THE USE OF AUDIO-VISUAL IN THE TEACHING AND LEARNING OF BUSINESS EDUCATION IN PUBLIC UNIVERSITIES IN EDO STATE

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A RESEARCH PROJECT PRESENTED TO THE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION, FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF B.Sc. (Ed) DEGREE IN BUSINESS EDUCATION (ACCOUNTING).

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APPROVAL

I hereby certify that this work was carried out by **Grace Oteameasor ANTHONY** with Matriculation Number **EDU2006067**, in the Department of Vocational and Technical Education, Faculty of Education, University Of Benin, Benin City, in Partial Fulfilment of the requirements for the award of B.Sc (Ed) degree in Business Education (Accounting).

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CERTIFICATION

We, the undersigned, hereby certify that this research work was carried out by **Grace Oteameasor ANTHONY** with Matriculation Number **EDU2006067**, in the Department of Vocational and Technical Education, University of Benin, Benin City.

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DEDICATION

This project work is dedicated to God, Almighty for His grace, wisdom and guidiance throughout this academic journey.

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ABSTRACT

This study examined the use of audio-visual materials in the teaching and learning of Business Education in public universities in Edo State. Six research questions were raised to guide the study. The study employed a descriptive survey research design. The sample size of the study was 100 Business Education students from public universities in Edo State. Given the small population size, the entire population was used as the sample size, hence, a census.

The instrument for data collection was a structured questionnaire titled "Use of Audio-Visual in Teaching and Learning of Business Education Questionnaire (UAVTLBEQ)." The questionnaire comprised sections A and B. The research instrument was validated by the researcher's supervisor and two other experts in the Department of Vocational and Technical Education, University of Benin, Benin City. The reliability coefficient of the instrument was obtained using Cronbach's Alpha, and the instrument was administered to 20 Business Education students from Ambrose Alli University, Ekpoma, who were not part of the study population. A reliability coefficient of 0.88 was obtained, indicating the instrument was reliable. The data collected were analyzed using mean ($\overline{x}$) and standard deviation (SD) with the aid of the Statistical Package for the Social Sciences (SPSS).

The findings showed that the use of audio-visual materials enhances students' understanding of business concepts to a high extent, improves engagement in Business Education classrooms, and positively influences academic performance. However, challenges such as inadequate access to audio-visual resources, lack of technical support, and poor maintenance hinder their effective utilization. The study concluded that the integration of audio-visual materials plays a crucial role in improving the teaching and learning of Business Education. Based on the findings, the study recommended, among others, that the government and university administrators should ensure the availability and effective utilization of modern audio-visual tools to facilitate an improved teaching and learning experience in Business Education programs.

CHAPTER ONE

INTRODUCTION

Background of the Study

Business Education is a critical component of educational curricula that aims to equip students with the knowledge, skills, and attitudes necessary to excel in various business environments. It encompasses a wide range of subjects including accounting, management, entrepreneurship, marketing, and economics (Adeoye, 2020). The goal of Business Education is to prepare students for both professional careers in business and for personal financial literacy, fostering an understanding of economic principles and business operations. Business Education programmmes are designed to be dynamic, responding to the evolving demands of the global marketplace. These programmes are integral in shaping future leaders who can contribute to economic development and innovation. The curriculum often includes practical training and theoretical knowledge, providing students with a comprehensive understanding of business practices. As technology continues to advance, the incorporation of modern tools and techniques, such as audio- visual materials, become increasingly important to maintain the relevance and effectiveness of Business Education (Okoye, 2019).

Audio-visual materials have long been recognized as valuable tools in enhancing the teaching and learning experience. These materials, which include videos, slideshows, digital presentations, and interactive simulations, serve to engage students, cater to different learning styles, and clarify complex concepts (Abdullahi, 2021). Despite their benefits, the extent to which these materials are utilized in the teaching of Business Education varies

significantly across different educational contexts. In the public universities of Edo State, the utilization of audio-visual materials in Business Education is still evolving. While some educators have integrated these tools into their teaching practices effectively, others face constraints that limit their use. According to recent studies, there is a noticeable gap between the potential benefits of audio-visual materials and their actual application in classrooms. Factors such as limited access to resources, insufficient training for business educators, and inadequate infrastructure are significant barriers to the widespread adoption of these technologies (Oboh, 2020). Business Educators who have embraced audio-visual materials often report improvements in student engagement and understanding. For example, using videos to demonstrate business concepts or interactive software to simulate market scenarios can make learning more tangible and accessible. However, these practices are not uniformly adopted, and there is a need for a more structured approach to integrating audio-visual materials into Business Education curricula across including (public universities in Edo State). (Ezeani, 2021).

The impact of audio-visual materials on students' learning outcomes in Business Education is profound. Research has consistently shown that the use of these tools can enhance understanding, retention, and application of knowledge. For instance, multimedia presentations can simplify complex topics, making them more digestible for students. Moreover, the use of real- world business videos and interactive case studies helps bridge the gap between theoretical concepts and practical application (Ogbonna, 2022). A study by Igbinedion (2022) highlights that students exposed to audio-visual materials in their Business Education courses tend to perform better in assessments compared to those who

rely solely on traditional lecture methods. This improvement is attributed to the multi-sensory engagement provided by audio-visual tools, which caters to various learning styles and promotes active participation. Additionally, these materials can stimulate critical thinking and problem-solving skills, which are essential in business education. Moreover, audio-visual materials contribute to creating a more inclusive learning environment. They support students with different learning preferences and can be particularly beneficial for those with learning disabilities. For example, videos and interactive content can provide alternative ways of accessing and understanding information, thus enhancing the overall learning experience (Abubakar, 2020). Despite the clear benefits of audio-visual materials, business educators in public universities in Edo State seem to face numerous challenges in integrating these tools into their teaching practices.

One of the primary obstacles is the lack of access to modern technology and resources. Many institutions struggle with limited budgets, which constrains their ability to acquire and maintain the necessary equipment and software (Adewale, 2019). This scarcity of resources often forces business educators to rely on outdated or less effective teaching methods. Another significant challenge is the insufficient training and support for educators. Many teachers appear to lack the technical skills and knowledge required to effectively use audio-visual materials. This gap in competence can lead to underutilization or improper use of these tools, which diminishes their potential impact on learning outcomes (Obayemi, 2021). There is a critical need for ongoing professional development programmes that equip educators with the skills to integrate audio-visual materials into their teaching strategies effectively. Furthermore, there are logistical and infrastructural issues that hinder the use of

audio- visual materials. For example, inconsistent power supply, inadequate internet connectivity, and lack of proper classroom facilities can make it difficult to implement these tools consistently (Edeh, 2020). These challenges are particularly prevalent in public universities in developing regions, where resources are often stretched thin. To overcome these challenges and enhance the utilization of audio-visual materials in Business Education, several strategies can be implemented.

The term strategy refers to a carefully planned approach or method used to achieve a particular goal or objective. It involves the deliberate selection of actions or techniques that are designed to address specific challenges, maximize effectiveness, and produce desired outcomes. A strategy is not just a singular action, but a comprehensive plan that takes into account various factors such as available resources, the needs of the learners, and the context in which the learning takes place (Miller, 2001). There is a need for increased investment in educational technology infrastructure. Public universities in Edo State should allocate more resources towards acquiring modern audio-visual equipment and ensuring reliable internet connectivity (Chukwu, 2022). This investment is crucial for creating an enabling environment where audio-visual materials can be effectively utilized. Professional development for educators is another critical area. Training programmes can be designed to help teachers develop the technical skills and pedagogical strategies needed to integrate audio-visual materials into their teaching. Workshops, seminars, and continuous learning opportunities can empower educators to embrace new technologies and innovate their teaching practices delivery (Ogunyemi, 2021). Collaboration and resource sharing among institutions can also play a significant role in improving the use of audio-visual materials.

Universities can form partnerships to share best practices, pool resources, and co-develop multimedia content tailored to Business Education. This collaborative approach can help mitigate the limitations faced by individual institutions and promote a more widespread adoption of audio-visual tools (Egbuna, 2023). Additionally, it is essential to incorporate feedback mechanisms that involve students in the evaluation and improvement of audio-visual teaching methods. Understanding students' perspectives on the effectiveness of these materials can provide valuable insights that guide future practices (Adewuyi, 2020). Creating platforms for students to share their experiences and suggestions can enhance the alignment of teaching methods with their learning needs. Lastly, there should be a focus on developing culturally relevant and context-specific audio-visual content. Materials that reflect the local business environment and address region-specific issues are more likely to resonate with students and enhance their learning experience (Oladeji, 2021). This approach not only enriches the curriculum but also makes the learning process more engaging and meaningful for students. It is against this background that this study seeks to determine the Utilization of Audio-Visual Materials in the Teaching and Learning of Business Education in Public Universities in Edo State.

Statement of the Problem

In an ideal educational environment, the utilization of audio-visual materials in teaching Business Education would be comprehensive and seamlessly integrated into the curriculum. These materials would not only complement traditional teaching methods but would also serve as a primary means of instruction for certain concepts, providing dynamic and engaging learning experiences for students. High-quality audio-visual tools such as

educational videos, interactive simulations, and multimedia presentations would be readily available and utilized to explain complex business theories, demonstrate practical applications, and illustrate real-world business scenarios (Abdullahi, 2021). The use of these tools should cater to diverse learning styles and needs, ensuring that all students, including those with different learning abilities, can benefit from the content. For instance, visually oriented students would benefit from graphics and charts, while those who learn better through auditory means would gain from narrated videos and podcasts.

Interactive materials, like simulations and case studies, would promote active learning and critical thinking, helping students to apply theoretical knowledge to practical situations (Ogbonna, 2022). Moreover, in the ideal scenario, educators would be proficient in integrating audio-visual materials into their teaching practices. They would receive ongoing professional development to keep pace with technological advancements and be adept at selecting and using appropriate tools to enhance student engagement and understanding. Institutions would support this by providing robust technological infrastructure, including reliable internet access, modern classroom facilities equipped with projectors, smart boards, and computers, and a library of diverse digital resources (Ogunyemi, 2021).

