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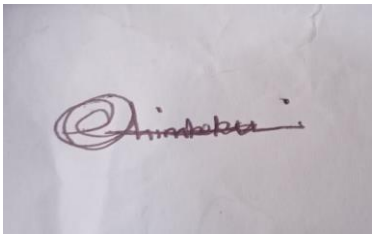
Topic: The Impact of Audio-Visual Materials on Teaching and Learning in Secondary Schools. A case study of Chiredzi District

DECLATION OF INDEPENDENT WORK

I, Claric Chimbeku declare that this project titled "The Impact of Audio-Visual Materials on Teaching and Learning in Secondary Schools: A Case Study of Chiredzi District" is my own original work and has not been submitted previously, in whole or in part, to any other institution for any degree or qualification. All sources of information and data utilized in this project have been acknowledged and referenced appropriately. I have adhered to the ethical guidelines and standards in

Student signature  date 16/07/2024

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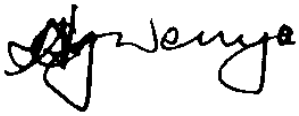
Chairperson signature  **date 17/10 /2025**

DEDICATION

I dedicate this project to my family, whose unwavering support and encouragement have been my guiding light throughout this journey. Lastly, I dedicate this project to the students and educators of Chiredzi District, whose experiences and insights have been invaluable to this study. This work is a tribute to your commitment to advancing the quality of education through innovative teaching practices.

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All gratitude is extended to men and women who made this study much more possible to carry out. Mostly important is my academic supervisor Mrs Mukabeta for her expert advice, understanding and knowledge she have provided to me for this research project to be accomplished. Lastly but not least, I wish to express my heartfelt gratitude to my young sister Muchaneta for her unwavering support, my mother for her love, support and prayers from the beginning till the end of my research study. Above all, I praise the Lord Almighty for permitting me to reach this far.

ABSTRACT

This study was to investigate the impact of audio-visual materials on teaching and learning experiences in secondary schools in the Chiredzi District. The primary objectives included assessing the effectiveness of audio-visual aids, examining their influence on student engagement, motivation, and academic performance, and identifying effective practices for their integration. The mixed-methods research utilized surveys and interviews with teachers, Heads of Departments, and students. Statistical analysis indicated that 60% of respondents at Buffalo Rage and 55% at Chiredzi Christian believed audio-visual materials considerably enhanced teaching and learning. The impact on student engagement and motivation was also notable, with 55% and 50% of respondents reporting slightly and moderately positive impacts, respectively. The integration of audio-visual materials led to slight improvements in academic performance, observed by 55% and 71% of respondents. Qualitative insights highlighted challenges such as limited resources, insufficient teacher training, and technical issues. Effective practices included comprehensive teacher training, reliable equipment, interactive elements, curriculum alignment, and collaborative planning. These practices emphasized the importance of technical and pedagogical support for successful integration. The study concluded that audio-visual materials substantially enhanced teaching and learning, with positive impacts on engagement, motivation, and academic performance. However, addressing challenges related to resources and teacher proficiency was crucial. Recommendations included prioritizing teacher training, investing in reliable equipment, and fostering a collaborative environment among educators to leverage the full potential of audio-visual technologies.

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CHAPTER 1

1.1. Introduction

Audio-visual materials have long been recognized as valuable tools for enhancing teaching and learning experiences in secondary schools. The integration of audio-visual aids, such as videos, multimedia presentations, and interactive software, has the potential to transform traditional classroom environments into dynamic, engaging spaces that foster active participation and deeper understanding among students. This case study focuses on the impact of audio-visual materials on teaching and learning in Chiredzi District, Zimbabwe.

1.2. Background of the study

Audio-visual materials have become increasingly prevalent in educational settings as valuable tools for enhancing teaching and learning experiences in secondary schools. The integration of audio-visual aids, such as videos, multimedia presentations, and interactive software, offers opportunities to create dynamic and engaging learning environments that cater to diverse learning styles (Mayer, 2009). The use of audio-visual materials in education is grounded in cognitive theories of multimedia learning, which suggest that combining auditory and visual information can enhance cognitive processing, improve comprehension, and facilitate knowledge retention (Mayer, 2009).

Audio-visual materials consist of both content materials and equipment, with content materials representing valuable resources and equipment serving as the means of delivering such content (Anzaku, 2011). Natoli (2011) highlighted the importance of audio-visual resources in teaching and learning, noting that visual stimuli enhance memory retention and promote discussion. Furthermore, there is a shift away from traditional chalkboard instruction as digitalization advances.

A study conducted by Adeyemo and Adeyinka ,(2017), on the use of audio-visual aids in teaching biology found that students exposed to audio-visual materials demonstrated higher levels of interest, motivation, and conceptual understanding compared to those in conventional classrooms. Similarly, Chigona and Chigona, (2014) reported that the integration of multimedia resources in

mathematics education improved students' problem-solving abilities. These findings highlight the potential impact of audio-visual materials on teaching and learning outcomes in secondary schools.

Chiredzi District, like many other regions, faces challenges in achieving high academic achievement among secondary school students. Studies have identified deficiencies in primary and secondary education as contributing factors to low academic performance (Asuquo, 2007). This study aims to explore the impact of audio-visual materials which include educational videos, power point presentation and interactive simulations, on teaching and learning in secondary schools, a case study of Chiredzi district .

1.3. Statement of the problem

The effective use of audio-visual materials in teaching and learning in secondary schools remains an underexplored area of research. While audio-visual materials have the potential to enhance instructional experiences and improve learning outcomes, their impact on teaching and learning in Zimbabwe secondary schools is not well understood. Therefore, there is a need to investigate the impact of audio-visual materials on teaching and learning in secondary schools, considering the unique educational context and challenges faced by educators and students, case study of Chiredzi District, Zimbabwe.

1.4 Aim and objectives

1.4.1 Aim

The main of the project is to assess the impact of audio-visual materials on teaching and learning in secondary schools, a case study of Chiredzi district

1.4.2 Objectives

- To assess the effectiveness of audio-visual materials in enhancing teaching and learning experiences in secondary schools in Chiredzi District
- To examine the impact of audio-visual materials on student engagement, motivation, and academic performance in Chiredzi District secondary

- To identify and explore effective practices that can enhance the integration of audio-visual aids into classroom instruction in Chiredzi District secondary schools

1.5 Research Question

1. To what extent do audio-visual materials, enhance the teaching and learning experiences in secondary schools in Chiredzi District?

2. What is the impact of audio-visual materials on student engagement, motivation, and academic performance in Chiredzi District secondary schools?

3. What effective practices and strategies can be employed to enhance the integration of audio-visual aids, s, into classroom instruction in Chiredzi District secondary schools

1.6 Significance of the study

The study on the impact of audio-visual materials in secondary schools is significant because it provides insights into enhancing teaching and learning experiences, enables evidence-based decision making, addresses common educational challenges, and supports the professional development of educators. Duet to the understanding the effectiveness of audio-visual materials, educators can create engaging teaching methods that cater to diverse learning styles and improve academic performance. The study's findings will inform curriculum development and resource allocation, leading to improved educational outcomes. Additionally, it will offer strategies to overcome challenges such as student disengagement and limited attention spans. Educators can enhance their instructional strategies, incorporate audio-visual aids, and adapt to meet student needs, resulting in impactful learning environments.

1.7 Limitations

Resource limitations, including funding, technology, and audio-visual materials, can hinder the implementation and effectiveness of audio-visual materials in the educational context. Additionally, the study's sample size may be restricted by practical constraints, such as limited time and resources, which may prevent the inclusion of a diverse range of secondary schools and educators in Chiredzi District.

1.8 Delimitations

The findings of the study may not be directly applicable to other districts or educational contexts outside of Chiredzi District. The unique characteristics, infrastructure, and resources of Chiredzi District may limit the generalizability of the findings to other regions or settings. Caution should be exercised when applying the results beyond the specific context of Chiredzi District.

