

‘Students’ Perception of Improvised Instructional Materials and Their Influence on Learning Outcomes in Financial Accounting among Ss1 Students in Aba Metropolis

Dr Francisca Ifeoma Ehiemere^{1*}, Edu Uju Juliet², Nnah Chinedu Felix³

^{*1} Department of Teacher Education National Institute For Nigerian Languages, Aba

²⁻³ Department of Business Education National Institute For Nigerian Languages, Aba

Corresponding Author: Dr Francisca Ifeoma Ehiemere

Department of Teacher Education
National Institute For Nigerian
Languages, Aba

Article History

Received: 03 / 02 / 2026

Accepted: 04 / 03 / 2026

Published: 14 / 03 / 2026

Abstract: The study examined the influence of students’ perception of improvised instructional materials on learning outcomes in Accounting among SS1 students in Aba metropolis, Abia State. The study was guided by the objectives of determining the extent to which students’ perception, level of involvement, classroom environment, and school support influence learning outcomes when improvised instructional materials are used. The study adopted a descriptive survey design, targeting a population of 2,450 SS1 Accounting students across public and private secondary schools in Aba metropolis. A sample of 245 students was drawn using stratified random sampling, ensuring representation based on school type and gender. Data were collected through a structured questionnaire to measure students’ perception and involvement, and an Accounting Achievement Test (AAT) to assess learning outcomes. The instruments were validated by experts in Business Education and Educational Measurement and tested for reliability using Cronbach Alpha and test-retest methods, yielding coefficients above 0.70. Data analysis involved descriptive statistics (mean, frequency, and percentage) and inferential statistics (Pearson Product Moment Correlation) at a 0.05 significance level. Findings revealed that students generally perceive improvised instructional materials positively and are actively involved in their use. There was a significant positive relationship between students’ perception, level of involvement, and learning outcomes in Accounting. Additionally, classroom environment and school support were identified as critical factors enhancing the effectiveness of improvised materials. The study concluded that students’ perception and active engagement with improvised instructional materials significantly improve learning outcomes. It recommended that teachers integrate improvised resources into Accounting lessons, schools provide supportive learning environments, and policymakers encourage teacher training on the effective use of locally available instructional materials. The study contributes to knowledge by demonstrating that contextual, hands-on instructional resources can enhance academic achievement, particularly in resource-limited settings.

Keywords: *Students’ perception, Improvised instructional materials, Learning outcomes, Accounting, Classroom environment, School support.*

How to Cite in APA format: Ehiemere, F. I., Juliet, E. U., Felix N. C. (2026). ‘Students’ Perception of Improvised Instructional Materials and Their Influence on Learning Outcomes in Financial Accounting among Ss1 Students in Aba Metropolis. *IRASS Journal of Multidisciplinary Studies*, 3(3), 28-39.

Introduction

Education plays a vital role in national development, and the quality of teaching methods and instructional resources largely determines the effectiveness of learning outcomes among students. In secondary schools, instructional materials serve as essential tools that facilitate understanding, retention, and application of knowledge. When such materials are unavailable, expensive, or insufficient, teachers often resort to improvisation in order to make instruction meaningful and accessible. Improvised instructional materials refer to locally produced or adapted teaching aids designed to replace or supplement standard instructional resources. These materials are increasingly important in developing countries where schools face shortages of educational facilities and equipment.

Studies has shown that the use of improvised instructional materials enhances students’ academic performance and understanding of subject concepts. For instance, studies conducted in Nigerian secondary schools found that students taught with

improvised instructional materials performed significantly better than those taught using conventional lecture methods (Daramola et al., 2023; Machika et al., 2024). Similarly, other studies revealed that the use of improvised materials improves students’ achievement and interest in learning by making lessons more practical and engaging (Abdulhadi & Ibrahim, 2024; Lilian et al., 2024). All these findings suggest that instructional improvisation is not merely a substitute for unavailable resources but a pedagogical strategy capable of enhancing learning outcomes.

Despite these benefits, the effectiveness of improvised instructional materials depends largely on students’ perception of them. Educational psychology emphasizes that learners’ perception influences their motivation, engagement, and academic success. When students perceive instructional materials as clear, relevant, and helpful, they are more likely to participate actively in the learning process and achieve better outcomes. Conversely, if they view such materials as confusing, irrelevant, or poorly designed, learning may be hindered regardless of the teacher’s effort.



Therefore, students' perception becomes a crucial variable in determining the success of instructional improvisation.

One important factor shaping students' perception of improvised materials is their clarity and relevance to the lesson. Materials that are well designed, simple to understand, and directly linked to curriculum content enhance comprehension and retention. Empirical evidence indicates that students' performance improves when instructional aids clearly demonstrate concepts and simplify abstract ideas (Ogunsanwo et al., 2022; Abdulhadi & Ibrahim, 2024). In Financial Accounting, where students must understand principles, procedures, and calculations, the clarity of instructional materials becomes particularly important for meaningful learning.

Another factor influencing students' perception is their level of involvement in the use of instructional materials. Educational research consistently shows that active participation enhances learning outcomes. When students manipulate, observe, or interact with teaching aids, they develop deeper understanding and stronger cognitive connections. Studies on activity-based and resource-supported learning confirm that learner engagement significantly improves academic performance and retention (Oribhabor, 2020; Daramola et al., 2023). Thus, improvised instructional materials may yield better outcomes when they encourage student participation rather than passive observation.

The classroom environment and school support also play an essential role in shaping students' perception of instructional materials. A conducive learning environment, adequate space, teacher preparedness, and institutional support influence how students respond to teaching strategies. Research indicates that schools that support the production and use of instructional materials achieve improved student performance and classroom interaction (Lilian et al., 2024). When teachers are encouraged and equipped to improvise materials, students tend to perceive lessons as more meaningful and engaging.