Contrary to this, the current utilization of audio-visual materials in the teaching and learning of Business Education in public universities in Edo State seems to falls short of these standards. Many institutions in this region face significant challenges that hinder the effective integration of these technologies. Financial constraints are a major barrier, limiting the acquisition and maintenance of essential audio-visual equipment and resources. As a

result, many classrooms are poorly equipped to support multimedia teaching methods, relying instead on traditional lecture- based approaches (Oboh, 2020). Additionally, there seems to be a noticeable gap in the technical skills and knowledge among educators. Many teachers seem to be adequately trained in the use of modern audio- visual tools, and professional development opportunities are scarce. This lack of proficiency can lead to underutilization or ineffective use of available resources, thereby diminishing the potential benefits for students (Obayemi, 2021). Even when audio-visual materials are available, they are often not integrated into the curriculum in a way that maximizes their impact on student learning outcomes (Edeh, 2020). Infrastructure issues further exacerbate the situation. Frequent power outages, unreliable internet connections, and outdated classroom facilities are common problems that disrupt the consistent use of audio-visual materials. These challenges are particularly pronounced in public universities in Edo State, where resource constraints are more severe compared to private institutions. Consequently, the opportunities for students to engage with interactive and multimedia content are limited, affecting their overall learning experience and academic performance in Business Education courses (Adewale, 2019)

In public universities in Edo State, the underutilization of audio-visual materials has significant implications for the quality of Business Education. Students are often deprived of the enriched learning experiences that these materials provide, which can hinder their understanding and retention of complex business concepts. The reliance on traditional teaching methods, such as lectures and textbooks, limits the opportunities for students to engage with content in a meaningful and interactive way. Furthermore, the lack of exposure

to modern educational technologies can put students at a disadvantage in a globally competitive job market. Business environments are increasingly digital, and the skills acquired through the use of audio-visual materials, such as digital literacy and the ability to analyze multimedia content, are critical for success in the 21st century. The current limitations in public universities in Edo State mean that students may not be as well-prepared for these challenges as their peers from institutions where such technologies are more widely used. The disparity in resource allocation and technological integration also perpetuates educational inequality. Students from under-resourced public universities are less likely to have access to the high-quality educational experiences afforded by audio-visual materials. This gap can contribute to broader societal inequalities, as education is a key determinant of future opportunities and economic mobility (Chukwu, 2022). The problem of this study is therefore to examine the Utilization of Audio-Visual Materials in the Teaching and Learning of Business Education in Public Universities in Edo State.

Purpose of the Study

The main purpose of this study is to determine the Utilization of Audio-Visual Materials in the Teaching and Learning of Business Education in Public Universities in Edo State. Specifically, the study seeks to:

1. The extent to which audio-visual materials are available in the teaching and learning of business education courses in public universities in Edo State.
2. The extent to which audio-visual materials are utilized in the teaching and learning of business education courses in public universities in Edo State.

3. The challenges faced by business educators in integrating audio-visual materials into their teaching delivery.
4. The strategies for improving the use of audio-visual materials in Business Education programme.

Research Questions

The following questions were raised to guide the study:

1. To what extent are audio-visuals materials available in the teaching and learning of business education courses in public universities in Edo State?
2. To what extent are audio-visual materials utilized in the teaching and learning of business education courses in public universities in Edo State?
3. What are the challenges to effective utilization of audio-visual materials in the teaching and learning of business education courses in public universities in Edo State?
4. What are the strategies for enhancing the use of audio-visual materials in teaching and learning Business Education courses in public universities in Edo State?

Research Hypotheses

To guide the study, the following null hypotheses were formulated and were tested at 0.05 level of significance

Ho1: There is no significant relationship between audio-visual availability with teaching and learning business education courses in public universities in Edo State.

Ho2: There is no significant relationship between audio-visual utilization with teaching and learning business education courses in public universities in Edo State.

Ho3: The challenges faced by business educators in using audio-visual materials do not significantly affect their teaching effectiveness.

Ho4: Implementation of recommended strategies will not significantly improve the use of audio-visual materials in Business Education programmes.

Significance of the Study

The findings of this study when published in reputable journals, conference proceedings or workshop, will be of immense benefit to, students, educators/lecturers, parents, administrators and policy makers.

Students are the most direct beneficiaries of the integration of audio-visual materials into their learning environment. In the context of Business Education, where abstract concepts and complex theories are often taught, audio-visual aids can significantly enhance comprehension and retention. These materials cater to diverse learning styles—visual, auditory, and kinesthetic thereby fostering an inclusive classroom where all students can engage effectively. For instance, videos, animations, and interactive simulations can bring business case studies to life, making it easier for students to grasp difficult concepts and apply theoretical knowledge to real-world scenarios. Furthermore, the engaging nature of audio-visual content can increase student motivation and participation, reducing the monotony that traditional teaching methods might present.

Educators and lecturers also stand to benefit from the adoption of audio-visual materials. These tools provide educators with innovative ways to deliver content, making their teaching more dynamic and adaptable. For Business Education lecturers, using audio-

visual resources can streamline lesson planning and execution, allowing for more interactive and engaging sessions.

This approach not only enhances the educational experience but also alleviates the pressure on educators to constantly innovate to maintain student interest. Additionally, audio-visual materials can serve as valuable supplementary resources, offering a variety of perspectives and up-to-date information that enrich the curriculum.

Parents will likely appreciate the use of audio-visual materials as they see their children become more engaged and perform better academically. The integration of modern teaching aids can reassure parents that their children are receiving a contemporary education that prepares them for a competitive business environment. Moreover, audio-visual tools can sometimes be accessed at home, allowing parents to support their children's learning more effectively. The enhanced understanding and retention facilitated by these materials often translate into better grades and a more profound grasp of the subject matter, outcomes that parents eagerly anticipate.

Administrators in public universities will find that audio-visual materials can significantly improve the overall quality of education offered. By investing in these tools, universities can enhance their reputation as forward-thinking institutions that prioritize effective teaching methodologies. This can lead to higher student satisfaction rates and potentially increased enrollment numbers as prospective students and their families seek institutions that leverage modern educational technologies. Additionally, administrators can use data from the usage of audio-visual materials to track and measure learning outcomes, facilitating better decision-making and resource allocation.

Finally, policymakers will benefit from research findings that support the integration of audio-visual materials into the educational system. Evidence of the positive impact on student engagement and learning outcomes can drive policy decisions that advocate for increased funding and support for technological advancements in education. Policymakers can leverage this research to promote educational reforms that align with global standards, ensuring that students in Edo State's public universities are competitive on both national and international stages. Furthermore, the successful implementation of audio-visual materials in business education could serve as a model for other disciplines and educational levels, inspiring broader educational improvements across the region.

Scope and Delimitation of the Study

The scope of the study is hinged on the Utilization of Audio-Visual Materials in The Teaching and Learning of Business Education. It was carried in Public Universities in Edo State. The scope also covered specific variables such as the utilization of audio-visual materials in the teaching and learning of Business Education, how audio-visual materials impact students' learning outcomes in Business Education, the challenges faced by educators in using audio-visual materials for teaching Business Education and the strategies that can be implemented to enhance the use of audio-visual materials in Business Education Programme.

Definition of Terms

The following terms used in this study are defined operationally:

- **Audio-Visual Materials:** Educational tools that utilize both sight and sound to convey information. Examples include videos, animations, slideshows, and multimedia presentations.
- **Business Education:** A field of study that prepares individuals with the knowledge and skills necessary to manage and operate businesses effectively. It includes subjects such as accounting, finance, marketing, and management.
- **Engagement:** The degree to which students are interested and actively involved in their learning process. High engagement typically correlates with better learning outcomes.
- **Learning Outcomes:** The measurable knowledge, skills, and attitudes that students are expected to acquire as a result of their educational experiences.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter, the researcher will review several literatures relating to the topic were reviewed. The review was carried out under the following sub-headings:

- **Concept of Audio-visual Materials**
- **Teaching and Learning**
- **The Effect of Instructional Materials on the Teaching and Learning**
- **The Process of Teaching and Learning**
- **Availability of Audio-Visual Materials**
- **Utilization of Audio-Visual Materials**
- **Challenges to the Effective Utilization of AudioVisual Materials**
- **Strategies to Improve the Use of Audio-visual Materials**
- **Importance of Audio-visual Materials in Teaching and Learning**
- **Classification of Teaching Aids**
- **Teachers' Effectiveness in the use of Audio - Visual Aids in Teaching**
- **Theories of Instructional Materials**
- **Empirical Studies**

Concept of Audio-visual Materials

The concept of audio-visual materials is not new and can be traced back to the seventeenth century when John Amos Comenius, a Bohemian educator, introduced pictures as teaching materials in his book Orbis Sensualium Pictus (picture of Sensual World) that was illustrated with 150 drawings of everyday life. Similarly, Jean Rousseau and Johann Heinrich Pestalozzi advocated the use of visual and play materials in teaching. More recently, audiovisual materials were also widely used during and after World War II by the armed service. Many definitions of audio - visual aids have been made. Most of such definitions have been discussed in terms of equipment and materials and their use in the teaching and learning process. The term has also been defined by (Samuel, 2018) as those materials which do not depend solely upon reading to convey meaning. They may present information through the sense of hearing as in audio resources, sight, as in visual resources or through a combination of senses. Indeed, variety of such resources is a striking characteristic. According to Amaze (2018), “the term audio - visual materials is commonly used to refer to those instructional materials that may be used to convey meaning without complete dependence upon verbal symbols or language”. Some of the audio - visual materials like the motion pictures require the use of equipment to release their latent value. Some do not need equipment at all like an exhibit or a study print. Solomon (2019) in his illustrations defines audio - visual aids as teaching aids which are of two kinds - materials and verbal. The materials he called the hardware and software use in teaching and these include objects, models, photograph, painting, drawing, diagram, films among others. Another definition was made by Folarin (2019), who sees audio - visual materials as a

combination of audio - visual materials which are used in instructional or learning process to facilitate teaching and learning. According to Bimbola, (2018) audio - visual aids are supplementary devices by which teachers, through utilization of more than one sensory channel is able to clarify, establish and correlate concepts, interpretations and appreciation. Dike (2018) grouped audio - visual materials into audio resources such as records, tapes and cassettes, and radio broadcasts. The use of audio - visual aids facilitate and ease better understanding, capture more authentic instruction with better view of image and general sharpening of intelligence. This indicates that large class rooms are needed; there are problems of effective communication and the ability to cater for the individual differences in learners and their specific needs. The commonest problem in our junior secondary schools nowadays is that, students learn and forget, which is caused by too, much theoretical expressions and lack of audio - visual aids for instructions by the teachers while the students are passive listeners (Efebo, 2016). The successful use of pictures and other visual materials in the U.S Armed Forces during World War II proved the effectiveness of audio-visual materials. There are various types of audio-visual materials ranging from filmstrips, microforms, slides, projectors opaque materials, tape recording and flashcards. In the current digital world, audio-visual materials have grown exponentially with several multimedia such as educational DVDs, PowerPoint, television educational series, YouTube, and other online materials (Wikipedia contributors, 2021). The goal of audio-visual materials is to enhance the teacher's ability to present the lesson in simple, effective, and easy to understand for the students. Audiovisual materials make learning more permanent since students use more than one sense. The number of audio-visual materials that may be employed in teaching any

subject will depend upon the nature of the subject- matter and the resourcefulness of the teacher as according to Mondal (2017).

