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

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Article Information:	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 Christian Religious Studies (CRS) adopt this method during the instructional process. The study was conducted within a constrained timeframe due to the school calendar. This study's contribution provides empirical validation of the effectiveness of the "chalk and talk" method supplemented with visual teaching materials in improving students' learning performance in Christian Religious Studies (CRS) subjects at the elementary school level. The findings provide important insights for developing effective teaching strategies in the elementary education curriculum. In addition, this study acknowledges the time constraints due to school schedules and recommends further research conducted over a more extended period or in different contexts to gain a broader understanding.

INTRODUCTION

In public primary schools across Ekiti State, teachers of Christian Religious Studies (CRS) frequently encounter difficulties in accessing or creating instructional materials, which significantly hampers effective lesson delivery. According to Naismith et al. (2005) and Naveed & Gordon (2024), the absence of these resources often leads educators to rely on conventional, lecture-based teaching methods that fail to foster active student engagement. Pedraja-Rejas et al. (2024) emphasize that participatory teaching is essential for deeper learning, and its absence reduces the effectiveness of instruction. McGarr (2009) and Ferreira et al. (2021) note that financial limitations and a lack of institutional focus on instructional media integration contribute to this challenge. The Ekiti State Ministry of Education's 2024 placement examination revealed low CRS performance among students, reflecting the broader issue of inadequate teaching strategies (Ralph et al., 2017; Drew, 2017). However, Kaplan (2024) highlights that many CRS teachers already possess smartphones or personal computers, which, as Reinhart et al. (2014) and Joshi et al. (2021; 2023) suggest, can serve as cost-effective tools for accessing visual learning content. By utilizing these

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technologies, educators can adopt more dynamic and student-centered approaches, ultimately enhancing comprehension and performance in CRS.

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 instrument's face and content validity were confirmed through expert reviews involving Christian Religious Studies scholars from the Department of Arts and Language Education and a specialist in testing and measurement from the Faculty of Education, Ekiti State University. As noted by Oroszi (2020) and supported by Lang et al. (2021), involving domain-specific experts ensures that instruments align with the intended educational objectives and content accuracy. These experts conducted detailed evaluations, and necessary revisions were made to improve clarity and relevance before the instruments were finalized. To assess reliability, the study adopted the test-retest approach, consistent with De Ridder et al. (2021), which emphasizes the importance of temporal stability in educational assessments. The resulting reliability coefficient of 0.83, as highlighted by Yuksekol et al. (2022), demonstrates a strong degree of consistency, indicating the instrument's effectiveness for use in measuring the intended variables within the study.

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 research investigated the impact of incorporating visual instructional aids in teaching Christian Religious Studies (CRS) to elementary students (Gazioğlu & Karakuş, 2023). The analysis of the first hypothesis using a t-test revealed a notable difference in post-test performance between students taught using the traditional chalk-and-talk method enhanced with visual aids and those taught with chalk-and-talk alone. Pitt and Orlander (2016) and Ahmed et al. (2024) argue that visual materials play a crucial role in enriching classroom instruction and enhancing student comprehension. Supporting this, Vazquez and Chiang (2014) and Ongeri (2017) found that visual resources significantly contribute to improving learning outcomes by making abstract religious concepts more tangible and relatable. These expert views affirm that integrating visual aids into the chalk-and-talk method enhances the effectiveness of CRS teaching. Thus, the study recommends prioritizing this combined approach over traditional lecture-only techniques to better support students' cognitive and spiritual development in CRS education.

The findings of this study align with those of Nasiru et al. (2023) and Klingenberg et al. (2019), who observed that students taught mathematical concepts using visual instructional materials performed significantly better than those who were not. Their insights suggest that visual aids enhance students' comprehension by making abstract concepts more concrete, thus improving

academic achievement. Similarly, Sirajo & Abdullahi (2023) and Yusuf & Jinjiri (2024) reported a significant difference in the mean academic performance of students taught social studies with visual resources compared to those taught using the lecture method. This supports the view that visual materials foster a more engaging and meaningful learning experience. Furthermore, Ojelade et al. (2020) found a statistically significant difference in the academic scores of students taught science using audiovisual aids versus those using conventional methods, with a t-value of 3.02, degrees of freedom (df) of 98, and a mean difference of 5.05 at a significance level of $P < 0.05$.

