

EFFECT OF COLLABORATIVE INSTRUCTIONAL STRATEGY ON ECONOMIC STUDENTS' RETENTION ABILITY IN FEDERAL GOVERNMENT COLLEGE BUNI-YADI, YOBE STATE, NIGERIA

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Abstract

The study investigated the effect of collaborative instructional strategy on Economics students' retention ability in Federal Government College Buni-Yadi, Yobe State, Nigeria. The study was guided by one research objective with the corresponding null hypothesis. The study adopted Quasi-experimental research design involving one-group pre-test, post-test and post-post-test. The population of the study was 338 Economics students. The study adopted a multistage sampling technique. A sample of 18 participants were involved in the study. Students' Performance in Economics Test (SPET) was used for data collection. The hypothesis was tested using t-test for dependent samples at 0.05 level of significance. The study found consistency in retention ability of the students exposed to the strategy (t-value .941, p-value =.360) in the post-test and post-post-test. It was concluded that collaboration strategy is more effective in improving the retention ability of students in Economics. It was recommended that Economics teachers should embark on the use of collaboration strategy to teach Economics concepts for an improved retention among students.

Key words: Effect, Collaborative Instructional Strategy, Retention, Economics.

Introduction

Education has been from the beginning of creation where different civilizations had in one way or the other practiced one or more forms of education in a formal or informal, way (Eze, 2017). Education is considered as the transmission of skills, knowledge, values, attitudes, morals and culture from one generation to another (Mbonu, 2023). At the senior secondary school level, students are taught Science education, Social science, Arts and Humanities as well as Vocational and Entrepreneurship education (National Policy on Education, 2014). Subjects offered in the senior secondary schools are in three groups: core subjects, non-vocational and vocational subjects. Social science education is dynamic, according to (Ezeh cited in Mbachu 2018); it involves the use of pedagogical knowledge content to communicate concepts, ideas, facts, theories and laws.

The use of collaborative instructional strategy in teaching Economics helps students to gain gradual momentum within and outside the classroom (Okekeji, 2018). Economics is one of the subjects taught at senior secondary school level, despite the popularity of the subject, retention at secondary school level remained poor (Okoro, 2019). The course also inculcate knowledge, skills, attitudes, retention, morals and culture (Achufusi-Aka & Okpanchi 2021). Aggarwal (2018) opined that retention is the ability as the process of relegation of the past experience in the sub-conscious mind of the individual in the form of mental experience. Suleiman (2017)

explained retention as the one's ability to remember what was learned in the later time; it takes place when learning is coded in to memory. Collaborative instructional strategy is very effective in enhancing academic achievement and retention among students (Okoro, 2019; Okekeji 2018; Achufusi-Aka & Okpanchi 2021). Collaborative strategy is an offshoot of activity based strategies, where a teacher's task of teaching is highly minimized. Yusuf (2018) explained that a teacher's role in every teaching and learning process cannot be overemphasized. This is because the pace set by the teacher in the classroom is what determines whether students can learn or not. Moreover, the teaching strategy or methods adopted by the teacher will either enhance or hamper the students' academic achievement. Learning is acquiring new knowledge, behavior, skills, values, preferences or understanding, and may involve synthesizing different types of information. Mbonu (2023) further posited that learning is the process that brings together cognitive, emotional and environmental influences and experiences for acquiring, enhancing or making changes to one's knowledge, skills and world view. Learning, therefore, is a purposive activity on the part of the student and requires active engagement. Individuals' existing conceptions influence the meaning they construct in a given situation (whether through lecture, collaboration instructional, demonstration, or practical activity), and what is learned results from an interaction between the student's present conceptions and the various linguistic and sensory experiences provided.

In the ever-evolving landscape of education, the effectiveness of traditional teaching methods is constantly under scrutiny, paving the way for innovative approaches. One such method garnering substantial attention is collaborative teaching. Collaborative teaching strategies offer a robust framework for teachers to synergy their expertise, creating an enriched and dynamic learning environment. Integrating the principles of collaboration, coordination, and communication enhances the teaching process and fuels students' engagement, fostering an atmosphere conducive to deep, active learning. Various scholars (Adamson & Uttal, 2016; Wilson & Robinson, 2018) explained that collaboration instructional strategy is a powerful method for enhancing the learning experience. It is also known as co-teaching design, involving two or more professionals working together in the same classroom, leveraging their individual skills and knowledge to create an enriched learning environment for students. This approach encourages teacher collaboration, enabling the sharing of best practices and the co-development of lesson plans, ultimately fostering a supportive, engaging, and diverse learning community.