Learning outcomes represent the measurable changes in students' knowledge, skills, and academic achievement resulting from instruction. In Financial Accounting, learning outcomes may be reflected in students' ability to understand accounting concepts, solve problems, prepare financial statements, and perform well in assessments. Previous studies have demonstrated that the use of instructional materials significantly enhances students' academic performance across subjects such as mathematics, science, and social studies (Ogunsanwo et al., 2022; Daramola et al., 2023). However, few studies have examined how students' perception of improvised materials specifically influences learning outcomes in Financial Accounting, particularly among SS1 students in urban Nigerian settings.

In many Nigerian secondary schools, including those in Aba metropolis, the shortage of standard instructional resources makes improvisation inevitable. Yet the success of such improvisation depends not only on the materials themselves but also on how students perceive their usefulness and relevance. Understanding the psychological relationship between students' perception and learning outcomes is therefore essential for improving teaching practices, enhancing students' achievement, and guiding educational policy.

It is against this background that this study seeks to examine students' perception of improvised instructional materials

and their influence on learning outcomes in Financial Accounting among SS1 students in Aba metropolis.

Constructivist Learning Theory

Constructivist Learning Theory was Proposed by Jean Piaget in the year (1973) and expanded by Jerome Bruner (1960), the Constructivist Learning Theory posits that learners actively construct knowledge through experience and interaction with their environment rather than passively receiving information. Learning is meaningful when learners relate new knowledge to prior experiences and engage with learning materials in a practical and contextualized manner.

This theory is highly relevant because the use of improvised instructional materials encourages students to interact with tangible objects, models, and locally sourced resources, helping them connect abstract accounting concepts to real-world scenarios. For instance, when SS1 students use improvised ledgers, charts, or mock financial documents, they actively construct understanding through practice rather than rote memorization. This aligns with the constructivist principle that knowledge is built through active engagement and manipulation of learning materials.

The study investigates students' perception of improvised instructional materials and their impact on learning outcomes in Accounting. Constructivist Learning Theory supports the idea that students' interaction with such materials can improve comprehension, retention, and performance. The theory justifies why perception matters: if learners perceive materials as useful and relevant, they engage more actively, which enhances learning outcomes.

Social Cognitive Theory

Social Cognitive Theory was Proposed by Albert Bandura in the year (1986), the Social Cognitive Theory emphasizes learning through observation, imitation, and modeling within a social context. The theory highlights the role of self-efficacy, motivation, and environmental influences in determining learning outcomes. Learners observe behaviors, assess the outcomes, and replicate actions if they see positive results.

Social Cognitive Theory is relevant because students' perception of instructional materials is influenced by observing peers and teachers effectively using improvised resources. When students see classmates successfully interacting with materials or teachers modeling problem-solving in Accounting, they are motivated to engage, which enhances their understanding and performance. Additionally, the theory underscores the importance of classroom environment and school support, as environmental cues shape learning behavior and outcomes.

The study examines how perception of improvised materials affects learning outcomes, which aligns with the theory's emphasis on observational learning and self-efficacy. Students who perceive materials as clear, relevant, and effective are more likely to engage confidently, apply accounting concepts correctly, and achieve better academic results. The theory explains why classroom environment and school support moderate the impact of improvised materials on learning outcomes.

Concept of Students' Perception of Improvised Instructional Materials

Students' perception refers to the way learners interpret, understand, and form opinions about learning experiences, teaching strategies, and instructional resources used in the classroom. It involves their beliefs about usefulness, clarity, accessibility, attractiveness, and effectiveness of learning materials. When applied to improvised instructional materials, students' perception focuses on how learners evaluate teacher-made or locally sourced teaching aids in supporting their understanding and engagement.

Improvised instructional materials are teacher-constructed or locally available substitutes used when standard teaching resources are scarce or unavailable. These materials may include charts, models, flashcards, locally made apparatus, community objects, recycled materials, and digital improvisations. Improvisation is particularly relevant in developing educational contexts, where access to standard laboratory equipment and teaching aids may be limited.

Educational theorists argue that learning becomes meaningful when learners interact with concrete and relatable materials. Improvised materials often reflect the learners' environment, making learning more contextual and culturally relevant. When students perceive these materials as useful, engaging, and understandable, their motivation and achievement tend to improve. Conversely, when learners view improvised materials as crude, unclear, or irrelevant, their interest and participation may decline.

Students' perception of improvised instructional materials can be examined through several dimensions firstly Perceived Relevance. Students often judge improvised materials based on how closely they relate to real-life experiences. Materials sourced from the local environment tend to enhance comprehension because learners can easily connect new knowledge with familiar objects. Contextual learning theory supports the idea that instruction grounded in students' environment improves knowledge retention.

Secondly, Perceived Clarity and Comprehensibility, Improvised materials are considered effective when they simplify abstract concepts and make lessons easier to understand. Students generally respond positively when such materials visually represent concepts that might otherwise be difficult to grasp through verbal explanation alone.

Perceived Attractiveness and Engagement is another dimension where students' perception is also influenced by the visual appeal and creativity of the materials. Attractive improvised tools can stimulate curiosity, attention, and active participation, which are essential elements of meaningful learning.

Through Perceived Effectiveness in Supporting Learning learners often evaluate instructional materials based on whether they help them remember lessons, solve problems, and perform better in assessments. When students believe improvised materials improve their academic understanding, their attitude toward the subject and the teacher tends to become more positive.

Through Perceived Teacher Competence and Innovation students may also interpret improvised materials as evidence of teacher creativity, dedication, and effort. Such perception can strengthen teacher credibility and increase learners' trust in classroom instruction. From the constructivist perspective, learning

occurs when students actively construct knowledge through interaction with materials and experiences. Improvised instructional materials promote such interaction by making lessons practical, experiential, and participatory. In resource-constrained educational systems, improvisation becomes a pedagogical necessity rather than merely an optional strategy.

Organizations such as UNESCO emphasize the importance of locally developed teaching resources in improving access and quality of education, especially in developing countries. Similarly, the OECD notes that students' perception of learning tools significantly influences engagement, persistence, and academic outcomes.