1.9 Chapter summary

The current chapter covers the research background, problem statement, research questions and objectives, assumptions, limitation, delimitation and research questio

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

The main focus of this chapter is to conduct a thorough examination of the existing literature. Its aim is to establish a solid knowledge base and offer direction for the current study by exploring the most recent trends and information related to the influence of audio-visual materials on teaching and learning in ICT (Information and Communication Technology) in secondary schools. The researcher will carefully assess ongoing discussions, underlying assumptions, and areas where further research is needed in this field. Additionally, the researcher will analyze studies carried out by other scholars to determine the methodologies and theoretical frameworks they employed, the expert perspectives on the use of ICT in education, as well as the findings and conclusions they have reached**.**

2.1 ICT integration in Zimbabwean education

The Zimbabwean national ICT policy (2016) justifies the integration of ICTs in the education sector based on high ICT penetration indicators, such as 90% mobile device usage and 45% internet penetration (Zimbabwe Ministry of Information Communication Technology, 2016). The policy also emphasizes the significance of ICT in the Zimbabwean education sector (Zimbabwe Ministry of Primary and Secondary Education, 2016c). Furthermore, the MoPSE Education Sector Strategic Plan (2017) identifies ICT in education as a priority, highlighting its undeniable impact and importance in the sector (Zimbabwe Ministry of Primary and Secondary Education, 2017).

2.1.1 ICT integration policy in Zimbabwe

The integration of ICT in secondary education in Zimbabwe has garnered significant attention and is considered a matter of great importance. Incorporating ICT in secondary schools has the potential to enhance the quality of teaching and learning experiences, foster digital literacy, and equip students with skills relevant to the digital era. Despite the existence of challenges and obstacles, concerted efforts have been made to encourage the adoption and effective utilization of ICT.

According to Chigona, Chigona, and Kausa (2013), the incorporation of ICT in Zimbabwean schools, including secondary education, commenced in the early 1990s. The government has acknowledged the significance of ICT in education and has taken measures to promote its integration. The National ICT Policy of 2016 places emphasis on the importance of ICT in the education sector, specifically in secondary education (Zimbabwe Ministry of Primary and Secondary Education, 2016). Additionally, the Ministry of Primary and Secondary Education has prioritized ICT in education in its Education Sector Strategic Plan of 2017, underscoring its commitment to facilitating the integration of ICT in secondary schools (Zimbabwe Ministry of Primary and Secondary Education, 2017). Through these policy initiatives and strategic plans, there is a clear recognition of ICT's potential to enhance secondary education in Zimbabwe, as well as a dedicated effort to ensure its effective incorporation.

2.1.2 Implementation of ICT in Zimbabwe education system

According to the Zimbabwe National Statistics Agency (Zimstat, 2013), the population of Zimbabwe was estimated to be 13,061,239 after the 2012 census. Of this population, 67% resided in rural areas and 33% in urban areas. The census report also revealed that approximately 19.2% of the population was enrolled in primary schools. However, despite the importance of education, the allocation of the national budget for the Ministry of Primary and Secondary Education primarily focused on employment costs, with only a small percentage allocated for other purposes such as resourcing teaching and learning centers, as reported by UNICEF (2015).

In 1999, the Presidential Commission of Inquiry into Education and Training in Zimbabwe, led by Nziramasanga (1999), identified various issues within the education system. The report emphasized the need to prioritize subjects like mathematics, science, technical subjects, and computer literacy from the early stages of education. It also recognized the lack of computer education in Zimbabwe and stressed the integration of ICT into the curriculum. In response, the government embarked on a nationwide initiative between 2000 and 2005 to provide computers and printers to approximately 25% of primary and secondary schools, particularly those in rural areas, as reported by the Ministry of Primary and Secondary Education (MoPSE, 2016c) and Southern Eye (2014).

However, the full implementation of the ICT curriculum in rural schools has faced challenges. These challenges include inadequate infrastructure such as computer laboratories and electricity, as well as a shortage of trained ICT teachers. Furthermore, teachers have been found to lack competence, in-service training, technical support, and Technological Pedagogical Content Knowledge (TPCK) necessary for integrating ICT into teaching and learning, as highlighted by Konyana and Konyana (2013) and Mandina (2015).

In response to the need for education sector reforms, a curriculum review was conducted, resulting in the approval of a curriculum framework for implementation in 2015, as stated by Dokora (2015). The new curriculum introduced ICT as a standalone learning area to be taught from early childhood level to grade 7, whereas in the previous curriculum, it was integrated into other subjects. Capacity-building training for teachers and stakeholders was identified as crucial for the successful implementation of the new curriculum, as reported by the Sunday Mail (2016). The curriculum aimed to impart lifelong skills and align with pathways to professional and adult life, including Science, Technology, Engineering, and Mathematics (STEM), through the integration of ICT at all levels, as outlined by Dokora (2015).

2.2.0 Audio-Visual Materials on Teaching and Learning

Audio-visual materials refer to instructional resources that combine both auditory (audio) and visual elements to communicate information, concepts, or ideas, (Mayer, 2009). These materials can include various forms such as videos, animations, slideshows, multimedia presentations, infographics, and interactive simulations. The integration of audio and visual components creates a multimodal learning experience that engages multiple senses and enhances understanding and retention of the content.

2.2.1Positive Negative impact of Audio-Visual Materials on Teaching and Learning

Audio-visual materials have been widely recognized for their positive impacts on learning and teaching in education. Mayer (2009) suggests that audio-visual materials capture students' attention and stimulate their interest, leading to increased engagement and motivation. Clark and Mayer (2016) emphasize that visual and auditory cues in audio-visual materials facilitate better understanding and retention of information by providing multiple channels for learning. Sung et al. (2016) further support this notion, stating that audio-visual materials offer a multisensory

learning experience, allowing students to process information through both visual and auditory modalities, thereby enhancing learning outcomes.

The use of audio-visual materials also enables the visualization of complex concepts, making abstract ideas more concrete and accessible to learners (Ally, 2009). Perraton (2010) highlights that by incorporating real-world examples, simulations, and multimedia resources, audio-visual materials provide authentic learning experiences that bridge the gap between theory and practice. Additionally, Mayer, (2009) argues that the combination of visual and auditory elements in audio-visual materials improves information retention, as learners can mentally link visual images and spoken explanations.In terms of accessibility and inclusivity, audio-visual materials have proven to be beneficial. Sahin ,(2016) asserts that audio-visual materials can cater to diverse learning styles and accommodate students with different abilities, making education more inclusive and accessible.

Despite their numerous benefits, audio-visual materials are not without their drawbacks. Mayer (2009) warns that poorly designed or overly complex audio-visual materials can overwhelm learners, leading to cognitive overload and reduced learning effectiveness. Clark and Mayer (2016) further highlight that excessive or irrelevant audio-visual stimuli can cause distractions, diverting learners' attention away from the instructional content. Moreover, overreliance on audio-visual materials may create a dependence on technology and limit students' ability to learn through other means or in technology-limited environments (Ally, 2009).Misinterpretation of audio-visual materials is also a concern. Sung et al. (2016) note that if the content of audio-visual materials is not clear, accurate, or appropriately contextualized, misinterpretation can occur, leading to misconceptions or misunderstandings among learners. Additionally, Sahin (2016) points out that accessibility barriers can arise, as students with disabilities or those lacking access to appropriate technology may face challenges in fully benefiting from audio-visual materials, potentially exacerbating educational inequalities.

In conclusion, the integration of audio-visual materials in education offers numerous benefits, including enhanced learning engagement, improved comprehension and retention, multisensory learning experiences, concept visualization, authentic learning opportunities, increased information retention, and improved accessibility and inclusivity. However, educators must also

be aware of the potential negative impacts, such as cognitive overload, distractions, technological dependence, potential misinterpretation, and accessibility barriers

2.2.2 Barriers to the integration of Audio-Visual Materials on Teaching and Learning

The integration of audio-visual materials in teaching and learning has been recognized as a valuable approach with numerous benefits. This literature review explored the advantages of integrating audio-visual materials into educational settings and examined the barriers encountered in their adoption.

