International Journal of Studies in Education – Vol. 21, Issue 1, 2025, 65-74
ISSN: 2636-6320 (ONLINE) - 2636-6339 (PRINT) - https://ijose.unn.edu.ng/

STUDENTS' PERCEPTION OF PEER-LED-TEAM LEARNING ENGAGEMENT IN SECONDARY SCHOOL ECONOMICS USING THEORY OF INVOLVEMENT

Nji, Ifeyinwa Awele[1] & Chinyelogo, Tochukwu C.[2]
[1]Department of Social Science Education, University of Nigeria, Nsukka
[2]Department of Arts Education, University of Nigeria, Nsukka

Abstract
Learning becomes meaningful when knowledge, skill and behaviour change positively on a particular experience or instruction. Peer-led-team learning is a learning strategy that requires active learning among students working together in a small group to solve problems. Therefore, this study investigated students' perceptions of Peer-led-team learning (PLTL) engagement in secondary school economics using the theory of involvement. The study has two specific objectives with two corresponding research questions and one null hypothesis tested at 0.05 level of significance. The study adopted a mixed method (Quasi-experimental and descriptive design). The study population was two thousand one hundred and thirty (2,130) Senior Secondary School (SS2) students in Nsukka Local Government Area. The study sample consists of 167 SS2 Economics students from two co-educational schools in the Nsukka Local Government Area. The instrument for data collection was the Student's Perception Questionnaire on Peer-led Team Learning (SQPLTL). The SQPLTL has a reliability coefficient of 0.82 using Cronbach Alpha. Face validity was done on the instrument by 3 experts (one from measurement and evaluation and two from economics education units) all from the University of Nigeria Nsukka. Students were exposed to PLTL after which they were given a questionnaire to fill out. Mean and standard deviation were used for data analysis. The findings of the study revealed that students perceived the use of PLTL to have enhanced their engagement in learning Economics and also to have helped to enhance their leadership skills in learning. The introduction of PLTL engaged students by facilitating them positively in teamwork. The researchers recommended among others that teachers should be encouraged to adopt PLTL in the classroom to improve the academic achievement of students.

Keywords: Learning, Peer-Led-Team, Economics, Perception, Engagement

Introduction

Learning could become meaningful when students are engaged, particularly in peer-led team learning. Peer-led-team learning (PLTL) as a team collaborative learning which encourages learners to become engaged with the environment. Learning becomes meaningful to the learner when they are involved in the teaching and learning process. Peer-led-team learning is an instructional strategy that involves learners of like minds forming a small learning group within themselves led by a team leader. Wilson and Varma-Nelson (2016) opined that PLTL provides students with effective and adaptive learning groups whereby problems are solved with the assistance of a student as a team leader under the auspices of the teacher, and some form of workshop and training is carried out to facilitate the learning process. PLTL is an evidence-based teaching-learning mode that ensures cooperation among learners and is also a form of supplementary instruction for teaching typically in related mathematical subjects and sciences. In PLTL, the grouping of students is within 6-10 based on the number of team leaders in the class, who work together on a set of class instruction aimed at developing students' knowledge and skill in Economics contents (Nji, 2023). PLTL was developed by Professor David Arendale in the 1990's to ensure collaborative learning in small groups specifically in problem-solving, discussion of concepts and cooperative learning purpose. The following steps were identified selection of peer leader (which was done by the class teacher and must be the best student/ students in that subject), training of the peer leaders, dividing students into groups,

arrangement of learning materials to be used for instruction, peer leaders teach by a discussion on problem-solving among group member, peer feedback on what was taught, self-assessment through quiz, exams and presentations (Snyder, Sloane, Dunk, & Wiles 2016). The unique nature of PLTL is such that students' knowledge is solidified by teaching each other through student tutors in a supervised environment to ensure better learning and retention (Jake, 2022). The learner is expected to acquire leadership skills, teaching and group management skills and gain confidence (Varma-Nelson, 2024). Peer-led–team learning incorporates three aspects in the teaching process which are discussion, questioning and application (Quitadano, Brolerer & Croach in Udoh & Obianuju, 2019) needed for studying Economics.

