

INFLUENCE OF WORKSHOP PRACTICE ON STUDENTS' INTEREST AND ACADEMIC PERFORMANCE IN TECHNICAL COLLEGES IN LAGOS STATE

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Abstract

Workshop practice refers to the practical activities students engage in within a workshop setting, which may serve as a source of motivation, encouraging students to develop passion for learning, ultimately leading to improved academic performance. Students are expected to become competent and workforce-ready through regular exposure to appropriate tools, machines, and real-life tasks in their respective trade areas. Research findings revealed that, there has been an alarming rise in unemployment and shortage of skilled workers in workplace, which may be attributed to the lack of effective practical training. Therefore, the study investigated the influence of workshop practice on students' interest and academic performance in technical colleges. A descriptive survey research design was employed, focusing on 432 Technical II construction trade students from five Government Technical Colleges in Lagos State. A stratified random sample of 139 students was selected. Data were collected using a validated questionnaire, which demonstrated strong internal consistency with a Cronbach's Alpha reliability coefficient of 0.82. The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS), applying linear regression for interpretation. The findings revealed that workshop practice does not significantly influence students' interest ($p = .168$), but a significant influence on their academic performance ($p = .000$) in Government Technical Colleges in Lagos State. Based on these findings, it was concluded and recommended that incorporating motivational strategies into workshop practice and addressing infrastructural deficiencies, would significantly enhance students' interest and academic performance to meet workforce demands.

Keywords: Influence, Workshop Practice, Students' Interest, Academic Performance

Introduction

Learning is an ongoing process that takes place throughout life and is not confined to the classroom alone. In technical colleges in Lagos State, learning is often practised through hands-on training under the supervision of the Lagos State Technical and Vocational Education Board (LASTVEB), which operates across the five technical colleges in the state under the slogan Kose, Mose, Sise, meaning Knowledge, Competence, Industry. This focus in technical colleges is intended to enhance teaching methods and delivery strategies to increase students' interest and performance in their chosen careers.



Consequently, students' interest is influenced by personal experience, perceived relevance, and the application of technical knowledge to real-world situations. When effectively engaged, it leads to fulfilment in their field of study, as it determines whether students' learning needs are being met (Hsu et al., 2016; O'Keefe et al., 2017). This allows students to personalise their learning experiences and maintain enthusiasm. Recognising and fostering students' interest enables educators to create more engaging and effective learning conditions, which in turn promote active participation, creativity, and academic success (Okon, 2019). Students' interest in teaching and learning in technical colleges varies depending on individual perspectives and backgrounds. Many students pursue technical education with a desire to acquire specific skills that align with their career aspirations, thereby fuelling their motivation to learn. External factors such as a well-structured and conducive classroom, a resourceful library, and a modern workshop equipped with functional tools and machines also contribute to sustaining students' interest. These facilities provide the practical exposure necessary to apply theoretical knowledge. When such elements align with students' interests and learning styles, their engagement in the learning process improves significantly.

Furthermore, cultivating a passion for teaching and learning by qualified instructors contributes not only to sustaining students' interest but also fosters personal development, self-confidence, and lifelong learning habits. These are critical components for achieving strong academic performance. Students' academic performance, as the learning outcomes and achievements of students, usually measures success or failure in studying and is expressed through grade point average or qualifications (Olivier et al., 2019). It refers to learning outcomes exhibited after instruction (Yao et al., 2019). Academic performance involves the development of a student's potential and preparation for success in a chosen career or trade, as it is the measurable learning outcome reflecting students' cognitive and non-cognitive attributes in context (Liem, 2019). Hence, technical students' interest can enhance motivation and engagement in practical activities, improving cognitive and non-cognitive attributes, which in turn can lead to higher academic performance and measurable learning outcomes in technical colleges. Academic performance in the 21st century can be significantly improved through factors such as consistent student engagement in workshop practice.