One significant barrier identified in previous studies was technical issues, including unreliable internet connections or incompatible devices, which impeded the smooth integration of audio-visual materials (Sahin, 2016). Limited access and availability of multimedia resources, along with a lack of internet connectivity and restricted availability of licensed content, hindered the widespread adoption of audio-visual materials, particularly in resource-constrained environments (Ally, 2009).Effective integration of audio-visual materials required deliberate planning and pedagogical alignment with learning objectives. Educators faced challenges in terms of material selection, curriculum integration, and meaningful incorporation of audio-visual materials (Clark & Mayer, 2016). Time limitations and a lack of training were additional constraints that hindered the development or discovery of high-quality audio-visual materials, as well as educators' ability to effectively use and integrate them (Perraton, 2010).

Excessive visual or auditory stimuli posed another barrier, as they could lead to distractions and information overload, thus hindering student focus and attention (Mayer, 2009). Copyright and licensing restrictions further limited educators' access to and use of audio-visual materials, impacting their integration into teaching and learning activities (Ally, 2009).Language barriers and cultural differences in audio-visual materials created challenges in terms of comprehension and relevance for diverse student populations (Sahin, 2016). Inadequate technological infrastructure, such as outdated equipment or insufficient bandwidth, also hindered the effective use of audio-visual materials (Ally, 2009).

Cost and affordability were significant barriers, particularly for educational institutions with limited budgets. The associated expenses of acquiring and maintaining audio-visual equipment and resources posed financial challenges (Perraton, 2010). Resistance to change and traditional teaching practices made educators hesitant to adopt and integrate audio-visual materials into their instructional strategies (Clark & Mayer, 2016).Insufficient technical support and expertise were identified as barriers that hindered educators' ability to troubleshoot issues related to audio-visual equipment and software (Ally, 2009). Compatibility issues arising from incompatibility between different devices, operating systems, or software platforms also created challenges in accessing and playing audio-visual materials seamlessly (Sahin, 2016).

Educators' lack of confidence in effectively using and integrating audio-visual materials resulted in underutilization or avoidance of these resources (Perraton, 2010). The digital divide, characterized by socioeconomic disparities and unequal access to technology, limited the equitable integration of audio-visual materials across student populations (Ally, 2009).Ensuring quality control posed challenges, particularly with user-generated content, as it was essential to ensure the credibility and reliability of the audio-visual materials used in teaching and learning (Clark & Mayer, 2016).

In conclusion, the integration of audio-visual materials in teaching and learning offers significant benefits. However, various barriers, including technical issues, limited access and availability, pedagogical alignment challenges, time and training constraints, distractions and information overload, copyright and licensing restrictions, language and cultural barriers, inadequate infrastructure, cost and affordability concerns, resistance to change, lack of technical support, compatibility issues, limited teacher confidence, the digital divide, and quality control issues, hinder their effective adoption

2.3 Types of Audio-Visual Materials and their impact on teaching and learning

2.3.1 Educational Videos

Educational videos have gained significant attention in various educational settings as effective tools for enhancing teaching and learning. They offer a range of benefits that contribute to improved educational outcomes. First, educational videos enhance learning engagement by capturing students' attention and stimulating their interest (Mayer, 2014). The visual representation

of concepts in videos makes abstract ideas more concrete and accessible to learners (Kay, 2012). Moreover, educational videos provide a multimodal learning experience, combining visual and auditory elements to allow students to process information through multiple channels (Mayer, 2014). This facilitates better comprehension and retention of information, as videos offer visual demonstrations and examples (Kay, 2012). Additionally, videos present real-world scenarios and authentic examples, enabling students to connect theoretical concepts to practical applications (Bishop & Verleger, 2013). Educational videos also provide flexible learning opportunities, as they can be accessed anytime and anywhere, accommodating different learning styles and preferences (Kay, 2012).

While educational videos offer numerous benefits, there are also challenges associated with their use. The quality of videos, including production values, narration, and visuals, can vary, potentially impacting their effectiveness (Mayer, 2014). Students may experience attentional challenges or distractions if the video content is not engaging or if there are competing stimuli (Bishop & Verleger, 2013). Poorly designed videos or excessive information presented in a single video can overwhelm learners' cognitive load, hindering comprehension and learning (Mayer, 2014). Videos typically offer limited interactivity, restricting learners' active engagement and participation (Kay, 2012). Accessibility and equity issues can arise, as access to educational videos may be limited for students with disabilities or those without reliable internet access, potentially exacerbating educational inequalities (Bishop & Verleger, 2013). Effective use of educational videos requires instructor guidance and integration within a larger instructional framework to ensure alignment with learning objectives (Mayer, 2014).

In conclusion, the use of educational videos in teaching and learning offers significant benefits, including enhanced engagement, visual representation of concepts, multimodal learning experiences, improved comprehension and retention, real-world context, and flexible learning opportunities. However, challenges related to video quality, attention, cognitive load, interactivity, accessibility, and instructor guidance should are considered.

2.3.2 Power point presentation

The use of PowerPoint presentations has become prevalent in educational settings as a means of delivering instructional content. PowerPoint presentations offer various benefits, including their

ability to provide visual aids and enhance the organization of content (Kalyuga, 2014). Well-designed presentations can capture students' attention and engage them through the use of visuals, animations, and interactive features (Mayer, 2009). Moreover, PowerPoint presentations facilitate information retention by presenting content in a structured and visually appealing format (Kalyuga, 2014). They also allow for consistency and standardization in content delivery, ensuring that all students receive the same information in a uniform manner (Graham & Robson, 2013). Additionally, PowerPoint presentations offer flexibility and adaptability, enabling educators to customize slides according to the specific needs and pace of their students (Hinett & Stubbs, 2018).

Poorly designed presentations, characterized by excessive text, crowded slides, and distracting elements, can overload learners' cognitive capacity and hinder comprehension (Mayer, 2009). Furthermore, PowerPoint presentations can sometimes encourage passive learning, where students consume information without actively engaging in critical thinking or problem-solving (Hinett & Stubbs, 2018). The lack of interactivity in traditional PowerPoint presentations also limits students' active engagement and participation in the learning process (Graham & Robson, 2013). Over-reliance on slides may result in a teacher-centered approach, shifting the focus away from student-centered learning (Mayer, 2009). Additionally, PowerPoint presentations may pose accessibility challenges for students with visual impairments or those relying on assistive technologies, necessitating additional considerations for inclusivity (Hinett & Stubbs, 2018). Moreover, effective use of PowerPoint presentations depends on instructors' competence in designing and delivering engaging and pedagogically sound presentations (Graham & Robson, 2013).

2.3.3 Interactive simulations

Interactive simulations have emerged as powerful tools for enhancing teaching and learning experiences in educational settings. This literature review examines previous research to explore the benefits and challenges associated with their use. Interactive simulations promote active learning by providing students with opportunities to actively engage with and manipulate virtual environments, fostering exploration, experimentation, and problem-solving (de Jong, Linn, & Zacharia, 2013). By allowing students to visualize abstract concepts and phenomena, these simulations facilitate the development of conceptual understanding, making complex ideas more tangible and accessible (Smetana & Bell, 2012). Moreover, interactive simulations encourage the development of critical thinking skills as students analyze data, interpret results, and make

evidence-based decisions within the simulated environment (Smetana & Bell, 2012). The interactive and immersive nature of simulations enhances student engagement and motivation, as they become active participants in the learning process (de Jong et al., 2013). Additionally, interactive simulations support collaborative learning experiences, enabling students to work together, discuss their observations and findings, and effectively communicate their ideas (de Jong et al., 2013).