Studying Economics requires the learner to be a rational and independent being who determines the practical application of solving personal, societal and economic problems. In this rationale, the Education Research Development Council (2008) emphasized students possessing sound minds, knowledge and skills in Economics that could help them become self-reliant and independent. The knowledge of Economics is relevant in 21st-century society to ensure that the complex nature of economic problems is known, identified and solved. Hence, Economics deals with human behaviour and the social environment to ensure the optimal utilization of resources needed for everyday life.

Economics as a social science examines the well-being of individuals, organisations and governments in response to economic incentives. Khumalo (2022) opined that Adam Smith conceptualized Economics as the allocation of scarce resources among numerous uses effectively and efficiently. In other words, man pursues several self-interests and invariably contributes to the most pressing want through the mechanism of market demand. The structure of market demand gives the individual the opportunity to make choices, draw a scale of preference and make decisions. The market demand and supply mechanisms in an economy determine the proficiency of production of goods and services. Specifically, in Nigeria, one of the key factors affecting the economy is the quantity of goods produced and supplied in the country which is determined by the choice of government. The importance of Economics to individuals, government and society is to make rational decisions.

The importance of Economics to man, society and government is to inspire the world to become a better place to live economically. Jana (2018) identified two importance of economics firstly to develop conceptual models of behaviour to predict responses to change in policy and market conditions and secondly to investigate changes that occur under market conditions. It is important to know that Economics helps make efficient use of limited resources within the environment. In other words, Economics is relevant to predicting past, future and current trends of economic models. There is a need to study Economics to provide learners with tools of critical thinking and the ability to face economic issues as they arise (American Economic Association, 2022). To achieve effective learning outcomes in Economics students need to be engaged in classroom learning.

Student engagement is the level of interest, attention and involvement that learners demonstrate for intellectual development. Verma (2023) found out that 71% of students using remote learning found it stressful. Thereby, learning should be an action-based work which makes learners feel less stressed and become interested in the learning process. Stan, Topala, Necsoi and Cazan, (2022) stressed student engagement as that which motivates students to become reliable to learn from one another thereby making the classroom student-centred. Glossary of Education (2016) described student engagement as the level of attention, curiosity, interest, optimism, and feeling students indicate during learning which may motivate them to learn more and progress in their studies. Redmond, Heffernan, Abawi, Brown and Henderson, Cohen, Brown and Redmond (2022) identified five elements that make up the engagement framework which are social engagement, emotional engagement, cognitive engagement, behavioural engagement and collaborative engagement. Social engagement is connected to learning from the interaction of peers, community, and relations; cognitive engagement addresses students' ability to comprehend complex ideas and master difficult skills i.e can be

done through critical thinking and self-reflection of past and present experiences; behavioural engagement learners at this stage demonstrate ways of working that follow explicit expectations such as rules and norms to participate in the learning process; collaborative engagement involves students carrying out collaborative discussion, the group works and assessment; and emotional engagement deals with students feelings and attitude connected to learning to increase their engagement Cohen et al. (2022). In a classroom setting students' activities through engagement are geared towards ideal outcomes (Hu & Kuh, 2012). Today students are more engaged in activities that are more creative, competitive and social (Koralik, 2009). Therefore, there is a need for all-inclusive education such as the student-centred approach to teaching.

The student-centred method allows students to explore the environment by being actively involved in the teaching process. Students' involvement enhances intellectual development in the learner. Satgapraksha (2015) identified that the intellectual development of students can be enhanced using different student-centred learning strategies. 21st-century education encourages student learners' approaches which are constructivist, collaborative, integrated, reflective and inquiry-based learning (Relleve, 2023). It becomes great value for the teacher to organise classroom instruction such that learning will become interesting to the learner. Weimer (2020) identified the characteristics of learner-centred teaching to include the direct engagement of students in works of learning, giving works of skill instruction, and motivating learners to reflect on what was learnt and how to teach themselves. In situations where not obtainable, the student becomes disengaged.

Students' disengagement disconnects students from educational activities. Student disengagement is a form of learning deficiencies that affect the outcomes, motivation and well-being of learners. Ademola (2023) explained that students fall into a state of hopelessness that merely serves as a distraction and becomes distracted. Students may become distracted due to certain factors which may be controlled or worked on such as personal issues, peer relationships, content difficulty, being unable to connect to real-world experience, poor teaching methods, and a mismatch between students' learning styles and instructional approach (Li & Xue, 2023). One of the major reasons for student disengagement is that they do not see any relevance of the curriculum to their lives (Byrd, 2024). Thus, students' interests should focus on emotional engagement and the development of personal value (Miesner, 2023). The increasing interest of the learner invariably increases students' involvement in the learning process.

