

Student-Centred and Instructor-Dominated Learning Environment: A Comparison of Impact on Students' Performance in Economics

Okhawere, Paulson Young Ofenimu (Ph.D) & Siman Emmanuel

Department of Business Education, School of Vocational Education, Federal College of Education, Kontagora, P.M.B. 39, Niger State, Nigeria gainsp@yahoo.com, mmanuelsiman2033@gmail.com

Abstract

This study compares the impact of student-centred and instructor-dominated teaching approaches on secondary school students' academic performance in Economics. The objectives include evaluating disparities in pretest scores between the two methods, investigating variations in pretest and post-test scores within each approach, and exploring potential gender differences in learning outcomes. A quasi-experimental design was employed, analyzing data from pretests and post-tests administered to students taught using both approaches. The results showed no significant difference in pretest scores between the two methods. However, post-test scores indicated a significant improvement with the student-centred approach compared to the instructor-dominated approach. Gender analysis revealed no significant differences in pretest and post-test scores between male and female students. This study contributes to evidence-based educational practices by providing empirical insights into the effectiveness of different teaching methods, particularly within the Nigerian educational context. Recommendations include incorporating student-centred teaching in Economics, adopting a balanced pedagogical approach, considering gender factors, enhancing teacher training in differentiated instruction, leveraging technology for student-centred learning, and conducting further research on Economics pedagogy.

Keywords: Student-Centred Learning, Instructor-Dominated Learning, Performance, Economics, Comparison

Introduction

Classroom management has historically been shaped by behaviourist learning theory, which asserts that behaviour primarily results from interactions with the environment. Influential proponents such as Skinner (1974) and Watson (1913) explored how environmental changes affect learning, suggesting that through conditioning, behaviour is shaped as responses to stimuli are reinforced (McLeod, 2018). Skinner (1974) and Watson (1913) emphasize organizing information into simple steps for passive learners and focus on observable behaviour and teacher control (Russ-Eft, 2004). However, this approach often limits student engagement and participation (Brophy, 2006). Such instructor-dominated methods, resembling traditional instruction, restrict students' autonomy and can lead to disengagement and reduced motivation to learn (Tabulawa, 2006).

In response to evolving educational goals and societal changes, there is a growing recognition of the necessity to move away from instructor-centred to student-centred approaches in education (Federal Republic of Nigeria, 2004, 2013). This shift reflects a broader movement toward constructivist paradigms that recognize the social and contextual aspects of learning (Pitsoe, 2014). While traditional methods prioritize teacher control, contemporary education emphasizes constructivist

principles, encouraging active student involvement in the learning process (Brophy, 2006).

Recent studies have reinforced the importance of transitioning to student-centred approaches. For example, Lopes and Silva (2021) conducted a meta-analysis that highlighted how student-centred learning significantly improves critical thinking, problem-solving abilities, and overall academic success across disciplines. They found that student-centred learning fosters deeper engagement, which leads to better educational outcomes. Similarly, de la Fuente and Lozano (2020) emphasized the role of self-regulation and cognitive engagement in student-centred learning. Their research suggested that such methodologies promote higher levels of self-regulation in learners, leading to improved academic performance.

Despite policy efforts to promote student-centred learning, many classrooms still adhere to behaviourist and instructor-dominated management styles, particularly in Nigeria (FRN, 2013; Hannafin, Hill, & Land, 1997). In these environments, students have limited opportunities for self-expression and self-directed learning, potentially leading to decreased motivation and focus (Mpho, 2018). Trujillo and Ocasio (2019) argue that behaviourist methods continue to shape classroom management, often constraining attempts to adopt more progressive educational practices.

In contrast, student-centred approaches prioritize inquiry, authentic activities, and collaborative knowledge construction between teachers and students, moving away from the traditional transmission model of instruction. Evans and Waring (2021) explored various student-centred pedagogies in higher education, finding that these methods encourage student autonomy, foster deeper learning, and support personalized instruction. Their research underscores the potential of these strategies to enhance student engagement and academic success.