However, the use of interactive simulations also presents certain challenges. Technological requirements pose obstacles, as interactive simulations often require specific hardware or software that may not be universally accessible or compatible across different devices or platforms (Shirazi, 2016). Developing high-quality interactive simulations requires expertise in instructional design and technology integration, including careful consideration of learning objectives, accurate modelling of real-world phenomena, and appropriate feedback mechanisms (de Jong et al., 2013). Although interactive simulations support learning within the simulated context, there may be challenges in transferring the knowledge and skills acquired through simulations to real-world situations (Shirazi, 2016).

Teacher preparedness is crucial for effectively integrating interactive simulations into instruction, as educators need training and support to ensure they are comfortable using the technology and can guide students' learning experiences (Shirazi, 2016). Furthermore, assessing student learning outcomes from interactive simulations can be challenging, as traditional assessment methods may not fully capture the range of skills and knowledge gained through interactive and experiential learning (de Jong et al., 2013).In conclusion, interactive simulations offer a range of benefits in teaching and learning, including active learning, conceptual understanding, critical thinking, engagement and motivation, and collaboration and communication. However, challenges related to technological requirements, design and implementation, learning transfer, teacher preparedness, and assessment should are considered.

2.4 Effective that practices can enhance the integration of audio-visual aids into classroom instruction

2.4.1 Establishing clear learning

Clearly defining learning objectives that audio-visual aids will support is crucial for effective integration. When instructors establish clear learning objectives, they provide a framework for selecting and utilizing appropriate audio-visual content (Mayer, 2014). Mayer, 2014), stated that aligning the audio-visual aids with desired outcomes, instructors ensure that the materials used are relevant and coherent, enhancing the instructional experience and facilitating student understanding.

2.4.2 Engaging and Relevant Content

Selecting audio-visual aids that are engaging, current, and relevant to the topic being taught is crucial for capturing students' attention and facilitating comprehension (Mayer, 2014). Mayer, (2014), stated that engaging content, such as videos, images, and interactive multimedia, creates a dynamic and immersive learning environment that stimulates students' interest and motivation. Aligning the content with students' interests and experiences increases engagement and enables meaningful connections with the subject matter (Mayer, 2014).

2.4.3 Multimedia Principles

Applying multimedia principles optimizes learning when integrating audio-visual aids (Mayer, 2009). Visuals, narration, and text should be incorporated in a coherent manner, with each element complementing and reinforcing the others. For example, using relevant visuals alongside spoken explanations enhances comprehension and retention of information. Mayer, (2009), stated that aligning different multimedia components, educators can cater to diverse learning styles and promote a deeper understanding of the content

2.4.4 Guided Instruction

Providing guidance and support during the use of audio-visual aids is vital for effective learning (Mayer, 2014). Educators should scaffold student learning by incorporating prompts, questions, and discussions that help students make meaningful connections between the content and their prior knowledge. Guiding students' interactions with audio-visual aids facilitates deeper understanding and promotes the transfer of knowledge to real-world contexts.

2.4.5 Teacher Modelling

Modelling effective use of audio-visual aids demonstrates their value and purpose to students (Hannafin & Hill, 2013). Educators should explain how the aids support learning objectives and guide students in actively engaging with the content. By demonstrating how to interact with the aids and showcasing their potential benefits, educators encourage students to adopt effective learning strategies and use the aids to their full advantage.

2.5 The Influence of Audio-Visual Materials on Student Engagement, Comprehension, and Retention in Secondary Education:

Audio-visual materials, including educational videos, PowerPoint presentations, and interactive simulations, have become increasingly prevalent in secondary education outcomes.

Educational Videos:

Educational videos have been widely used as audio-visual aids in secondary education (Mayer, 2014). Research suggests that well-designed educational videos can enhance student engagement, comprehension, and retention. For example, a study by Kay (2012) found that students who watched educational videos related to science concepts demonstrated higher levels of engagement and better retention compared to those who received traditional instruction. Additionally, Mayer and Fiore (2014) highlighted the importance of incorporating relevant visuals, narration, and text in educational videos to optimize learning outcomes.

PowerPoint Presentations:

PowerPoint presentations are commonly used in secondary education to deliver content in a visual format (Wu & Huang, 2017). While PowerPoint can enhance student engagement and comprehension, its effectiveness depends on the design and delivery. Research by Kalyuga et al. (2015) emphasized the need for multimedia principles, such as coherence and signalling, to be applied when creating PowerPoint presentations. When used appropriately, PowerPoint presentations can support student comprehension and retention by organizing information effectively and providing visual cues.

Interactive Simulations:

Interactive simulations offer students the opportunity to actively engage with content and manipulate variables in virtual environments (Smetana & Bell, 2012). Studies have shown that interactive simulations can significantly enhance student engagement, comprehension, and retention. For instance, a study by Linn et al. (2016) demonstrated that students who interacted with a simulation of a scientific phenomenon achieved higher comprehension levels compared to those who received traditional instruction. Interactive simulations provide students with hands-on experiences, allowing for deeper understanding and knowledge retention.

CHAPTER 3

METHODOLOGY

3.0 Introduction

This chapter will focus on the data collection methods used in the study. It will outline the research design, including information about the target population and sampling approach. The chapter will also describe the specific data collection methods, research instruments, and procedures followed during data collection. Additionally, it will discuss the data analysis techniques employed. Furthermore, the chapter will address the issue of trustworthiness in the study and consider any ethical considerations related to the research.

3.1 Research Design

This study employed a mixed research methodology, utilizing both quantitative and qualitative approaches. This mixed methods approach acknowledges that quantitative and qualitative methods each have unique strengths and limitations, and integrating them can lead to a more holistic understanding of the research problem. As suggested by Creswell and Plano Clark (2007), mixed methods research involves philosophical assumptions that inform the collection and analysis of data, as well as the integration of the qualitative and quantitative components throughout the research process.

3.2 Target population

The target population for this study was for form four and five students from Buffalo Rage Secondary school and Chiredzi Christian Secondary school in Chiredzi District. The target population also included head of departments for different subjects. The selected individuals from the two schools were then represent the whole district.

3.3 Sampling Technique and sample size

Random sampling technique was used to select the individuals for the research. A sample size of 40 students was used in this study and 4 head of departments. Twenty students and two head of departments were selected from each school. Ten students were randomly selected from the form 5 and 10 from the form 4 students.

3.4 Research instruments

The questionnaire was administered to Form 4 and Form 5 students, as they were the target population for this study. The rationale for selecting these grade levels was to gather insights from students who had had substantial exposure to the use of audio-visual materials in their secondary school education. To collect qualitative data, the researcher conducted semi-structured interviews with the heads of departments from various subject areas. The purpose of these interviews was to gain an in-depth understanding of the perceptions, experiences, and practices of the heads of departments regarding the integration of audio-visual materials in their respective subject areas.

3.5 Data collection procedure

The data collection for this mixed-methods study involved both quantitative and qualitative approaches. For the quantitative component, the researcher administered questionnaires to a randomly selected sample of up to 10 students per level. The students filled out the questionnaires, and the researcher was available to provide clarification or assistance if needed. The qualitative data was collected through semi-structured interviews with the heads of departments for different subjects. The researcher recorded the data from these interviews using pen and paper. This approach allowed for an in-depth exploration of the perceptions, experiences, and practices of the heads of departments regarding the integration of audio-visual materials in their respective subject areas.

