

PEER ASSESSMENT AND ACHIEVEMENT SCORES OF STUDENTS IN ECONOMICS IN JOS SOUTH LOCAL GOVERNMENT AREA OF PLATEAU STATE

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Abstract

In the study, peer assessment and achievement scores of Economics students in Jos South Local Government in Plateau State were studied. This study was quasi-experimental research with one objective, one research question and one hypothesis. All the Senior Secondary Two (SS II) Economics students of government owned secondary schools in Jos South L.G.A was the population studied. The sample was made up of 89 students from two public secondary schools. The economic achievement test (EAT) was used to gather data on students' academic achievement. To assess the instrument reliability, the scores of the first test were compared with scores on the second test and the reliability coefficient obtained was 0.781. For the research question, data were analysed through mean and standard deviation, and for the test of the hypothesis, Analysis of Covariance (ANCOVA) was used. The results showed that the mean score of the experimental group was higher in the post-test than that of the control group with a mean difference of 7.844 in favour of the experimental group. The ANCOVA result revealed F value of 77.126, adjusted R-squared of 0.466 and p value of 0.000. The p value is less than 0.05, this indicates rejection of the null hypothesis. This means that the achievement mean scores of students in the Economics taught by peer assessment is significantly different from the mean scores of students in the conventional Economics. Based on the findings of the study, it was recommended that peer assessment should be used by Economics teachers to enhance students' academic performance and the use of peer assessment in teacher training course should be integrated into the teacher training curriculum.

Keywords: Peer Assessment, Academic Achievement, Economics Students, Jos South; Quasi-Experimental Study, Conventional Teaching.

Introduction

Assessment as a major tool employed for appraising the outcomes of what has been taught and learned constitutes one most significant area of the process (Atsua&Onuka, 2017). In Nigerian schools, the decision to make placement and certification of students is usually based on measures obtained from conventional assessment tools. Nevertheless, assessment experts have identified shortcomings associated with conventional assessment approach of continuous testing that uses mostly multiple-choice tests, objective tests and essay tests, fill-in-the gap among others. The arguments are that, conventional assessment focuses on certain information that requires learners to make use of lower-level thinking skills, these assessment approaches are often lower in task and assessing practical skills are lacking such that, tasks assessed are not complex, Conventional assessment approaches are no longer appropriate in responding to the demands of the emerging global economic competition (Mustapha, 2020) and assessing the increasing global use of indigenous knowledge to create products and

services (Obanya, 2014). Conventional assessment approaches deprive learners of immediate feedback that could help them improve on meaningful learning and growth (Mustapha, 2020). Such assessment approach according to Anikweze (2014), requires mere regurgitation of the immediately learned materials.

Conventional assessment approaches cannot assess high level cognitive, affective and psycho-productive abilities of students as it provides only negligible information about learning outcomes of students. It is mainly designed to measure lower cognitive domain of knowledge through one-shot tests instead of multi-assessment approach. They are hardly practicable when group and task hierarchy are involved (Al-Sabbah, Al Momani, Darwish, & Najwan, 2022). Hence, development in educational assessment globally has shifted from the use of conventional assessment to alternative assessments. Various teaching methods and assessments need to be explored, the specific influence of peer assessment on the academic achievement of economic students remains understudied. Understanding the potential correlation between peer assessment and academic performance is essential for effective educational strategies. In educational psychology, interest is conceptualized as an emotional state and has been studied as a critical antecedent of motivation and learning (Al-Sabbah, Al Momani, Darwish, & Najwan, 2022) Unfortunately, despite the advancement of interest theory and assessment across three fields, the study of interests remains largely siloed within disciplinary boundaries, and different research paradigms and perspectives have rarely been reconciled. The current review is a modest attempt to integrate interest research across vocational, organizational, and educational psychology and, in doing so, provide a comprehensive picture of the predictive power of interests across different domains and suggest promising areas for advancing the psychology of interests.