Mascolo (2020) offers a critique of the strict dichotomy between student-centred and teacher-centred pedagogies, proposing a model of "guided participation" where learning is co-constructed by teachers and students. This approach aligns with constructivist theories that stress the importance of social interactions in learning (Mascolo, 2020). Furthermore, Tadesse and Gillies (2021) reviewed the implementation of student-centred pedagogies in sub-Saharan Africa, highlighting the challenges of transitioning from traditional, instructor-dominated teaching methods due to resource constraints and institutional resistance.

The debate between student-centred and instructor-dominated learning environments has been a focal point of educational pedagogy discussions for decades. This research aims to explore the comparative impact of these two approaches within the domain of economics education. The study sought to understand how the instructional approach, whether prioritizing student autonomy and engagement or instructor-led direction, influences students' performance in economics.

As previously discussed, student-centred learning emphasizes active student participation, collaborative learning, and personalized instruction, whereas instructor-dominated learning typically involves more traditional methods such as lectures and direct instruction. Understanding which approach yields better outcomes in the field of economics education is crucial for educators and policymakers seeking to optimize teaching methodologies.

Several key studies have contributed to understanding student-centred and instructor-dominated learning environments, shedding light on their respective impacts on student performance. Hake (1998), for example, compared the effectiveness of interactive-engagement methods, closely aligned with student-centred approaches, against traditional methods in introductory physics courses. Although not directly related to economics education, the study provides valuable insights into the efficacy of student-centred learning in improving academic outcomes. Similarly, Prince (2004) synthesized research findings on active

learning methods, often associated with student-centred approaches, which, while focusing on engineering education, offer insights into the effectiveness of these strategies across various disciplines.

While centred on science education, Abd-El-Khalick and Lederman (2000) discussed the importance of promoting student-centred pedagogies for enhancing conceptual understanding. Their findings underscore the relevance of student-centred approaches in fostering deep learning. Additionally, Chickering and Gamson (1987) proposed seven principles for effective undergraduate education, advocating for student-centred practices such as active learning and prompt feedback. Their framework serves as a foundational guide for designing student-centred learning environments.

This research seeks to enrich the ongoing discussion on effective teaching methods in economics education by incorporating findings from various relevant studies. Through a comparative analysis of student-centred versus instructor-dominated learning environments and their effects on students' performance in economics, the study aims to offer practical recommendations. These insights will be valuable to educators and policymakers working to refine teaching strategies and improve student learning outcomes.

Statement of Problem

The choice between student-centred and instructor-dominated learning environments remains a critical decision for educators, with implications for students' academic achievement and overall learning experience. Advocates of student-centred approaches highlight active engagement, critical thinking, and tailored learning experiences, while proponents of instructor-dominated approaches emphasize structured content delivery, discipline, and knowledge transmission. However, the existing literature lacks comprehensive insights into how these divergent approaches specifically impact students' performance in Economics. Despite an increasing body of research on student-centred and instructor-dominated learning environments, empirical studies focusing on their effects within the context of Economics education are scarce. While Becker and Watts (1999) offer insights into the teaching methods used in undergraduate economics courses in the United States, their study does not specifically compare student-centred and instructor dominated learning environments within the context of Economics education. Similarly, Taylor and Jones (2001) discuss student-centred learning strategies but did not focus on economics education. Roth's (2002) study examines the effect of problem-based learning on

undergraduate economics education but did not directly compare student-centred and instructor-dominated learning environments. These examples highlight the scarcity of empirical studies specifically addressing the effects of student-centred and instructor-dominated learning environments within economics education context.

Furthermore, existing research presents conflicting findings and fails to establish a consensus regarding the superiority of one approach over the other. For instance, Smith and Johnson (2018) argue that student-centred learning environments promote active engagement and foster critical thinking skills among economics students. Conversely, Jones, Smith, Johnson, and Brown (2020) contend that teacher-directed approaches are more effective in ensuring a thorough understanding of economic concepts and theories. These conflicting perspectives highlight the need for further exploration into the varying impact of instructional methods on economics performance. Additionally, factors such as students' demographic characteristics may mediate the relationship between instructional methods and academic performance in economics (Ozturk, 2016; Hoxby, 2009; Pascarella & Terenzini, 2005). By systematically examining the influence of student-centred versus instructor-dominated learning environments on economics performance, this study aims to address these gaps in the literature. Through a nuanced analysis of existing research and empirical evidence, it sought to provide insights into the relative effectiveness of these pedagogical approaches and identify factors contributing to variations in students' learning outcomes.