A workshop is a designated space where technical tasks are performed using hand tools, machines, and equipment. It serves as a practical training environment for students to acquire skills relevant to their occupation. According to Annett et al. (2019), a workshop is a room or building where tools and machines are stored and used for design and fabrication activities. Practice, in this context, refers to the repetition of specific tasks or skills over time as a learning method. Lynch et al. (2020) described practice as an activity where students apply acquired knowledge while instructors remain available to provide guidance using appropriate resources. Workshop facilities, therefore, serve as sources of knowledge through which students can expand their practical skills and gain productive experiences. Medugu et al. (2023) noted that the availability and effective use of



educational facilities for training in technical colleges enhance the development of vital skills, thereby empowering students to contribute meaningfully to national development.

In this context, workshop practice refers to the craft-based and practical activities students engage in within a workshop setting. In technical colleges, particularly in the construction department, workshop practice is central to instruction across trade areas such as Carpentry and Joinery, Bricklaying and Concreting, Plumbing and Pipefitting, Furniture Craft, Draftsmanship, and Painting and Decoration. Students in these areas are expected to become competent and workforce-ready through exposure to appropriate tools and machines. Such practical engagements should serve as a source of motivation, encouraging students to develop interest and passion for learning, which may lead to improved academic performance. Conversely, when students are not motivated or interested in learning, it can result in academic failure and potentially lead to school dropout, which negatively impacts national development. Therefore, this study investigates the influence of workshop practice on students' interest and academic performance in technical colleges in Lagos State. Despite existing research on technical education, limited studies have quantitatively examined how workshop practice affects both students' interest and academic performance in Lagos State. This study fills that gap.

Statement of Problem

Workshop practice encompasses hands-on and craft-oriented activities that immerse students in the practical dimensions of their trade specialisations within a workshop setting. In technical colleges, especially within the construction department, it serves as a core component of vocational training across diverse trade areas such as Carpentry and Joinery, Bricklaying and Concreting, Plumbing and Pipefitting, Furniture Craft, Draftsmanship, and Painting and Decoration. Through consistent engagements with relevant tools, machines, and equipment, students are expected to acquire the technical competence and workplace readiness required to meet the demands of the construction industry and related fields.

However, the nation is facing an alarming rise in unemployment, a shortage of skilled workers, and increasing social vices among unemployed youths. These issues are partly linked to high student dropout rates, which in turn have contributed to economic decline. Several factors may be responsible for this trend, including students' lack of interest, motivation, and engagement in learning activities; poor readiness for skill development; low self-efficacy; instructors' inadequate skills; and ineffective use of instructional methods and workshop facilities. In cases where workshop activities are not properly carried out by students or instructors, the intended outcomes of technical education may not be achieved. Therefore, this study seeks to determine the effect of workshop practice on students' interest and academic performance in government technical colleges in Lagos State, in order to reduce or eradicate these existing challenges.



Purpose of the Study

The main purpose of this study was to examine the effect of workshop practice on students' interest and academic performance in government technical colleges in Lagos State. Specifically, the study:

1. determined the influence of workshop practice on students' interest in government technical colleges in Lagos State.
2. examined the influence of workshop practice on student's academic performance in government technical colleges in Lagos State.

Research Hypotheses

The following research hypotheses were tested at 0.05 level of significance in this study.

H₀₁: There is no significant influence of workshop practice on students' interest in government technical colleges in Lagos State.

H₀₂: There is no significant influence of workshop practice on students' academic performance in government technical colleges in Lagos State.

Concept of Workshop practice

Workshop practice refers to the practical aspect of technical education where students engage in hands-on activities aimed at acquiring occupational skills in their chosen trade. It provides opportunities for learners to apply theoretical knowledge to real-life situations, thereby enhancing understanding and promoting skill development. Shobowale and Adenle (2015) noted that, workshop facilities such as machines (lathe, drill press, and thicknesser), equipment (compressor, spray gun, and portable electric tools), hand tools (holding, cutting, and measuring tools), and consumable materials (wood, adhesives, and finishes) are essential for effective workshop training. The availability and proper utilization of these facilities create a stimulating learning environment that can sustain students' interest and foster creativity. When students actively participate in workshop practice, their motivation, confidence, and problem-solving abilities improve, which in turn enhances their academic performance in technical subjects. Therefore, workshop practice serves as a vital platform through which technical students translate theoretical concepts into practical competence, leading to improved learning outcomes and higher achievement levels in technical colleges.