However, the specific impact of peer assessment on economic students' achievement in senior secondary schools in Jos South, Plateau State, Nigeria, remains largely unexplored. This study aims to fill this research gap by investigating the effect of peer assessment on economic students' interest and achievement in Jos South, Plateau State, Nigeria. By examining the potential benefits of peer assessment in the local context, the findings of this study can contribute to the improvement of economics education and inform instructional practices in Jos South and beyond.

The problem addressed in this study is the perceived disinterest and low achievement levels of economic students in senior secondary schools in Jos South, Plateau State, Nigeria. Economics is often perceived as a challenging and abstract subject, leading to a lack of motivation and engagement among students. Traditional assessment methods may not effectively capture students' understanding and may not promote active learning. Therefore, there is a need to investigate the potential impact of peer assessment of economic students on achievement in order to address these challenges and enhance their learning outcomes.

Research question

1. What is the different in achievement mean scores of economic students taught using peer assessment and those taught using conventional method?

Objective

1. To compare the achievement mean scores of economic students who participate in peer assessment with those who do not.

Hypothesis

1. There is no significant different in achievement mean scores of economic students taught using peer assessment and those taught using conventional method.

Empirical Review

Ogbodo, Agwagah and Ozomadu (2024) studied the effects of peer-assessment technique on students' academic achievement and interest in Mathematics in Upper Basic Schools II in Enugu North Local Government Area of Enugu State. The study adopted a Quasi Experimental Research Design and used the pretest – posttest non-randomized control group design. The area covered by this study is Enugu Education Zone of Enugu State. This education zone consists of Enugu East, Enugu North and Isi-uzo Local Government Areas of Enugu State. The population of the study consisted of all the Upper Basic School Two (UBSII) students in Enugu North Local Government Area of Enugu State numbering 5,628 (male = 2,492 and female =3,136). A sample of 120 Upper Basic School II (UBSII) students (58 males and 62 females) was used for the study. A multi-stage sampling technique to draw the sample for the study. The data was analyzed using mean, standard deviation and analysis of covariance (ANCOVA). The result revealed that peer assessment, which is a method of assessment whereby learners are allowed to assess their peers and give feedback based on a given rule had significant effect on students' academic achievements and interest in mathematics. The study also revealed that peer assessment method is significant in enhancing students' academic achievement in mathematics. The study further indicated that peer assessment in enhancing male and female students' interest in mathematics does not differ significantly. Based on the findings of this study, it could be concluded that when Peer Assessment is properly used by teachers, the academic performance and achievement of the students will not only improve but it can also enable the students to better understand and develop keen interest in the contents of the subject. Proper understanding and interest in the contents of the subject will enable the students not only to perform better but enhance academic achievement. The study recommended that peer assessment strategy should be used by teachers in the teaching and assessment of student in mathematics.

Shao, Kang, Lu, Zhang and Li, (2024) investigated how peer relationships affect junior high school students' academic achievement through the chain mediating roles of learning motivation and learning engagement, employing the self-system model of motivational development as the theoretical framework. In January 2024, 717 participants were selected from two middle schools in eastern China (mean age = 13.49 years, SD = 0.5). The data analysis in this study was performed using the structural equation model (SEM) in AMOS 24.0 and SPSS 24.0. The results showed that peer relationships were directly and significantly related to junior high school students' academic achievement, and that peer relationships were indirectly and positively related to junior high school students' academic achievement via learning motivation and learning engagement respectively. The results also revealed a significant indirect and positive relationship between peer relationships and junior high school students' academic achievement, mediated by the sequential mediating roles of

learning motivation and learning engagement. Moreover, the path “peer relationship→learning→motivation→academic achievement” has the strongest indirect effect. For junior high school students to achieve academic success, the appropriate interventions should be implemented to improve peer relationships, learning motivation, and learning engagement.

