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Enhancing Student Learning Outcomes Through Visual Teaching Materials in Christian Religious Education for Elementary Schools

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ABSTRACT

This study investigated the impact of visual instructional materials on the learning outcomes of primary school pupils in Christian Religious Studies (CRS) in Ado-Ekiti, Ekiti State, Nigeria. It utilized relevant pictures depicting Bible stories during the instructional process. A quasi-experimental design was employed, featuring one experimental group and one control group. The participants consisted of 119 primary 5 pupils offering CRS, selected from the central area of Ado-Ekiti through a simple random technique. Data were collected using the Christian Religious Studies Achievement Test (CRSAT), and the research hypotheses were analyzed using t-tests and Analysis of Variance (ANOVA). The findings revealed a significant difference in the post-test scores between the experimental and control groups, indicating the effectiveness of the chalk and talk method supplemented with visual instructional materials. However, the interaction between treatment and gender was found to be statistically insignificant. Based on these findings, it is recommended that primary school teachers in CRS adopt this method during the instructional process. The study was conducted within a constrained timeframe due to the school calendar.

INTRODUCTION

In Ekiti State public primary schools, many teachers face challenges in procuring or improvising instructional materials for Christian Religious Studies (CRS), leading to lessons often being conducted without these aids. This deficiency results in less effective and non-participatory teaching methods, adversely affecting student engagement and comprehension (Naismith et al., 2005; Naveed & Gordon, 2024; Pedraja-Rejas et al., 2024). Financial constraints deter teachers from purchasing necessary materials. Additionally, there is a lack of emphasis on integrating instructional aids into CRS lessons, causing reliance on traditional lecture methods that may not fully engage students (McGarr, 2009; Ferreira et al., 2021; Kaplan, 2024). The 2024 placement examination results for secondary schools, released by the Ekiti State Ministry of Education, Science, and Technology, indicate subpar performance in CRS among pupils. This underachievement highlights the need for improved teaching strategies and resources (Ralph et al., 2017; Morris, 2010; Drew, 2017). Notably, many CRS teachers possess smartphones or android devices, and some own personal computers, which they use for internet browsing and social media. These devices can be harnessed to download relevant visual teaching materials at minimal or no cost, facilitating more interactive and effective CRS instruction (Reinhart et al., 2014; Joshi et al., 2021; Joshi et al., 2023). By leveraging existing technology, teachers can enhance student engagement and improve learning outcomes in elementary schools.

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Existing studies highlight the crucial role of visual teaching materials in enhancing students' academic performance across various subjects. Research by Bozdogan (2011), Umar et al. (2020), and Nasiru et al. (2023) emphasizes their positive impact on learning outcomes. Adalikwu and Iorkpigh (2013) found a strong correlation between instructional materials and improved academic performance, particularly in Chemistry. Similarly, Daboer & Shaorga (2023) reported higher academic and retention scores in Christian Religious Studies (CRS) when using improvised materials. Olayinka (2016) noted significant performance improvements in Social Studies, while Nasiru et al. (2023) and Umar et al. (2020) documented better results in Mathematics and technical education with visual aids and videos. Bozdogan (2011) demonstrated that visual materials effectively addressed misconceptions, and studies by Chundung et al. (2020) and John & Jeno-Mary (2024) showed enhanced comprehension and language learning outcomes using visual tools. Collectively, these findings confirm the effectiveness of visual instructional materials in improving academic achievements across disciplines. Although visual instructional materials have been applied effectively in subjects like Mathematics, Building Technology, English, and global warming concepts, their use in teaching Christian Religious Studies (CRS) at the primary school level in Ekiti State still needs to be explored. This study aims to bridge this gap by investigating the effectiveness of visual teaching aids in enhancing pupils' learning outcomes in CRS. It seeks to provide insights into their relevance and effectiveness in implementing the CRS curriculum, achieving its objectives, and supporting their inclusion in the educational framework.

