according to gender. The result supports the findings of Britwum et al. (2026), who reported that gender and learning styles significantly influence academic engagement and students' satisfaction with learning experiences. Likewise, Sumra et al. (2026) found that gender moderates students' perceptions and internalization of technical training, while institutional support contributes significantly to students' interest in AI-related learning activities.

Although the lecture method contributed to some improvement in students' interest, its effectiveness was considerably lower than that of experiential learning. The active participation, hands-on activities, and learner-centered nature of experiential learning appear to promote greater student engagement and readiness for learning. This finding further confirms the position of Muogbo, Okafor, and Umezulike (2026), who emphasized that modern pedagogical approaches and active learning strategies are essential for developing advanced computer competencies and improving learning outcomes in Nigerian secondary schools.

4. CONCLUSION

The study revealed that the teaching methods used in teaching Microsoft Word significantly influenced the academic achievement and interest of secondary school students. The findings demonstrated that the experiential learning strategy was more effective than the traditional lecture method in improving students' learning outcomes and increasing their interest in computer studies. Through active participation and hands-on learning experiences, students were able to move beyond passive observation, resulting in substantial improvements in both achievement and interest scores.

The study also established a significant interaction effect between teaching methods and gender. Although experiential learning was generally more effective than the lecture method, its influence differed between male and female students in terms of achievement and interest. This finding suggests that instructional strategies do not operate independently of learners' gender, as gender-related factors may shape students' responses to different teaching approaches and ultimately influence learning outcomes. Therefore, experiential learning can serve as an effective instructional strategy for creating more inclusive, equitable, and productive classroom environments.

Furthermore, the findings emphasize the importance of adopting engaging, learner-centered, and mastery-oriented approaches in the teaching of computer studies within an increasingly technology-driven society. The integration of experiential learning strategies can enhance the capacity of educational stakeholders to prepare students, regardless of gender, for the technological demands of the modern workforce, particularly within the technologically oriented Nnewi Education Zone. Consequently, this study strongly advocates for a shift from teacher-centered and rote learning approaches toward more active, participatory, and student-centered methods in computer studies instruction.