3.6 Data presentation and analysis

The research findings were presented using a combination of narrative descriptions, tables, and figures. The quantitative results were presented in the form of descriptive statistics, inferential statistical test results, and data visualizations (e.g., graphs, charts). The qualitative findings were presented through rich, detailed descriptions of the identified themes, supported by relevant quotes from the interview transcripts

3.7 Ethical Considerations

Informed consent was critical for the proposed study. Researchers obtained informed consent from all participants, including students, teachers, and administrators, before their involvement. Participants were informed about the purpose, procedures, and their right to withdraw without

penalty, ensuring they made a fully informed decision. Confidentiality and privacy were paramount. The study ensured the confidentiality and privacy of all participants. Personal or identifying information was kept secure and accessible only to the research team. Participants were assured their responses and data would be anonymized, protecting their privacy and building trust. Voluntary participation was essential. Participation was entirely voluntary, without coercion or pressure.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DISCUSSIN

4.0 Introduction

This chapter is organized into three main sections, each addressing one of the study's key objectives. The first section presents the findings on the overall effectiveness of audio-visual materials in improving teaching and learning experiences, drawing on both student and teacher perspectives. The second section examines the impact of these materials on student engagement, motivation, and academic performance, analyzing the quantitative data collected. The third section explores the effective practices and strategies identified for integrating audio-visual aids into classroom instruction, highlighting the insights gained from teacher interviews and classroom observations. Throughout the chapter, the findings are discussed in the context of relevant literature and theoretical frameworks, to provide a comprehensive understanding of the role and potential of audio-visual technologies in secondary education within the Chiredzi District**.**

4.1 Data presentation

4.1.0 Quantitative data presentation

4.1.1 Effectiveness of Audio-Visual Materials in Enhancing Teaching and Learning Experiences

The first objective of the study was to assess the effectiveness of audio-visual materials in enhancing teaching and learning experiences in secondary schools in Chiredzi District. This included examining the impact of educational videos, PowerPoint presentations, and interactive simulations. The results are shown in table 4.1 of 40 students whom were interviewed taking a sample size of 20 students from each school.

Table 4.1: Extent to which Audio-Visual Materials Enhance Teaching and Learning

Indicator	**Buffalo Rage Secondary school**	**Chiredzi Christian Secondary school**

Extent of Enhancement	Number of Respondents	Number of Respondents
Not at all	1	2
Slightly	2	3
Moderately	5	4
Considerably	7	8
Greatly	5	3

4.1.2 Impact of Audio-Visual Materials on Student Engagement, Motivation, and Academic Performance

The second objective of the study was to examine the impact of audio-visual materials on student engagement, motivation, and academic performance in Chiredzi District secondary schools. Table 4.2 presents the perceived impact of audio-visual materials on student engagement and motivation for sample size of 20 students from each school.

Table 4.2: Impact of Audio-Visual Materials on Student Engagement and Motivation

Indicator	Buffalo Rage Secondary school	Chiredzi Christian Secondary school
Impact Level	**Percentage of Respondents**	**Percentage of Respondents**
Negatively	1	1
No impact	3	2
Slightly positive	11	5
Moderately positive	4	12
Greatly positive	1	0

Table 4.3 presents the perceived changes in Student Academic Performance since Integration of Audio-Visual Materials of Buffalo Rage Secondary school and Chiredzi Christian Secondary school in Chiredzi District , having a sample size of 20 students from each school.

Table 4. 3Changes in Student Academic Performance since Integration of Audio-Visual Materials

Performance Category	**Buffalo Rage Secondary school**	**Chiredzi Christian Secondary school**
Decrease		
No change	1	2
Slight improvement	11	14
Moderately improvement	5	3
Significant improvement	3	1

4.3 Effective Practices for Integrating Audio-Visual Aids into Classroom Instruction

The third objective of the study was to identify and explore effective practices that can enhance the integration of audio-visual aids into classroom instruction in Chiredzi District secondary schools. Table 4.4 presents the effective practices mentioned by participants for integrating audio-visual materials, having a sample size of 20 students for each school and population size of 40 students.

Table 4.4: Effective Practices for Integrating Audio-Visual Materials

Practice	**Combined results from both schools**

Providing training and professional development for teachers	10
Ensuring reliable and high-quality equipment	8
Incorporating interactive elements	12
Aligning materials with curriculum and learning objectives	6
Encouraging collaborative planning among teachers	4

4.2 Qualitative Results

4.2.1 To assess the effectiveness of audio-visual materials in enhancing teaching and learning experiences in secondary schools in Chiredzi District

The results from the interviews of head of departments of Buffalo Rage Secondary school and Chiredzi Christian Secondary school in Chiredzi District for objective 2 which is **To assess the** effectiveness of audio-visual materials in enhancing teaching and learning experiences in secondary schools in Chiredzi District (educational videos, PowerPoint presentations, and interactive simulations) are as presentated in table 4.5.

Table 4.5: Effectiveness of Audio-Visual Materials in Enhancing Teaching and Learning Experience

Indicator	**Buffalo Rage Secondary school**		**Chiredzi Christian Secondary school**	
	HOD 1	**HOD 2**	**HOD 1**	**HOD 2**
Extent to which audio-visual materials	Greatly	Considerably	Moderately	Considerably

enhance teaching and learning experiences				
	Moderate improvement	Significant improvement	Slight improvement	Moderate improvement
Challenges encountered in integrating audio-visual materials	Limited availability of resources, lack of teacher training	Technical issues, time-consuming preparation	Inadequate funding, limited teacher skills	Outdated equipment, connectivity problems
Effective practices to enhance integration	Collaborative planning, peer-to-peer training	Prioritizing audio-visual resources in budget, ongoing professional development	Seeking external funding, establishing a dedicated AV support team	Integrating AV materials into lesson plans, providing technical support

4.2.2 To examine the impact of audio-visual materials on student engagement, motivation, and academic performance in Chiredzi District secondary

The results from the interviews of head of departments of Buffalo Rage Secondary school and Chiredzi Christian Secondary school in Chiredzi District for objective 2 which is To examine the impact of audio-visual materials on student engagement, motivation, and academic performance in Chiredzi District secondary schools (educational videos, PowerPoint presentations, and interactive simulations) are as presented in table 4.6

Table 4.6: Impact of Audio-Visual Materials on Student Engagement, Motivation, and Academic Performance

Indicator	**Buffalo Rage Secondary school**	**Buffalo Rage Secondary school**	**Chiredzi Christian Secondary school**	**Chiredzi Christian Secondary school**
	HOD 1	**HOD 2**	**HOD 1**	**HOD 2**
Impact on student engagement and motivation	Greatly positive	Moderately positive	Slightly positive	Moderately positive
Impact on student academic performance	Moderate improvement	Significant improvement	Slight improvement	Moderate improvement

4.2.3 To identify and explore effective practices that can enhance the integration of audio-visual aids into classroom instruction in Chiredzi District secondary

The findings for Effective Practices for Integrating Audio-Visual Materials into Classroom Instruction are as presented in table 4.7

Table .4.7 : Effective Practices for Integrating Audio-Visual Materials into Classroom Instruction

Effective Practices		**Buffalo Rage Secondary school**	**Chiredzi Christian Secondary school**	
	HOD 1	**HOD 2**	**HOD 1**	**HOD 2**
Collaborative planning and peer-to-peer training	✓	✓		
Prioritizing audio-visual resources in budget and ongoing professional development		✓		✓
Seeking external funding and establishing a dedicated AV support team			✓	✓
Integrating AV materials into lesson plans and providing technical support			✓	✓