This study aims to fill a gap in the literature by exploring the effectiveness of using visual instructional materials to enhance pupils' learning outcomes in Christian Religious Studies (CRS) at the primary school level, particularly in Ekiti State. By integrating visual teaching aids into CRS instruction, the study seeks to provide valuable insights into the relevance and effectiveness of visual aids in supporting the implementation of the CRS curriculum. It also aims to confirm the role of visual instructional materials in achieving CRS educational objectives and justifying their inclusion in the academic framework. This research benefits include improving the quality of CRS teaching and learning at the primary school level through a more interactive and engaging approach. Additionally, the study offers practical recommendations for teachers to utilize visual instructional materials as effective teaching aids. The findings can also serve as a basis for education policymakers to design strategies that support visual aids in implementing the CRS curriculum, thereby optimizing the attainment of educational goals.

The study formulated two key hypotheses to guide the research process. The first hypothesis posits no significant difference between the pre-test and post-test mean scores of pupils taught Christian Religious Studies (CRS) using the traditional chalk-and-talk method combined with visual instructional materials and those taught using the chalk-and-talk method alone without visual instructional materials. This hypothesis examines whether integrating visual aids alongside traditional teaching methods has a measurable impact on student's academic performance in CRS. The second hypothesis examines the role of gender in influencing learning outcomes. It proposes no significant influence of gender on the learning outcomes of pupils taught CRS using either the chalk-and-talk method with visual instructional materials or the chalk-and-talk method without visual instructional materials. This hypothesis aims to determine whether the effectiveness of visual aids in teaching CRS is consistent across male and female pupils, ensuring that gender does not act as a confounding factor in the study. These hypotheses provide a structured framework for investigating the effectiveness and equity of teaching strategies in CRS instruction.

RESEARCH METHODS

A quasi-experimental design was adopted for the study, chosen for its relevance and suitability in assessing change over time. This design, often referred to as the classical design for change experiments (Campbell & Stanley, 1963), allows for the study of pre-test and post-test measures, incorporating both experimental and control groups. An intact class from each selected school was used, with the experimental group receiving the conventional chalk and talk method

supplemented with visual instructional materials for teaching CRS (independent variable), while pupils' learning outcomes in CRS served as the dependent variable. The control group was taught using the conventional chalk and talk method without visual aids. The study population comprised all primary 5 pupils offering CRS in Ado-Ekiti Local Government Area, with 101 public primary schools recorded during the 2023/2024 academic session. A total of 119 pupils were selected for the sample through a simple random sampling technique, ensuring representation. Similar approaches to experimental designs have been emphasized for their robustness in evaluating educational interventions (Glele-Ahanhanzo et al., 2019; Yan et al., 2023).

The Christian Religious Studies Achievement Test (CRSAT), adapted from questions set by the Ekiti State Ministry of Education, was used to measure pupils' learning outcomes before and after treatment. The instrument consisted of 40 objective questions. Two lesson plans were developed: one for the chalk and talk method with visual instructional materials, created by the researcher for research assistants, and another for the conventional chalk and talk method without visual aids, prepared for regular CRS teachers. Both lesson plans, based on topics from the primary 5 syllabus, detailed the course content, methods, and behavioral objectives. Each plan included behavioral objectives, content presentation, pupil activities tailored to the teaching method, and evaluation to assess pupils' progress in achieving instructional objectives.

The face and content validity of the instrument were established with the assistance of experts in Christian Religious Studies from the Department of Arts and Language Education and a test and measurement specialist from the Faculty of Education, Ekiti State University. The instruments underwent thorough scrutiny, and necessary corrections were made before being deemed valid for the study (Oroszi, 2020; Lang et al., 2021). The reliability of the instruments was tested using the test-retest method, which yielded a reliability coefficient of 0.83, indicating a high level of consistency (De Ridder et al., 2021; Yuksekol et al., 2022).