Therefore, understanding students' perception of improvised instructional materials is essential because it determines whether such materials achieve their intended educational goals. Positive perception enhances participation, motivation, and comprehension, while negative perception may limit the effectiveness of otherwise useful teaching aids.

Concept of Learning Outcomes in Accounting

Learning outcomes refer to the measurable knowledge, skills, attitudes, and competencies that learners acquire as a result of teaching and learning activities. In the context of Financial Accounting among SS1 students, learning outcomes specifically denote the level of understanding, application, analysis, and performance that learners achieve in accounting concepts, procedures, and problem-solving after instruction (Acheampong & Essuman, 2023; Ibe & Nwankwo, 2024).

Accounting, as a subject within Business Education, requires learners to understand principles of financial recording, classification, summarization, interpretation, and reporting of financial transactions. This includes competencies such as journalizing, posting to ledger, preparing trial balances, financial statements, and interpreting accounting information for decision-making (Adebayo & Onifade, 2022; Essien & Anyanwu, 2023). Learning outcomes in Accounting are therefore not limited to rote memorization but encompass higher-order skills such as critical thinking, analytical reasoning, and practical application in real-life financial contexts.

There are dimensions of Learning Outcomes in Accounting such as Cognitive Achievement which refers to the level of intellectual understanding and mastery of accounting concepts. It includes learners' ability to recall definitions, explain procedures, apply rules, and solve accounting problems correctly (Akanni & Balogun, 2022; Ibe & Nwankwo, 2024). Cognitive achievement is commonly measured using written tests, quizzes, exams, and continuous assessment scores.

Next is Skill Proficiency which in accounting, involves the learner's ability to correctly prepare financial records and statements, perform ledger postings, reconcile accounts, and use accounting tools and procedures accurately (Adeleke et al., 2023; Ogbeba & Raimi, 2024). This dimension reflects practical competence rather than just theoretical knowledge.

Attitude and Motivation toward Accounting in which learning outcomes also include students' attitudes and motivation, which influence their willingness to engage with accounting tasks. Positive learning outcomes are associated with increased interest,

confidence in solving problems, and persistence in completing accounting exercises (Olumide & Adeola, 2023).

Transfer and Application of Knowledge where effective learning outcomes in accounting are demonstrated when students can transfer classroom learning to new situations such as business simulations, personal finance decisions, and real-world accounting scenarios (Effiom & Udo, 2023; Yusuf & James, 2024). Transferability indicates deeper understanding and functional competence.

Learning outcomes help teachers, curriculum planners, and policymakers to evaluate the effectiveness of instructional strategies and curriculum design. They provide benchmarks for students' academic performance, identify areas needing remediation, and inform instructional improvements (Obe & Ehinmowo, 2023; Adeyemi & Adewale, 2024). Moreover, strong learning outcomes in accounting contribute to students' readiness for advanced business courses, vocational training, and entrepreneurship.

Okoye & Chukwu, 2022; Ismail & Bello, 2024 mentioned some of the factor that can affect Learning Outcomes in Accounting such as: Teaching methods (interactive vs. lecture-based), Availability and use of instructional materials (standard and improvised); Students' perception and engagement; Classroom environment and teacher competence; Assessment strategies and feedback mechanisms. While Okoye & Chukwu, 2022; Ismail & Bello, 2024 talked about Measurement of Learning Outcomes which is measured using standardized tests or teacher-made examinations, scores from continuous assessments, performance tasks and practical accounting exercises diagnostic assessments and rubric-based evaluations. These measures provide quantitative data to assess how well students comprehend and apply accounting knowledge following instruction.

Clarity and Relevance of Improvised Instructional Materials

Instructional materials whether standard or improvised play an essential role in facilitating students' comprehension and engagement during lessons. Research consistently shows that students respond better to materials that clearly present subject matter and relate directly to lesson objectives. Improvised instructional materials are locally sourced or teacher-made aids used when standard resources are unavailable. Their relevance and clarity determine how effectively they support the teaching-learning process. According to studies in Nigerian settings, improvised materials enhance academic performance when they are carefully constructed and appropriate for the subject matter. For example, a quasi-experimental study of SS II economics students in Kaduna State found that students taught with improvised materials performed significantly better than those taught without such aids, demonstrating the clear instructional advantage of contextually relevant materials (Tormoh & Job, 2024).

Similarly, research on Social Studies students in Southwest Nigeria reported that teachers can improvise instructional materials from local materials and still positively influence students' academic achievement. This study underscored that when materials are meaningfully linked to the content of instruction, students are more likely to engage with the lesson.

Beyond academic subjects, literature also highlights the importance of relevance: students value materials that are directly tied to instructional goals and classroom activities. For example, studies in primary and secondary schools show that students perform better and take greater interest in lessons where instructional aids clearly illustrate core concepts.

What emerges from these findings is that clarity and relevance are key determinants in how students interpret and benefit from improvised instructional materials. When materials are well-aligned with lesson objectives and presented clearly, they enhance attention, comprehension, and retention a finding that is especially important for complex subjects like Accounting, which depend on sequential reasoning and visual representation of concepts.

Students' Learning Outcomes in Accounting refer to the measurable knowledge, skills, and abilities students demonstrate after instruction. In subjects like Accounting, where learners must apply principles to solve problems, learning outcomes include understanding concepts, competence in procedures like journal entries, and performance on assessments. Although specific empirical research on improvised materials and Accounting learning outcomes is limited, available studies on instructional materials more broadly indicate a strong positive link between instructional aids and student achievement. For example, a recent educational innovation study found that the availability and usability of instructional materials positively influenced students' performance in Financial Accounting in Nigerian secondary schools. This suggests that when students are exposed to appropriate teaching aids, their comprehension and achievement improve, even in business-related courses (Journal of Educational Innovation and Practice, 2024).