Methodology

This study adopted the quasi-experimental research design, incorporating pre-test and post-test and non-randomized control group. Quasi-experimental designs identify a comparison group that is as similar as possible to the treatment group in terms of baseline (pre-intervention) characteristics. The population for the study consisted of all senior secondary two economics students in government owned senior secondary schools in Jos south Local Government Area of Plateau State. The population is made up one hundred and fifty (150) of male and female in two government secondary schools that have reached SSII. The sample for the study was made up of 89 students from two public secondary schools in Jos South Local Government Area, Plateau state. One intact arm was used in each of the selected schools for both control and experimental group. For the purpose of this study, public secondary schools in Jos South were used. This is because they tend to have more harmonized program which is uniformly coordinated. The two schools also have closely related history and same characteristics. Two senior secondary schools were randomly selected using ‘balloting method’ from the area of study. In each school selected intact class was used. And the two schools were divided into experimental and control groups using odd and even number method where the odd number school becomes the control group while the even number school becomes the experimental school.

The instrument used in this study was Economics Achievement Test (EAT). The instrument was used to measure the academic achievement of the students under study. The scores of the first and second test were compared to ascertain the reliability of Economics Achievement Test (EAT) instrument. From the outcome of the analysis, it can be observed that the test and retest scores of students under study was 0.781 which indicates a high reliability index. As such, the instrument Economics Achievement Test (EAT) was considered to be reliable. The data collected for this study were analyzed using various statistical tools. The data collected was analyzed using mean and standard deviation to answer the research question and inferential statistics of Analyses of Covariant (ANCOVA) was used to test all the hypotheses.

Results

Research Question: What is the different in achievement mean scores of economic students taught using peer assessment and those taught using conventional method?

To answer the research question, the post-test scores of students for EIS in the experimental and control groups were subjected to descriptive statistics in form of Means and Standard Deviations.

Table 1

Analysis of Post-test Means and Standard Deviations Scores for EIS in the Experimental Group of male and female students.

	Group	N	Mean	Std. Deviation	Std. Error Mean	Mean Difference
Post-test	Experimental	46	32.57	4.750	.700	7.844
EIS	Control	43	24.72	3.383	.516	

Table 1 revealed that the post-test means and standard deviations of students for EIS scores of experimental groups were 32.57 and 4.750 while that control group were 3.383 and 3.383. The mean score difference was 7.844 in favour of experimental group.

Hypothesis

Ho: There is no significant difference in achievement mean scores of economic students taught using peer assessment and those taught using conventional method.

To test hypothesis, the scores of experimental and control groups were subjected to Analysis of Covariance (ANCOVA). The result is presented Table 3.

Table 2

ANCOVA Analysis of the Post-Test Mean Scores for EIS of the Experimental and Control Groups

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1367.927 ^a	2	683.963	39.330	.000
Intercept	196.921	1	196.921	11.323	.001
PreEIS	.377	1	.377	.022	.883
Group	1341.260	1	1341.260	77.126	.000
Error	1495.579	86	17.390		
Total	76557.000	89			
Corrected Total	2863.506	88			

R Squared = .478 (Adjusted R Squared = .466)

Table 2 revealed that the F-value obtained was 77.126; adjusted R Squared observed was 0.466 and the p-value of 0.000 was observed. Since the obtained p-value of 0.000 is less than the alpha value of 0.05, thus the study rejected the null hypothesis that says there is no

significant different in achievement mean scores of economic students taught using peer assessment and those taught using conventional method. The decision implies that there is a significant difference in achievement mean scores of economic students taught using peer assessment and those taught using conventional method.

Discussion of Findings

The findings of this research indicated there is significant different in achievement mean scores of economic students taught using peer assessment and those taught using conventional method in favour of experimental group. This indicated that treatment has effect on students' achievement mean scores of economic. The result agreed with that of Alade et al. (2014), which focused on the effect of Peer- Assessment Strategy on secondary school students' achievement in Economics subject. Three hypotheses directed the focus of the study. The experimental research design was employed, data were analyzed using both descriptive and inferential statistical tools. Findings from analysis revealed that there is significant difference in the mean achievement scores of students taught with Peer-Assessment Strategy ($t = 44.017$, $p = 0.00$) while there is no significant difference in the mean achievement scores of students taught without Peer-Assessment Strategy, ($t=1.135$, $p = 0.282$). The result also was in line with that of De-Armas et al. (2023), this study explores the use of peer assessment in mathematical problem-solving activities, focusing on the assessment process. The research involved future Secondary mathematics teachers solving open-ended problems individually and assessing a classmate's answer in pairs. The result showed that assessors were strongly attached to their own solutions, influencing the assessment process. The main difference between the two pairs was the focus on assessing resolution and errors, while the discussion focused on giving numerical grades.