The study procedure comprised three stages: pre-test, treatment, and post-test. The researcher, in collaboration with regular CRS teachers in selected primary schools, administered a pre-test to determine the homogeneity of the samples. The experimental teaching sessions were conducted over four weeks, with each session lasting 45 minutes and covering two periods per week in each school. Lessons for the experimental group were delivered using the chalk and talk method integrated with visual instructional materials, such as Bible story pictures displayed on the chalkboard. This approach allowed pupils to connect verbal and visual information, better understand the lessons, and construct their own learning. Meanwhile, the control group received lessons through the conventional teaching method without visual aids (Mayer, 2009).

At the end of the fourth week, a post-test on Christian Religious Studies (CRS) was conducted for the pupils. The collected test scores were systematically analyzed using descriptive statistics, including means and standard deviations, to summarize data trends. For hypothesis testing, inferential statistics such as the t-test were employed to evaluate the first hypothesis, which compared the average scores of the experimental and control groups. This aimed to determine if visual instructional materials significantly impacted the pupils' learning outcomes compared to the conventional method. The second hypothesis used Analysis of Variance (ANOVA) to examine potential gender influences on learning outcomes, assessing significant differences between groups based on this variable. All hypotheses were tested at a 0.05 level of significance to ensure the reliability and validity of the findings in assessing the effects of visual instructional materials on academic performance in CRS.

RESULTS AND DISCUSSION

Results

Using Visuals in Teaching Spiritual and Moral Values through Bible Stories

In Christian Religious Education (CRS), topics such as the parable of the Prodigal Son (Luke 15: 11-32; Matthew 9: 9-13) and the importance of showing compassion to others (Matthew 18: 21-34) are integral for imparting spiritual values. Visualization serves as a powerful tool in these

lessons, enhancing students' comprehension of the deep moral and ethical teachings embedded in these Bible stories. By using visual aids, educators can vividly bring these narratives to life, facilitating a deeper emotional and intellectual engagement with the material, which is essential for fostering a thorough understanding of these foundational Christian principles.

Table 1. Use of Visuals in Teaching Spiritual and Moral Values through Bible Stories

No	Visual Image	Description
1	 	Figure 1: God's Mercy on us: The Story of the Prodigal Son (Luke 15: 11-35; Matthew 9: 9-13) (Source: https://www.freebibleimages.org/illustrations/ls-lost-son/) Figure 1 explains the story of the prodigal son leaving the house for a distant country after collecting his share of his father's property. The prodigal son hired himself out to one of the local inhabitants who put him on his farm to feed the pigs for him to survive after wasting everything he collected from his father. The prodigal son came back to his father pleading for him to be accepted back.
2	 	Figure 2: God's Mercy on us: The Need to be Merciful to Others (Matt 18: 21-34) (source: https://www.freebibleimages.org/illustrations/unforgiving-servant/) Figure 2 explains the unforgiving servant pleading with his master to give him more time for him to settle his debt, but his master forgave him of his debt. Because the unforgiving servant refused to forgive his fellow servant of his debt, his master decided to punish him afterward.

The provided descriptions highlight two profound biblical parables that emphasize the theme of mercy. The first, "The Story of the Prodigal Son," depicted in Figure 1, illustrates a father's unconditional forgiveness and love towards his wayward son. This parable in the Gospel of Luke showcases the son's repentance and the father's compassionate reception, symbolizing God's boundless grace towards sinners who repent. The second image, "The Need to be Merciful to Others," from Figure 2, is taken from the Gospel of Matthew and portrays the parable of the unforgiving servant. This story highlights the hypocrisy of a servant who, despite being forgiven a large debt by his master, refuses to forgive a minor debt owed by his fellow servant. This leads to his punishment, underscoring the importance of showing mercy to others if one expects to receive mercy in return. These illustrations serve as visual aids that powerfully communicate the moral lessons of compassion and forgiveness embedded in Christian teachings.