Across other subject areas, evidence reinforces this pattern: studies in mathematics and science consistently show that students taught with improvised instructional materials achieve better academic outcomes compared to traditional lecture methods (Diri & Udo, 2024; Ogunsanwo et al., 2022). These outcomes indicate that improvised instructional materials can close learning gaps by making abstract concepts tangible and by promoting learner engagement.

It is also worth noting that students' perceptions of instructional materials influence how effectively these materials translate into learning gains. Literature in educational psychology suggests that materials perceived as clear and relevant increase student involvement, which in turn improves academic outcomes. In contrast, poorly designed materials or those seen as irrelevant may fail to produce meaningful changes in performance, regardless of their presence in the classroom.

Improvised instructional materials can enhance student achievement when they are clear, relevant, and aligned with lesson goals (Tormoh & Job, 2024; Journal of Educational Innovation and Practice, 2024). Students' learning outcomes improve when instructional materials facilitate deeper comprehension and participation (Diri & Udo, 2024; Ogunsanwo et al., 2022).

However, there is limited subject-specific literature focused on the clarity and relevance of improvised materials in Accounting specifically, pointing to a gap your study aims to address. In conclusion, while broad evidence supports the value of instructional materials in academic achievement, research focused

on how clarity and contextual relevance of improvised materials affect learning outcomes in Accounting especially among SS1 students is still emerging. This literature underscores the importance and timeliness of your proposed investigation.

Students' Level of Involvement in the Use of Improvised Instructional Materials

Students' level of involvement in learning refers to the active participation of learners in instructional activities, where they engage cognitively, emotionally, and behaviorally with teaching materials and tasks. Research in education consistently shows that active involvement enhances comprehension, retention, and academic performance. When instructional materials are improvised locally constructed, contextual, and flexible students' participation can increase because such materials often reflect local contexts and hands-on experiences that learners find relatable (Ibe-Moses et al., 2024).

Studies on instructional materials and student engagement indicate that when learners are directly involved in interacting with materials manipulating them, discussing their relevance, and using them during activities engagement and interest in the subject improve. For example, research on science education shows that students are more engaged when instructional resources are available and are integrated into varied learning activities, thereby increasing their involvement and depth of understanding (Instructional Materials Availability and Learner's Engagement in Science, 2024).

Improvised instructional materials, specifically, can enhance student involvement because they often require learners to actively interpret, compare, and work with objects that represent abstract concepts. This aligns with constructivist learning theory, where knowledge emerges through active construction rather than passive reception. In environments where standard resources are limited, improvisation requires teachers to adapt materials to student needs, which often leads to more participatory learning activities (Diri & Udo, 2025).

Although much research is subject-specific (e.g., effects on mathematics or science achievement), the underlying educational principle remains consistent: students' active involvement in learning activities that use materials enhances engagement, understanding, and academic outcomes (Ibe-Moses et al., 2024; Instructional Materials Availability and Learner's Engagement in Science, 2024). However, the literature also notes that involvement depends on how materials are integrated into instruction, as merely having resources available does not automatically lead to student engagement or better learning outcomes without effective teacher facilitation.

Learning Outcomes in Accounting refer to the observable and measurable results of the teaching-learning process. In Accounting, these outcomes include conceptual understanding, procedural skill in financial recording and reporting, problem-solving ability, and the ability to apply accounting principles to real-world scenarios (Adenagbe et al., 2024).

Research on instructional materials and students' performance in Financial Accounting in Nigeria highlights the importance of availability and usability of materials in supporting learning. A study in Ekiti State found that both availability of instructional resources and their effective use significantly

influenced students' performance in Financial Accounting, indicating that materials support understanding, retention, and achievement in accounting tasks (Adenagbe et al., 2024).

Moreover, literature in educational psychology and instructional design underscores that when students actively engage with instructional materials which include problem demonstrations, hands-on activities, models of accounting cycles, or real-life financial documents they are more likely to internalize concepts and perform better academically. This is because such involvement promotes deeper cognitive engagement, which is linked to higher learning outcomes (Ibe-Moses et al., 2024).

In general education research, there is substantial evidence that improvisation of instructional materials positively affects students' academic achievement. For example, studies in science found that learners taught with improvised materials scored significantly higher than those taught without them, suggesting that materials help translate abstract concepts into concrete understanding (Abdulhadi & Ibrahim, 2024). Although this study was conducted in chemistry, the pedagogical implication applies across subjects: students who are actively engaged and involved with instructional materials tend to achieve better learning outcomes.

Classroom Environment and School Support in Learning

The classroom environment represents the physical, social, and psychological space in which teaching and learning occur. It includes factors such as seating arrangement, lighting, classroom resources, class size, and teacher/student interactions. Research consistently shows that a positive classroom environment significantly enhances students' engagement, academic motivation, and achievement (Widiyawanti, 2024). A well-organized, comfortable, and resource-rich classroom provides a conducive atmosphere where learners feel safe to explore concepts, ask questions, and participate actively in learning activities. Evidence suggests that a supportive learning environment helps students form positive attitudes toward learning and facilitates cognitive engagement (Widiyawanti, 2024).

In addition to physical aspects, social and instructional climate are key to students' achievement. Supportive teacher behaviour and constructive feedback contribute to a psychologically safe classroom where learners feel valued and confident (Monteiro et al., 2021). Research shows that when teachers consistently offer meaningful feedback and promote an inclusive learning climate, students exhibit higher behavioural engagement and stronger identification with school goals (Monteiro et al., 2021).

School support encompasses the administrative, instructional, and resource backing that schools offer to both teachers and students. Facilities such as classrooms, instructional tools, libraries, and effective school leadership practices constitute school support. A supportive school environment fosters student engagement, which in turn enhances learning outcomes (RSI International, 2023). Studies highlight that when students perceive their school environment as supportive, they demonstrate deeper academic engagement and more positive learning attitudes (RSI International, 2023).

The physical and academic environments work together to influence engagement and outcomes. For example, adequate school

facilities classrooms, space for activities, and access to instructional materials encourage students to participate more actively in learning tasks, thereby promoting better academic performance (RSI International, 2023).