The theory of involvement by Astin (1984) stressed on desired outcome of students which is based on the level where a positive change and development occurs as a result of being involved in teaching and learning. The theory emphasises commitment and energy dispensed towards attaining education goals. The growth and development of a learner depend greatly on extracurricular activities. Astin believes that for quality learning the students need to be meaningfully engaged in the learning process. Astin's theory of involvement suggests five stages which will engage students these are: Pre-involvement, Entry, involvement, exit and post-involvement. The pre-involvement is the initial stage that requires interest and awareness of a task, in this study, students are aware of the given strategy PLTL which is expected to increase their interest. Entry is that stage that involves students actively engaging students in learning experiences, in this study, the students are exposed to activities in the strategy (roles). Involvement is the stage that requires the learners' participation in the activities, in this study, the learner learns from the peer leader who coordinates and directs teaching and learning. Exit is the stage that requires the conclusion of the program, in this study, the learner is given the questionnaire (Students Perception Questionnaire on Peer-Led Team Learning, SPQPLTL) to respond in a bid to sort information on experiences in PLTL. Post-involvement requires continuous engagement or reflection after completing the experience, in this study, the learner either acquires certain skills (communication and leadership skills) or disengages in the learning process. In other words, student quality participation is directly associated with the

level of development, success or failure of the student (Smith, 2018). Foreman and Retallick (2018) carried out a study on students' extracurricular involvement and leadership outcome among traditional-age college seniors and found out that the theory of Astin was at par with the outcome indicating leadership skill development and increase of clubs due to the positive effect of threshold on the students. Campbell (2016) identified that Astin's theory of student involvement was significant in improving the learning environment for accounting students.

The environment of the learner could cause changes in behaviour which may vary as a result of engagement, thus the need to identify their perception. Perception is the ways things are understood and interpreted individually. McDonald (2012), explained perception as the process in which the brain senses, selects, and organises information, interprets and gives feedback. In this study students' perception of PLTL engagement in Economics is investigated using the theory of involvement. Studies on perception such as Kulal and Nayak (2020) carried out a study on the perception of teachers and students towards the online classroom, likewise, Hashini et al (2017) examined perceptions and attitudes of community pharmacists on extended pharmacy services. These studies showed different perceptions as they relate to different concepts. Thus, the study deals with perceptions of Economics student's engagement in PLTL which has not been done in any study. Therefore, based on these studies the researchers examined students' perception of PLTL engagement using the theory of involvement. Students' involvement varies in structure from small groups and gender differences.

Gender is considered a very critical aspect in the classroom, especially in this study. This is as a result of the competitiveness in the classroom setting. There are differences in gender statuses on students' academic achievement (Tsaousis and Alghamdi, 2022) seems to demonstrate different behaviours. According to the World Health Organization (WHO), (2024), gender is that feature that classifies male and female, young and old by social construct. It is a biological construct that differentiates a male or female. In this study, gender was examined to determine the perception of engagement in PLTL. Studies have shown that there are differences in student engagement among males and females. Hartono, Nurul, Umamah and Puji (2019) identified that there was a significant difference in students' engagement level based on gender in favour of female students. Also, Lam et al (2012) indicated higher levels of engagement of female students in schools. On the contrary, Leras, Kippen and Larson (2018) identified that male students were more associated with class participation while female students were associated with interaction outside the class. Also, Nji (2023) identified that male students were more highly engaged in their PLTL than their female counterparts.

Purpose of the Study

Based on the different outcomes this study examined gender differences in their level of perception of engagement using PLTL. Therefore, the purpose of this study is to investigate students' perception of PLTL engagement in secondary school Economics using the theory of involvement. Specific objectives are:

1. To identify students' perception of the level of engagement in PLTL
2. To identify factors associated with students' disengagement in PLTL

Research Questions

1. What are student's perceptions of engagement in PLTL?
2. What are the factors associated with students' disengagement in PLTL?