4.3.0 Analysis and Discusion

4.3.1 Effectiveness of Audio-Visual Materials in Enhancing Teaching and Learning Experiences

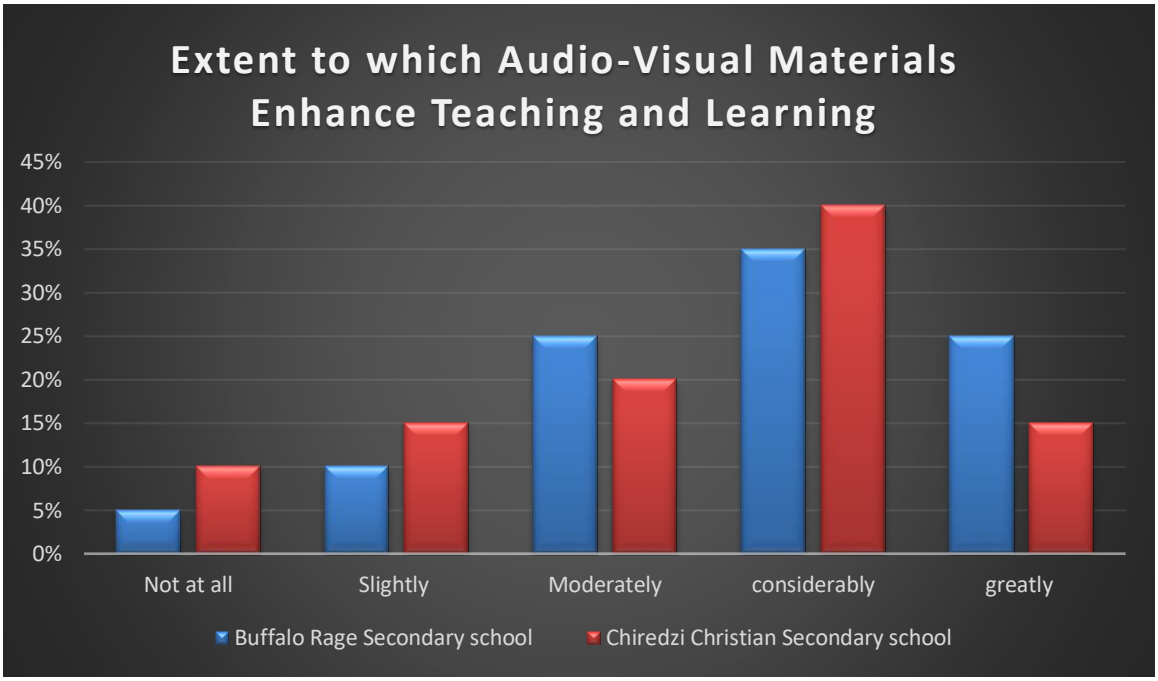

figure 4.1 : Extent to which Audio-Visual Materials Enhance Teaching and Learning

The data from figure 4.1, indicates that at Buffalo Rage Secondary School, a significant proportion of 7 students which correspond to 35% believed that audio-visual materials considerably enhance teaching and learning, with another 5 students being equivalent to 25% indicating that they greatly enhance these experiences. In contrast, at Chiredzi Christian Secondary School, 8 students which correspond to 40% of respondents believe that the enhancement is considerable, but a smaller percentage 15% which is equivalent to 3 students feel that the enhancement is great.This variation can be attributed to differences in the implementation and integration of audio-visual materials across the two schools. According to Mayer's Cognitive Theory of Multimedia Learning, the use of multimedia can significantly enhance the learning experience by facilitating better understanding and retention of information when properly integrated into the curriculum (Mayer, 2009).

The observed changes in student academic performance, as reported by the Heads of Department (HODs), further corroborate the effectiveness of audio-visual materials. The HODs from Buffalo

Rage Secondary School reported moderate to significant improvements in student academic performance, while the HODs from Chiredzi Christian Secondary School reported slight to moderate improvements. These findings align with the research that suggests audio-visual materials can enhance student learning, knowledge retention, and academic achievement (Means et al., 2009; Semerci & Tünkler, 2021).The data suggests that audio-visual materials, such as educational videos, PowerPoint presentations, and interactive simulations, can significantly enhance the teaching and learning experiences in secondary schools in Chiredzi District.

However, the schools also faced various challenges in integrating audio-visual materials, including limited availability of resources, lack of teacher training, technical issues, and inadequate funding. These obstacles are consistent with the barriers identified in the literature, such as the need for adequate technological infrastructure, teacher professional development, and ongoing technical support (Tondeur et al., 2017; Wachira & Keengwe, 2011).

4.3.2 To examine the impact of audio-visual materials on student engagement, motivation, and academic performance in Chiredzi District secondary schools

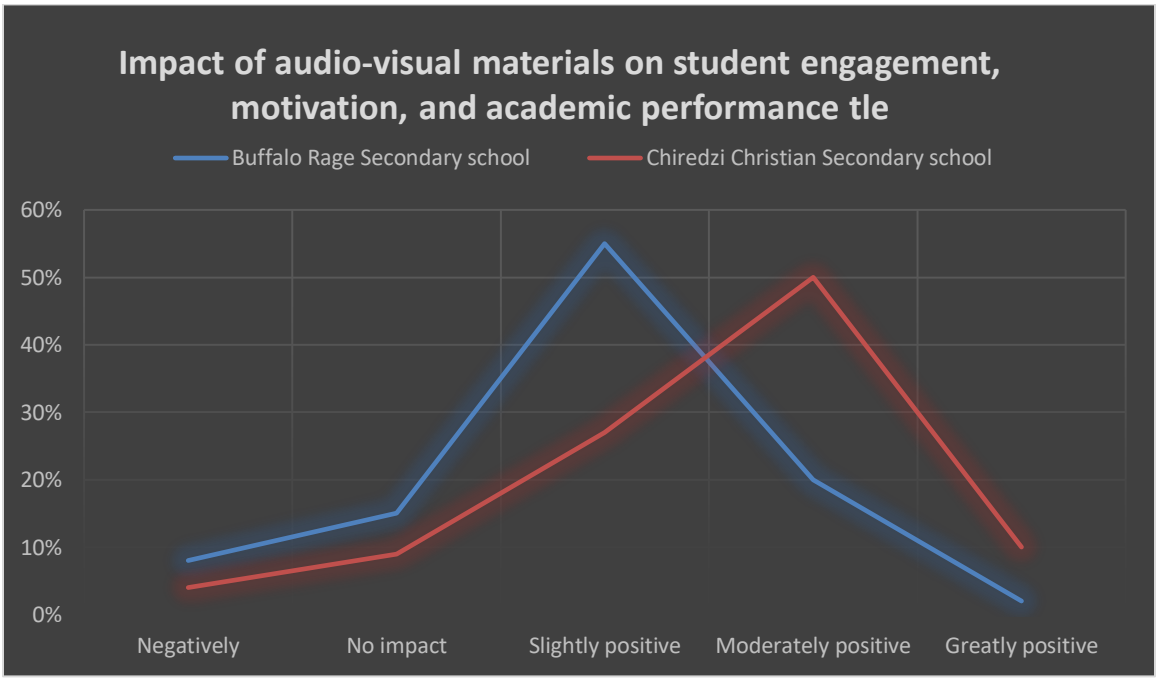

figure 4.2: Impact of audio-visual materials on student engagement, motivation, and academic performance