REFERENCES

- Achebe, S. C., & Onyemacchi, C. I. (2023). Moral disengagement and gender as predictors of tendency to commit crime among adolescents in Anambra State. *Ziks Journal of Multidisciplinary Research*, 6(2), 32–47.
- Agoha, K. U., Azogu, I. I., & Ume, J. A. (2026). Performing objectification: Analysing gendered power dynamics in the comedy skits of Mr. Macaroni and Kelvinblak. *International Journal of Sub-Saharan African Research*, 3(4), 679–690.
- Agoha, K. U., Ume, J. A., & Akas, N. C. (2024). Child rights, abuse and mitigating options in Nollywood films: A study of *Wives on Strike* and *Ito*. *International Journal of Law and Society*, 7(4), 148–154.
- Anyima, F. F., Ikwuka, O. I., & Akudolu, L. R. (2026). Effect of gender on students' academic achievement in government on exposure to think-pair-share and peer tutoring instructional strategies in Delta State. *International Journal of Progressive Trends and Studies in Education*, 2(1), 29–39. <https://doi.org/10.5281/zenodo.18329948>
- Britwum, F., Acheampong, H. Y., Amoah, S. O., Adjei, E., Aidoo, S., & Agyemang, E. O. (2026). Mediation–moderation analysis of senior high school student satisfaction, academic engagement, gender, and its relationship with learning styles and academic performance. *Future in Educational Research*, 4(1), 74–94. <https://doi.org/10.1002/fer3.70034>
- Enemuo, C. J., & Muogbo, F. U. (2024). Perception of students on lecturers' computer literacy skills used in teaching and learning in South East Colleges of Education Nigeria. *International Journal of Novel Research in Education and Learning*, 11(1), 73–78.
- Enemuo, C. J., & Muogbo, U. F. (2023). Extent of awareness and adoption of Zoom technology in teaching and learning among lecturers in colleges of education, Anambra State. *International Journal of Education Research and Scientific Development*, 2(2), 12–12. <https://doi.org/10.59795/ijersd.v2i2.44>
- Enemuo, C. J., & Muogbo, U. F. (2025). Digital divide in the provision of ethical and values education: Re-engineering for sustainable national development. *UNIZIK Journal of STM Education*, 8(2), 49–57.
- Enemuo, C. J., Muogbo, U. F., & Adigwe, I. P. (2025). Extent of computer literacy among junior secondary school students in computer studies in Ebonyi State. *IRASS Journal of Multidisciplinary Studies*, 2(4), 32–41.
- Gatissa, T. A. (2026). Early educational experiences and teacher gender bias in shaping female students' interest in physics. *Pedagogical Perspective*, 5(1), 171–190. <https://doi.org/10.29329/pedper.2026.160>
- Ilukwe, E. E., & Ume, J. A. (2026). Using theatre for development to teach social media's impact on Nigeria's justice system: A case study at COOU Law Faculty. *Journal of Interdisciplinary and Multidisciplinary Research*, 12(1), 6367–6376.
- Kassim, G. B., Han, Y., & Hong, S. (2026). Examining the effects of gender representation on student academic performance in STEM subjects. *International Journal of Educational Development*, 120, 103478. <https://doi.org/10.1016/j.ijedudev.2025.103478>
- Muogbo, U. F., & Nnoli, J. N. (2025). Negative influence of ICT on academic performance of junior secondary school students in Nnewi North LGA of Anambra State.
- Muogbo, U. F., & Obiefoka, A. O. (2022). Impact of information and communication technology on entrepreneurial opportunities among secondary school students in Anambra State. *International Journal of Advanced Academic & Educational Research*, 1, 1–10.
- Muogbo, U. F., Muogbo, U. S., & Enemuo, C. J. (2025). Entrepreneurship and security solution toward millennium development goals: Assessing the effect of entrepreneurial education on secondary school students' ability to address economic security challenges in Anambra State, Nigeria. *Journal of Gender and Millennium Development Studies*, 2(2), 129–141.
- Muogbo, U. F., Okafor, T. U., & Okafor, C. F. (2025). Experiential learning strategy as a predictor of male and female students' interest in computer studies in Nnewi Education Zone, Anambra State, Nigeria. *IRASS Journal of Arts, Humanities and Social Sciences*, 2(5), 112–116.
- Muogbo, U. F., Okafor, T. U., & Umezulike, F. M. (2026). Teachers' readiness and competence in integrating AI-based educational tools in computer studies classrooms in Nnewi Education Zone, Anambra State, Nigeria. *STEM Journal of Anambra STAN*, 6(2), 72–81.
- Muogbo, U. F., Okafor, U. T., & Okafor, C. F. (2025a). Impact of experiential learning strategy on secondary school students' academic achievement in computer studies in Nnewi Education Zone, Anambra State. *Indonesian Journal of Innovative Teaching and Learning*, 2(2), 125–134.
- Nnoli, J. N., & Muogbo, U. F. (2025). Perceptions of teachers and students on the integration of ICT in chemistry instruction in senior secondary schools in Awka Education Zone. *International Journal of Social and Education*, 2(1), 863–874.
- Nwokolo, E. E., Themba, M. Q., & Achebe, S. C. (2022). Examining psychological empowerment as a moderator of the relationship between job insecurity and organizational citizenship behaviour among the Eastern Cape Department of Health employees. *Nigerian Journal of Social Psychology*, 5(2), 1–18.
- Okigbo, E. C., & Enemuo, C. J. (2021). Acquisition of computer literacy skills in teaching and research by lecturers in colleges of education in South-East Nigeria. *Journal of Research & Method in Education*, 11(5), 42–49.
- Onwuka, C. C., Nwokolo, E. E., & Achebe, S. C. (2022a). Perception of employee development programs among non-academic employees in selected state-owned tertiary institutions in South-East Nigeria. *Nigerian Journal of Social Psychology*, 5(2), 80–89.
- Onwuka, C. C., Nwokolo, E. E., & Achebe, S. C. (2022b). Gender dimension of conflict among non-academic staff of selected public tertiary institutions in Southeast Nigeria. *International Journal of General Studies (IJGS)*, 2(3), 7–19.

- Onyemaechi, C., Achebe, S. C., Maduekwe, C., Onwudiwe, A., Philip, P., & Okafor, J. (2025). Social support as panacea for psychological symptoms of COVID-19. *Cuestiones de Fisioterapia*, *54*(3), 4822–4838.
- Onyemaechi, C., Benedeth, E. N., Onwuka, C., Achebe, S., Udechukwu, P., & Ezechukwu, C. (2025). Psycho-social dimensions of economic crises in Nigeria: Role of the media. *Cuestiones de Fisioterapia*, *54*(3), 3844–3858.
- Sumra, B., Sultana, A., Elbashir, A. M., & Ahmad, Z. (2026). Institutional support and students' interest in AI: The mediating role of learning aspirations and the moderating effect of gender. *TechTrends*, 1–20.
- Utoh-Ezeajugh, T., & Ume, J. A. (2025). Dance costumes as expressions of cultural identity: A study of selected cultural dances. *Frontiers in Art and Design*, *1*(1), 34–34.