Students' Learning Outcomes Before and After the Implementation of Chalk and Talk Method with and Without Visual Instructional Materials in CRS Learning

In an exploration of teaching strategies in Christian Religious Education (CRE), Table 2 provides a detailed quantitative analysis comparing the effects of the chalk and talk teaching method. The table highlights mean scores and standard deviations to show how the incorporation of visual instructional materials versus the absence of such aids affects pupils' learning outcomes. This data serves as an essential foundation for evaluating the efficacy of visual enhancements in traditional teaching approaches within the context of religious studies.

Table 2. Average Results and Standard Deviation of Student Learning Outcomes Using the Chalk and Talk Method with and Without Visual Learning Materials at CRS

Group	N	Pretest		Posttest		Mean Diff.
		Mean	Std. D	Mean	Std. D	
Chalk and Talk Method with Visual Instructional Materials	61	30.0	9.614	49.05	11.690	19
Chalk and Talk Method without Visual Instructional Materials	58	31.9	15.049	33.38	11.547	1.5
Grand Mean	119	31.0	12.30	41.40	11.60	10.50

Table 2 shows that prior to the treatment pupils in the chalk and talk method with visual instructional materials, and chalk and talk method without visual instructional materials groups had mean scores of 30.0 and 31.9 respectively. The mean total of the two groups was 31.0. This implies that the groups were homogenous before the treatment. However, after the exposure of the two groups to treatment, the grand mean of the groups increased to 41.40. Of the two groups, pupils exposed to the chalk and talk method with visual instructional materials had the highest performance with a mean score of 49.05, while those exposed to chalk and talk method without visual instructional materials had the lowest mean score of 33.38. Based on these results, it can be inferred that the pupils taught CRS utilizing chalk and talk method with visual instructional materials performed better, as shown by the highest mean score.

Hypothesis 1: There is no significant difference in the pre-test and post-test mean scores of pupils taught CRS utilizing chalk and talk method with visual instructional materials, and chalk and talk method without visual instructional materials.

Table 3: t-test Showing Difference in the pre-test and post-test mean scores of CRS pupils in experimental and control groups

Group	Test	N	Mean	Std. D	Df	T	p-value
Chalk and Talk Method with Visual Instructional Materials	Pretest	61	30.03	9.614	117	-.824	.412
Chalk and Talk Method without Visual Instructional Materials		58	31.93	15.049			
Chalk and Talk Method with Visual Instructional Materials	Posttest	61	49.05	11.690	117	7.353	.000
Chalk and Talk Method without Visual Instructional Materials		58	33.38	11.547			

Table 3 shows that the pre-test mean score for CRS pupils in the chalk and talk method with visual instructional materials group was 30.03 with a standard deviation of 9.614, while the chalk and talk method without visual instructional materials group had a mean score of 31.93 with a standard deviation of 15.049. The t-test result, $t(117) = -0.824$, $p = 0.412$, indicates that there is no significant difference between the pre-test scores of the two groups at 0.05 level of significance. This implies that both groups had similar performance levels before the treatment, supporting the assumption that they were comparable at the start of the study. However, after treatment, the result indicates that the chalk and talk method with visual instructional materials had a mean score of 49.05 with a standard deviation of 11.690, whereas the chalk and talk method without visual instructional materials had a mean score of 33.38 with a standard deviation of 11.547. The t-test result, $t (117) = 7.253$, $p = 0.000$, shows a significant difference between the post-test scores of the experimental and control groups. This indicates that pupils taught using the chalk and talk method with visual instructional materials performed significantly better than those taught using the chalk and talk method without visual instructional materials.

Hypothesis 2: There is no significant influence of gender on the learning outcomes of pupils taught CRS utilizing chalk and talk method with visual instructional materials, and chalk and talk method without visual instructional materials.

The Influence of Gender on Student Learning Outcomes with and without Visual Learning Materials in the Chalk and Talk Method

Table 4 provides an ANOVA analysis that explores the influence of gender on the learning outcomes of pupils in Classroom Religious Studies (CRS). The table specifically examines how male and female students respond to the traditional chalk and talk teaching method, both with and without the integration of visual instructional materials. This analysis helps in understanding whether gender plays a significant role in how effectively students can assimilate and retain religious education content under different pedagogical conditions.