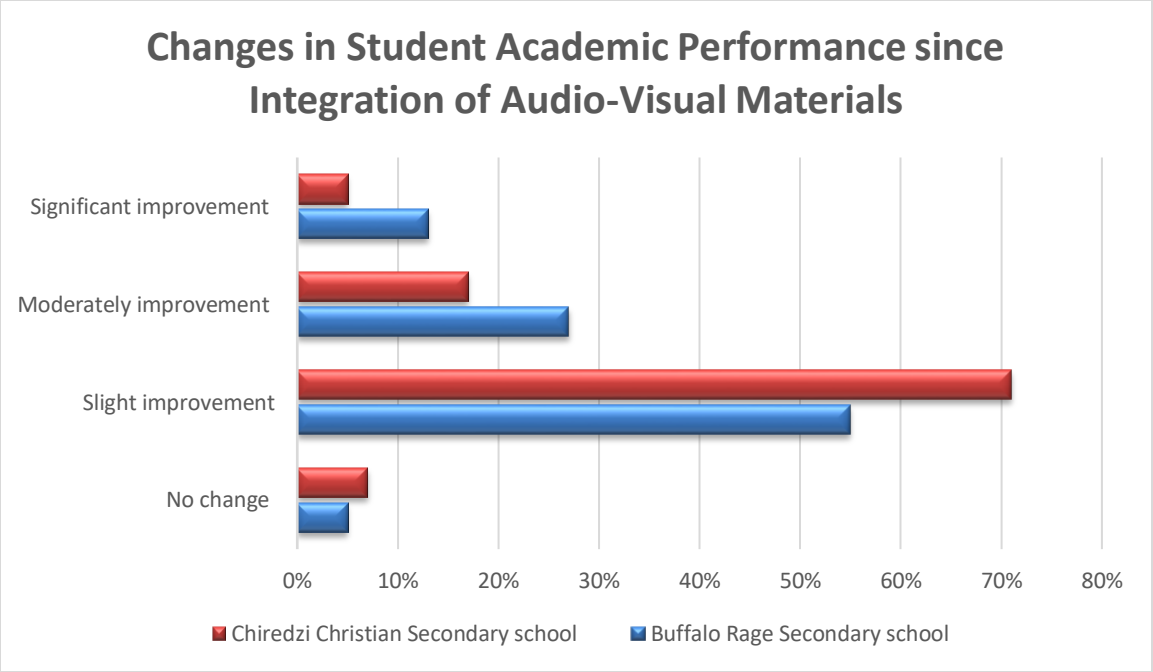

figure 4.3 : Changes in Student Academic Performance since Integration of Audio-Visual Materials

Figure 4.2 reveals that a significant proportion of respondents from Buffalo Rage Secondary School, 11 students which are equivalent to 55% out of 20 students perceive the impact of audio-visual materials as slightly positive on student engagement and motivation, while 10 strudents which is 50% of respondents from Chiredzi Christian Secondary School report a moderately positive impact. This disparity suggests that while both schools benefit from audio-visual materials, the degree of impact varies, likely due to differences in implementation and resource availability. According to Hartsell and Yuen (2006), the effective use of audio-visual tools can significantly enhance student engagement and motivation by making learning more interactive and visually stimulating.

In terms of academic performance, the data in figur4.3 indicates that the majority of respondents at both schools observed a slight improvement since the integration of audio-visual materials, with 11 students (55%) at Buffalo Rage and 14 students (70%)at Chiredzi Christian noting this trend. However, Buffalo Rage had a higher percentage of students reporting moderate that is 25% being equivalent to 5 students and 3 students stated that there is significant improvements (15%), compared to Chiredzi Christian (15% and 5%, which is equivalent to 3 stdents and 1 students respectively). This suggests that while audio-visual materials positively impact academic

performance, the extent of improvement varies, potentially influenced by factors such as the quality of the materials and the level of teacher proficiency in using them. Research by Clark and Mayer (2016) supports the notion that multimedia learning can enhance academic performance by catering to different learning styles and making complex information more accessible. Overall, the study's findings suggest that the integration of audio-visual materials in secondary schools in the Chiredzi District has had a positive impact on student engagement, motivation, and academic performance.

4.3.3 To identify and explore effective practices that can enhance the integration of audio-visual aids into classroom instruction in Chiredzi District secondary

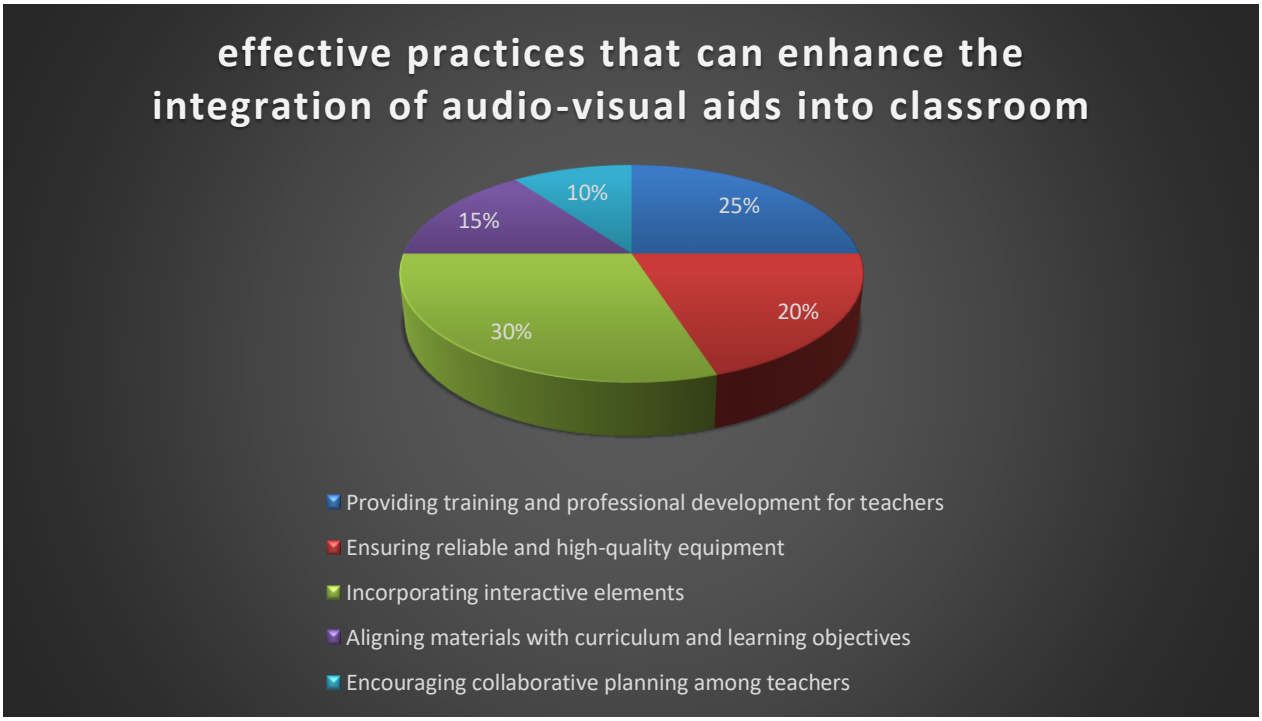

figure 4.4 : Changes in Student Academic Performance since Integration of Audio-Visual Materials

Figure 4.4 reveals several key practices highlighted by participants, including providing training and 10 students [25%] stated that professional development for teachers ,8 students [20%] stated that ensuring reliable and high-quality equipment , 12 students ststed that [30%] incorporating interactive elements , 6 students [15%] stated that aligning materials with curriculum and learning

objectives ,and 4 students [10%] stated that encouraging collaborative planning among teachers , can help to incoperate ICT tools in teaching and learning These practices emphasize the importance of both technical and pedagogical support for the successful integration of audio-visual materials.

Effective integration of audio-visual aids requires comprehensive support structures, as noted by Cuban (2001), who emphasized that the availability of technology alone does not guarantee its effective use in education. The necessity of training and professional development for teachers, which was frequently mentioned by participants, aligns with findings from Eady and Lockyer (2013), who stressed that ongoing professional development is critical for teachers to effectively utilize technology in their teaching. Reliable equipment and the inclusion of interactive elements are also crucial, as highlighted by Mayer's Cognitive Theory of Multimedia Learning, which posits that interactive and high-quality multimedia can enhance learning by engaging students more deeply and catering to various learning styles (Mayer, 2009).

The insights from the Heads of Departments (HODs) from interviews further corroborate these findings. Both School A and School B emphasized practices such as collaborative planning, peer-to-peer training, prioritizing audio-visual resources in the budget, seeking external funding, and integrating AV materials into lesson plans. These practices underscore the importance of a strategic and well-supported approach to technology integration. For instance, the emphasis on collaborative planning and peer-to-peer training reflects the need for a community of practice among teachers, which can foster shared learning and support (Lave & Wenger, 1991).