Conclusion and Recommendations

This study examined the effect achievement mean scores of economic students who participate in peer assessment with those who do not. The data collected was analyzed using mean and standard deviation to answer all the research questions and inferential statistics of Analyses of Covariant (ANCOVA) was used to test the hypothesis. The result of the findings indicated thatthere is significant different in achievement mean scores of economic students taught using peer assessment and those taught using conventional method in favour of experimental group.

Based on the findings of this study, it can be concluded peer assessment improves students' achievement in economics of students under study. The study recommended that Peer-Assessment Strategy is one of the best teaching and assessment method for teachers to improve students' academic achievement in Economics subject. Thus, there is need for additional qualifications and further training for teachers. Peer-Assessment should be incorporated in the curriculum of teacher training institutions to promote achievement of both male and female students.

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ASSESSMENT OF THE METHOD OF ENGAGING STUDENTS WITH INDIVIDUAL DIFFERENCES IN ECONOMICS CLASS IN SECONDARY SCHOOL IN BOKKOS LOCAL GOVERNMENT AREA, PLATEAU STATE

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Abstract

This study assessed the methods for engaging secondary school students exhibiting individual differences in Economics within Bokkos Local Government Area (LGA), Plateau State. The specific objectives were to identify the types of individual differences prevalent in Economics classes, evaluate the effectiveness of current teaching methods, and propose actionable strategies for instructional improvement. Utilizing a mixed-methods research design, the study integrated quantitative surveys with qualitative interviews and classroom observations to gather comprehensive data from a stratified sample of 150 students and 30 teachers. Quantitative data were analyzed using descriptive and inferential statistics via SPSS, while qualitative data were subjected to thematic analysis. The findings revealed that while educators recognize diverse learner needs, traditional lecture-based instructional formats dominate, largely failing to accommodate variations in learning styles (40%) and academic achievement levels (30%). Significant constraints included large class sizes, resource deficits, and a lack of specialized teacher training. Consequently, the study recommends institutionalized ongoing professional development in differentiated instruction, curriculum adjustment toward student-centered practices, and strategic integration of ICT tools to foster an inclusive learning environment.

Keywords: Individual Differences, Differentiated Instruction, Student Engagement, Economics Education, Inclusive Pedagogy, Bokkos LGA.

Introduction

In any secondary educational ecosystem, classrooms are inherently heterogeneous spaces where students exhibit an extensive array of individual differences that fundamentally dictate their learning trajectories and scholastic outcomes. These human variations span distinct cognitive capacities, divergent learning style preferences, asymmetric prior knowledge bases, sociocultural backgrounds, and unique affective interests (Tomlinson, 2017). Deciphering and adjusting for these differences are a foundational prerequisite for effective pedagogy, enabling educators to design instructional environments that equalize learning access for every student.

According to Gardner's (2018) theory of multiple intelligences, human cognitive processing is multimodal; while certain learners maximize comprehension through visual-spatial tools, others require kinesthetic engagement, collaborative social dialogue, or auditory processing. Empirically, accommodating these distinct student profiles directly stimulates learner motivation, optimizes cognitive retention, and nurtures an equitable, supportive environment where all students feel validated (Dunn & Dunn, 2018). Within this purview, differentiated instruction functions as a cornerstone of inclusive education, systematically

engineering content, process, and product delivery to encompass mainstream learners alongside those navigating learning difficulties or socio-economic disadvantages (Hall et al., 2019).

The imperative for instructional differentiation is exceptionally acute in disciplines like Economics. Economics requires secondary school students to manipulate abstract macroeconomic models, interpret complex statistical charts, and apply theoretical principles (such as scarcity, opportunity cost, and market equilibria) to real-world scenarios. When taught via rigid, monolithic instructional designs, these abstract concepts frequently trigger cognitive overload and student disengagement.