Purpose of the Study

This study explored and compared the differential impact of student-centred approach and instructor-dominated approach on the academic performance of secondary school students in Economics within a selected secondary School in the Kontagora Local Government Area of Niger State, Nigeria. The specific objectives of the study are:

1. To evaluate the disparity between the pretest scores of students instructed through the student-centred approach and those instructed through the instructor-dominated teaching approach.
2. To investigate the potential variance between the pretest and post-test scores of students instructed through the instructor-dominated approach.
3. To determine if a significant difference exists between the pretest and post-test scores of students instructed through the student-centred teaching approach.
4. To confirm whether there is a significant difference between the post-test scores of students instructed

through the student-centred approach and those instructed through the instructor-dominated teaching approach.

5. To investigate the interaction effect of gender on the effectiveness of student-centred versus instructor-dominated learning environments in the field of economics.

Research Questions

In line with the objectives of the study, the following research questions were raised to guide the study:

1. What is the disparity between the pretest scores of students instructed through the student-centred approach and those instructed through the instructor-dominated teaching approach?
2. What is the variance between the pretest and post-test scores of students instructed through the instructor-dominated approach?
3. Is there a significant difference between the pretest and post-test scores of students instructed through the student-centred teaching approach?
4. Is there a significant difference between the post-test scores of students instructed through the student-centred approach and those instructed through the instructor-dominated teaching approach?
5. Does gender significantly moderate the effectiveness of student-centred versus instructor-dominated learning environments in economics?

Hypotheses

To align with the core research questions guiding this study, the following research hypotheses were formulated to give the study a clear direction:

Ho1: There is no significant disparity between the pretest scores of students instructed through the student-centred approach and those instructed through the instructor-dominated teaching approach.

Ho2: There is no significant variance between the pretest and post-test scores of students instructed through the instructor-dominated approach.

Ho3: There is no significant difference between the pretest and post-test scores of students instructed through the student-centred teaching approach.

Ho4: There is no significant difference between the post-test scores of students instructed through the student-centred approach and those instructed through the instructor-dominated teaching approach.

Ho5: There is no significant difference in pretest scores between males and females in the instructor-dominated approach.

Ho6: There is no significant difference in post-test scores between males and females in the instructor-dominated approach.

Ho7: There is no significant difference in pretest scores between males and females in the student-centred teaching approach.

Ho8: There is no significant difference in post-test scores between males and females in the student-centred teaching approach.

Methodology

The study implements a quasi-experimental design with pretest and post-test measurements to compare the effects of student-centred and instructor-dominated learning environments on economics performance. Quasi-experimental design endeavours to establish causal relationships by administering a treatment or condition to one group and then comparing the outcomes with those of a control group (William, Cook, and Campbell, 2002). To assess this causal relationship, subjects should be randomly assigned to the groups to minimize bias and control for extraneous variables. This research design was chosen because it requires pretest and post-test assessments for both treated and comparison groups. Additionally, it is a research design that tests causal relationships and aims to address issues related to comparison.

The population under study consisted of thirty (30) senior secondary school (SSII) students from a single chosen private secondary school in the Kontagora Local Government Area of Niger State, Nigeria. The sampling technique employed was a form of purposive sampling known as "total population sampling," which involves scrutinizing the entire population with specific characteristics. This approach aligns with the framework outlined by Leedy and Ormrod (2015), even though they did not explicitly mention total population sampling. Instead, they discuss the concept of examining the entire population with specific characteristics. The utilization of the total population sampling technique is highly suitable as it encompasses various demographic attributes such as age, gender, particularly given the relatively small size of the population.

In addition to employing quizzes and assignments, the study utilized an Economics Achievement Test (EAT). This test, developed by the researchers, was tailored to mirror internal school examination questions in Economics. The items within the instrument were structured in accordance with Bloom's Taxonomy of educational objectives (See Johnson & Krathwohl, 2001) to gauge students' grasp of Economics concepts across various cognitive levels. Consisting of a single section, the EAT comprised thirty multiple-choice items, each worth one mark, with students allotted 45 minutes to complete the test. These items were selected from

topics outlined in Nigeria's Economics Curriculum for Senior Secondary School two (SS II), specifically focusing on the labour market and economic systems.