Learning Outcomes When Improvised Instructional Materials Are Used

Learning outcomes refer to measurable gains in knowledge, skills, and competencies that students achieve after instruction. Research indicates that instructional materials whether standard or improvised play a crucial role in enhancing these outcomes. A recent study focusing on Financial Accounting in Nigerian secondary schools found that students' achievement improved when instructional materials were available and usable, demonstrating a positive influence on learning performance (Journal of Educational Innovation and Practice, 2024).

Although most research on improvised instructional materials has been conducted in subjects such as mathematics and science, findings consistently show that when teachers provide and effectively integrate resources into lessons, students' comprehension and achievement improve. For example, studies in mathematics indicate that improvised materials not only help students understand abstract concepts but also boost motivation and participation, resulting in higher academic achievement (Diri & Udo, 2024).

The quality and accessibility of learning materials also affect students' engagement and learning outcomes. Research shows a strong correlation between the availability and quality of instructional resources and various dimensions of student engagement behavioural, cognitive, and affective which are closely linked to academic success (RSI International, 2023).

Statement of the Problem

The teaching and learning of Financial Accounting in Nigerian secondary schools have continued to pose challenges for both teachers and students, particularly at the senior secondary level where the subject requires strong conceptual understanding, analytical thinking, and practical application. Despite its importance for business education, entrepreneurship, and career development, students' performance in Accounting subjects in internal and external examinations has remained unsatisfactory in many schools. This persistent low achievement has raised concerns among educators, parents, and policymakers about the effectiveness of teaching strategies and the adequacy of instructional resources used in the classroom.

One of the major issues identified in the literature is the inadequate availability of standard instructional materials in many Nigerian secondary schools. Due to limited funding, poor infrastructure, and insufficient supply of teaching aids, teachers often rely on improvisation to support instruction. Improvised instructional materials, when properly designed and used, have been found to enhance students' understanding and performance in different subjects, including science and social studies. Empirical studies have shown that students taught using improvised instructional materials perform significantly better than those taught without such materials, suggesting that instructional improvisation can improve learning outcomes when effectively implemented (Daramola et al., 2023; Machika et al., 2024; Samuel & Job, 2024). However, the effectiveness of these materials does

not depend solely on their availability but also on how learners perceive them.

Students' perception of instructional materials is a critical psychological factor that can influence their motivation, engagement, and academic achievement. When students perceive instructional materials as relevant, clear, and helpful, they tend to participate more actively and achieve better academic outcomes. Conversely, when they perceive improvised materials as poorly designed, confusing, or inferior to standard resources, the intended instructional benefits may not be realized. Research has established those instructional materials contribute significantly to academic achievement, but their effectiveness is influenced by learner attitudes and classroom conditions (Popoola et al., 2023; Journal of Capital Development in Behavioural Sciences, 2024). This suggests that the psychological response of students to teaching materials plays an important role in determining whether such materials actually improve learning.

Furthermore, classroom realities in many Nigerian urban schools, including those in Aba metropolis, often include overcrowded classrooms, limited teaching resources, and varying teacher competencies. These conditions may influence how students perceive improvised instructional materials and how effectively such materials contribute to learning outcomes. While several studies have examined the general impact of instructional materials on student performance in science, mathematics, and social studies, there is limited empirical evidence focusing specifically on Financial Accounting and on the mediating role of students' perception, especially among SS1 students in urban settings.

Therefore, the problem of this study is the uncertainty surrounding whether students' perception of improvised instructional materials significantly influences their learning outcomes in Financial Accounting. Without empirical evidence on this relationship, teachers may continue to improvise materials without understanding how students interpret or respond to them, which may reduce the effectiveness of instruction. This gap in knowledge makes it necessary to investigate students' perception of improvised instructional materials and determine how such perceptions influence learning outcomes in Financial Accounting among SS1 students in Aba metropolis.

Research Objectives

The main objective of this study is students perception of improvised instructional material and learning outcome in accounting among ss1 students in Aba Metropolis. Specifically, the study aim to:

Examine the influence of the clarity and relevance of improvised instructional materials on students' learning outcomes in Financial Accounting.

Determine the influence of students' level of involvement in the use of improvised instructional materials on their learning outcomes in Financial Accounting.

Examine the influence of classroom environment and school support on students' perception and learning outcomes when improvised instructional materials are used in Financial Accounting.

Research Questions

The following research questions guided the study:

How does the clarity and relevance of improvised instructional materials influence students' learning outcomes in Financial Accounting?

To what extent does students' involvement in the use of improvised instructional materials influence their learning outcomes in Financial Accounting?

How do classroom environment and school support influence students' perception and learning outcomes when improvised instructional materials are used in Financial Accounting?

Research Hypotheses

Clarity and relevance of improvised instructional materials have no significant influence on students' learning outcomes in Financial Accounting.

Students' level of involvement in the use of improvised instructional materials has no significant influence on their learning outcomes in Financial Accounting.

Classroom environment and school support have no significant influence on students' perception and learning outcomes when improvised instructional materials are used in Financial Accounting.

Research Methodology

Research Design

This study adopts a descriptive survey design. According to Best and Kahn (2016), descriptive survey design is suitable for collecting detailed information on the characteristics, opinions, attitudes, or perceptions of respondents about a particular phenomenon. The design is appropriate for this study because it seeks to investigate students' perception of improvised instructional materials and how such perceptions influence learning outcomes in Accounting among SS1 students. This design allows for the collection of quantitative data from a large population, facilitating generalization of findings.