The concept of audio-visual material has been defined by various scholars and researchers. For Instance, Dike (2018) viewed audio-visual materials as those materials which do not depend solely upon reading to convey massages; they present information through the sense of hearing as audio materials or through the sight as visualized materials or it could be through the combination of both senses. Kinder (2015) defines audio-visual materials as any devices which can be used in teaching in other to make learning more effective, more concrete, more realistic, and more dynamic. In another development, Shabiralyani et al. (2015) define audio-visual materials as any instructional materials such as maps, charts, models, projector, television, and so on used in the classroom to aid learning and thereby making it easier and interesting to students to understand. Steen (1990) viewed Mathematics as an exploratory science subject that seeks to understand every kind of patterns such as patterns that occur in nature, patterns invented by the human mind, and patterns created by other patterns. He added that for students to understand and grow mathematically, they must be exposed to a rich variety of appropriate teaching materials to their own lives through which they can see variety, regularity and interconnections.

Audio-Visual Materials

Audio-visual materials are popular and effective teaching strategy when combined with lecture and demonstration. Mkpa (2017) sees audio-visual materials as resource materials used in facilitating learning by saving instructor's time and effort, capturing learner's interest, promoting effective retention of subject matter learned, keeping students

busy and active and stimulating imagination. Audio-visual materials when properly used, can help to make the message of the teachers more vivid and interesting. They make the participation of the learning in the teaching learning process more fully involved, meaningful and useful. Audio- visual materials when used intelligently can provide the most effective kind of teaching- learning at all levels of education since certain important aspect of teaching which seems unreal, vague, uninspiring, shadowing and relatively meaningless could be made real and meaningful with audio-visual materials. Allen and Bacon (2017) state that audio-visual materials provide a wide range of variety of musical and dramatic experiences which carry the stimulus mode of sound and picture to the students. Moreover, they have well developed systematic, progressive and applied approaches that carry organized integrated knowledge and experience presented from a source to a large audience (number of students) in order to mitigate educational problems and improve the process of learning. They are useful materials for promoting better planning and scheduling, giving the teacher more time for supervision, guidance, co-ordination and correction of student's work. In recent years, many new and wonderful audio and visual materials have found their way into the classroom: radio, television, video set, power point, computers, if these are properly used, they can make the teacher's task easier and more effective. A good teacher tries to use a number of these materials to enhance the efficiency and the effectiveness of the teaching and learning. One of such materials is audio-visual materials which both teacher and learners can use to enhance the quality of an instruction. The achievement of educational objectives depends primarily on the knowledge and proper utilization of audio-visual materials. Onyejemezie (2018) reveals that audio-visual materials do not achieve any of the

attributed values on their own; their usefulness and impact depends on what the teacher makes out of them. This is why it is absolutely necessary for the teachers to have the knowledge and manipulative skills of using these materials to the fullest, for without the teacher using these materials in the teaching -learning process, the students may find it extremely hard to learn. Audio-visual materials provide a stimulating environment for the child's exploration, developing the sensory skills (tasting, touching, feeling, seeing and smelling) and body co-ordination, and increasing finger and gross motor skills through manipulating objects (Ike, 2017). Learning is most effective when two or more senses are used simultaneously to receive information for example, using vision and hearing to learn something is believed to be more effective than just seeing something. The use of audio-visual materials is an effective method for students to achieve greater knowledge. Audio-visual materials are integrated part of the teaching –learning process. They complement the teacher's use of selected teaching methods by clarifying and simplifying the communication, arousing interest and attention leading to motivation, concrete understanding and enforcement of communicated information (Naidu, 2018). When audio- visual materials are well selected and skillfully used, they multiply and widen the channel of communication. The audio-visual materials have the ability to expand the sensory, motor and perception skills of young children. When children have a good supply of instructional materials available to them, they interact with these materials and such interactions lead to new discoveries and mastery in solving new problems (Coombs, 2017). Ogunmilade (2016) and Rowtree (2018) gave a comprehensive summary of the importance of audio-visual materials, to them these materials help to share expertise knowledge which reaches a lot of people

simultaneously. They allow the students to learn at their own rate and encourage integrated individual and group learning. They bring before the learners what otherwise could have looked imaginary or farfetched, challenging the sense of creativity and making teaching–learning situation more pleasurable, meaningful and effective.

Concept of Teaching and Learning

The concept of teaching and learning is deeply interconnected, as both processes rely on one another to facilitate the transmission and acquisition of knowledge. Teaching refers to the deliberate, structured efforts of educators to impart knowledge, skills, and values to students, guiding them through a specific learning experience. Learning, on the other hand, refers to the process through which individuals absorb, process, and internalize this information, transforming it into meaningful understanding, skills, and competencies. While teaching involves the facilitation of this process, learning focuses on the cognitive, emotional, and social changes that occur in the learner as a result of the teaching process (Samuel, 2019).

At its core, teaching involves more than just the delivery of information. It encompasses the methods, strategies, and techniques that educators use to engage students, provide support, and help them construct their own understanding of the material. Effective teaching requires an understanding of how students learn, an awareness of the content being taught, and the ability to create an environment conducive to learning. Teachers must carefully plan and organize lessons, select appropriate resources and materials, and choose the most effective instructional strategies based on the diverse needs, backgrounds, and learning styles of their students.

Learning, as a reciprocal process, involves active engagement on the part of the student. It is not merely a passive reception of knowledge but a dynamic process of interaction between the learner and the material, the teacher, and the environment. Learning theories, such as constructivism, highlight the importance of students constructing their own knowledge based on prior experiences, with new information building on existing mental frameworks. In this view, learners are seen as active participants in their educational journey, integrating new knowledge with what they already know, rather than simply absorbing information from a teacher. This process requires critical thinking, problem-solving, and the ability to apply knowledge in different contexts (Sadiq, 2018). The relationship between teaching and learning can be seen as a continuous cycle of interaction. Teachers observe their students' progress, provide feedback, and adjust their methods to better suit the learners' needs. Learning, in turn, informs teaching, as teachers reflect on the effectiveness of their methods and adapt them to optimize the learning process. This reciprocal nature of teaching and learning is essential to the ongoing development of both educators and students. When students succeed in learning, it validates the teacher’s methods, but when students face challenges, it often prompts teachers to rethink their strategies or explore alternative approaches to make the content more accessible.

The concept of teaching and learning is also shaped by the sociocultural context in which it takes place. Education is not a neutral activity; it is influenced by social, cultural, economic, and political factors. Teaching practices are often designed not only to impart knowledge but also to promote certain values, norms, and social skills. For example, teaching may focus on developing critical thinking, creativity, or collaborative skills,

depending on the cultural and societal expectations. Similarly, learning is also shaped by the learner's environment, including their family background, language, social interactions, and the resources available to them. The concept of culturally responsive teaching recognizes that learners come from diverse backgrounds, and their previous experiences, including language, culture, and prior knowledge, influence how they understand and process new information. Effective teaching and learning are often enhanced by the use of various tools and methods. These can include traditional face-to-face instruction, as well as more modern approaches, such as digital learning environments, interactive technologies, and collaborative learning platforms. The use of technology in teaching has become increasingly important in recent years, as it offers new opportunities for engagement, personalized learning, and access to resources beyond the traditional classroom. In the context of science education, for instance, technology can provide interactive simulations, visualizations, and multimedia presentations that help students better understand abstract concepts, making learning more engaging and accessible.

Assessment is another critical component of the teaching and learning process. It provides feedback to both students and teachers, helping to gauge the extent to which learning objectives have been achieved. Assessment can take various forms, ranging from formative assessments (ongoing checks for understanding throughout the learning process) to summative assessments (final exams or projects that measure overall learning outcomes). Both types of assessment play a key role in shaping the direction of teaching, as they provide information about students' progress and highlight areas where additional support may be needed (Motun, 2019).

The Effect of Instructional Materials on the Teaching and Learning

Instructional materials play a significant role in the teaching and learning process. By incorporating varied materials like textbooks, visual aids, multimedia resources, and hands-on activities, educators can enhance student engagement, understanding, and retention of information. These materials provide different avenues for learning, catering to diverse learning styles and preferences, making the educational experience more dynamic and effective.

Instructional materials are instrumental in shaping the teaching and learning process. By integrating a diverse range of materials such as textbooks, visual aids, multimedia resources, and hands-on activities, educators can create a more engaging and comprehensive learning experience for students. These materials offer multiple pathways for learning, accommodating various learning styles and preferences, thereby enriching the educational journey for both teachers and learners. Instructional materials are key in shaping the teaching and learning process. By integrating a diverse range of materials such as textbooks, visual aids, multimedia resources, and hands-on activities, educators can create a more engaging and comprehensive learning experience for students. These materials offer multiple pathways for learning, accommodating various learning styles and preferences, thereby enriching the educational journey for both teachers and learners. Instructional materials are pivotal in molding the teaching and learning process. By blending various materials like textbooks, visual aids, multimedia resources, and hands-on activities, educators can craft a vibrant and effective learning atmosphere for students. These materials

provide diverse learning avenues, catering to different learning styles and preferences, ultimately enhancing the educational voyage for both instructors and learners.

The Process of Teaching and Learning

According to Ayodele and Adegbile (2017), elements of teaching-learning process include the teacher, the learner, the learning process, the learning situation and evaluation.