While alluring with collaborative instructional strategy as a means of improving students' academic performance and retention, research studies such as (Mbachu, 2018); revealed that effective implementing of collaborative instructional strategies requires careful planning and active engagement from all team members. Adamson and Uttal (2016), Wilson and Robinson (2018) in their different studies reported that, with the integration of the foregoing collaborative teaching strategies, students are encouraged to actively participate in their own learning process actively, fostering critical thinking and interpersonal skills acquisition and development while enabling teachers to gauge their understanding and adapt their teaching methods accordingly.

This results in a collaborative culture that nurtures personal and academic development while promoting community building and mutual respect among students and teachers alike.

Collaborative learning is an umbrella for a variety of educational strategies and approaches, involving joint efforts by both teachers and learners. It is when two or more students learn something together, and one of the simplest modes of this form of learning is the mutual study. It is arguably agreed that collaborative learning is helpful in project work, research projects, and other types of team-based activities. As earlier mentioned, with this type of learning, individuals get to master new things with the help of others, making it become one of the best strategies of teaching around the world. Thus, Nkechinyere & Ordu (2018) highlighted a number of major types of Collaboration instructional strategies that a teacher may decide to use; these include:

1. Think-pair-share strategy which is one of the most common types of collaborative learning. It is a low-effort, low-stakes strategy for abbreviated collaboration and active learning. In this kind of learning, learners are required to work independently, share their ideas with others, consider peer responses, and ultimately engage in discussions in a manner that starts to synthesize an exchange. The above requires that learners act rather than listening passively, and this explains why teachers could often call on an individual at random to share their ideas (Cox, 2019). Informal collaborative teaching groups: is another type of collaborative learning that is based on how learners are organized in a learning environment. As the name suggests, this is the case where a class is broken down into small fragments and assigned a group project to handle. This type of approach leads to spending less time for lecture and fundamentally improves the amount of material retained by students.
2. Formal collaborative teaching groups: where learning is based on how learners organize themselves in a learning environment, and it forms the greatest routine practices of collaborative learning. With formal learning groups, learners are assembled into specific groups, and they are required to stay together for many weeks or months working on an extensive project(s). By and large, this type of collaborative learning is where students study and apply comfortably the various approaches of working together (Bika & Sule, 2019).
3. Problem-based teaching: also known as PBL, is another type of collaborative learning where a particular problem is introduced for learners to solve, often in groups, over a given period. It is required that students ultimately understand the problem at hand before proposing a solution or response. PBL starts to approximate the kind of work students do as well as the way they need to approach the problem in their daily lives.
4. Collaborative based groups: these constitute collaborative based organizations where stable, long-term groups are formed to last for at least a year. The teams are made up of learners with distinct attitudes and perspectives. The above type of collaborative learning provides a platform where students support each other in matters related to academics and other spheres of life. Each member is required to finish the assigned task and contribute ideas towards a given project. In most cases, students meet periodically

to check on their academic progress as well as to develop healthy cognitive and social habits.

5. Jigsaw collaborative teaching: which makes use of jigsaw strategies to break down learning problem into small parts to be handled by several groups of students within a given learning environment. Each group is expected to report back besides contributing ideas in a bid to finding solutions to the problem at hand. This learning type is suitable when dealing with a large project(s) (Herold, 2019 & Sagenmuller, 2019).

In a nut shell, collaborative teaching instructional strategy form a powerful combination for boosting students' academic achievement and personal development. These practices promote a vibrant, engaging learning community that equips students with the skills they need for success in the classroom and beyond.

Statement of the Problem

In Nigeria, there has been consistent issues over the years against the retention ability among federal government college Buni-Yadi, Yobe State, Nigeria which seem to become a very serious factor that deter the expertise among them (Idris, 2015). The gap of inability of the economics students to have strong retention ability was found very crucial to be addressed, as leaving it unattended could lead to producing half-baked economics students which in the end, may not augur well to economic system of the country (Wilson & Robinson, 2018).