Table 4. Effect of Gender on Student Learning Outcomes in CRS: Comparison of Chalk and Talk Methods with and without Visual Learning Materials

Source	Ss	df	Ms	F	sig.
Corrected Model	7811.256[a]	3	2603.752	22.750	.000
Intercept	184389.790	1	184389.790	1611.096	.000
Group	7252.972	1	7252.972	63.372	.000
Gender	220.325	1	220.325	1.925	.168
Group * Gender	411.912	1	411.912	3.599	.060
Error	13161.736	115	114.450		
Total	221094.000	119			
Corrected Total	20972.992	118			

Table 4 shows that the effect of treatment was significant, F (1, 115) = 63372, p = .000, indicating that pupils who were exposed to chalk and talk method with visual instructional materials performed better in CRS than their counterparts exposed to chalk and talk method without visual instructional materials. In contrast, the main effect of gender did not have statistical significant effect on pupils' learning outcomes in CRS, F (1, 115) = 1.925, p = .168, supporting the null hypothesis that there is no significant influence of gender on pupils' learning outcomes when exposed to treatment. Additionally, the interaction between treatment and gender was statistically insignificant, F (1, 115) = .3.559, p = .060, indicating that the effect of chalk and talk method with visual instructional materials was consistent across both male and female pupils.

Discussion

Effectiveness of Chalk and Talk Method with Visual Teaching Materials in CRS Learning

This study evaluated the effect of using visual instructional materials in teaching Christian Religious Studies to students. The t-test results of the first hypothesis showed a significant difference in post-test scores between the experimental group using the chalk-and-talk method with the help of visual materials and the control group using only the chalk-and-talk method without visual materials (Pitt & Orlander, 2016; Ahmed et al., 2024). This finding confirms that using visual materials together with the chalk-and-talk method significantly improves students' learning outcomes compared to using the chalk-and-talk method alone (Vazquez & Chiang, 2014; Ongeri, 2017). This shows that combining the chalk-and-talk method with visual instructional materials improves students' understanding of Christian Religious Studies at the elementary school level. Therefore, this method is more relevant and should be chosen than the chalk-and-talk method without visual support in the teaching process of the subject.

Meanwhile, the current findings corroborate the earlier findings by Nasiru et al (2023) and Klingenberg et al (2019) that students who were exposed to the use of visual instructional materials in the teaching of mathematics concepts significantly performed better than those not exposed to the use of visual instructional materials. This means that the use of visual instructional materials in the teaching of mathematics concepts increased students' academic achievement in the subject. Also, the findings agree with the findings of Sirajo & Abdullahi (2023) and Yusuf & Jinjiri (2024) that there is a significant difference between the mean academic performance scores of students taught

social studies using visual instructional resources and those taught using lecture method. Therefore, students exposed to visual instructional resources significantly performed better than those exposed to lecture method. In addition, Ojelade et al (2020) found out that there is significant difference in the mean academic scores of students taught with audio-visual aid in learning science and those taught with conventional method t (3.02, df 98, P <0.05) with mean difference of 5.05.

The result from hypothesis 2 shows that the main effect of gender did not have statistical significant effect on pupils' learning outcomes in CRS, F(1, 115) = 1.925, p = .168, supporting the null hypothesis that there is no significant influence of gender on pupils' learning outcomes when exposed to treatment. Additionally, the interaction between treatment and gender was statistically insignificant, F (1, 115) = .3.559, p = .060, indicating that the effect of chalk and talk method with visual instructional materials was consistent across both male and female pupils. This shows that the use of chalk and talk method with visual instructional materials in the instructional process of CRS favours both male and female pupils, and that both of them have equal chances to excel under it. By implication, the chalk and talk method with visual instructional materials is gender friendly.