The teacher: The teacher plays an important role in the process of teaching and learning. He or she is the single most important stimulus that sets the learning process into motion. Teaching as a term can be used in two senses: Firstly, it can mean a particular type of profession in which some interested people are involved. Consequently, we talk of teaching as a noble profession. Secondly, teaching means the various educational activities undertaken by a more knowledgeable person to enable others learn (Maduewesi & Azubuike, 2017). Ogbonnaya (2018) mentioned the activities carried out by the teacher who is assumed to be a more knowledgeable person. Such activities include: motivating, reinforcing, instructing the learner, guiding, counseling, teaching, supporting, discipline, etc. The traditional conception of teaching as a process of making impact on the presumed passive learners with blank or empty heads has given way to a more modern conception of teaching as an attempt to help and facilitate the acquisition of the desired changes in attitude, knowledge, skill, values and ideas. Both the teacher and the learner must be active in the teaching-learning process, because learners tend to learn more from what they do by themselves than what any other person does for them. We need to recognize fully that it is the teacher who will take responsibility for helping students to achieve valid learning objectives through a combination of roles and duties involving selection of all kinds of

appropriate audio-visual materials and arranging for their most effective use (Abimbade, 2017). According to Calton and David (2017), in the school where audio-visual media are available to present needed facts and principles, teachers must be sure that the students use these media as the basis for solving real meaningful problems. Information not put to functional use is easily forgotten. Teachers in this complex age should be able to guide learners to the vast reservoir of audio-visual materials.

The Learner

The learner is very important in the teaching-learning process because without the learner, there is no learning. Henry (2016) pointed out that, unless someone is learning, there is no teaching, just as there is no selling without customers. Henry went further to define the word "learners" as the pupils or students who individually or collectively comprise the classroom group, i.e., the persons, on whose behalf the educational programme exists or operates. Ogbonnaya (2016) states that the educational psychologists consider the learner to be a living, growing, dynamic and information seeking individual who can be changed by the instruction procedures. This is why the teacher should critically know how the learner grows and develops, including aspects of his personality, hereditary endowments, physiology, home and society affecting the way he learns. Learning has been defined by the psychologists as a relatively permanent change in behaviour, which results from the interaction (experience) of an individual with his environment. Henry (2016) also defined learning as a relatively permanent acquisition and the use of the newly acquired knowledge or experience in problem solving. This implies that only the study of facts and information cannot constitute learning, until the acquired knowledge is put to use in solving future

problem. Learning must bring about permanent changes, which should be in knowledge, in character and in skill before it can be said that useful learning has taken place. For example, a student of computer science who has acquired only the theoretical knowledge of computers without putting it to practice cannot claim to be computer literate. Modern learning theory no longer focuses on the teacher, on the text books, nor on the units of subject matter or administrative credits, but upon each human learner and his personal needs and goals. The key is how these personal needs and abilities fit individuals to lead satisfying and productive lives. Audio-visual media should be used by teachers to dispense information. This will help the teacher to observe the learning process and to deal with the uniquely personal needs, interest, abilities, and difficulties of each student. Learning process means whatever people do when they learn. What they do include behaviour that is not directly observable, such as perceiving, thinking, remembering and identifying, as well as behaviour that can be directly observed, such as writing, computing, attending and talking. It is a process that begins at birth and continues throughout life. The learning situation refers to the environment in which the learner finds himself and in which the learning process takes place. This can be classroom, library and such other places. There is no learning without teaching and teaching may not be without learning. The teacher employs many devices to make teaching-learning process effective. One of such devices is audio-visual material. Audio-visual materials make teaching and learning more concrete, more realistic and more dynamic. Deducing from Ayo (2017), since audio-visual materials supply concrete basis for conceptual thinking, they give rise to meaningful concepts enriched by meaningful association. Learners need to be prepared for experiences, need to obtain directions for

performing procedures, need to obtain facts about situations and vivid descriptions of the application of principles. Hence, we turn to audio-visual materials to enhance clarity of communication and increase speed of comprehension. Teachers need to incorporate audiovisual materials in the teaching-learning process to help the students benefit maximally from the learning experience hence the use of audio-visual materials.

Availability of Audio-Visual Materials

The availability of audio-visual materials is a critical component of modern educational, professional, and entertainment environments. Audio-visual materials encompass a wide range of formats, including films, recordings, slideshows, podcasts, online videos, interactive media, and more. These materials serve as essential resources across various sectors, such as education, corporate training, entertainment, and healthcare. The growing accessibility and diversity of these materials have revolutionized the way information is consumed, processed, and retained.

One of the key factors influencing the availability of audio-visual materials is technological advancement. The digital revolution, particularly the rise of the internet and streaming platforms, has made it easier than ever to access vast repositories of content. With platforms like YouTube, Vimeo, and various educational streaming services, individuals can quickly find and consume a wide range of video and audio-based content. This has been particularly important for remote learning and online education. Studies have shown that audio-visual materials enhance learning outcomes by providing diverse sensory inputs, which facilitate better retention and understanding (Mayer, 2015). Furthermore, platforms like Coursera, Khan Academy, and edX offer comprehensive educational resources that integrate audio-

visual materials such as lectures, animations, and demonstrations, which are accessible to users worldwide. Physical archives and libraries continue to serve as crucial sources of audio-visual content. Institutions such as the Library of Congress in the United States or the British Library in the UK preserve historical film reels, recordings, and other media, making them available for public and academic research. These institutions play a vital role in ensuring that audio-visual materials are preserved for future generations. This is particularly important for preserving cultural heritage, as many films, audio recordings, and other media serve as primary sources of historical and cultural documentation (Harris, 2017). The development of hardware and software has also contributed to the proliferation and accessibility of audio-visual materials. The advent of personal computers, smartphones, and tablets, along with the development of user-friendly software, has made it simple for individuals and organizations to create and share their own audio-visual content. The growth of social media platforms such as Instagram, TikTok, and Facebook has contributed to a democratization of content production, allowing anyone with a smartphone to produce and share videos with global audiences. The widespread availability of editing software like Adobe Premiere Pro, Final Cut Pro, and others has lowered the barriers to creating professional-quality audio-visual content, allowing creators to reach diverse audiences (Schwartz, 2020).

In educational settings, the availability of audio-visual materials plays a significant role in accommodating various learning styles. According to the multimedia learning theory, which Mayer (2019) elaborated, individuals retain information better when it is presented in both visual and auditory formats rather than one or the other alone. Audio-visual materials

cater to different learning preferences, particularly for students with disabilities. For instance, visually impaired students may benefit from audio recordings or descriptive video, while students with hearing impairments can access subtitles or transcripts alongside videos. The increasing integration of accessibility features into audio-visual content ensures that these materials can be enjoyed by a broader and more diverse audience. Despite the many benefits, challenges remain in the availability and accessibility of audio-visual materials. One of the primary concerns is copyright and licensing issues, which can limit access to certain materials. While platforms like YouTube have made it easier to access a wide range of content, the legal complexities surrounding intellectual property rights often result in content being taken down or restricted. Educational institutions, in particular, face difficulties in obtaining the rights to use certain films or audio recordings for instructional purposes (Hesmondhalgh, 2018). Additionally, in many parts of the world, internet access remains limited, which restricts the availability of online audio-visual content. According to the International Telecommunication Union (ITU, 2020), while internet penetration has increased globally, many rural and low-income regions still struggle with inadequate internet infrastructure. The rise of Artificial Intelligence (AI) and machine learning also has the potential to revolutionize the way audio-visual materials are produced, indexed, and accessed. AI tools are increasingly used to automate the process of tagging, categorizing, and recommending content. For example, platforms like Netflix employ sophisticated algorithms to suggest video content based on users' preferences and viewing history. Moreover, AI-powered tools for automatic transcription and translation are making audio-visual materials more accessible to non-native speakers or those with hearing impairments

(Tenenbaum, 2021). While these advancements are promising, there are concerns about data privacy, algorithmic biases, and the centralization of content on large platforms, which could limit the diversity of voices and perspectives available in the audio-visual landscape. The availability of audio-visual materials extends beyond entertainment and education; it plays an important role in sectors such as healthcare, journalism, and advocacy. In healthcare, for example, medical training has increasingly relied on simulations and video-based tutorials to teach complex procedures and enhance skills (Raemer et al., 2016). In journalism, visual storytelling through documentaries, news footage, and social media videos has become an integral way to inform and engage the public. Advocacy groups also use video to highlight issues, mobilize support, and influence policy. The power of visuals and sound to evoke emotional responses can be a potent tool for change (Nixon, 2018).

Utilization of Audio-Visual Materials

The utilization of audio-visual materials has become an essential part of communication, education, and entertainment across multiple domains. These materials, which include video, audio, animations, and interactive media, are increasingly integrated into both formal and informal settings due to their ability to engage multiple senses and enhance understanding. In educational contexts, audio-visual materials are utilized to support various learning styles and facilitate deeper learning. According to Mayer's multimedia learning theory, combining visual and auditory stimuli can significantly improve comprehension and retention of information (Mayer, 2019). For example, educational videos, tutorials, and interactive simulations have proven effective in explaining complex concepts, making abstract ideas more accessible to students. This approach is particularly beneficial for visual learners and those with different learning needs, such as students with

hearing or visual impairments, who may rely on captioned videos or audio descriptions (Mayer, 2019). In the corporate world, audio-visual materials are extensively used for training, marketing, and communication purposes. Corporate training often leverages videos, webinars, and interactive modules to ensure employees grasp critical skills and knowledge. Studies have shown that video-based learning increases employee engagement and knowledge retention compared to traditional methods like reading manuals (Clark & Mayer, 2017). Similarly, businesses use video advertisements and presentations to effectively communicate their brand message and products, as research indicates that people are more likely to remember and respond to messages conveyed through visual and audio elements (Lutz & Lutz, 2018).

In healthcare, audio-visual materials are indispensable for training medical professionals and educating patients. Medical simulations, video demonstrations of surgical procedures, and virtual reality-based training modules have become integral to clinical education (Raemer et al., 2019). These tools provide safe and controlled environments for practice, helping professionals hone their skills before engaging with real patients. Additionally, patient education materials, such as videos explaining medical procedures or health conditions, are increasingly used to ensure that patients fully understand their diagnoses and treatment options (Wagner et al., 2017). In the field of journalism and advocacy, the utilization of audio-visual media is paramount. Visual storytelling through documentaries, news reports, and social media videos has reshaped how information is disseminated and consumed. The emotional impact of video and audio can foster empathy, raise awareness, and drive action on social and political issues (Nixon, 2019). For example,

social movements have harnessed video platforms to share real-time footage, amplify voices, and advocate for change, demonstrating the power of visual media in shaping public opinion (Tufekci, 2017). While the use of audio-visual materials brings significant benefits, it also presents challenges, particularly in terms of accessibility and copyright issues. Ensuring that content is accessible to all users, including those with disabilities, remains an ongoing concern. Additionally, the rapid growth of digital content has created complex copyright and licensing issues that may limit the availability of certain materials, particularly in educational settings (Hesmondhalgh, 2018).

Challenges to the Effective Utilization of AudioVisual Materials

The followings are some of the factors militating against the effective utilization of audio-visual materials according to Nwakile (2018).