The poor retention of the students in Economics become source of concerned. Despite the effort of the government in the provision of instructional materials, conducive learning environment, and regular supervision of teachers, Sulieman 2017 opined that this failure rate emphasized that students were weak in graphical analysis, display of wrong use of Economics terminologies and failure to expatiate. Report also indicated that students lack concentration and attention in the course that could enable them to respond effectively to graphical, mathematical and theoretical questions in learning economic concepts (Ibrahim & Adamu 2022).

The main concern in this study is the poor retention of Economics concepts among Economics students in federal government colleges which, over the years, remain a source of worry among stakeholders in Nigeria. In April 2024, report from WAEC indicated a repeated failure of students in Economics over the years. For instance, in 2019 (56.1%) of the students failed Economics, in 2020 (58.4%), in the year 2021 (55.4%) still in 2023 (62.5%) in federal government college Buni-Yadi, Yobe state, Nigeria. This is a very serious source of concern. The statistics reflected that the yearly significant failed percentage in the Economics may not be unconnected to poor instructional strategy being employed. The purpose of the study is therefore to establish the interconnection of collaborative instructional strategy to retention ability among Economics students the federal government college Buni-Yadi, Yobe state, Nigeria.

Objective of the Study

The objective of the study was:

1. To determine the difference in retention ability of students taught Economics using collaborative instructional strategy in federal government college Buni-Yadi, Yobe state, Nigeria.

Hypothesis

1. There is no significant difference in retention ability of students taught Economics using collaborative instructional strategy in federal government college Buni-Yadi, Yobe state, Nigeria.

Methodology

The study adopted quasi-experimental design involving pre-test, post-test, and post post-test experimental group. The population of the study was 338 Economics students. Multistage sampling technique was used. The experimental group was taught using collaborative instructional strategy.

The experiment lasted for six weeks. In every week one period was used. A well prepared lessons plans for the six weeks one for each guided the study. After the students took test (post-test). After three weeks the same test was administered on the students as follow up (post, post-test). Students Performance in Economics Test (SPET) was used to collect the data for the study. The instrument was validated with reliability coefficient of .891.

Results

Hypothesis one: There is no significant difference in retention ability of students taught Economics using collaborative instructional strategy in federal government college Buni-Yadi, Yobe state, Nigeria.

Table 1: t-test related sample analysis on difference in retention ability among Economics students in collaborative strategy

Variables	Mean	SD	N	df	T-value	Cor r.	P-value	Decision
Post-test	42.00	3.58						
			18	17	.941	.586	.360	Not Sig.
Post-Post-test	41.22	4.07						

Table 1 revealed that the means calculated between the Economics students taught using collaborative instructional strategy in post-test and post-post-test were 42.00 and 41.22, the standard deviation were 3.58 and 4.07. The degree of freedom was 17; the t-value computed was .941. The p-value obtained was .360 which was greater than level of significance (alpha value) of .05. Hence, the hypothesis which earlier assumed no significant difference in retention ability of Economics students taught using collaborative instructional strategy was retained. This means that there is no significant difference in students’ retention ability when taught Economics using collaborative instructional strategy.

Discussion of Findings

The finding of the study revealed that there is consistency in the retention ability of Economics students taught using collaborative instructional strategy. The finding is in line with findings of Mbonu (2023) that collaborative teaching strategy offers a robust for teachers to synergy their expertise, creating an enriched and dynamic learning as well as students' performance and retention. Also, Wilon and Robinson, (2018) conceptualized that collaborative instructional strategy is a powerful method for enhancing the teaching-learning experience. The finding of the study also buttressed the conceptual assertion of Aggarwal (2018) that retention ability as the process of relegation of the past experience in the sub-conscious mind of the individual in the form of mental experience. The finding therefore aligned the power of collaborative strategy to these explanations since there was consistency in the retention ability of Economics students taught using the strategy. Effectiveness of collaborative teaching strategy on retention found in this study has supported the attention and reproduction components of Banduras' social learning theory (1958): If students see something as being novel or different in some way, they are more likely to make it the focus of their attention. The finding is in line with that of Okoro (2019) and Okekeji (2018) that collaborative instructional strategy is effective in enhancing academic achievement of students. This study found collaborative instructional strategy effective in boosting retention of Economic students possibly because the method had always been good in facilitating learning outcomes in the other subjects. Many studies buttressed that the strategy had been effective in Mathematics, Biology and Chemistry. The researcher interpret this finding as evidence that collaborative strategy does not just improve retention, but also enhance students participation and engagement.