Despite the recognized merits of classroom differentiation, educators working in marginalized, under-resourced jurisdictions like Bokkos Local Government Area (LGA) in Plateau State encounter systemic barriers to implementation. These operational constraints include a pervasive lack of professional development, overcrowded classrooms, and severe deficits in basic instructional media and technological infrastructure. Confounded by these systemic deficiencies, many secondary school teachers default to teacher-centric, passive lecture methods that fail to engage diverse learners. This pedagogical mismatch triggers academic underperformance and drives vulnerable student populations to disengage entirely from the discipline. Therefore, this study systematically investigates these classroom dynamics in Bokkos LGA to provide empirical clarity and offer data-driven strategies to optimize instructional engagement in Economics.

Aim and Objectives of the Study

The primary aim of this study is to assess the methods used to engage secondary school students with individual differences in Economics within Bokkos LGA. The specific operational objectives are to:

1. Identify the specific types and distribution of individual differences present in senior secondary Economics classes.
2. Evaluate the pedagogical effectiveness and structural limitations of current teaching methods relative to student differences.
3. Formulate and propose evidence-based strategies to improve student engagement and inclusive instructional delivery.

Research Questions

1. To provide empirical direction for the study, the following research questions were answered:
2. What are the prevalent individual differences characterizing secondary school students in Economics classes within Bokkos LGA?
3. How effective are the currently deployed teaching methods in accommodating these individual differences?

The Concept of Individual Differences in Learning

Individual learning differences refer to the systematic variations among students regarding how they acquire, process, organize, and retrieve academic information within

classroom settings. These characteristics are broadly classified into cognitive, emotional, and social dimensions.

Cognitive Differences: These represent variations in internal mental processes, including working memory capacity, information processing speed, perception, and problem-solving modalities. Within the context of Economics education, cognitive variations determine how effectively a student interprets analytical data; for instance, a student with highly developed visual-spatial processing may easily grasp supply and demand curves, whereas a student with strong logical-mathematical or verbal recall might excel in narrative economic analysis and theoretical evaluations. Aligning teaching strategies with these cognitive configurations directly improves learning outcomes (Dunn & Dunn, 2018; Schunk et al., 2020).

Emotional Differences: Student affect—specifically emotional intelligence, intrinsic motivation, and stress coping mechanisms—dictates how students manage academic anxiety, engage in collaborative peer tasks, and sustain focus through challenging materials (Tomlinson, 2017).

Social Differences: These encompass the student's broader sociocultural ecology, including socio-economic status, parental education level, language proficiency, and cultural backgrounds. These factors form the lenses through which students perceive the functional utility of education (Wang et al., 2018). When teachers purposefully acknowledge and validate these overlapping cognitive, emotional, and social student variables, they dismantle instructional barriers and create an inclusive classroom environment where all students feel a sense of belonging.

Conceptualizing Teaching Methods in Economics

Selecting an appropriate teaching methodology is a primary driver of student engagement, especially when dealing with abstract economic principles.

Differentiated Instruction

Differentiated instruction requires teachers to proactively modify content access, process activities, and final products to match students' readiness levels and learning preferences (Tomlinson, 2017). Instead of relying on a single lecture format, a differentiated Economics classroom incorporates a variety of instructional media, such as graphical models, kinesthetic market simulations, and tiered group assignments. For example, when teaching market structures, an instructor might divide the class into flexible learning groups: one group analyzes numerical cost data, another constructs visual diagrams of monopolistic markets, and a third participates in structured role-playing simulations of corporate pricing behaviors.

Cooperative Learning

Cooperative learning emphasizes structured peer collaboration to achieve shared academic goals. By working together in heterogeneous teams, students discuss complex concepts, challenge misconceptions, and co-construct understanding. Empirical evidence confirms that cooperative tasks significantly deepen comprehension of complex economic theories by encouraging meaningful peer dialogue (Kourilsky, 2020). A clear example is the jigsaw technique, where individual students cultivate expertise on specific economic sub-topics (e.g., fiscal policy tools) and return to teach their home group members. This

instructional approach builds personal accountability, sharpens communication skills, and leverages peer support to aid lower-achieving students.