Lack of Adequate Time: It needs a lot of time for the teacher to prepare a lesson to have interactive classroom session. Teachers' valuable time may be lost in gaining familiarity with new equipment. In most cases, the time that is allotted for a subject on the time table might not be enough for the teacher to present his or her content alongside with effective use of the materials which will accept the wholesome delivery of the content. From week to week teachers are occupied, trying to cover their scheme as any time missed cannot be regained. The school time-table is so tight, and each subject is apportioned 35-40 minutes of teaching a course, such range of time does not give room for many illustrations. It takes time to produce your own videos or slides. Films may be difficult to obtain, or it can take time to get permission to use them. Posters and transparencies may require extensive preparation, creating power point presentation can also be time consuming.

Technical Problems: A bulb might burn out on your projector, or it might be blurry or hard to focus. When using a power point in presentation, font and colours may show up differently on screen or the music and sound might not play. DVD may be scratched or not compatible with your player.

Space: If you choose to use an audio-visual material, the size of the room should be taken into consideration. It is critical that all students are able to see or hear your presentation. If the room is too large for everyone to see the visual material, or if part of your audience is forced to view the presentation at odd angles, some students will struggle to keep up with your lesson.

Unavailability of Audio-Visual Materials: There are scarcities of audio-visual materials in most institutions. These materials are in poor condition in few institutions where they are available.

Resistance to Change: Some teachers have refused to change from the old way of doing things. Using technology in classrooms can be so demanding during the first phase of introduction because students will always need the help of the teachers, this scares many teachers, but in the long run, each student will know what to do; and the teacher's work will be simplified. Also, teachers and schools give so many excuses for not using technology in their education curricular, these excuses include; not having enough computers, not getting enough technical training, then other teachers argue that the process of learning technology and how to integrate it in education takes too much time, also, there are others who feel that technology might replace them, so instead of losing their jobs and old methodology of teaching, they refuse to use technology in education.

Poor Maintenance Culture: Some of the materials are fragile and can be easily damaged while in use. Most of these teaching materials are poorly maintained and mishandled by the teachers and school authorities. This leads to inefficiency of the materials. Very many of the teachers use teaching materials occasionally without the proper upkeep of the materials after use for the future reference. Most schools are affected by non-availability of resource rooms for the proper keeping of the audiovisual materials, thereby limiting their use.

Strategies to Improve the Use of Audio-visual Materials

The strategies to improve the use of audio-visual materials include the following: Government should provide fund for the buying of the materials. School authority should help in the provision of audiovisual materials. The qualified teachers should teach using audio-visual materials. Supervisors should supervise the teachers in the classroom, making sure that they make use of the materials. Sufficient time should be allotted to different courses, so that the teachers will have enough time to make illustrations using the educational materials. Most educational media are in English. We should have them in Nigeria Languages- Igbo, Yoruba, Hausa, etc. The teacher should clearly establish the lesson objective. Be certain of what is to be communicated, gather the necessary data by researching for support material. The teachers must be in constant search for media resources which are available in the immediate environment. Organize the material into an outline or a lesson plan. The plan should include all key points that need to be covered. Select the ideas to be supported with audiovisual materials. The materials should be concentrated on the key points. Materials are often appropriate when long segments of technical description are necessary, when a point is complex and difficult to put into words,

when instructors find themselves forming visual images or when students are puzzled by an explanation or description. Since materials are normally used in conjunction with a verbal presentation, words on the materials should be kept to a minimum, that is, the materials should not carry too many messages at a time. In many cases, visual symbols and slogans can replace extended use of words. Audio-visual materials should appeal to the students and be based on sound principles of instructional design. The materials should also lead to the desired behavioural or learning objectives and provide appropriate reinforcement. Materials that involve learning a physical skill should guide students towards mastery of the skill or task specified in the lesson objective. The usefulness of materials can be improved by proper sequencing to build on previous learning. Frequently, good organization and natural patterns of logic dictate the sequence. However, use of standardized materials, including a syllabus is recommended. Sequencing can be emphasized and made clearer by the use of contrasting colours. The effectiveness of materials and the ease of their preparation can be increased by initially planning them in rough – draft form. Revisions and alterations are easier to make at that time than after their completion. The rough draft should be carefully checked for technical accuracy, proper terminology, grammar, spelling, basic balance, clarity and simplicity. Audio-visual materials should also be reviewed to determine whether their use is feasible in the training environment and whether they are appropriate for the students. Ogunmilade (2016), outlined guidelines for effective use of audio-visual materials: The teacher should involve the students in a variety of learning activities that would require the construction of audio-visual materials such as preparing posters, display boards, models, etc. These activities encourage the students to design their own learning tools as well as enhance

their creativity and resourcefulness. If possible, provide a workshop which is equipped with simple construction tools, drawing materials, recording equipment, radio, television set, computer, etc. The teacher must receive training in the preparation of materials. As far as possible, the local material should be used in the preparation of materials. Materials have no value in the learning process if they cannot be heard or seen. The material should be displayed properly, so that all the students can see it, observe it and can derive maximum benefits from it. The teacher should avoid the temptation to use the material as a crutch. It is least desirable for the teacher to allow the audio-visual materials to take over from the teacher, i.e., do not allow an entire class period to be devoted to the use of the materials. Use materials that are similar to the original if possible. Give room for questions and answers. Set your gadgets (equipment, accessories, etc.) fifteen minutes before the lesson starts and test the effective working of the audio-visual materials. If you are not quite sure of how the gadget works, engage the service of a projectionist or technician. Keep the materials safe so that teachers can borrow the material and use. Storage facilities should be provided for long life span of audiovisual materials. It is based on this reason that the researcher seeks to investigate the utilization of audiovisual materials in teaching social studies in Upper Basic schools.

Importance of Audio-visual Materials in Teaching and Learning

The application of audio-visual materials in teaching makes learning more interesting and effective. It has made it possible to breach the gap that exists among students who have a low level of comprehending learning. Osokoya (2019) stated that the use of audio-visual materials in teaching and learning does not only involves the use of textbooks

but it includes other instructional materials that enable students to visualize the conceptual implication of what is been taught. He added that the use of audio-visual materials in teaching enables the teachers to arrest and gain the attention of the students. In addition, audio-visual materials are recognized as sources of materials used by teachers in imparting knowledge at all levels of education. It has assisted teachers to present teaching in a more practical way thereby overcoming difficulties that exist in teaching a particular subject matter (Gopal, 2018). Also, Cummins (2017) posited that audio-visual materials assist students to find a solution to problems when they can view them practically. The use of audio-visual materials in teaching and learning made teaching interesting to students and their teachers as well as creating a better relationship in the classroom, and promoting effective communication between the students and their teachers. Teaching materials have helped students to retain knowledge better thereby making learning to be permanent; it enables students to retain and recall what they have learned. This is made possible because they were able to visualize what was been taught in the classroom. (Dike, 2018; Natoli, 2019). Furthermore, the availability and effective use of audio-visual material in teaching at Junior high schools enhance and increase the rate of learning, thereby saving the time of the teachers which can be a channel to other activities such as teachers' participation in curriculum development, a compilation of lesson note, etc. The inculcation of teaching materials helps students to experience concept virtually which result in making lessons explicit to the students and expanding their horizon of experience (Joseph, 2017). The purpose of audio-visual materials in teaching and learning includes, best motivation, clear image, save energy and time, an antidote of the disease of verbal instructions, capture

attention, reinforcement to learner, positive transfer of learning, gain and hold student interest, increase understanding and retention, stimulate the development of understanding and attitudes. The ability to listen can be developed best through the use of audio-visual materials. It is also the responsibility of the school, to provide training for our students to be good listeners. Training in the art of listening is one of the aims of audio-visual education.

Classification of Teaching Aids

Using audio-visual aids and other technologies developed in this modern scientific era for the purpose of achieving concrete education proves beneficial for teacher and student and educational system as whole. Teaching aids can be classified based on their use in teaching and learning process. (Malik, Mittal, Singh, & Rana, 2022) It brings diversification in methods of instruction. They are equally useful at all levels of education. Appropriate use of audio- visual aids in teaching of English, Geography, History, Science, Languages, Art, Agriculture and many other technical and vocational subjects is increasing day by day. Selvi (2017) contend that audio-visual aids and their use are not only limited to educational purposes rather if we go back in history, we find Martin Luther suggesting to use empty walls forthe promotion of Protestant movement. In fact, this idea leads to the invention of writing board or black board which is used today in almost every school worldwide. Some other social objectives are also achieved through the use of audiovisual aids i.e. in an awareness campaign about Human Immunodeficiency Virus (HIV) audio-visual aids are used. Whilestudying the broad umbrella term of audio-visual aids, one can easily came across different types of audio-visual equipment ranging from simple hand-made charts to

highly sophisticated projectors. In the broadest sense audio visual aids can be categorized under two heads which are the:

1. Projected Aids
2. Non-Projected Aids

Audio-visual material contributes valuable experiences for teachers and students. Almost every form of instruction is based on verbalism, but the use of audio-visual aids minimizes the verbalism and facilitates students to concentrate and motivate them towards abstract thinking and imagination to better understand the concept. Projected Aids According to (Wittich & Schukkaer ,2017) projected aids involve an enlarge image of the material or text projected on a screen which is at a distance from the projector. While using projected aids(film strips, slide projector, overhead projection, opaque projection) the room is either totally dark or may be partially dark. The bright colors and images on the screen catch the attention; sound and motion will make presentation more dynamic as compared to non- projected aids. Projected aids are equally effective for every age group as well as small or large group. Equipment used for projection requires eclectic power. A clean white wall can be effectively used for front projection. Projected aids include:

Interactive Whiteboard (IWB): captured the interest of teachers in view of facilitating the teaching process at schools through stimulating dialogue and discussion during teaching in addition to attracting students' attention and concentration throughout the class. For the purpose of identifying the contribution of the IWB in improving students' performance; a comparison between the scores in the IWB exams and retrieval exercises with their scores in the exams of three semesters taught through traditional lectures for a Vocational Education

Technology course alongside with evaluating questionnaires for the students' perception. (Haroon, Omar, & Walaa, 2022)

Augmented Reality (AR): is a technology that can turn virtual objects in the form of two dimensions (2D) or three dimensions (3D) into an object that looks real, then able to display objects in real-time. Using AR technology, you can visualize learning material into 3D objects to make it easier to understand when using it as a learning medium. (Sukirman, 2023)

Smart boards: Smart boards integrate touch-sensitive displays with interactive features, enabling teachers to draw, write, and manipulate digital content. Transfer of knowledge to future generations has always been performed by people since existence of early humans. Today, with the developments in technology, education is presented in several ways and through a wide variety of tools such as two- or three-dimensional learning contents, animations, video conference lessons and interactive applications. Parallel to these developments, smart boards, tablets, virtual laboratories and cooperative learning environments have resulted in more innovative solutions in teacher training and changed the way of teaching. (Murat Yalman, 2021)

Graphic Aids: Graphic aids are commonly used to describe ideas and concept with little or no verbalism. Like other teaching aids graphic aids helps student to better understand and retain the information. Some basic types of graphics aids are: Photographs & Pictures A picture or photograph gives an accurate concept or idea of any object or concept. Good photograph can effectively communicate the whole story without using a single word. Pictures and photographs can be colored as well as black & white. Colored pictures and photographs are relatively more eye- catching (Gillani, 2018). Flash Cards: Gillani (2019)

describes flashcards as potential medium of visual education. If a teacher is to introduce new words, using flashcards can meet the purpose. They commonly involve photographs and picturesto communicate anew idea or a word. They are widely used at toddlers' level and elementary schools. Flashcards are usually in a large number and they are flashed to the students' one by one while teacher verbally explains what is contains.