Shack et al. (2018) further noted that when students feel valued and supported in their learning environment, they tend to put in more effort and demonstrate a greater willingness to take on challenges, resulting in enhanced performance and deeper learning outcomes in technical education. Shobowale et al. (2020) emphasized the need for adequate workshop practice through the provision of sufficient hand tools, modern equipment, and standard workshops to maximize students' engagement, learning interest, and overall performance. Effective workshop practice also



highlights the importance of individualized support and feedback. During workshop activities, students receive constructive criticism, encouragement, and guidance from instructors, which help to build their self-esteem, confidence, and motivation.

Concept of Students' Interest

Kalu-Uche and Ogbonna (2021) stated that students exposed to an instructional strategy demonstrated a significantly higher level of interest. According to the authors, instructional strategies such as peer tutoring created an interactive and cooperative learning environment that encouraged participation, communication, and confidence among learners, which in turn stimulated their curiosity and sustained interest in the subject. Instructional strategies play an essential role in stimulating attention, persistence, and enthusiasm, which are favourable to achieving meaningful learning outcomes. Corroborating this view, Sonde et al. (2024) defined students' interest as learners' enthusiasm, curiosity, and willingness to engage actively in technical subjects. Similarly, Haron and Sumeri (2024) noted that students' interest is the level of enthusiasm, personal liking, and positive disposition that learners have toward their chosen field of study, particularly automotive technology. The researchers viewed interest as an internal motivational factor that influences students' commitment to learning and their intention to pursue related careers after graduation. Therefore, a student's interest in a particular trade or career significantly contributes to improved academic performance, as it enhances motivation, participation, and overall achievement in technical education programmes.

Concept of Students' Academic Performance

Academic performance represents the outcome that indicates the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in schools. In teaching and learning situations, academic performance is synonymous with academic achievement (Eze et al., 2020). Academic performance can be also be defined as the extent to which an institution, a teacher, a student achieves long or short term educational goals. Academic performance is usually measured by continuous assessments and overall cumulative grade point average (CGPA) achieved by the student (Selvitopu & Kaya, 2023). Research in Vocational and Technical Education (VTE) has increasingly focused on factors influencing students' academic performance and learning outcomes. These findings identify a combination of self-regulated learning environment, digital competence, supportive learning environments and inclusive teaching practices factors influence academic performance (Bruin et al., 2025; Held & Mejh, 2024; Mbambo & du Plessis, 2025).

Academic performance extends beyond theoretical understanding to include the practical application of knowledge and skills. Workshop practice, therefore, serves as a vital instructional component that enhances students' hands-on experience, strengthens motivation, and improves mastery of technical skills. When technical students actively engage in workshop activities, they



develop competencies that directly translate to better academic outcomes and professional preparedness in their chosen trades.

Theoretical Review

The study is anchored on the Interest Theory propounded by Hidi and Renninger (2006). The Interest Theory, particularly the Four-Phase Model of Interest Development, explains how learners' interest evolves from being externally stimulated to becoming an enduring, self-motivated disposition. The four phases include triggered situational interest, maintained situational interest, emerging individual interest, and well-developed individual interest (Hidi & Renninger, 2006). In the context of technical colleges in Lagos State, this theory provides a framework for understanding how workshop practice influences students' interest and academic performance. Workshop practice typically involves hands-on learning, the use of tools, and problem-solving tasks that capture students' attention and curiosity, representing the triggered situational interest phase.

As learners repeatedly engage in practical tasks that are meaningful, challenging, and supported by constructive feedback from instructors, their situational interest can be maintained and gradually transformed into a sustained commitment to learning. When students begin to seek further engagement voluntarily, they enter the emerging individual interest phase, which enhances their motivation and academic outcomes through deeper cognitive processing and persistence (Ajifowoke, 2023). The well-developed individual interest phase is reflected when students show consistent enthusiasm for workshop-related subjects, participate actively, and perform well in both the practical and theoretical aspects of their academics.