To validate the content of the EAT instrument, three secondary school Economics teachers and the co-researcher's supervisor (who happens to be the primary researcher in this study) were recruited. According to suggestions by the American Psychological Association (1999) and Nunnally (1978), content evaluation of an instrument can be conducted by a panel of judges tasked with assigning items to the theoretical domains underlying the content construct. A pool of 45 multiple-choice questions, generated from the course content taught, was assessed by the four judges. Each judge critically examined the items and assigned a score of either 0, indicating 'not suitable,' or 1, signifying 'suitable.' Items deemed suitable by all four assessors were selected for inclusion in the EAT.

The data collection process comprised four phases: preliminary, pre-treatment, treatment, and post-treatment stages. In the preliminary stage, subsequent to obtaining permission from the school authorities, the researchers secured informed consent from the students and ensured confidentiality and anonymity in data collection and reporting. They also elucidated the study's objectives and their expected participation. Lesson plans were devised based on selected topics from the SSII Economics Curriculum. During the pre-treatment stage, pretest assessments were administered to gauge the baseline economics knowledge and performance levels of the participants prior to any intervention. Throughout the treatment phase, both the experimental and control groups were instructed in the same Economics topics utilizing distinct instructional strategies. This phase spanned six weeks. Finally, in the post-treatment stage, a post-test was conducted, and students' responses were collected for grading and further statistical analysis. Academic performance data, comprising scores on quizzes, examinations, and assignments, were compiled to evaluate the influence of learning environments on economics performance.

Results

Descriptive and inferential statistics were utilized to compare the mean differences in economics performance between the student-centred and instructor-dominated groups. IBM SPSS version 21 was employed for the analysis of hypotheses one, two, and five to eight. Independent samples t-tests were used to analyze hypotheses five to eight, while paired samples t-tests were utilized for hypotheses two and three. According to the IBM SPSS guideline, if the value in the "sig. (2-tailed)" column is ≤ 0.05 (alpha level), there is a

significant difference in the mean scores. Conversely, if the value is above 0.05 (alpha level), there is no significant difference in the mean scores between the two groups. Hypotheses one and four were manually analyzed using a between-groups t-test technique. In a between-group t-test analysis, the t-value measures the difference between the means of two groups relative to the variability within the groups. Therefore, during a t-

test, we compare the observed t-value to a critical t-value from a t-distribution table. If the observed t-value is lower than the critical t-value, it indicates a significant difference between the two groups. Conversely, if the observed t-value is greater than the critical t-value, it suggests there is no significant difference between the two groups

Table 1: Results of a between-group t-test comparing students' pretest scores between instructor-dominated and student-centred teaching approaches.

Group	N	\bar{x}	SD	df	t-observed	t-critical	P
Instructor-Dominated	14	10.79	24.80	27	-0.16	*2.05	0.05
Student-Centred	15	11.87	9.41				

*Not significant at $p > 0.05$

Table 1 displays the results of a between-group t-test, manually conducted to compare students' pretest scores between instructor-dominated and student-centred teaching approaches. The findings indicate no significant difference in scores between the pretest

scores of the instructor-dominated teaching approach ($\bar{x} = 10.79$, $SD = 24.80$) and the student-centred teaching approach ($\bar{x} = 11.87$, $SD = 9.41$) at $df = 27$, with $p > 0.05$. Consequently, hypothesis one was accepted.

Table 2: Results of a paired samples t-test comparing pretest and post-test scores of students in the instructor-dominated teaching approach.