Hypothesis

Ho1: There is no significant difference between the mean ratings of male and female students' level of engagement using PLTL.

Methods

The study adopted a mixed method (quasi- experimental and descriptive survey design). A Quasi-experiment is an experimental design that allows the experimental groups used in the study not to be randomly assigned but rather used in its intact nature (Nworgu, 2015). Also, Nworgu explained descriptive survey design is a quantitative method that describes the characteristics of a phenomenon. This study was carried out in Nsukka Local Government Area of Enugu state. The population of this study consisted of 2,130 senior secondary (SSII) Economics students in 32 secondary schools Nsukka Local Government Area. The sample of the study is 167 SSII Economics students (69 male and 98 female) selected from two co-educational schools in the Nsukka Local Government Area. Purposive sampling was used to select co-education schools and a simple random sampling technique was used to select the intact classes that used in the study. The instrument for data collection was the Student's Perception Questionnaire on Peer-Led Team Learning (SPQPLTL) which was obtained from reviewed works of literature. The instrument is a four-point rating scale of Strongly Agree (SA), Agree (A), Strongly Disagree (SD), and Disagree (D) with points 4, 3, 2 and 1 respectively which were positively and negatively skewed. The instrument has two sections, section A has information on the personal information of the respondent in terms of gender and Section B has two clusters A and B. Cluster A has items on students' perception of the level of engagement in PLTL and Cluster B has items on factors associated with students' disengagement in PLTL. The clusters have 12 and 10 items respectively. The instrument was face-validated by three experts from the University of Nigeria (one from measurement and evaluation and two from Economics education units). The reliability of the instrument was 0.81 and 0.79 for clusters A and B respectively with an overall reliability of 0.86 using Cronbach Alpha.

In this study, the sample students were exposed to PLTL after which they were all administered the instrument (SPQPLTL). The steps that were used for PLTL were:- Introduction of previous knowledge by the teacher; the teacher introduces the PLTL to the students and presents peer leaders to the class and explains the processes; Grouping of students; Presentation of a topic by the Peer Leaders, discusses and interact extensively on the topic of the day with peers; Self-Evaluation. Students are given a test that is administered in the form of a quiz. Students were administered SPQPLTL to know their level of engagement or disengagement on the use of PLTL in learning of Economics. Mean and standard deviation were used to answer research questions while a t-test was used to test the hypothesis at 0.05 level of significance. The mean responses above 2.50 were accepted indicating a high level of engagement in using PLTL for learning while below 2.49 indicates low level of engagement in using PLTL for learning while mean research question two response above 2.50 is accepted and below 2.49 is rejected.

Results

Research question 1: What are student's perceptions of engagement in PLTL?

Table 1: Mean responses and standard deviation for perceived level of engagement in PLTL

n=167

S/N	Items	Students		
		$\overline{X}$	SD	Dec.
1.	Enjoy learning Economics using PLTL	3.08	0.68	H
2	Not clear of my role in PLTL	2.99	0.76	H
3	Learnt to interact more with peers	2.76	0.91	L
4	Get constructive feedback during classroom teaching and learning	2.40	0.78	H
5	Value interactive feedback during class instruction	2.67	0.82	H
6	Develop critical thinking in learning environment using PLTL	3.01	0.79	H
7	Contribute to the discussion during PLTL class	3.22	0.86	H
8	Feel relax learning with peers in PLTL class	2.59	0.79	H

9	Develop confidence when using PLTL in learning	2.89	0.77	H
10	Using PLTL improves my communication skill	2.79	0.84	H
11	PLTL improved my understanding of Economics more especially mathematical aspects	3.11	0.79	H
12	PLTL increased my interest in Economics	2.96	1.81	H
	Grand mean	**2.87**	**1.06**	**H**

Key: $\overline{X}$ = mean, SD = standard deviations, Decision, L-Low of Engagement, H- High level of engagement

The data presented in Table 1 showed that items 1, 2, 3, 5, 6, 7, 8, 9, 10, 11 and 12 had means 0f 3.08, 2.99, 2.76, 2.67, 3.01, 3.22, 2.59, 2.89, 2.79, 3.11, and 2.96 respectively had their mean above the bench mark of 2.50 while items 4 with mean of 2.40 which is below the bench mark of 2.50. The standard deviation from items 1 to 12 were 0.68, 0.76, 0.91, 0.78, 0.82, 0.79, 0.77, 0.84, 0.79, and 1.81 respectively indicate that the data are spread out and have close clusters.. The grand mean is 2.87 indicating that students have effective engagement in PLTL. The result showed that majority of the students perceived PLTL has high level of student engagement.