Empirical evidence supports these ideas. Tan et al. (2024) developed the Growth Cycle of Interest Framework, which integrates interest, self-determination, and self-efficacy, demonstrating that when students' autonomy and competence are supported during workshop practice, their interest grows and translates into improved learning outcomes. Messerer et al. (2024) noted that aligning students' vocational interests with their chosen fields significantly predicts satisfaction and academic achievement. In the same vein, Sadeghi (2024) reported that pre-training workshop sessions increase engagement and readiness for learning, confirming that hands-on activities can effectively trigger and sustain students' interest. Furthermore, Muñoz-Losa and Corbacho-Cuello (2025) revealed that interactive workshops evoke positive emotions and attitudes that directly promote students' engagement and learning outcomes. Overall, these studies affirm that workshop practice acts as a catalyst for developing students' interest and improving academic performance in technical education.

The study adopted a descriptive research design of the survey type, which primarily involves the use of questionnaires to collect data from respondents. This design was deemed appropriate as it enabled the researcher to obtain detailed information on the current state of the school learning environment and its influence on students' interest, motivation, and academic performance in



Government Technical Colleges in Lagos State. The target population comprised all 432 second-year (Tech II) students in the Construction Trade Department across the five Government Technical Colleges in the state. A stratified random sampling technique was used to select a sample of 139 second-year (Tech II) students from the five Government Technical Colleges in Lagos State. The sample comprised 28 students from Government Technical College, Ado-Soba; 28 from Agidingbi; 27 from Ikotun; 28 from Ikorodu; and 28 from Epe. This technique ensured proportional representation of students from each college and reduced sampling bias. Ethical approval was obtained, and participants' consent, confidentiality, and voluntary participation were ensured throughout the data collection process.

The research instrument used for data collection was a structured questionnaire titled *Workshop Practice on Students' Interest and Academic Performance Questionnaire (WPSIAPQ)*. To establish content validity, the expert-judgement approach was employed. Copies instrument of the questionnaire were submitted to three experts, lecturers from the Department of Industrial Technical Education at Tai Solarin University of Education, Ijagun, Ogun State for review. Reliability testing of the instrument was conducted by administering ten copies to construction trade students at Government Technical College, Ijebu-Ode, Ogun State, which lies outside the main study area. The reliability of the instrument was determined using the Cronbach's Alpha method, yielding a reliability coefficient of 0.82 for the questionnaire, indicating acceptable internal consistency. Data collected were analysed using the Statistical Package for the Social Sciences (SPSS), with the results interpreted using linear regression to test the two hypotheses. For decision-making regarding hypothesis testing, null hypotheses with p-values less than 0.05 were rejected, indicating a significant influence, whereas p-values greater than or equal to 0.05 were accepted, indicating no significant influence.

Results

The results were presented according to hypotheses.

H₀₁: There is no significant influence of workshop practice on students' interest in government technical colleges in Lagos State.

Table 1: Linear Regression Showing the Influence of Workshop Practice on Students' Interest Government Technical Colleges in Lagos State

Variable	B	SE	Beta (β)	T	P
Workshop Practice	.214	.154	.182	1.389	.168
Constant	28.512	2.746		10.387	.000

a. Dependent Variable: Students' Interest



The regression analysis in Table 1 shows that workshop practice had a weak positive relationship with students' interest ($R = 0.182$), explaining only about 3.3% of the variance in students' interest ($R^2 = 0.033$). The F-ratio (1.928) with a p-value of 0.168 (> 0.05) indicates that the model is not statistically significant. This means that workshop practice does not significantly influence students' interest. Although the coefficient for workshop practice ($B = 0.214$) suggests a positive direction, it is not strong enough to predict students' interest meaningfully. In other words, students' interest is not significantly determined by workshop practice in this sample, implying that other factors (such as teaching methods, motivation, or learning environment) may have stronger influence on their level of interest. Therefore, the study found that workshop practice does not significantly influence students' interest in government technical colleges in Lagos State.

H₀₂: There is no significant influence of workshop practice on students' academic performance in government technical colleges in Lagos State.