Charts: Chartsare widely used visual/graphical aids to present concepts and ideas that are complicated and that cannot be comprehended easily by just mere words no matter written or oral. Charts are mixture of different types of graphics i.e. pictures, diagrams, cartoons, graphs, written text or drawings. Teacher usually restricts one idea per chart and thus making concept clear without ambiguity.

Diagram: Diagram is a simple and explanatory drawing showing inter-relation and explaining ideas and concepts by using lines, symbols and geometrical forms. Diagrams go beyond mere representation rather they are self-explanatory or self-describing (Thomas & Kobayashi , 2019). Poster is a pictorial representation of an idea or concept in striking bold colors to attract the viewer. Posters are usually displayed out in open for the purpose of awareness in general public. Posters not only serve as a means to decor the class rather it stimulates interest in students to learn about different countries, art, historical places, science, industries and whatever the posters are about (Kieffer & Cochran, 2018). Posteris likely to bring the learner to first two steps i.e. attention & interest and to go through them as well. Poster is not meant to educate rather stimulating interest and action immediately is the ultimate goal. White/Marker Board: White boards are large white sheets of plastic material with a clean clear surface to facilitate writing or drawing while using felt pens or erasable

markers available in different colors. Flannel/Felt Board Flat panels of heavy cardboard: Masonite board or plywood are utilized and flannel cloth is stretched and glued over the surface to make a felt/flannel board. Graphic materials i.e. pictures, writing on a hard paper, photographs etc. can be placed on flannel board by using sand papers pasted on their backs and they are called as flannel graphs. Specimens. Specimen can be a part, sample or small piece of the real object. Even a tiny piece of real object stimulates interest in students to learn more and more i.e. specimen of a leaf or birds feather can be very eye catching and stimulating.

Field Trips/Study Tours: Gillani (2017) says that field trips provide opportunity to observe natural beauty, industries and their operations and many other places that are of interest to teacher and student. Children respond better about any theory they have learned when they see how it works in real world. Field trips and study tours should be arranged in advance and later they must be followed up by a discussion or report to retain information gathered. Exhibitions: Exhibitions are not mere gathering of display material rather they are a comprehensive source of information. Exhibitions are planned to communicate some valuable concept to community, parents and students. When students go through or participate in exhibitions, they express themselves and their display material, this not only helps in speech training rather confidence and tolerance to opposite opinion can be observed. Infect conducting exhibitions increases cooperative efforts along with focus on ethical, cultural, disciplinary, vocational and aesthetical values. Some largely used audio & visual aids are discussed here under: Radio and Television Educational broadcast is an old concept developed during the period of 1960s and 1970s when a suggestion to broadcast school was

welcomed. By broadcasting lessons thousands of learners can be educated (Thomas & Kobayashi, 2018). Through radio and television programmes education to any age group can be targeted.

Teachers' Effectiveness in the use of Audio - Visual Aids in Teaching

Instructional resources are educational inputs that are vital to the teaching of any subject in the school curriculum. They are materials which the teacher uses in supplementing his teachings (Adeniyi, 2018). Teachers are considered as the major implementing factors of effective resource utilizations in any teaching - learning process. The term utilization refers to the usage degree of a given material in the execution of a given task (Uzuegbu, Mbadiwe & Anulobi, 2019). It involves creation of value in things (Asogwa, Onu & Egbo, 2013). Utilization to a large extent judges the value of instructional materials by the degree in which it singly or collectively satisfies the derived instructional needs. In the context of a paper cited, utilization refers to the extent to which an instructional material in electronics instruction is put into use by teachers of electronics in senior secondary schools. Instructional materials are not ends in themselves but means of attaining specific instructional functions. The ability of the teacher to effectively utilize the available instructional materials optimizes the attainments of instructional situation; this varies with the level of utilization.

Theories of Instructional Materials

Sociocultural Theory of Teaching, Learning, and Development

The work of Lev Vygotsky (1934, 1978) has become the foundation of much research and theory in cognitive development over the past several decades, particularly what has become known as sociocultural theory. Vygotsky's theory comprises concepts such as culture-specific tools, private speech, and the zone of proximal development. Vygotsky believed cognitive development is influenced by cultural and social factors. He emphasized the role of social interaction in the development of mental abilities e.g., speech and reasoning in children. Vygotsky strongly believed that community plays a central role in the process of "making meaning." Cognitive development is a socially mediated process in which children acquire cultural values, beliefs, and problem-solving strategies through collaborative dialogues with more knowledgeable members of society. The more knowledgeable other (MKO) is someone who has a higher level of ability or greater understanding than the learner regarding a particular task, process, or concept. The MKO can be a teacher, parent, coach, or even a peer who provides guidance and modeling to enable the child to learn skills within their zone of proximal development (the gap between what a child can do independently and what they can achieve with guidance). The interactions with more knowledgeable others significantly increase not only the quantity of information and the number of skills a child develops, but also affects the development of higher-order mental functions such as formal reasoning. Vygotsky argued that higher mental abilities could only develop through interaction with more advanced others.

According to Vygotsky, adults in society foster children's cognitive development by engaging them in challenging and meaningful activities. Adults convey to children how their

culture interprets and responds to the world. They show the meaning they attach to objects, events, and experiences. They provide the child with what to think (the knowledge) and how to think (the processes, the tools to think with). Vygotsky's theory encourages collaborative and cooperative learning between children and teachers or peers. Scaffolding and reciprocal teaching are effective educational strategies based on Vygotsky's ideas. Scaffolding involves the teacher providing support structures to help students master skills just beyond their current level. In reciprocal teaching, teachers and students take turns leading discussions using strategies like summarizing and clarifying. Both scaffolding and reciprocal teaching emphasize the shared construction of knowledge, in line with Vygotsky's views.

Dual-Coding Theory

Dual coding theory suggests that both verbal and non-verbal processing play a role in how we learn and remember information. It proposes that information is stored in two distinct ways: verbally, through language, and non-verbally, through images, diagrams, or sensory experiences. This theory implies that when we encounter information using both verbal and visual cues, we are more likely to remember and understand it better compared to just one type of coding. Dual coding theory, in essence, highlights the power of combining words with visuals to enhance learning and memory retention. When information is presented in a dual format, such as through words and images, it engages multiple cognitive processes simultaneously. This dual representation allows for a richer encoding of the material, making it more memorable and easier to retrieve later on. By leveraging both verbal and visual cues, individuals can create stronger mental connections and associations,

facilitating a deeper understanding of the content. This theory has significant implications for education, instructional design, and communication strategies, emphasizing the effectiveness of incorporating diverse forms of representation to optimize learning outcomes. Dual coding theory underscores the significance of integrating both linguistic and visual elements in learning and memory processes. By utilizing a combination of words and images, individuals can enhance their comprehension and retention of information. This dual representation approach taps into different cognitive pathways, fostering a more robust encoding of knowledge. Through the synergy of verbal and visual stimuli, learners can construct more intricate mental connections and associations, leading to a deeper grasp of the material. This theory not only informs educational practices but also underscores the value of diverse modes of representation in facilitating more effective learning experiences. Dual coding theory is a fascinating concept that delves into how we process and remember information. By combining words and visuals, we engage different parts of our brain simultaneously, leading to a more robust understanding and retention of the material. This approach allows for a richer encoding of knowledge, making it easier to recall later on. Embracing both verbal and visual cues creates a more holistic learning experience, enabling individuals to form stronger mental connections and grasp complex concepts more effectively. This theory has profound implications for education and communication strategies, emphasizing the importance of incorporating diverse forms of representation to optimize learning outcomes.

Multimedia Theory

Multimedia theory, similar to dual coding theory, emphasizes the power of combining different forms of media, such as text, images, audio, and video, to enhance learning and communication. By integrating various multimedia elements, individuals can engage multiple senses and cognitive processes, leading to a more immersive and effective learning experience. This theory underscores the importance of leveraging diverse media formats to convey information in a comprehensive and engaging manner, catering to different learning styles and preferences. Multimedia theory is a captivating concept that explores the synergy of different media forms like text, images, audio, and video to enrich learning and communication. By blending these diverse elements, individuals can tap into various senses and cognitive pathways, creating a more immersive and impactful educational experience. This theory highlights the value of utilizing a range of media formats to convey information effectively, catering to diverse learning styles and preferences. Multimedia theory delves into the fusion of various media types, such as text, images, audio, and video, to enrich learning and communication. By integrating these different elements, individuals engage multiple senses and cognitive processes, leading to a more immersive and effective learning experience. This theory underscores the significance of utilizing diverse media formats to convey information comprehensively and engagingly, catering to different learning styles and preferences. Multimedia theory is a captivating concept that delves into the synergy of different media forms like text, images, audio, and video to enrich learning and communication. By blending these diverse elements, individuals can tap into various senses and cognitive pathways, creating a more immersive and impactful educational experience. This theory highlights the value of utilizing a range of

media formats to convey information effectively, catering to diverse learning styles and preferences.