Methodology

This study employed a mixed-methods research design, concurrently integrating quantitative and qualitative research paradigms to investigate classroom engagement strategies within Bokkos LGA. The quantitative component used descriptive surveys to capture statistical trends regarding teachers' and students' perceptions of instructional efficacy. The qualitative component used semi-structured interviews and structured classroom observations to uncover the contextual constraints and operational realities shaping classroom dynamics. This mixed-methods approach facilitates data triangulation, mitigating mono-method bias and yielding a deeper, more comprehensive analysis of the educational phenomenon (Creswell & Plano Clark, 2018).

The target population comprised all senior secondary school Economics teachers and students operating within Bokkos LGA, Plateau State. These participants were selected because they are directly involved in daily classroom instruction, ensuring relevant and practical insights. To ensure representative sampling across the educational landscape, a stratified random sampling technique was utilized. The sample was stratified based on institutional type (public versus private secondary schools) and teacher professional experience. Within each stratum, simple random sampling was used to select individual participants, minimizing selection bias and increasing the generalizability of the findings (Creswell, 2014). The final sample size consisted of 150 students and 30 Economics teachers.

A preliminary pilot study was conducted in a separate local government area with a small sample of teachers and students who were not part of the final study population. Data from this pilot test were used to compute internal consistency coefficients; the questionnaire achieved a Cronbach's alpha value ($\alpha \geq 0.70$), confirming acceptable empirical reliability (Tavakol & Dennick, 2011). The research instruments were administered directly by the researchers across the sampled institutions. Surveys were completed anonymously to ensure data privacy and promote candid responses. Semi-structured interviews were recorded with permission, and classroom observations were completed systematically during scheduled class times. Quantitative data were coded and entered into Statistical Package for the Social Sciences (SPSS) software to compute descriptive statistics (frequencies, percentages, and mean scores) and inferential metrics. Qualitative data from interviews and observations were transcribed and analyzed using thematic analysis, tracking recurring patterns, open codes, and overarching themes (Braun & Clarke, 2006).

Results

Prevalent Individual Differences

Data addressing Research Question 1 regarding the distribution of learner differences are presented in Table 1.

Table 1: Prevalent Individual Differences Among Students in Economics Classes

Individual Differences		Percentage (%)	Observed Classroom Indicators / Examples
Learning Styles		40%	Visual, auditory, and kinesthetic processing variations.
Academic Levels	Achievement	30%	Simultaneous presence of high, average, and low achievers.
Socio-economic Backgrounds		20%	Disparate family income levels and home learning support.
Language Proficiency		15%	Varied fluency and comprehension in English instruction.
Special Educational Needs		10%	learning disabilities.

Efficacy of Current Teaching Methods

Data addressing Research Question 2 regarding the instructional effectiveness of existing methods are detailed in Table 2.

Table 2: Effectiveness of Current Teaching Methods in Addressing Individual Differences

Teaching Method	Mean Score (out of 5.0)	Identified Strengths	Instructional	Observed Weaknesses	Structural
Lecture Method	2.5	Delivers systematic, clear verbal explanations.		Fosters low interaction and minimal student engagement.	
Group Work / Discussions	3.8	Promotes collaborative peer learning and support.		Highly time-consuming; uneven student participation.	
Use of Visual Aids	3.2	Enhances conceptual clarity and understanding.		Severely limited by resource deficits in schools.	
Interactive Technology	4.0	Strongly engages students; supports targeted learning.		Hindered by technical failures and a lack of training.	
Hands-on Activities	3.5	Solidifies practical, real-world understanding.		Difficult to execute consistently in large classes.	

Stakeholder-Suggested Strategies

Data addressing Research Question 3 regarding recommended interventions to improve classroom engagement are structured in Table 3.