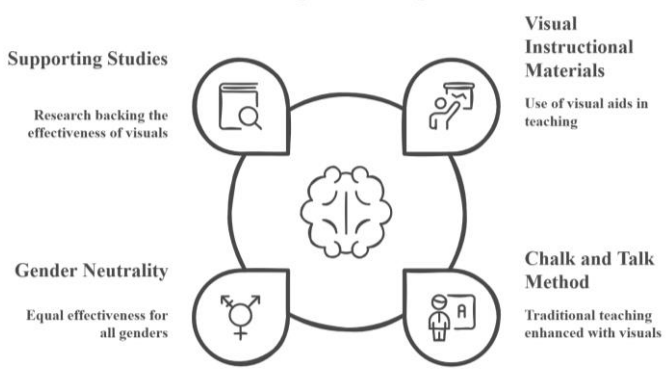

Figure 3. Factors Enhancing Learning Outcomes in CRS

Factors that influence learning outcomes in Christian Religious Studies (CRS). This diagram comprises four interconnected key elements, illustrating how different pedagogical aspects interact to support the learning process. First, Supporting Studies highlights the importance of research supporting the effectiveness of using visual instructional materials in education (Chiou et al., 2015; Huwari et al., 2023). Second, Visual Instructional Materials refers to the use of visual aids as a tool to enrich teaching, which has been shown to improve students' comprehension and retention of material (Abdulrahaman et al., 2020). Third, the "Chalk and Talk Method" refers to a traditional teaching approach enriched with visual elements, demonstrating the adaptation of classical methods to integrate modern aids. Finally, Gender Neutrality affirms that this approach is practical for all genders, ensuring that the teaching method is inclusive and accessible to all students (McBrien et al., 2022; Mendoza & Johnson, 2024). This diagram illustrates how combining scientific evidence, innovation in learning materials, and an inclusive approach can contribute significantly to improving learning outcomes in CRS, with each component supporting each other to achieve an optimal learning environment.

Therefore, the findings support the report by Sirajo & Abdullahi (2023) and Yusuf & Jinjiri (2024) that there is no significant difference between the mean academic performance scores of male and female students taught social studies using visual instructional resources. This means that exposure of students to visual instructional resources does not cause any significant difference in the academic performance of both genders. In agreement with the findings, Nasiru et al (2023) also reported that the result of their study on gender does not reveal any significant difference in the academic achievements of the male and female students in the experiment. Hence it reveals that both male and female students receive the same impact when exposed to the use of visual instructional materials in the teaching and learning of Mathematics.

Relevance and Contribution of Chalk and Talk Method to Visual Teaching Materials

The findings indicating that the chalk and talk method enhanced by visual instructional materials significantly improves learning outcomes in Christian Religious Studies (CRS) align with broader educational theories suggesting that multisensory teaching approaches can lead to better retention and understanding of material (Mayer, 2009; Esplendori et al., 2022). This approach leverages the cognitive theory of multimedia learning, which posits that individuals learn more effectively from words and pictures than from words alone (Clark & Mayer, 2011; Gazioglu & Karakuş, 2023).

However, the reported insignificance in the interaction between treatment and gender raises questions about the uniform applicability of these findings across different demographic groups. While the study concludes that the method is "gender friendly," it does not account for the nuanced ways in which different genders might interact with visual materials based on various socio-cultural factors (Halpern, 2012; Thompson et al., 2015; Davidson & Turin, 2021). Future studies could benefit from a more granular analysis of how gender influences the efficacy of visual instructional materials, potentially considering variations within gender groups or intersectional factors such as age, socioeconomic status, and cultural background (Gruber et al., 2021; Campbell et al., 2023).

Moreover, while the study effectively highlights the benefits of integrating visual aids into the chalk and talk method, it would be beneficial to compare this approach against other contemporary teaching methods that use technology or group-based interactive techniques. This would provide a more comprehensive view of its relative effectiveness and help educators make informed decisions about instructional strategies (Kirschner, Sweller, & Clark, 2006).