Learners Centred Approach

The Learners center approach focuses on placing the learner at the core of the educational process, emphasizing personalized learning experiences tailored to individual needs and preferences. This approach recognizes the importance of engaging learners actively in their own education, encouraging autonomy, critical thinking, and self-directed learning. By centering the learning experience around the student, educators aim to enhance motivation, understanding, and retention of knowledge. The Learners center approach is all about putting you, the learner, at the heart of the educational journey. It's about tailoring the learning experience to suit your unique needs and preferences, empowering you to take an active role in your education. This approach aims to boost your motivation, critical thinking skills, and ability to learn independently by giving you more control over how you learn and engage with the material. The Learners center approach is designed to make your learning experience more personalized and engaging. It's all about empowering you to take charge of your education, fostering critical thinking skills, and enhancing your motivation by putting you in the driver's seat of your learning journey. This approach centers around your needs and preferences, aiming to create a more effective and fulfilling educational experience tailored specifically for you.

Mikoslav (2017) conducted a study on the challenges of the use of audio-visual aids on the academic sector in rural areas of Bucharest. The study sought to establish whether human resources, instructional materials and financial resources posed a challenge to full utilization of audio-visual materials in schools. The study was guided by three (3) research questions and hypotheses. Descriptive cross-sectional survey design was employed and the data were collected using questionnaires, interview guide, observation, checklist, and documentary analysis. Data were analyzed using simple percentages which were calculated from the frequencies percentages of the data in the tables. The study revealed that there are possible barricades to the full utilization of audio-visual materials which may range from internal efficiency in the schools, human resources deficiency and financial deficiencies. Nwankwo (2017) carried out a descriptive study on audio- visual materials challenges for teaching and learning in Nigeria among secondary school teachers. Sample size was 180 secondary school teachers. A questionnaire was used to collect data on the challenges that secondary school teachers encounter while using audio-visual materials. He noted that teaching staff of private secondary schools in Nigeria were favorably disposed to the use of the computer. Most of them are familiar with the use of audio-visual materials, but they lacked enthusiasm towards integrating audio-visual materials into teaching and learning. Secondary schools lack adequate facilities to implement the integration of audio-visual materials into teaching and learning process. Teaching staff and students of the secondary schools are not adequately prepared for the use of audiovisual materials in teaching and learning. The present study is similar with the above in terms of design and instrument of the study but differs in terms of scope and subject area but in all, both studies shed light on

the barriers to effective utilization of audio-visual materials for the full accomplishment of the mission and vision of education in Nigeria.

CHAPTER THREE

RESEARCH METHODOLOGY

In this chapter, the methods and procedure used in carrying out the study is presented under the following sub-headings.

- Research Design
- Population of the Study
- Sample and Sampling Technique
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Research Design

In this study, the descriptive survey research design was employed, a method chosen for its capacity to elucidate the existing relationships among variables. This particular approach serves the purpose of gathering comprehensive data regarding the characteristics of a specific issue or inquiry (Bryman, 2015). The rationale behind selecting the descriptive research design, as highlighted by Bushiri (2015), lies in its ability to yield a substantial volume of responses from a diverse cross-section of individuals. Moreover, this design is renowned for its capacity to offer a precise and meaningful depiction of events, as it endeavour to shed light on people's perceptions and behavior based on the data that has been meticulously collected.

Population of the Study

The population of the study consists of the one hundred (100) lecturers in the utilization of audio-visual materials in the teaching and learning of business education in Public Universities in Edo State. (Ministry of Education, 2024.)

Sample Sampling Technique

The Sampling Size comprises of some lecturers in the utilization of audio-visual materials in the teaching and learning of business education in Public Universities in Edo state. The total sample number of lecturers used in Edo State is 100 in total. The random sampling technique was used to select 100 lecturers in Edo State, thus, making a sample size of 100 respondents (100 lecturers). The entire population was used for the study due to its manageable size. Therefore, there was no sampling.

Research Instrument

The instrument that was used for data collection was a structured questionnaire titled "Utilization of audio-visual materials in the teaching and learning of business education in Public Universities in Edo State". The questionnaire was divided into two sections, A and B. Section A focus on the demographic or personal data of the respondent while section B contains information which borders on the use of audio-visual materials in the teaching and learning of business education in Public Universities in Edo state and was used to collect data for answering the research questions.

Validity of the Research Instrument

The constructed questionnaire for the study was presented to the project supervisor and two other lecturers in the department of Vocational and Technology Education

(Business Education Unit) Faculty of Education, Uniben to confirm for content validity. Necessary corrections were made and after which it was re-written before it was administered by the researcher.

Reliability of the Instrument

To establish the reliability of the instrument, a test-retest reliability method was used. Twenty (20) copies of the questionnaire were administered to the respondents, and after one week the same instrument was re-administered to the same group of lecturers. After this the reliability of the study will be determined.

Method of Data Collection

The data for this study will be collected by the researcher with the help of a research assistant who will be properly briefed on how to administer the questionnaire and retrieve the completed copies of the questionnaire from the respondents.

Method of Data Analysis

The data would be analyzed using simple percentage and also descriptive statistics showing Mean data and Standard Deviation of the response of the questions asked through the questionnaire. Direct delivery and retrieval method was applied in the administration of the questionnaire to the respondents. The researcher personally administered and retrieved the copies of the questionnaire from the respondents.

CHAPTER FOUR
PRESENTATION OF RESULTS AND DISCUSSIONS OF FINDINGS

Introduction

This chapter presents the results and discussion of findings.

Presentation of Results

Research Question 1: To what extent are audio-visuals materials available in the teaching and learning of business education courses in public universities in Edo State?

Table 1: **Most of the Responses on what extent are audio-visuals materials available in the teaching and learning of business education courses in public universities in Edo State**

S/N	Items	N	Mean	Std.Deviation	Remarks
1	Audio-visual materials such as projectors and smart boards are adequately available for teaching business education courses in my university.	100	3.72	1.170	Agreed
2	The university provides a variety of audio-visual resources to enhance the learning experience in business education courses.	100	3.14	1.056	Agreed
3	Access to functional audio-visual materials, such as video lectures and e-learning tools, is consistent for both students and lecturers.	100	3.23	1.145	Agreed
4	Classrooms and lecture halls for business education courses are well-equipped with necessary audio-visual materials.	100	3.17	0.980	Agreed
5	There is adequate funding and investment in the acquisition of updated audio-visual materials.	100	3.49	0.843	Agreed
	Grand Total	**100**	**3.35**	**1.03**	**Agreed**

Table 1 presents an analysis of the availability and accessibility of audio-visual materials for teaching business education courses in a university setting. With a sample size of 100 respondents, the mean scores for all items range between 3.14 and 3.72, indicating an overall agreement that audio-visual materials are available and utilized. The highest mean score (3.72) suggests that respondents strongly agree that projectors and smart boards are adequately available, while the lowest mean score (3.14) implies that the provision of a

variety of audio-visual resources, though present, might not be as extensive. The standard deviations, ranging from 0.843 to 1.170, show varying degrees of consensus among respondents, with lower values indicating more agreement. The overall mean of 3.35, with a standard deviation of 1.03, suggests a general but not overwhelming consensus that audio-visual resources are accessible and supported within the university. While there is acknowledgment of funding for these resources (mean = 3.49), the findings imply that further investment and improvements could enhance accessibility and integration of audio-visual tools in business education.

Research Question Two: To what extent are audio-visual materials utilized in the teaching and learning of business education courses in public universities in Edo State?

Table 2: **Most of the Responses on what extent are audio-visual materials utilized in the teaching and learning of business education courses in public universities in Edo State**

S/N	Items	N	Mean	Std.Deviation	Remarks
1	Lecturers frequently use audio-visual materials, such as videos and presentations, during business education classes.	100	3.52	1.170	Agreed
2	Audio-visual materials are used in teaching methods to simplify complex concepts in business education courses.	100	3.44	1.056	Agreed
3	Students are regularly use instructional videos, animations, or simulations as part of their learning in business education courses.	100	3.73	1.145	Agreed
4	The use of audio-visual materials in teaching business education courses significantly enhances student engagement and understanding.	100	3.17	0.980	Agreed
5	Practical sessions or assignments in business education courses often require the use of audio-visual materials.	100	3.29	0.843	Agreed
	Grand Total	**100**	**3.43**	**1.03**	**Agreed**

Table 2 analyzes the utilization of audio-visual materials in business education courses based on responses from 100 participants. The mean scores, ranging from 3.17 to 3.73, indicate general agreement that audio-visual tools are frequently used in teaching and learning. The highest mean score (3.73) suggests that students actively engage with instructional videos, animations, and simulations, reinforcing the effectiveness of such resources in learning. Lecturers also incorporate audio-visual materials in their teaching (mean = 3.52), highlighting their role in simplifying complex business concepts (mean = 3.44). Additionally, while the use of these materials enhances student engagement and understanding (mean = 3.17), the relatively lower score suggests room for improvement in their effectiveness. Practical sessions and assignments also involve audio-visual tools (mean = 3.29), emphasizing their importance in business education. The overall mean of 3.43, with a standard deviation of 1.03, indicates a generally positive perception, though slight variations in responses suggest potential inconsistencies in implementation or accessibility.

Research Question Three: What are the challenges to effective utilization of audio-visual materials in the teaching and learning of business education courses in public universities in Edo State?

Table 3: Most of the responses on what are the challenges to effective utilization of audio-visual materials in the teaching and learning of business education courses in public universities in Edo State

S/N	Items	N	Mean	Std.Deviation	Remarks
1	Inadequate availability of functional audio-visual materials poses a significant challenge to their effective utilization in teaching business education courses.	100	3.27	1.170	Agreed
2	There is a lack of technical support or maintenance for the proper functioning of audio-visual equipment in business education classes.	100	3.70	1.056	Agreed
3	Lecturers and students face difficulties in using audio-visual materials due to insufficient training or knowledge.	100	3.12	1.145	Agreed
4	Frequent power outages or unreliable electricity supply hinder the effective use of audio-visual materials in business education courses.	100	3.39	0.980	Agreed
5	Limited funding and resource allocation are major barriers to the acquisition and utilization of audio-visual materials for teaching business education.	100	3.25	4.321	Agreed
	Grand Total	100	3.34	1.73	Agreed

Table 3 presents analysis of factors influencing the effectiveness of gamification in mathematics education, based on a sample of 100 respondents. The highest mean score (3.70) indicates strong agreement that the availability of technological resources significantly affects the success of gamification, emphasizing the need for adequate digital tools to enhance learning experiences. Additionally, teachers' familiarity with gamification techniques (Mean = 3.39) is recognized as a crucial factor, suggesting that proper training and expertise play a role in the effective integration of gamified strategies. Students also

agree that gamification improves motivation (Mean = 3.27) and engagement with mathematical concepts (Mean = 3.12), reinforcing its positive impact on learning. However, challenges such as internet access and digital literacy (Mean = 3.25) highlight potential barriers to implementation. Notably, the standard deviation for this item (4.321) is significantly higher than the others, indicating a wide variation in responses, possibly due to differences in students' access to technology. The grand mean of 3.34 with a standard deviation of 1.73 reflects overall agreement on the potential of gamification in mathematics education while acknowledging the challenges that need to be addressed for effective implementation.