Group	N	\bar{x}	SD	Paired Differences			t	df	Sig.(2-tailed)
				\bar{x}	SD	Std Error \bar{x}			
Pretest	14	.36	.16				Lower	Upper	
				-.07	.17	.05			
									-1.45
Post-test	14	.43	.11				-0.17	0.03	0.17

Not significant at $p > 0.05$

Table 2 presents the outcomes of a paired samples t-test aimed at assessing the impact of the instructor-dominated teaching approach on students' scores. The findings suggest no significant difference between

students' pretest scores ($\bar{x} = 0.36$, $SD = 0.16$) and post-test scores ($\bar{x} = 0.43$, $SD = 0.11$) at $t = -1.45$, $df = 13$, $p = 0.17$ in the instructor-dominated teaching approach. Hence, hypothesis two was accepted.

Table 3: Results of a paired samples t-test comparing pretest and post-test scores of students in the student-centred teaching approach.

Group	N	\bar{x}	SD	Paired Differences			t	df	Sig.(2-tailed)
				\bar{x}	SD	Std Error \bar{x}			
Pretest	15	.40	.10						
							95% Confidence Interval of the Difference		
							Lower	Upper	
Post-test	15	.64	.12	-0.24	0.16	0.046	-5.88		0.000

Significant at $p < 0.05$

In Table 3, the findings of a paired samples t-test evaluating the impact of the student-centred teaching approach on students' scores are displayed. The analysis suggests significant difference between

students' pretest scores ($\bar{x} = 0.40$, $SD = 0.10$) and post-test scores ($\bar{x} = 0.64$, $SD = 0.12$) at $t = -5.88$, $df = 14$, $p < 0.05$. Consequently, hypothesis three was rejected.

Table 4: Results of a between-group t-test comparing students' post-test scores between student-centred and instructor-dominated teaching approaches.

Group	N	\bar{x}	SD	Df	t-observed	t-critical	P
Instructor-Dominated	14	12.86	11.82	27	-4.70	2.05	0.05
Student-Centred	15	19.07	12.92				

Significant at $p < 0.05$

Table 4 displays the results of a between-group t-test, manually conducted to compare students' post-test scores between instructor-dominated and student-centred teaching approaches. The findings reveal a significant difference in scores between the post-test

scores of the instructor-dominated teaching approach ($\bar{x} = 10.79$, $SD = 24.80$) and the student-centred teaching approach ($\bar{x} = 11.87$, $SD = 9.41$) at $df = 27$, with $p < 0.05$. Consequently, hypothesis four was rejected.

Table 5: Results of an independent samples t-test comparing scores between males and females in the pretest of the instructor-dominated teaching approach.

Variab les	N	\bar{x}	SD	t	df	Sig.(2-tailed)	\bar{x} difference	Std error difference	95% confidence interval of the difference Lower	Upper
Males	8	.38	.18	.68	12	.51	.06	.09	-0.13	0.26
Females	6	.32	.14							

Not significant at $p > 0.05$

Table 5 displays the findings of an independent-sample t-test comparing the scores of males and females in the pretest of the instructor-dominated teaching approach. The analysis indicates no significant difference in scores

between males ($\bar{x} = 0.38$, $SD = 0.18$) and females ($\bar{x} = 0.32$, $SD = 0.14$) at $df = 12$, $N = 14$, $t = 0.68$, $p = 0.51$ (two-tailed). Consequently, hypothesis five was accepted.

Table 6: Results of an independent samples t-test comparing scores between males and females in the post-test of the instructor-dominated teaching approach.

Variables	N	\bar{x}	SD	t	df	Sig.(2-tailed)	\bar{x} difference	Std error difference	95% confidence interval of the difference	
									Lower	Upper
Males	8	.42	.09	-20	12	.85	-0.01	0.06	-0.15	0.13
Females	6	.43	.14							

Not significant at $p > 0.05$

Table 6 presents the outcomes of an independent-sample t-test comparing the scores of males and females in the post-test of the instructor-dominated teaching approach. The analysis reveals no significant

difference in scores between males ($\bar{x} = 0.42$, $SD = 0.09$) and females ($\bar{x} = 0.43$, $SD = 0.14$) at $df = 12$, $N = 14$, $t = -0.20$, $p = 0.85$ (two-tailed). Consequently, hypothesis six was accepted.

Table 7: Results of an independent samples t-test comparing scores between males and females in the pretest of the student-centred teaching approach.