Research 2: What are the factors associated with student's disengagement in PLTL?

Table 2: Mean responses and standard deviation on factors that could contribute to students disengagement (n= 167)

S/N	Items	Students		
		$\overline{X}$	SD	Dec.
1.	Unable to relate learning to real life experience	2.98	0.97	A
2	Monotonous teaching method	3.01	0.88	A
3	Nonuse of innovative teaching method	2.87	0.90	A
4	Poor learning environment	2.87	0.60	A
5	Students' personal problems	2.98	1.04	A
6	Low self confidence	2.99	0.89	A
7	No motivation from the teacher	2.68	1.05	A
8	Lack cooperation with peers	1.99	0.98	D
9	Get confused using PLTL	2.49	0.88	D
10	Technological gadgets distract learning	2.83	0.96	A
	Grand mean	**2.77**	**0.92**	**A**

Key: $\overline{X}$ = mean, SD = standard deviations, Disagree= D, Agree =A

The above table 2 shows high mean responses of students on almost all the items indicating factors associated with students' disengagement in PLTL except items 7 and 8 to were students seems to have low factors associated with disengagement in PLTL. In other words the result indicated that lack of cooperation with peers and getting confused with PLTL were not factor associated with being disengaged in PLTL.

Hypothesis

Ho_1: There is no significant difference between the mean ratings of male and female students on perceptive level of engagement using PLTL.

Table 3: Summary of t--test analysis of the difference between the ratings of male and female economics students' on level of engagement using PLTL

S/N	Status	N	*X*	SD	Df	Level of sig.	p-value	t-value	Dec
1	Male	69	2.13	0.58	165	0.05	0.16	0.08	Sig.
2	Female	98	2.71	0.48					

Keys: N- Number of male, Number of female, *X- Mean for Male and Mean for Female students, SD- Standard Deviation, Df- Degree of Freedom, Dec- Decision*

Given the result on Table 3, it is established that no significant difference exists on the perception level of engagement between male and female students. The t-test is 0.08, while the p-value is 0.16 is more than 0.05 level of significance at 165 degrees of freedom. Thus, the null hypothesis was rejected. This implies that there is a significant difference in the perception level of engagement of male and female students using PLTL in favour of the male students.

Discussions

The findings of this study showed that using PLTL in the teaching of Economics has a lot of perceptions on students' engagement. It also indicated that based on the results the theory of involvement was in line with the use of PLTL on student engagement. The result also showed that PLTL in teaching and learning Economics makes students involved in classroom learning by students identifying their roles, interacting with peers, valuing interactive feedback, developing critical thinking, contributing to discussions, relaxing with peers, developing confidence, acquiring communication skills, improve in the understanding of economics and interest in the subject. This could also relate to the tenets of Astin's theory on student involvement that stressed more on students' classroom interaction to gain knowledge which is lifelong and meaningful. This theory emphasizes the relevance of the teaching process to the learner. In other words, its innovative approach makes the student-centered approach to teaching.

The findings of this study on table 1 are in agreement with studies by Stan et al. (2022) who found that student engagement motivates learning by making them active. Thus, PLTL according to Varma-Nelson (2024) believes that students are more effective and prune to group learning than teacher-centred teaching and learning. Also, in line with the findings of this study, Weimer (2020) identified that student-based teaching enhanced cognitive development through engagement, group work and motivation. Similarly, the findings are in line with Hollister, Nair, Hill-Lindsay and Chukoskie (2022) that saw majority of students felt more comfortable asking and answering questions with peers. Also, Foreman and Retallick (2013) supported the result of the findings which is in line with Astin's theory that students acquire leadership skills and cognitive development by involving in classroom learning. These findings supported Husain (2010) that learning through motivation allows learners to learn by interacting with themselves in a manner that makes them feel it is a real-life situation.