A critical analysis of the study suggesting that the chalk and talk method, enhanced by visual instructional materials, improves learning outcomes in Christian Religious Studies (CRS)supports the efficacy of integrating visual aids based on Mayer's multimedia learning theory (Mayer, 2003; Won et al., 2023). However, the study might not fully address how variables like socio-economic background or cultural factors affect this method's effectiveness. It also mainly focuses on traditional teaching techniques without comparing them to modern technological methods. While it confirms the method's broad applicability, including its gender neutrality, further research could explore more interactive and technologically advanced educational strategies to better engage students in today's digital landscape.

Figure 4. Enhancing Educational Outcomes with Chalk and Talk

Based on the above, to improve the quality of education through the "Chalk and Talk" method, with four core elements. First, there is a focus on the use of visual learning materials such as diagrams, videos, and presentations to strengthen students' understanding and memory of the material. Second, the image underlines the need for gender-neutral education, ensuring that the language, examples, and materials used are free from gender bias, creating an inclusive learning environment. Third, there is the use of comparative analysis as the main technique to improve students' critical thinking skills through a comparison of various theories and approaches. Finally, the image emphasizes the importance of sensitivity to students' socio-cultural factors, which

requires an understanding and appreciation of cultural diversity and social norms. Overall, the integration of these four elements is expected to significantly improve the effectiveness of learning.

Practical Implications for CRS Teachers

This study highlights significant practical implications for Religious Studies in the Christian Religious Studies (CRS) teachers, focusing on enhancing pedagogical skills through visual instructional materials (McKnight et al., 2016; Narkabilova & Davidova, 2022). This adaptation not only promises to improve learning outcomes but also caters to the diverse learning needs of students throughout the learning process. By integrating technologies such as smartphones and computers into their teaching methods, CRS teachers can align with contemporary educational trends, creating more engaging and effective learning environments that support the CRS curriculum (Eden & Adeniyi, 2024; Hidayat & Firmanti, 2024).

The integration of technology and visual aids in education is often praised for its ability to enhance learning experiences. However, the practical aspects of such adoption must be critically examined. The assumption that technology is easily accessible and cost-effective for all educational environments is not always realistic. In contexts where resources are limited, the financial burden of procuring, implementing, and maintaining technology can be significant. Such costs may make it difficult for underfunded schools to adopt these tools, potentially exacerbating existing educational disparities rather than alleviating them (Selwyn, 2013; Afzal et al., 2023; Kamalov et al., 2023). This issue highlights the importance of considering the socio-economic realities of educational settings when advocating for technological integration. Ensuring equitable access to technology is crucial to prevent widening the educational gap, suggesting that more tailored approaches and funding strategies are needed to support all schools effectively.

The effectiveness of using visual aids and technology in teaching Christian Religious Studies (CRS) can differ greatly, largely influenced by the teachers' ability to utilize these tools effectively. Research indicates that merely possessing technological tools is insufficient for ensuring their successful integration into educational practices. To truly benefit from these innovations, teachers require proper training and continuous professional development (Ertmer & Ottenbreit-Leftwich, 2010; Luu, 2020; Bowman et al., 2020). This training helps educators develop the necessary skills to incorporate new technologies and methodologies into their teaching. Additionally, ongoing support is crucial as it addresses the challenges teachers may face as they adapt to new tools and techniques. Hew and Brush (2007) highlight that without this foundational support, the introduction of new technologies into the classroom may not improve educational outcomes as anticipated, underscoring the need for comprehensive training and support systems to enhance the effective use of visual aids and technology in education.

Implementing technology in education presents significant hurdles, especially in environments where resources are limited. The initial investment and ongoing maintenance costs of technology pose considerable barriers, often rendering it unaffordable for some educational institutions (Carlander & Thollander, 2023; Borges do Nascimento et al., 2023). These financial challenges can impede the effective adoption of technology, potentially exacerbating the educational divide. Students in wealthier areas may benefit from enhanced access to superior educational tools and resources, while those in less affluent regions continue to encounter substantial obstacles. This disparity highlights the need for a careful and thoughtful approach to integrating technology in educational settings.