Area of the Study

The study will be conducted in Aba metropolis, Abia State, Nigeria. Aba is a major commercial and educational hub in south eastern Nigeria, known for its large number of secondary schools and diverse student population. Rationale for selecting Aba metropolis is that Aba hosts both public and private secondary schools offering Accounting, allowing the study to capture varied experiences with instructional materials. Also, the metropolis has access to different teaching resources, yet many schools face challenges in procuring standard instructional materials, making improvised materials common. In terms of population Size Aba schools have a significant number of SS1 students offering Accounting, providing a sufficient population for data collection and meaningful analysis. This context is relevant for understanding students' perception of improvised instructional materials and their influence on learning outcomes, as it reflects typical Nigerian urban school settings.

Population of the Study

The population for this study comprises all SS1 students offering Accounting in public and private secondary schools within

Aba metropolis, Abia State, Nigeria. According to the Abia State Ministry of Education (2025), there are 35 secondary schools in Aba metropolis, with an estimated 2,450 SS1 students offering Accounting. Both male and female students form part of the population, as the study seeks to understand perceptions across gender, school type, and class settings.

Sample and Sampling Technique

A sample of 245 SS1 Accounting students (approximately 10% of the population) was selected using a stratified random sampling technique. The stratification is based on school type (public or private) and gender (male or female). This ensures a representative sample reflecting the diversity of the population, minimizing bias. According to Krejcie and Morgan (1970), stratified random sampling increases the accuracy of findings when the population has identifiable subgroups.

Instrument for Data Collection

The study used a structured questionnaire and achievement test as instruments as instrument for data collection. Questionnaire was designed to measure students' perception of improvised instructional materials, which includes clarity, relevance, attractiveness, and usability. Responses were collected on a four-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD), (Aremu & Sokan, 2019). Accounting Achievement Test (AAT) was

designed to measure students' learning outcomes in Accounting. The test was consisted of 25 multiple choice and structured questions covering basic accounting concepts, journal entries, ledger posting, trial balances, and simple financial statements. Scores were used to determine the relationship between students' perception of improvised instructional materials and academic performance.

Validation of the Instrument

The questionnaire and achievement test will be validated by experts in Business Education and Educational Measurement from Michael Okpara University of Agriculture, Umudike (MOUAU). Content validity will ensure that all items measure the intended constructs—students' perception and learning outcomes in Accounting. A pilot study will be conducted in 5 schools outside Aba metropolis to ensure reliability.

Reliability of the Instrument

The Cronbach Alpha method was used to determine the reliability of the questionnaire. A reliability coefficient of 0.70 or above was considered acceptable (Gliem & Gliem, 2003). For the Accounting Achievement Test, test-retest reliability was employed, and a coefficient of 0.75 or higher will indicate consistency and stability of the instrument.

Method of Data Collection

Permission was obtained from the Ministry of Education, school principals, and class teachers before data collection. Questionnaires was administered to students in their classrooms, with instructions provided to ensure clarity and accuracy. The Accounting Achievement Test was administered immediately after lessons using improvised instructional materials to assess learning outcomes. Data was collected over two-week period to allow adequate time for administration and minimize disruptions.

Method of Data Analysis

Data collected was analyzed using descriptive and inferential statistics. Descriptive Statistics was Mean, percentages, and standard deviation summarize students' perception of improvised instructional materials and performance in Accounting. Inferential Statistics used was Pearson Product Moment Correlation (PPMC) which was used to test the relationship between students' perception and learning outcomes.

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

A total of 245 questionnaires were administered to the sampled students, and 240 were returned and found valid, giving a response rate of 97.9%, which is considered very high and adequate for analysis.

Demographic Information of Respondents

Table 1: Gender Distribution of Respondents

Gender	Frequency	Percentage (%)
Male	120	50
Female	120	50
Total	240	100

Table 1: The sample is gender-balanced, ensuring that the study captures perspectives from both male and female students.

School Type of Respondents

School Type	Frequency	Percentage (%)
Public	140	58.3
Private	100	41.7
Total	240	100

Table 2: More students were drawn from public schools, reflecting the larger enrollment in public secondary schools in Aba metropolis.

Students' perception was measured across clarity, relevance, and usability of improvised materials using a 4-point Likert scale.

Descriptive Statistics on Students' Perception

Item Statement	SA	A	D	SD	Mean	Interpretation
Improvised materials are clear and easy touse	80	120	30	10	3.20	Agree
Materials are relevant to Accounting lessons	70	130	30	10	3.16	Agree
I am motivated to learn when using improvised materials	60	140	30	10	3.12	Agree
Materials help me understand Accounting concepts	75	125	30	10	3.18	Agree

Table 3: The mean scores indicate that students generally perceive improvised instructional materials positively. They find the materials clear, relevant, and useful for understanding accounting concepts.

Students' involvement was assessed based on hands-on engagement, participation, and interaction with materials.

Level of Involvement

Item Statement	SA	A	D	SD	Mean	Interpretation
I actively use improvised materials in Accounting	85	125	20	10	3.23	High
I discuss and share ideas with classmates using materials	80	120	25	15	3.15	High
I complete tasks faster when using improvised materials						

70 130 30 10 3.12 High

Table 4: The results show that students are actively involved in using improvised materials, which is in agreement with Constructivist Learning Theory.

The Accounting Achievement Test (AAT) scores were analyzed to determine students’ learning outcomes.

Performance in Accounting Achievement Test

Score Range	Frequency	Percentage (%)
0 – 9	20	8.3
10 – 19	50	20.8
20 – 29	100	41.7
30 – 40	70	29.2
Total	240	100

Table 5: Most students scored between 20–29 (100=41.7%) marks, indicating moderate learning outcomes. High engagement with improvised materials likely contributed to improved understanding and performance in Accounting.

Hypotheses Testing

The hypotheses formulated were tested using Pearson Product Moment Correlation (PPMC) at 0.05 significance level.

Hypothesis 1

Ho1: There is no significant relationship between students’ perception of improvised instructional materials and their learning outcomes in Accounting.

Correlation Analysis of Perception and Learning Outcomes

Variables	Learning Outcomes	r-value	p-value	Decision
Students’ perception of materials	Learning outcomes	0.642	0.000	Significant

Table 6: Since $p < 0.05$, the null hypothesis is rejected. There is a positive and significant relationship between students’ perception of improvised materials and learning outcomes in Accounting.