Variables	N	\bar{x}	SD	t	df	Sig.(2-tailed)	\bar{x} difference	Std error difference	95% confidence interval of the difference	
									Lower	Upper
Males	7	.37	.11	-85	13	0.41	-0.05	0.05	-0.16	0.07
Females	8	.42	.10							

Not significant at $p > 0.05$

Table 7 illustrates the outcomes of an independent-sample t-test comparing the scores of males and females in the pretest of the student-centred teaching approach. The findings indicate no significant difference

in scores between males ($\bar{x} = 0.37$, $SD = 0.11$) and females ($\bar{x} = 0.42$, $SD = 0.10$) at $df = 13$, $N = 15$, $t = -0.85$, $p = 0.41$ (two-tailed). Therefore, hypothesis seven was accepted.

Table 8: Results of an independent samples t-test comparing scores between males and females in the post-test of the student-centred teaching approach.

Variables	N	\bar{x}	SD	t	df	Sig.(2-tailed)	\bar{x} difference	Std error difference	95% confidence interval of the difference	
									Lower	Upper
Males	7	.67	.07	1.25	13	0.23	.08	.06	-0.06	0.21
Females	8	.60	.14							

Not significant at $p > 0.05$

Table 8 displays the outcomes of an independent-sample t-test comparing the scores of males and females in the post-test of the student-centred teaching approach. The findings reveal no significant difference

in scores between males ($\bar{x} = 0.67$, $SD = 0.07$) and females ($\bar{x} = 0.60$, $SD = 0.14$) at $df = 13$, $N = 15$, $t = 1.25$, $p = 0.23$ (two-tailed). Therefore, hypothesis eight was accepted.

Discussion of the Findings

In hypothesis 1, the study hypothesized no significant difference in pretest scores between students instructed through instructor-dominated teaching and those through student-centred teaching approach. This hypothesis was supported by the findings, indicating no significant disparity in pretest scores between the two approaches. This is consistent with the research of Smith and Jones (2019), who similarly found no significant difference in pretest scores across different teaching methods. Hypothesis 2 posited that there would be no significant variance between pretest and post-test scores in the instructor-dominated teaching approach. The analysis supported Hypothesis 2, stating that there was no significant difference between pretest and post-test scores in the instructor-dominated teaching approach. While this outcome aligns with the hypothesis, it is essential to note that the absence of significant improvements from pretest to post-test scores in this study does not necessarily imply no improvement at all in the instructor-dominated teaching approach. It merely suggests that the improvement was not statistically significant at the 0.05 alpha level. This result contradicts the findings of Johnson, Smith and Williams (2017), who observed significant improvements in post-test scores after instructor-dominated teaching interventions.

Hypothesis 3 postulated no significant difference between pretest and post-test scores in the student-centred teaching approach. However, the analysis showed a significant difference between pretest and post-test scores, indicating an improvement in performance after the student-centred teaching intervention. This finding corroborates the study by Brown, Miller, Garcia, and Martinez (2020), which demonstrated the effectiveness of student-centred teaching approach in enhancing students' understanding and performance. In hypothesis 4, the study posited no significant difference in post-test scores between instructor-dominated and student-centred teaching approaches. The analysis, however, revealed a significant difference in post-test scores between the two approaches, suggesting that the post-test scores of the student-centred teaching approach ($\bar{x} = 11.87$) are relatively higher than those of the instructor-dominated teaching approach ($\bar{x} = 10.79$). It also suggests that the interventions administered in student-centred approach have proved to be more effective than those of the instructor-dominated teaching approach. This finding resonates with the research of White and Black (2018), who similarly observed significant differences in post-test scores between different teaching approaches.

Hypothesis 5 explored the gender differences in pretest scores in the instructor-dominated teaching approach. The result of the analysis supported the hypothesis, showing no significant difference in pretest scores between males and females. This finding is consistent with the findings of previous studies such as those conducted by Adams (2016) and Smith (2018), which also found no significant gender disparities in pretest scores. Similarly, hypothesis 6 posited no significant difference in post-test scores between males and females in the instructor-dominated teaching approach. The finding supported this hypothesis, indicating no significant gender differences in post-test scores. This finding aligns with the research of Brown and Green (2019), who also found no significant gender disparities in post-test scores.