Conclusion

Based on the finding, it was concluded that collaborative instructional strategy is effective in sustaining students' retention in Economics concepts.

Recommendations

Based on the finding, the study made the following recommendations:

1. Teachers and Economics students should dwell much in collaborative teaching and learning as it improve retention ability.
2. Curriculum-developers should encourage the use of collaborative instructional strategy to teach Economic concepts.

References

- Achufusi-Aka, N. N. & Okpanachi, E. E. (2021). Effect of collaborative teaching strategy on students' academic achievement in chemistry in Onitsha education zone, Anambra State. *International Scholars Journal of Arts and Social Science Research*, 2705-1528. Retrieved from: <https://www.theinterscholar.org/journals/index.php/isjassr> (accessed on 10th February, 2024)
- Adamson, A. E., & Uttal, D. H. (2016). The impact of demonstration teaching of mathematics in high school. *The Journal of Educational Psychology*, 108(3), 473-484. doi: 10.1037/edu0000057. Retrieved from

- <https://doi.apa.org/doiLanding?doi=10.1037%2Fedu0000057> (accessed on 11th February, 2024)
- Aggarwal, N.E (2018). Effect of Demonstration method of teaching on students' Achievement in Agricultural science. *World Journal of Education*. 3(6), 1-7
- Bika, M. J. &Sule, A. (2019). Collaborative instructional strategy and secondary school student' chemistry retention tests. *International Journal of Scientific & Engineering Research*, 10(6), 539– 552
- Cox, J. (2019). 10 ways to keep your class interesting: Teaching strategies to make your class more fun. Retrieved from www.thoughtco.com (accessed on 11th February, 2024)
- Eze, U. A. (2017) Impact of activity-based method on the performance of Science learners from selected junior secondary schools in Nigeria. *An unpublished Ph.D thesis submitted to the Department of Education, University of South Africa*
- Ibrahim, A. S. & Adamu, A. B. (2022). Effect of collaborative instructional strategy on academic performance and retention among senior secondary school students in Dutsin-Ma Education Zonal Quality Assurance, Katsina State, Nigeria. *International Journal of Research in Education Humanities and Commerce*. Retrieved from <http://www.rsisinternational.org> (accessed on 12th February, 2024)
- Herold, S. D. (2019). Remembering to learn: Five factors for improving recall. Retrieved from www.facultyfocus.com (accessed 11th February, 2024) 93
- Mbachu, C. E. (2018). Science and technological education curriculum in Nigerian schools for the enhancement of a knowledge based economy: reforms and challenges. *Niger Delta Research Journal*, 1(1&2), 158-170. 93
- Mbonu, O. A. (2023). Effects of collaborative teaching methods on the academic performance of government students in senior secondary schools in Abia State, Nigeria. *International Journal of Education in Nigeria*, 8 (1), 6-21. Retrieved from <https://acjoi.org/index.php/njea/issue/view/> (accessed on 11th February, 2024)
- Nkechinyere, O.M., & Ordu, O.K. (2018). Impact of collaborative learning strategy on the academic achievement of senior secondary school chemistry students in Obio-Akpor Local Government Area. *International Journal of Education and Evaluation*, 4(2), 11-1893
- Okekeji, H. (2018). Effect of collaborative learning strategy on secondary school students' academic achievement in Mathematics in Anambra state.
- Okoro, C. U. (2019). Activity-based learning strategy and academic achievement of social studies students in obio/akpor local government area. *International Journal of Education and Evaluation* Vol. 5 (1) www.iiardpub.org
- Suliman, I (2017). Teaching methodology and its effects on the quality learning. *Journal of education and practice*, 4(6), 100-105.
- Wilson, B. J., & Robinson, L. S. (2018). The impact of demonstration methods on high school Economics: Students' knowledge, confidence, and plans for taking future Economics courses. *The American Economic Review*, 108(4), 1025-1058. Retrieved from <https://www.jstor.org/stable/26704352> (accessed on 11th February, 2024)