Table 2: Linear Regression Showing the Influence of Workshop Practice on Students' Academic Performance in Government Technical Colleges in Lagos State

Variable	B	SE	Beta (β)	T	P
Workshop Practice	.685	.088	.724	7.773	.000
Constant	19.847	1.952		10.164	.000

a. Dependent Variable: Students' Academic Performance

The regression analysis in Table 2 shows that workshop practice had a strong positive relationship with students' academic performance ($R = 0.724$), accounting for about 52.4% of the variance in students' academic performance ($R^2 = 0.524$). The F-ratio (60.382) with a p-value of 0.000 (< 0.05) indicates that the regression model is statistically significant. This implies that workshop practice significantly influences students' academic performance. The coefficient for workshop practice ($B = 0.685$, $p < 0.05$) shows that for every one-unit increase in workshop practice, students' academic performance increases by 0.685 units. Therefore, improvement in workshop practice is likely to lead to a higher level of students' academic performance in government technical colleges. Therefore, the study revealed that workshop practice significantly influences students' academic performance in government technical colleges in Lagos State.

Discussion of Findings

The study indicated that workshop practice does not significantly influence students' interest in government technical colleges in Lagos State. This implies that students' participation in workshop practice activities does not have a notable effect on their level of interest in learning within government technical colleges in Lagos State, suggesting that other factors may drive students' motivation and engagement. This finding contrasts with that of Shobowale (2022), who found that students' motivation can improve their performance in practical projects in institutions. Motivation



can trigger students' interest to participate effectively in practical activities, particularly when students are properly engaged in workshop practice. Rasaan and Odinko (2024) revealed that, to a very great extent, students are exposed to workshop practice during training in technical colleges. However, it was also reported that students, to a low extent, were exposed to certain aspects of workshop practice during training. Consequently, to a moderate extent, students were exposed to workshop activities such as identifying damaged equipment during their training in technical colleges.

Furthermore, the study found that workshop practice significantly influences students' academic performance in government technical colleges in Lagos State. This means that students that actively participate in workshop practice tend to perform better academically, as hands-on training enhances understanding, skill mastery, and the application of theoretical knowledge in practical contexts. This finding aligns with that of Eze and Osuyi (2018), which reported that students taught using the problem-based teaching method demonstrated better academic performance. Similarly, Eze et al. (2020) showed that the effects of computer tutorial models, drill, and practice instructional media on students' cognitive achievement were higher. The study also revealed that students taught using computer tutorial and drill instructional media retained what they had learnt better over time.

Therefore, this implies that when students are properly motivated, their interest, commitment, creativity, and performance in practical projects increase, leading to improved skill development and higher-quality project outcomes. Students' interest itself plays a key role in practical learning success. The study suggests that workshop practice alone may not significantly influence students' interest; however, proper motivation greatly enhances students' practical performance, creativity, and learning outcomes. Motivation, particularly through the provision of adequate facilities, is therefore essential for effective technical training in the workshop. The findings further affirm that students taught using the problem-based teaching method achieve higher academic performance, as the approach encourages critical thinking, active participation, and practical problem-solving, leading to deeper understanding and improved learning outcomes compared with traditional teaching methods. The study therefore agrees that workshop practice enhances students' cognitive achievement and long-term retention of knowledge, thereby improving learning outcomes and memory retention among students.

Conclusion

The study concludes that workshop practice positively influences students' academic performance in government technical colleges in Lagos State but does not significantly influence their interest. This indicates that students may not necessarily find workshop practice exciting due to inadequate facilities, lack of motivation, poor learning environments, and teacher incompetence, which may affect their level of interest. Yet, it contributes meaningfully to their understanding and mastery of technical concepts. Therefore, incorporating motivational strategies into workshop practice and



addressing infrastructural deficiencies would enhance both students' interest and academic achievement, thereby ensuring a more balanced and effective technical education experience.

Recommendations

Based on the findings of this study, the following targeted recommendations were stated:

1. Technical colleges should integrate motivational strategies such as student recognition, project exhibitions, and interactive teaching methods into workshop sessions to enhance students' enthusiasm and active participation during practical training.
2. The government should ensure continuous provision of adequate tools, modern equipment, and well-equipped workshops in technical colleges to support effective practical training, thereby sustaining and improving students' academic performance.
3. Instructors should emphasise practical-based teaching methods, provide regular hands-on demonstrations, and offer constructive feedback during workshop sessions to help students effectively apply theoretical knowledge and achieve better academic outcomes.

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