Hypothesis 7 suggested no significant difference in pretest scores between males and females in the student-centred teaching approach. The analysis supported this hypothesis, revealing no significant gender differences in pretest scores. This finding is consistent with the research of Johnson (2020), which also found no significant gender variations in pretest scores in student-centred teaching settings. Lastly, hypothesis 8 posited no significant difference in post-test scores between males and females in the student-centred teaching approach. The analysis supported this hypothesis, indicating no significant gender differences in post-test scores. This finding resonates with the research of White, Smith, and Brown (2017), who similarly found no significant gender disparities in post-test scores in student-centred teaching environments.

Conclusion

This study compared the impact of student-centred and instructor-dominated learning environments on the performance of secondary school students in Economics. The findings revealed that while there was no significant difference in pretest scores between the two approaches, students taught using the student-centred method showed significantly better post-test performance compared to those under the instructor-dominated approach. This highlights the effectiveness of active learning and student engagement in improving academic outcomes. Additionally, the study found no significant gender differences in either approach, suggesting that both instructional methods are equally effective across genders. These results underscore the value of incorporating student-centred methodologies in economics education to foster deeper understanding and improved academic performance. Educators and policymakers are encouraged to consider these insights

when refining teaching strategies in secondary education.

References

- Abd-El-Khalick, F., & Lederman, N. G. (2000). Improving science teachers' conceptions of nature of science: A critical review of the literature. *International Journal of Science Education*, 22(7), 665-701.
- Adams, J. (2016). Gender Disparities in Pre-Test Scores: A Comparative Study. *Journal of Educational Equity*, 10(3), 245-258.
- American Psychological Association (1999). *Standards for educational and psychological testing*. Washington, DC: American Psychological Association.
- Becker, W. E., and Watts, M. (1999). Teaching methods in U.S. undergraduate economics courses. *The Journal of Economic Education*, 30(3), 279-289.
- Brophy, J. (2006). *Active learning: Creating excitement in the classroom*. Sage Publications.
- Brown, A., & Green, B. (2019). Gender Disparities in Post-Test Scores: A Comparative Analysis. *Journal of Educational Equity*, 12(1), 78-92.
- Brown, C., Miller, E., Garcia, M., & Martinez, S. (2020). Enhancing Understanding and Performance through Group-Based Teaching: A Case Study Analysis. *Educational Research Quarterly*, 47(1), 112-126.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *American Association for Higher Education Bulletin*, 39(7), 3-7.
- De la Fuente, J., & Lozano, P. (2020). Self-regulation in education: The role of student-centred approaches and cognitive engagement. *Frontiers in Psychology*, 11, 2784. <https://doi.org/10.3389/fpsyg.2020.02784>
- Higher Education Research & Development*, Evans, C., & Waring, M. (2021). Learning and teaching in higher education: Perspectives on student-centred pedagogies. 40(5), 909-922. <https://doi.org/10.1080/07294360.2020.1864713>
- Federal Republic of Nigeria (2004). *National policy on education*. Yaba, Lagos: NERDC.
- Federal Republic of Nigeria (2013). *National policy on education*. Yaba, Lagos: NERDC.
- Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American Journal of Physics*, 66(1), 64-74.
- Hannafin, M., Hill, J. & Land, S. (1997). Student centered learning and Interactive multimedia: Status, issues and implications. *Contemporary Education*, 68(2), 94 – 99.
- Hoxby, C. (2009). The Changing Selectivity of American Colleges. *Journal of Economic Perspectives*, 23(4), 95-118.
- Johnson, E. (2020). Exploring Gender Variations in Pre-Test Scores in Group-Based Teaching Settings: A Comparative Study. *Journal of Educational Research*, 48(2), 215-228.
- Johnson, L., & Krathwohl, D. (Eds.). (2001). Bloom's taxonomy of educational objectives. In *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives (Complete edition)*. Longman.
- Johnson, A., Smith, J., & Williams, P. (2017). *Innovative Teaching Methods: Strategies for Classroom Success*. London: Sage Publications.
- Jones, R., Smith, T., Johnson, L., and Brown, K. (2020). Teacher-Directed Approaches: A Study on Their Impact. *Journal of Education Research*, 72(4), 501-517.
- Jones, P., & Taylor, J. (2001). Student-Centred Learning Strategies: A Guide for Implementing Active Learning. *Journal of Geography in Higher Education*, 25(3), 381-394.
- Leedy, P.D. & Ormrod, J.E. (2015). *Practical research: Planning and design*. Pearson.
- Lopes, A., and Silva, P. (2021). The effect of student-centred learning on student engagement and academic success: A meta-analysis. *Educational Psychology Review*, 33(2), 421-452. <https://doi.org/10.1007/s10648-020-09538-3>
- Mascolo, M. F. (2020). Beyond student-centred and teacher-centred pedagogy: Teaching and learning as guided participation. *Pedagogical Research*, 5(4), em0073. <https://doi.org/10.29333/pr/8485>
- McLeod, S. A. (2018). Behaviour is acquired through conditioning, where responses to stimuli are reinforced. *Simply Psychology*. Retrieved from <https://www.simplypsychology.org/operant-conditioning.html>
- Mpho, Otukile-Mongwaketse (2018). Teacher centered dominated approaches: Their implications for today's inclusive classrooms. *International Journal of Psychology and Counselling*, 10(2), 11-21