The findings on student disengagement using PLTL are in line with those of Ademola (2023), who averred that learning is more involving but when students are disconnected from the teaching process, the goal of the instruction is defective. It was identified that students lack cooperation and become confused using PLTL which were not factors that cause student's disengagement. . The findings are in line with Perera (2021) who identified factors that led to student disengagement which are low socioeconomic status and family status. Thus the learners' inability to cooperate with peers and adjust to different learning strategies may be a result of family upbringing or low socioeconomic status. Thus, Lamina (2020) encourage the application of cooperation, interest and participation (CIP) engagement factors after students' exposure to PLTL thereby reducing students' disengagement.

This result was expected because students seem to be active if technology is included in their learning though blended learning, this will make learning interesting and students will not be disengaged in the teaching and learning process. Due to the trend, the world is becoming more digitalized and students of that age attach more importance to technology-based learning which is more engaging.

Conclusion

Based on the findings of this study it can be inferred that students are more engaged in their teaching and learning using PLTL The use of the strategy in classroom instruction delivery method will help reduce student disengagement through acquiring psychomotor and affective developments and not only cognitive development. Hence Economics educators should embrace this approach in classroom instruction.

Recommendations

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

1. Adoption of PLTL strategy in teaching of Economics particularly mathematical and graphical aspects of the content. This will give the learners free opportunities to ask questions of difficulty and also develop communication skills.
2. Curriculum planners should plan to include this strategy PLTL as one of the teaching strategies used in teaching Economics at the secondary school.

References

Ademola, O. (2023). Perceived leader behavior and student performance in higher education physical education. *Studies in educational evaluation.* 19 (4), 421-424.

American Economic Association (2022). Why should I major in Economics? Retrieved from *https://www.deptsttu.edu>whysho...*

Astin, A. W. (1984). Student involvement: A development theory for higher education. *Journal of college student Development,* 40(1), 518-529.

Campbell, L.M. (2016). A study of students involvement variables in higher education their influence in success on the uniform CPA examination. A Ph.D thesis of the University of Toledo. Retrieved from *https://etd.ohiolint.edu>send pdf*

Campbell, M. (2016). An investigation of academic preparation on 5 students and instructors preference of ESL writing feedback. *Open journal of social science*. 4(1), 128-138.

Cohen, J. Brown, A. & Redmond, P. (2022). Five key elements that drive student online engagement. Retrieved from *https://www.fineshighereducation.com*>...

Foreman, E. A. & Retallick, M.S. (2013). Using involvement theory to examine the relationship between .undergraduates' participation in extra curriculum activities and leadership development. *Journal of leadership education.* 12(2), 56-73.

Frenandez-Zabala, A., Goni, E, Camino, I. & Zulaika, L.M.(2016). Family and school context in school engagement. *European Journal of education and psychology* .9(2), 47-53.

Glossary of education reform (2016). Student engagement. *https://www.edglossary.org/student-engagement/*

Hartono, F.P., Nurul Umamah, S & Puji,R.P.N (2019). The level of student engagement based on gender and grade on History subject senior high school students in Jember Regency. *International journal of scientific and technology research* 8(8), 21-26.

Hayes, A. (2024). Economics defined with types indicators and system. Retrieved from *https://www.investopedia.com>ec...*

Hollister, B., Nair, P. Hill-lindsay, S.& Chukoskie, L. (2022). Engagement in online learning: students attitudes and behavior during COVID 19. Digital learning innovations 7(1). Retrieved from *https://doi.org/10.3389ifedu.2022.851019*.

Hu, S. & Kul, G.D. (2012). Being disengaged in educationally purposeful activities: the influence of educationally purpose full activities: influence of student and institutional characteristics. *Research in higher Education.* 43(!), 555-575.

Husain N. (2010). Computer-based instructional simulations in education. Why and how. Retrieved from *https://www.researchgate.net/publication/272505693 computerbased _instructional simulations in education why and How/link/64e76cococf2bi99060c43fo/download*

Jake, S. (2022). Peer learning: Overview, benefits and Models. Retrieved from *https://www.wgu.edu>blog>peer...*

Jana, S. K. (2018). The role and importance of studying economics. Retrieved from *https//theknowledgereview>com/role-importance-studying-economics/.*

Khumalo, B.(2022). Defining Economics in the twenty first century. *Modern economy Journal* 3(1), 596-607.