To address these issues, it is crucial to consider strategies for equitable technology integration that ensure all students have the same opportunities to access these important learning tools. By focusing on reducing the cost barriers and supporting all schools regardless of their financial situation, educational equity can be improved. Initiatives might include subsidized technology programs, grants for schools in need, and comprehensive training for educators to maximize the benefits of technology in teaching and learning (Kamalov et al., 2023; Wang et al., 2024). This

thoughtful integration can help elevate the overall quality of education and diminish the gap in educational opportunities between different socio-economic groups.

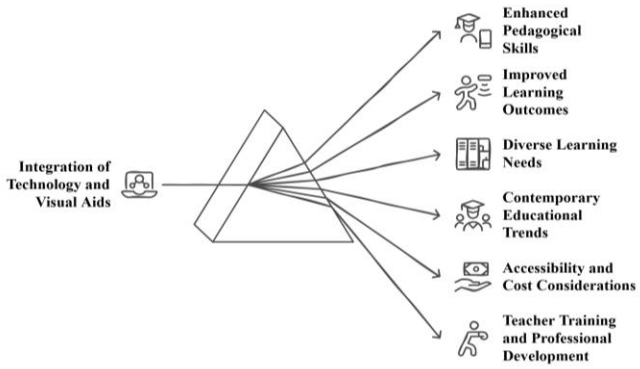

Figure 5. Enhancing CRS Teaching through Technology and Visual Aids

Integrating technology and visual aids into education offers many benefits but also brings challenges. Technology can enrich teaching methods by providing more tools to tailor learning to the needs of diverse students, but this requires teachers to continue learning and adapting to new technologies that require adequate support and resources. While technology can make learning experiences more interactive, its effectiveness largely depends on its proper integration into the curriculum and daily practice. Technology supports inclusive education by providing access to various learning modalities, such as visual and audio, but adds complexity to lesson planning. Aligning education with current trends, such as project-based learning, may be easier with technology, but there is a risk of neglecting fundamental learning principles that remain relevant. The cost and accessibility of technology are also significant barriers, especially in low-resource settings. At the same time, adequate training and professional development for teachers is essential to ensure the effective and optimal use of technology in education.

CONCLUSION

The study on the chalk-and-talk method enhanced by visual instructional materials in Christian Religious Studies (CRS) underscores notable advancements in student learning outcomes, demonstrating the potential of multisensory instructional strategies to boost engagement and retention. This method's effectiveness across gender lines prompts a call for more nuanced research to explore how various demographic factors, such as socioeconomic and cultural backgrounds, influence learning outcomes. The successful integration of technology in conventional teaching also highlights the critical need for comprehensive teacher training and adequate resource distribution to facilitate effective implementation. To fully leverage the benefits of visual instructional materials and technology, educators and researchers should strive to develop teaching practices that are inclusive, engaging, and effective across diverse educational settings.

Given the demonstrated success of the chalk-and-talk method with visual aids in CRS, it is advisable to extend this teaching approach to other school subjects. This expansion could validate and enhance the method's efficacy, encouraging its broader adoption among educators at all educational levels. Teachers have a range of visual instructional materials at their disposal, such as pictures, videos, real objects, diagrams, and charts, which can be locally sourced or downloaded from the internet. Effective utilization of these resources involves organizing lesson content into coherent units, presenting information pertinent to the lesson objectives, and ensuring a logical flow and alignment between text and images. Such structured and resourceful teaching strategies are pivotal in maximizing the educational impact of the chalk-and-talk method supplemented with visual aids.

Further research is warranted to assess the long-term effects of integrating visual instructional materials with the chalk-and-talk method in Christian Religious Studies at the primary level. Future

studies should focus on how this method affects student engagement and information retention, examining its effectiveness in various socio-economic and cultural settings. Research should also identify the most effective types of visual materials and explore the specific training needs of CRS teachers for optimal implementation. Additionally, comparative analyses of different teaching methods within CRS could help identify the best pedagogical strategies to support diverse learning styles and needs.

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