- Nunnally, J. C. (1978). *Psychometric Theory (2nd ed)*. New York: McGraw-Hill.
- Ozturk, M. B. (2016). The Relationship between Students' Characteristics and Academic Performance in Higher Education: A Meta-Analysis. *Educational Research Review*, 19, 1-15.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How College Affects Students: A Third Decade of Research*. San Francisco, CA: Jossey-Bass.
- Pitsoe, V. J. (2014). From an Instructionist to a Constructivist Classroom Management: A Dialogue. *International Journal of Education and Science*, 7(2), 391-399.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223-231.
- Roth, G. (2002). Economics in the Classroom: An Experimental Study of the Effect of Problem-Based Learning on Undergraduate Learning. *Journal of Economic Education*, 33(1), 3-16.
- Russ-Eft, Darlene (2004). *Toward a Meta-Theory of Learning and Performance* Oregon State University
- Skinner, B. F. (1974). *About Behaviourism*. New York: Alfred A. Knopf.
- Smith, L. (2018). *Gender Disparities in Teaching Methods: Analyzing Classroom Dynamics*. New York: Springer.
- Smith, J., and Johnson, A. (2018). *Student-Centered Learning Environments: How and Why They Work*. New York: Routledge
- Smith, R., & Jones, T. (2019). *Effective Teaching Methods: Research-Based Practices*. 9th ed. Boston: Pearson.
- Tabulawa R (2006). International aid agencies, learner-centred pedagogy and political democratization: A critique. *Comparative Education*, 39(11), 7-26.
- Tadesse, T., & Gillies, R. M. (2021). Student-centred pedagogy in sub-Saharan Africa: A qualitative meta-synthesis of implementation in higher education. *Journal of Educational Research and Reviews*, 9(3), 47-66. <https://doi.org/10.5897/JERR2021.0612>
- Taylor, J., & Jones, P. (2001). Student-Centred Learning Strategies: A Guide for Implementing Active Learning. *Journal of Geography in Higher Education*, 25(3), 381-394.
- Trujillo, T., & Ocasio, K. (2019). The persistent influence of behaviourist theories on classroom management practices. *Journal of Educational Change*, 20(3), 287-310. <https://doi.org/10.1007/s10833-019-09341-6>
- Watson, J. B. (1913). Psychology as a behaviourist views it. *Psychological Review*, 23, 89-116
- White, J., & Black, S. (2018). Comparative Analysis of Teaching Approaches: A Study on Post-Test Scores. *Journal of Educational Research*, 36(4), 567-580.
- White, J., Smith, R., & Brown, M. (2017). Gender Disparities in Post-Test Scores in Group-Based Teaching Environments: An Empirical Investigation. *Journal of Educational Equity*, 11(2), 134-148.
- William, R.S., Cook, T.D. & Campell, D.T. (2002). *Experimental and Quasi-Experimental Design for Generalized Causal Inference*. Boston, MA: Wadsworth Cengage Learning.