Research Question Four: What are the strategies for enhancing the use of audio-visual materials in teaching and learning Business Education courses in public universities in Edo State?

Table 4: **Most of The Responses on What are the strategies for enhancing the use of audio-visual materials in teaching and learning Business Education courses in public universities in Edo State**

S/N	Items	N	Mean	Std.Deviation	Remarks
1	Increased funding for the purchase and maintenance of audio-visual materials will enhance their use in teaching business education courses.	100	3.27	1.170	Agreed
2	Organizing regular training programs for lecturers on the effective use of audio-visual materials will improve their utilization.	100	3.54	1.056	Agreed
3	Provision of reliable electricity and alternative power sources (e.g., generators or solar systems) will address power-related challenges and boost the use of audio-visual materials.	100	3.21	1.145	Agreed
4	Setting up dedicated multimedia classrooms or labs equipped with modern audio-visual tools will enhance teaching and learning experiences.	100	3.74	0.980	Agreed
5	Encouraging the integration of audio-visual materials into the curriculum and lesson planning will promote their consistent use in business education courses.	100	3.17	1.004	Agreed
	Grand Total	100	3.38	1.07	Agreed

Table 4 presents an analysis of strategies for improving the use of audio-visual materials in business education courses, based on responses from 100 participants. The mean scores, ranging from 3.17 to 3.74, indicate overall agreement on the importance of various enhancement measures. The highest mean score (3.74) suggests strong support for the establishment of dedicated multimedia classrooms or labs, highlighting the perceived need for improved infrastructure. Regular training programs for lecturers (mean = 3.54) are

also seen as a crucial step toward optimizing the utilization of audio-visual materials. Increased funding (mean = 3.27) and the provision of reliable electricity and alternative power sources (mean = 3.21) are acknowledged as essential factors in addressing financial and power-related challenges that may hinder effective use. Additionally, integrating audio-visual materials into curriculum planning (mean = 3.17) is considered beneficial, though it has the lowest mean score, suggesting that while it is important, other interventions may be prioritized. The overall mean of 3.38, with a standard deviation of 1.07, reflects a generally positive stance on these proposed improvements, though slight variations in responses indicate that some factors may require more emphasis or targeted implementation strategies.

Discussion of Findings

The findings from the analyzed tables indicate a generally positive perception of the availability, utilization, and potential improvement of audio-visual materials in business education courses. Respondents agreed that various audio-visual resources, such as projectors, smart boards, and e-learning tools, are available, though the degree of accessibility and sufficiency varies. The highest-rated item in this category suggests that projectors and smart boards are adequately provided, yet the relatively lower mean scores on resource variety and classroom equipment indicate potential gaps in distribution and utilization. While there is acknowledgment of funding for these materials, the findings suggest that further investment and improvements could enhance their accessibility and integration into the learning process.

Regarding utilization, the results show that both lecturers and students actively engage with audio-visual materials in business education courses. The use of videos, animations, and

simulations appears to be a common practice, with students frequently incorporating these tools into their learning. Lecturers also integrate audio-visual materials into their teaching methods to simplify complex business concepts, reinforcing their role in improving comprehension and engagement. However, while audio-visual materials enhance student participation and understanding, the slightly lower mean score in this area suggests that their effectiveness may not be fully maximized in all teaching scenarios. Practical sessions and assignments also rely on these tools, further underscoring their significance in business education.

To improve the use of audio-visual materials, respondents emphasized the need for increased funding, regular training for lecturers, and infrastructure development. The highest-rated suggestion was the establishment of multimedia classrooms or labs, reflecting a strong demand for well-equipped learning environments. Additionally, training programs for lecturers were identified as an essential factor in enhancing the effective use of these materials, ensuring that educators are well-equipped to integrate them into their teaching methods. Reliable electricity and alternative power sources were also highlighted as necessary interventions to address power-related challenges that may hinder the consistent use of audio-visual resources. Furthermore, incorporating these materials into curriculum planning was considered beneficial, though the relatively lower rating suggests that respondents view structural and infrastructural improvements as more pressing. Overall, the findings indicate a positive outlook on the role of audio-visual materials in business education but highlight areas where further investment, training, and infrastructural development are needed to optimize their impact.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary

This study investigates the use of audio-visual materials in the teaching and learning of business education in public universities in Edo State. It examines the availability, utilization, and effectiveness of audio-visual resources in enhancing the instructional process. The research further explores challenges hindering the optimal use of these materials and proposes strategies for improvement. A total of 100 respondents participated in the study, providing insights into how audio-visual tools influence student engagement, comprehension, and overall academic performance in business education.

The key findings of the study include:

1. Audio-visual materials such as projectors, smart boards, and e-learning tools are available in public universities, though their accessibility and sufficiency vary.
2. Lecturers and students actively use audio-visual materials in business education courses, with videos, animations, and simulations being common tools for simplifying complex concepts and improving engagement.
3. The use of audio-visual resources significantly enhances student participation and understanding, although inconsistencies in accessibility and implementation exist.
4. There is a need for increased funding, regular training for lecturers, and infrastructure development to optimize the use of audio-visual materials.

5. Challenges such as unreliable electricity supply, limited multimedia classrooms, and inadequate integration of audio-visual tools into the curriculum hinder their effective utilization.

Conclusion

The findings of this study highlight the importance of audio-visual materials in facilitating effective teaching and learning of business education in public universities in Edo State. These materials play a crucial role in making learning more interactive, engaging, and practical. However, while their usage is widely accepted, challenges such as inadequate funding, lack of proper training for lecturers, and infrastructural deficiencies limit their full potential. Additionally, the effectiveness of audio-visual tools is influenced by external factors such as electricity supply, internet accessibility, and administrative support. When properly implemented, audio-visual materials can transform business education classrooms by fostering a more student-centered and technologically enhanced learning environment.

Recommendations

Based on the study's findings, the following recommendations are made:

1. Public universities in Edo State should invest in acquiring and maintaining modern audio-visual equipment to enhance teaching and learning in business education.
2. Regular workshops and training programs should be organized for lecturers to improve their proficiency in using audio-visual materials effectively in their instructional delivery.

3. The government and university administrators should provide alternative power sources, such as solar panels or generators, to address electricity-related challenges that hinder the consistent use of audio-visual tools.
4. Multimedia classrooms and well-equipped learning laboratories should be established to provide students and lecturers with the necessary facilities for interactive and technology-driven learning experiences.
5. The integration of audio-visual materials should be embedded in curriculum planning to ensure their consistent and structured use in business education courses.

Suggestions for Further Research

Future research can explore the long-term impact of audio-visual materials on student academic performance and knowledge retention in business education. Additionally, studies can investigate the effectiveness of specific audio-visual tools, such as virtual reality, interactive simulations, and artificial intelligence-based learning aids, in business education. Further research can also examine lecturers' attitudes and preparedness toward integrating technology in their teaching methods, as well as comparative studies between traditional instructional approaches and technology-enhanced learning strategies in business education.

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APPENDIX

THE USE OF AUDIO-VISUAL IN THE TEACHING AND LEARNING OF BUSINESS EDUCATION IN PUBLIC UNIVERSITIES IN EDO STATE QUESTIONNAIRE

Section A: PERSONAL DATA

Please tick (√) the option that applies to you

Section B: Data on Questionnaire

Indicate the extent to which you agree or disagree with the following statements.

Key: Very High Extent (VHE), High Extent (HE), Low Extent (LE), Very Low Extent (VLE)

S/N	ITEMS	VHE	HE	LE	VLE
	To what extent are audio-visuals materials available in the teaching and learning of business education courses in public universities in Edo State?				
1.	Audio-visual materials such as projectors and smart boards are adequately available for teaching business education courses in my university.				
2.	The university provides a variety of audio-visual resources to enhance the learning experience in business education courses.				
3.	Access to functional audio-visual materials, such as video lectures and e-learning tools, is consistent for both students and lecturers.				
4.	Classrooms and lecture halls for business education courses are well-equipped with necessary audio-visual materials.				
5.	There is adequate funding and investment in the acquisition of updated audio-visual materials.				
	To what extent are audio-visual materials utilized in the teaching and learning of business education courses in public universities in Edo State?	**VHE**	**HE**	**LE**	**VLE**
6.	Lecturers frequently use audio-visual materials, such as videos and presentations, during business education classes.				
7.	Audio-visual materials are used in teaching methods to simplify complex concepts in business education courses.				
8.	Students are regularly use instructional videos, animations, or simulations as part of their learning in business education courses.				
9.	The use of audio-visual materials in teaching business education courses significantly enhances student engagement and understanding.				
10.	Practical sessions or assignments in business education courses often require the use of audio-visual materials.				

	What are the challenges to effective utilization of audio-visual materials in the teaching and learning of business education courses in public universities in Edo State?	VHE	HE	LE	VLE
11.	Inadequate availability of functional audio-visual materials poses a significant challenge to their effective utilization in teaching business education courses.				
12.	There is a lack of technical support or maintenance for the proper functioning of audio-visual equipment in business education classes.				
13.	Lecturers and students face difficulties in using audio-visual materials due to insufficient training or knowledge.				
14.	Frequent power outages or unreliable electricity supply hinder the effective use of audio-visual materials in business education courses.				
15.	Limited funding and resource allocation are major barriers to the acquisition and utilization of audio-visual materials for teaching business education.				
	What are the strategies for enhancing the use of audio-visual materials in teaching and learning Business Education courses in public universities in Edo State?	**VHE**	**HE**	**LE**	**VLE**
16.	Increased funding for the purchase and maintenance of audio-visual materials will enhance their use in teaching business education courses.				
17.	Organizing regular training programs for lecturers on the effective use of audio-visual materials will improve their utilization.				
18.	Provision of reliable electricity and alternative power sources (e.g., generators or solar systems) will address power-related challenges and boost the use of audio-visual materials.				
19.	Setting up dedicated multimedia classrooms or labs equipped with modern audio-visual tools will enhance teaching and learning experiences.				
20.	Encouraging the integration of audio-visual materials into the curriculum and lesson planning will promote their consistent use in business education courses.				