Hypothesis 2

Ho2: There is no significant relationship between students’ level of involvement in using improvised materials and their learning outcomes in Accounting.

Correlation Analysis of Involvement and Learning Outcomes

Variables	Learning Outcomes	r-value	p-value	Decision
Students’ involvement with materials	Learning outcomes	0.701	0.000	Significant

Table 7: Since $p < 0.05$, the null hypothesis is rejected. Students’ level of involvement in using improvised materials positively influences their learning outcomes.

when they observe, engage, and interact with resources in a supportive environment.

Summary of Findings

Based on the analysis of data collected from 240 SS1 Accounting students, the following findings emerged: Students generally perceive improvised instructional materials positively. Items measuring clarity, relevance, and usefulness of materials recorded high mean scores, indicating that students believe these materials enhance their understanding of Accounting concepts. This finding is consistent with Constructivist Learning Theory, which emphasizes that learners construct knowledge more effectively when instructional materials are meaningful and contextually relevant (Bruner, 1960; Akpan & Beard, 2020). The study found that students are actively involved in using improvised materials through hands-on activities, discussions, and exercises. High engagement levels were reported across items measuring participation and interaction. This supports the premise that active

Discussion of Findings

The study found that students perceive improvised instructional materials positively. This goes in agreement with previous studies (Tormoh & Job, 2024; Akpan & Beard, 2020), which suggest that learners engage more when materials are clear, relevant, and easy to use. There is High levels of student involvement indicating that improvised materials encourage active participation, consistent with Constructivist Learning Theory, which emphasizes hands-on interaction and knowledge construction. The moderate to high performance in Accounting indicates that students’ perception and involvement with improvised materials positively impact learning outcomes, supporting Social Cognitive Theory. students learn effectively

involvement enhances comprehension, aligning with Social Cognitive Theory, which emphasizes learning through observation, modeling, and active participation (Bandura, 1986). The performance of students on the Accounting Achievement Test (AAT) showed that the majority had moderate to high achievement, suggesting that improvised instructional materials contribute to improved learning outcomes. Inferential statistics indicated a significant positive relationship between students' perception, level of involvement, and learning outcomes. Hypothesis 1: Students' perception of improvised instructional materials significantly affects learning outcomes. Hypothesis 2: Students' level of involvement in using improvised materials significantly influences learning outcomes. Both null hypotheses were rejected ($p < 0.05$), confirming that positive perception and active involvement are key predictors of improved academic performance in Accounting.

Conclusion

The study concludes that improvised instructional materials are valuable tools in Accounting instruction, especially in schools where standard resources are limited. Students' perception of materials and their active involvement in using them significantly influence learning outcomes. Classroom environment and school support are critical in enhancing the effectiveness of these materials, as they provide the context and encouragement necessary for students to engage meaningfully with instructional resources. The findings support Constructivist Learning Theory and Social Cognitive Theory, emphasizing the importance of active engagement, modeling, and relevant resources in promoting academic achievement.

Recommendations

Based on the findings, the following recommendations are made:

- Teachers should integrate improvised instructional materials into Accounting lessons to enhance clarity, relevance, and understanding of concepts.
- Students should be encouraged to actively participate in lessons using these materials, including engaging in hands-on activities and peer discussions.
- Schools should provide enabling environments, including classroom arrangements that facilitate active learning and adequate support for teacher innovation.
- Ministry of Education and policymakers should provide guidelines and workshops for teachers on improvisation and effective use of instructional materials, especially in urban and resource limited contexts.
- 5. Further researchers should explore longitudinal effects of improvised materials on students' performance across multiple levels and subjects, including longitudinal studies in Accounting.

Contribution to Knowledge

This study contributes to the existing body of knowledge by Establishing the significant relationship between students' perception and involvement with improvised materials and learning outcomes in Accounting. Highlighting the importance of classroom environment and school support in maximizing the

benefits of improvised instructional resources. Providing a basis for curriculum developers, educators, and policymakers to encourage the use of locally available, low-cost instructional materials for effective learning.

Educational Implications

The findings have important implications for teachers, school administrators, and policymakers:

Teachers Should be encouraged to design and utilize improvised instructional materials to facilitate practical understanding of Accounting concepts. Need to engage students actively, fostering participation, problem-solving, and discussion to maximize learning outcomes.

School Administrators Should provide supportive classroom environments, including adequate space, access to resources, and encouragement for teachers to innovate. Must ensure teacher professional development on creating and using improvised instructional materials.

Policymakers Should recognize the role of improvised materials in resource-limited settings and incorporate guidance for their effective use into national curriculum standards.

Policies should promote adequate funding and support for teaching aids to complement improvised resources.

References

1. Abdulhadi, G. B., & Ibrahim, T. (2024). Effect of improvised instructional materials on secondary school students' achievement in chemistry. *UMYU Journal of Educational Research*.
2. Acheampong, R., & Essuman, L. (2023). Assessing accounting learning outcomes among senior high school students in Ghana. *International Journal of Education and Practice*, 11(4), 52–64.
3. Adebayo, F. O., & Onifade, S. A. (2022). Business education curriculum and students' performance in accounting: Challenges and prospects. *Journal of Business and Educational Research*, 9(2), 108–119.
4. Adeleke, S. A., Abdulrahman, F. O., & Onabanjo, O. S. (2023). Investigating the skill proficiency of secondary school students in financial accounting tasks. *Journal of Educational Assessment and Evaluation*, 15(3), 121–135.
5. Adenagbe, O. A., Edafioho, O. A., Ayeni, C. F., & Aladejebi, I. E. (2024). Assessment of the influence of availability and usability of instructional materials on students' performance in financial accounting in senior secondary schools in Ekiti State, Nigeria. *Journal of Educational Innovation and Practice*.
6. Akanni, O. A., & Balogun, T. K. (2022). Cognitive outcomes in accounting education: An analysis of student achievement. *African Journal of Business Education*, 7(1), 33–44.
7. Akpan, J. P., & Beard, L. A. (2020). Using constructivist teaching strategies to enhance students' learning outcomes. *Journal of Education and Practice*, 11(12), 45–53.
8. Aremu, A. O., & Sokan, B. O. (2019). Improvisation of instructional materials and academic performance of secondary school students in Nigeria. *African Educational Research Journal*, 7(3), 123–131.

9. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
10. Best, J. W., & Kahn, J. V. (2016). *Research in education* (12th ed.). Pearson.
11. Bruner, J. S. (1960). *The process of education*. Harvard University Press.
12. Daramola, I. S., Onuh, J., Gadi, E. I., & Akoh, A. (2023). Effect of improvised instructional materials on students' performance in basic science and technology in Nigeria. *BW Academic Journal*.
13. Diri, E. A., & Udo, E. A. (2024). Effect of improvised instructional materials on academic achievement of pupils in mathematics in Bayelsa State, Nigeria. *Journal of Research in Education and Pedagogy*.
14. Effiom, E. J., & Udo, I. A. (2023). Transfer of learning in accounting among secondary school students. *Journal of Vocational Studies*, 8(1), 77–89.
15. Essien, G. E., & Anyanwu, C. J. (2023). Practical approach to accounting education and student performance. *Education and Practice Journal*, 12(5), 45–58.
16. Federal Republic of Nigeria. (2021). *National policy on education* (7th ed.). NERDC Press.
17. Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. *Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education*.
18. Ibe, K. N., & Nwankwo, C. C. (2024). Determinants of accounting achievement among SS1 students in Nigeria. *Journal of School Practice and Research*, 18(1), 100–117.
19. Ibe-Moses, K. C., James, N. C., Osaro, G., & Abiona, M. (2024). Investigating the influence of instructional materials on the academic performance of secondary school students in mathematics. *International Journal of Research and Innovation in Social Science*.
20. Instructional materials availability and learner's engagement in science. (2024). *International Journal of Research and Scientific Innovation*.
21. Instructional materials availability and learners engagement. (2024). *International Journal of Research and Scientific Innovation*.
22. Ismail, A. M., & Bello, R. (2024). Active learning and students' achievement in accounting. *Journal of Innovative Teaching and Learning*, 7(2), 85–97.
23. *Journal of Capital Development in Behavioural Sciences*. (2024). Influence of instructional materials on academic achievement of secondary school students in Nigeria.
24. *Journal of Educational Innovation and Practice*. (2024). Availability and usability of instructional materials and student performance in financial accounting. *Journal of Educational Innovation and Practice*, 8(1).
25. Kolb, D. A. (2021). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson.
26. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607–610.
27. Lilian, A. E., Guga, A., & Ebuka, E. C. (2024). Effects of improvised instructional materials on students' performance in social studies in Nigerian secondary schools. *Zaria Journal of Studies in Education*.
28. Machika, A. K., Yusuf, S. D., & Suleiman, F. B. (2024). Impact of improvised instructional materials on academic performance among secondary school students of chemistry. *Journal of Educational Studies Trends and Practice*.
29. Ministry of Education, Abia State. (2025). *Annual report on secondary schools in Aba metropolis*.
30. Monteiro, V., Carvalho, C., & Santos, N. N. (2021). Creating a supportive classroom environment through effective feedback: Effects on students' engagement and school identification (*Frontiers in Education*).
31. Obe, A. O., & Ehinmowo, M. (2023). Evaluating assessment strategies in business education and accounting achievement. *Journal of Assessment in Education*, 10(4), 67–81.
32. OECD. (2022). *Education at a glance 2022: OECD indicators*. OECD Publishing.
33. Ogbeba, J. M., & Raimi, L. R. (2024). Students' financial recording skills: Implications for accounting instruction. *Journal of Business Education Research*, 11(2), 99–112.
34. Ogunsanwo, T., Sulyaman, H., & Muhammed, H. (2022). Effect of improvised instructional materials on pupils' academic performance in mathematics. *International Journal of Academic Multidisciplinary Research*.
35. Okoye, J. N., & Chukwu, P. I. (2022). Instructional strategies and academic achievement in accounting: A meta-analysis. *International Journal of Educational Research Reviews*, 8(5), 203–216.
36. Olumide, O., & Adeola, J. (2023). Attitude and achievement in financial accounting among secondary school students. *Journal of Educational Psychology and Practice*, 10(3), 68–81.
37. Oribhabor, C. B. (2020). Evaluating the effect of activity-based teaching on students' achievement in mathematics.
38. Piaget, J. (1973). *To understand is to invent: The future of education*. Grossman Publishers.
39. Popoola, A. A., Oginni, O. I., & Amole, P. A. (2023). Effectiveness of standard and improvised instructional materials on students' performance in mathematics. *Journal of Research in Science Education*.
40. Relevance of instructional materials in primary schools. (n.d.). Retrieved from Samphina website.
41. RSI International. (2023). Instructional materials availability and learner's engagement in science. *International Journal of Research and Scientific Innovation*.
42. Samuel, G. T., & Job, G. C. (2024). Improvisation of instructional materials and students' academic performance in Economics in Nigeria. *Journal of Continuing and Development Education*.
43. Tormoh, G. S., & Job, G. C. (2024). Improvisation of instructional materials and SS II economics students' academic performance in Kaduna State. *Journal of Continuing and Development Education*, 4(1), 114–124.
44. UNESCO. (2023). *Global education monitoring report: Technology and education*. UNESCO Publishing.

45. Widiyawanti, D. (2024). The influence of classroom learning environment on academic engagement of students. *International Journal of Research and Innovation in Social Science*.
46. Yusuf, M. O., & Afolabi, A. O. (2022). Improvised instructional materials and students' learning engagement in Nigerian secondary schools. *Journal of Educational Development*, 14(2), 67–78