Kulal, A. & Nayak, A. (2020). A oerception of teachers and students towards online classes in Dakshina Kannada and Udupi District. Asian association of Open University Journal 15 (3).*https://eric.ed. gov*

Lam, S. Jimersm, S.R, Kikas, E., Cefai, C. Veiga, F.H, Nelson, b., Hatzichristou, C.,Polychroni, F.,Basnette, J, Duck, R, Farrel, P, Liu, Y., Negovan, V., Shin, H., Stanculescu E., Wong B.P.H., Yang, H., Zollnevitsch, J. (2012). Do girls and boys perceive themselves as equally engaged in school? The results of an international study from 12 countries. *Journal of school psychology*. 50 (1), 77-94.

Lamina, O.G. (2020). Peer- led Team learning (PLTL) Student achievement and engagement in learning chemistry. Retrieved from *https://papers.ssrn.com>papers*

Leras, B.C., Kippea, N.R.& Larson, S. J. (2018). Gender and Student participation. *Journal of the scholarship of teaching and learning,* 18 (4), 51-70.

Li, J. & Xue. E. (2023). Dynamic interaction between students learning behavior and learning environment: Meta-analysis of students' engagement and its influencing factors. Behaviour science psychology 13(1). Retrieved from *https://doi.org/103390ibs/30/0059*

Mcdonald , .S.M. (2012). Perception: A concept analysis. *International journal.* 23 (1) 2-9.

Miesner, E. (2023). Boosting interest in learning by focusing on both content and students' need. Retrieved fromhttps://www.edutopia.org>article.

Nji, I. A. (2023). Comparison of Peerto-peer and Peerled team learning strategies on secondary school students' engagement and achievement in graphical analysis related content in economics. A Ph.D thesis of the department of Social science education, University of Nigeria, Nsukka.

Nworgu, B.G. (2015). *Advanced Educational research: basic issues and methodology* (2nd edition). Nsukka: University trust Publishers.

Perera, K.O.R.L.J(2021). Factors associated with students disengagement from learning: A review of relevant literature. Retrieved from *https://www.research gate net >352…*

Redmond, R. Hefferman, C.Abawi, J. Brown A. & Hendorson J. (2018). An online engagement framework for Higher education. *https//files.eric.edu.gov* .

Relleve, C.C. (2023). Teachers challenges, Capabilities and needs in teaching learning with reading difficulties. Journal of science and education (JSE), 3(3) 221-231.

Relleve, C.C. (2023). Values Education pedagogy for Z learners. Retrieved from *https://www.disud.ed.ph*>

Satyprakasha, C.V.(2015). Research studies on effect of cooperative learning on social relations. *International journal of education and psychological Research (IJEPR),* 3(1) 39-45.

Smith, L. (2018). A comprehensive first year engagement theory. *Journal of access, retention and conclusion in higher education* 1(1), 1-4.

Stan, M.M., Topala, L.R., Necso, D.V. &Cazan, A. (2022). Predictions of learning Engagement in the context of online learning during COVID 19 pandemic. *Front psychol.* 13(1), 1-13.

Synder, J.J., Sloane, J.D., Dunk, R.D., Wile, J.R. (2016). Peer-Led Team Learning helps minority students succeed. *PLOSBio/14(3)e1002398.doi:10137/journal.phio.1002398*

Tsaouusis, I. & Alghamdi, M.H. (2022). Examing academic performance across gender differently. Measurement invariance and latent mean differences using bias-corrected bootstrap confidence intervals, *Journal of education.* 13(1), 1-12.

Varma-Nelson, P. (2024) Peer-Led-Team learning. Retrieved from *https://serc.carleton.edu>pltl*

Weimer, M. (2020). Students' engagement. Retrieved from *https://www.igi.global.com>creati*....

Wilson, S,.& Varma-Nelson P. (2016). Small groups, significant impact: A review of Peer-Led Team Learning Research with implications for STEM education Researchers and Faculty. *Journal of chemical education*, 93(10), 1686-1702.

World health organization (WHO). (2024). Gender and health. Retrieved from https:///www.who.int>health.topics.