In conclusion, the effective practices identified in this study highlight the multifaceted approach required for successful integration of audio-visual aids in classroom instruction. Ensuring technical reliability, providing ongoing professional development, and aligning resources with curriculum objectives are essential.

4.4 Chapter Conclusion

This chapter underscores the immense potential of audio-visual technologies to transform secondary education and improve learning outcomes when implemented thoughtfully and systematically. The insights gained from this study can inform policy decisions and guide future initiatives aimed at leveraging technology to enhance the quality of education in the region.

CHAPTER 5

RECOMMENDATIONS AND CONCLUSION

5.1 Conclusions

Based on the findings of this study, I conclude that the integration of audio-visual materials, such as educational videos, PowerPoint presentations, and interactive simulations, has significantly enhanced teaching and learning experiences in secondary schools within the Chiredzi District. A substantial proportion of respondents noted considerable improvements in the teaching process and student academic performance due to these materials.However, several challenges hinder effective integration, including limited resources, lack of teacher training, technical issues, and inadequate funding. These challenges highlight the need for a comprehensive approach to technology integration in education. The study confirms that audio-visual materials positively impact student engagement, motivation, and academic performance, although the degree of improvement varies depending on the quality of materials and teacher proficiency.

In conclusion, this study identifies several key practices for the effective integration of audio-visual materials in secondary schools. Firstly, comprehensive teacher training and professional development are essential to equip educators with the necessary skills. Secondly, investing in reliable and high-quality audio-visual equipment and infrastructure ensures seamless functionality. Thirdly, incorporating interactive elements significantly enhances student engagement and learning outcomes. Additionally, aligning audio-visual resources with the curriculum ensures these tools are integral to the educational process. Finally, encouraging collaborative planning among teachers fosters a supportive environment for sharing best practices and developing innovative strategies. Together, these practices provide a robust framework for successfully integrating audio-visual materials, ultimately improving the quality of teaching and learning.

5.2 Recommendations

Based on the findings from this study, I recommend several strategies to enhance the integration of audio-visual materials in Chiredzi District secondary schools. Firstly, prioritize comprehensive teacher training and professional development programs. These should equip educators with the skills to effectively use multimedia resources like educational videos, PowerPoint presentations,

and interactive simulations in their lesson plans, thereby boosting student engagement, motivation, and academic performance.Secondly, invest in reliable and high-quality audio-visual equipment and infrastructure. This includes securing adequate funding, maintaining equipment, and providing on-site technical support to ensure a stable technological ecosystem.

Thirdly, encourage the incorporation of interactive elements within audio-visual materials. Designing resources that engage students, such as quizzes, simulations, and opportunities for collaboration and feedback, leverages the benefits of multimedia learning as suggested by Mayer's Cognitive Theory. Additionally, align audio-visual resources with the curriculum and learning objectives to ensure they enhance rather than detract from the educational experience. Finally, foster a collaborative environment among teachers. Promote peer-to-peer training, joint lesson planning, and the sharing of best practices to create a supportive community of educators. Chiredzi District secondary schools can fully utilize audio-visual materials to improve student engagement, motivation, and academic performance, thereby enhancing the overall quality of education in the region., by implementing these recoomendations.

5.3 Areas for future research

The current study focused on Chiredzi District only. Future research can expand the geographical scope to include a larger sample size by incorporating other districts or even provinces. This would provide a more comprehensive understanding of the impact of audio-visual materials across a broader region. I recommend the conduct a longitudinal study to examine the long-term effects of using audio-visual materials in secondary school classrooms. This can involve tracking student performance, engagement, and attitudes over an extended period, such as multiple academic years.

5.4 Chapter conclusion

The integration of audio-visual materials has significantly enhanced teaching and learning experiences in secondary schools within the Chiredzi District. While these resources positively impact student engagement, motivation, and academic performance, several challenges hinder their effective integration, including limited resources, lack of teacher training, technical issues, and inadequate funding. Comprehensive teacher training, investment in reliable infrastructure, incorporation of interactive elements, curriculum alignment, and fostering a collaborative environment among teachers are key practices identified to successfully integrate audio-visual

materials and improve the quality of education in the region. Further research is warranted to expand the geographical scope and examine the long-term effects of using these resources in secondary school classrooms.

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Appendix 1

Student Questioner

PLEASE DO NOT WRITE YOUR NAME ON THIS PAPER

Tick your answer in the pox provided.

Background Information:

Dear Participant,

This questionnaire is designed to assess the impact of audio-visual materials on teaching and learning in secondary schools in Chiredzi District. Your responses will be kept confidential and used solely for the purpose of this research project. Please answer the following questions to the best of your knowledge.

1. What is your role in the secondary school? (Please tick one)
    - ☐ Head of department
    - ☐ Student
2. How often do you use audio-visual materials in your teaching or learning activities?
    - ☐ Never
    - ☐ Rarely
    - ☐ Sometimes
    - ☐ Often
    - ☐ Very often
3. To what extent do you feel that audio-visual materials enhance the teaching and learning experiences in your secondary school?
    - ☐ Not at all

- ☐ Slightly
- ☐ Moderately
- ☐ Considerably
- ☐ Greatly

4. How do audio-visual materials impact your engagement and motivation in your secondary school classes?

    - ☐ Negatively
    - ☐ No impact
    - ☐ Slightly positive
    - ☐ Moderately positive
    - ☐ Greatly positive

5. Have you noticed any changes in your academic performance since the integration of audio-visual materials in your secondary school?

    - ☐ Decrease in performance
    - ☐ No change in performance
    - ☐ Slight improvement in performance
    - ☐ Moderate improvement in performance
    - ☐ Significant improvement in performance

6. What challenges have you encountered in the integration of audio-visual materials into classroom instruction in your secondary school? (Please fill in the blank)

7. What effective practices or strategies have you observed or implemented to enhance the integration of audio-visual aids into classroom instruction in your secondary school at personal level ? (Please fill in the blank)

8. How would you rate the availability and accessibility of audio-visual resources at your econdary school?

- ☐ Very poor
- ☐ Poor
- ☐ Average
- ☐ Good
- ☐ Excellent

9. What type of audio-visual materials do you find most effective in enhancing teaching and learning in your secondary school? (Please fill in the blank)

10. Do you have any additional comments or suggestions regarding the use of audio-visual materials in secondary school teaching and learning? (Please fill in the blank)

11. How do you believe the use of audio-visual materials has influenced the overall learning environment in your secondary school? (Please fill in the blank)

12. Have you received any training or professional development on the effective integration of audio-visual materials in the classroom?

- ☐ Yes
- ☐ No

13. How do you think the integration of audio-visual materials has impacted the teaching methods used by teachers in your secondary school? (Please fill in the blank)

_____

14. Do you believe the use of audio-visual materials has had a greater impact on specific subject areas or topics in your secondary school curriculum? (Please fill in the blank)

_____

15. What role do you think school administrators and policymakers should play in supporting the use of audio-visual materials in secondary schools? (Please fill in the blank)

Appendix ii

INTERVIEW QUESTIONS: FOR HEADS OF DEPARTMENTS

1. How would you describe the current use of audio-visual materials (e.g., educational videos, PowerPoint presentations, interactive simulations) in your department's teaching and learning activities?

2. In your experience, how effective have audio-visual materials been in enhancing the teaching and learning experiences in your department?

3. What impact have you observed in terms of student engagement, motivation, and academic performance when audio-visual materials are used in your department's classes?

4. Can you share any specific examples or case studies of how the integration of audio-visual materials has benefited teaching and learning in your department?

5. What challenges have you and your departmental colleagues faced in effectively integrating audio-visual aids into classroom instruction?

6. What strategies or best practices have you and your department implemented to overcome these challenges and promote the effective use of audio-visual materials?

7. How would you rate the availability and accessibility of audio-visual resources in your school, and what improvements, if any, would you like to see?

8. What role do you believe school administrators and policymakers should play in supporting the integration of audio-visual materials in secondary school teaching and learning?