Table 3: Suggested Strategies to Enhance Student Engagement

Proposed Strategy	Intervention	Frequency (%)	Hypothesized Impact	Classroom
Integration of Technology	Interactive	50%	Cultivates engagement; multimodal pathways.	higher supports
Systematic Instruction	Differentiated	40%	Dynamically tailors lessons to individual student needs.	
Teacher Development	Professional	35%	Equips educators to manage classroom diversity.	
Reduction of Class Sizes		30%	Facilitates individualized attention.	focused, student
Expanded Cooperative Work	Group	45%	Drives peer-led learning and collaborative interactions.	

Discussion of Findings

The empirical findings from this study show that secondary school Economics classrooms in Bokokos LGA are deeply heterogeneous spaces, characterized by distinct variations in student learning styles (40%) and academic achievement levels (30%). These baseline statistics reinforce the argument that uniform, teacher-centric instructional models are structurally inadequate for secondary education. When an educator treats a classroom as a monolithic group, they overlook the learning needs of visual, auditory, and kinesthetic learners, as well as the unique requirements of students experiencing socio-economic disadvantages or language proficiency gaps. Furthermore, the presence of students with special educational needs (10%) highlights the need for inclusive instructional practices.

A clear mismatch emerges when comparing the diversity of the student population with the effectiveness ratings of current teaching methods. The traditional lecture method—which qualitative data show remains the most common instructional format due to overcrowding and limited resources—received a low efficacy score ($M = 2.5$). While the

lecture format can be efficient for delivering content to large groups, it does little to engage students or help them process abstract economic concepts.

Conversely, student-centered approaches such as interactive technology ($M = 4.0$) and cooperative group work ($M = 3.8$) achieved high efficacy scores. These findings align with Gardner's multiple intelligences theory and constructivist principles, which show that students learn more deeply when they actively process content and collaborate with their peers. However, classroom observations revealed that these effective strategies are rarely used due to technical issues, power supply instability, and a lack of instructional resources.

To address these challenges, stakeholders strongly recommended the integration of interactive technology (50%) and the systematic use of differentiated instruction (40%). However, implementing these strategies requires a well-trained teaching workforce. The frequency of requests for targeted professional development (35%) indicates that many teachers currently lack the practical skills needed to implement differentiated instruction in their classrooms.

These findings show that improving student engagement in Economics requires a coordinated approach. Rather than relying on isolated interventions, schools must combine ongoing teacher training with improved access to digital resources and structural changes, such as reduced class sizes and increased opportunities for cooperative learning.

Conclusion

This study shows that while secondary school Economics teachers in Bokkos LGA recognize the diverse needs of their students, significant barriers remain to implementing effective engagement strategies. Classrooms feature a wide range of cognitive, emotional, and social differences, yet conventional, lecture-based instruction remains the dominant teaching method. This pedagogical disconnect limits student participation and makes it more difficult for learners to understand complex economic principles.

To close this gap, instructional practices must shift toward flexible, inclusive models like differentiated instruction and cooperative learning. Additionally, integrating educational technology and interactive media provides important pathways for personalizing instruction. For Economics education in Bokkos LGA to become more effective and equitable, schools must move away from rigid, one-size-fits-all teaching methods and invest in systematic teacher training and improved classroom resources.

Recommendations

To address the deficiencies identified in the reviewed report, the study offers the following recommendations:

1. Institutionalize Professional Development: Ministries of education and school boards should launch ongoing professional training programs focused on differentiated instruction and inclusive teaching practices. These sessions should provide teachers with practical strategies for identifying learning styles and modifying their daily lesson plans accordingly.
2. Revise and Flexibly Adapt the Curriculum: The secondary school Economics curriculum should be updated to explicitly encourage student-centered instructional methods. Curriculum

guidelines should include practical recommendations for project-based learning, case studies, and real-world economic applications to help make abstract concepts more accessible.

3. Provision Digital Infrastructure and ICT Support: Government agencies and school administrators must invest in basic classroom technology, including educational software and interactive digital platforms. This infrastructure must be paired with technical training for teachers to ensure digital tools are effectively integrated into daily lessons.

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