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, $F(1, 115) = .3559$, $p = .060$, 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.
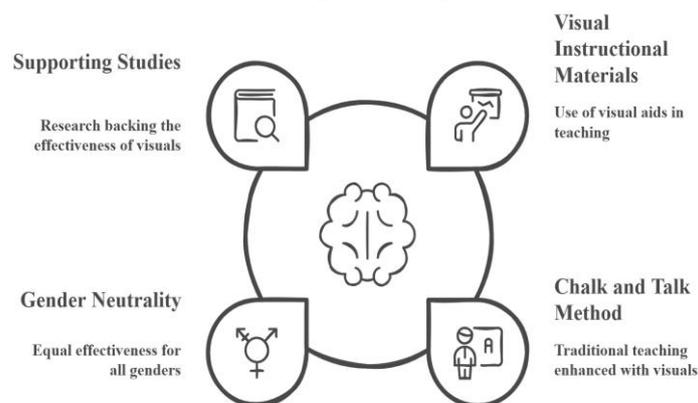
Figure 3. Factors Enhancing Learning Outcomes in CRS

The diagram illustrating factors that influence learning outcomes in Christian Religious Studies (CRS) highlights four key elements that work together to enhance the educational process. First, Supporting Studies emphasizes the significance of research demonstrating the effectiveness of visual instructional materials in education (Chiou et al., 2015; Huwari et al., 2023). Second, Visual Instructional Materials refers to the use of visual aids to enhance teaching, which has been shown to improve student comprehension and material retention (Abdulrahaman et al., 2020). Third, the "Chalk and Talk Method" is a traditional teaching approach that integrates visual tools, showcasing how classical teaching methods can be adapted with modern aids. Lastly, Gender Neutrality underscores that this teaching approach is inclusive and accessible to students of all genders, ensuring equal opportunities for all (McBrien et al., 2022; Mendoza & Johnson, 2024). This diagram demonstrates how combining research, innovation in instructional tools, and inclusivity leads to improved learning outcomes in CRS by creating a well-rounded, supportive 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 that the chalk and talk method, enhanced by visual instructional materials, significantly improves learning outcomes in Christian Religious Studies (CRS) support broader educational theories emphasizing the benefits of multisensory teaching approaches. These theories suggest that combining different sensory inputs can enhance retention and understanding of material (Mayer, 2009; Esplendori et al., 2022). This approach aligns with the cognitive theory of multimedia learning, which argues that individuals retain information more effectively when presented with both words and visuals, as opposed to words alone (Clark & Mayer, 2011; Gazioglu & Karakuş, 2023). By incorporating visual aids into traditional teaching methods, educators can engage students more effectively, enhancing both comprehension and long-term retention. This demonstrates the importance of integrating visual elements into teaching strategies to foster deeper learning experiences, particularly in subjects such as Christian Religious Studies.

The lack of significant interaction between treatment and gender raises concerns about the broader applicability of these findings across different demographic groups. While the study labels the method as "gender-friendly," it does not address how gender might interact with visual materials in various socio-cultural contexts. Researchers like Halpern (2012), Thompson et al. (2015), and Davidson & Turin (2021) note that gender-based learning preferences can be shaped by socio-cultural factors, influencing how students engage with visual materials. Future studies should explore the impact of gender on the effectiveness of visual aids, considering other factors such as age, socioeconomic status, and cultural background. An intersectional approach, as suggested by Gruber et al. (2021) and Campbell et al. (2023), could lead to more inclusive and tailored teaching methods.

While the study effectively showcases the benefits of incorporating visual aids into the chalk-and-talk method, it would be beneficial to compare this approach with other contemporary teaching strategies that leverage technology or promote collaborative, group-based activities. As noted by Raja et al. (2023), Pimpa (2023), and Windchief (2023), exploring a broader range of instructional methods would offer a more comprehensive understanding of their relative effectiveness. These comparisons could shed light on which approaches are most successful in boosting student engagement and improving learning outcomes. Kirschner et al. (2006) stress the need to evaluate different teaching strategies to better inform educational practices, ensuring that educators are using the most effective methods to meet the diverse needs of their students. By incorporating this broader perspective, educators can make more informed decisions and select the best strategies to enhance student understanding, interaction, and academic success in the classroom.

A critical evaluation of the study suggesting that the chalk-and-talk method, enhanced by visual instructional materials, improves learning outcomes in Christian Religious Studies (CRS) aligns with Mayer's multimedia learning theory (Mayer, 2003; Won et al., 2023). However, the study may not fully consider the influence of socio-economic or cultural factors on the method's effectiveness, as highlighted by Bell and Gitomer (2023) and Sanfo and Malgoubri (2023). Additionally, the study primarily focuses on traditional teaching methods without comparing them to modern, technology-driven approaches. While it affirms the method's broad applicability and gender-neutral nature, further research could benefit from exploring more interactive and technologically advanced strategies, which are increasingly relevant in today's digital learning environments. Such an exploration could provide a deeper understanding of how contemporary teaching techniques, integrating digital tools, might enhance student engagement and learning outcomes, in line with the evolving educational landscape.

To enhance the effectiveness of the "Chalk and Talk" method, it is crucial to integrate four key elements. First, the incorporation of visual learning materials, such as diagrams, videos, and presentations, strengthens students' comprehension and retention, making lessons more engaging

and memorable. Second, ensuring gender-neutral education is essential, as it fosters an inclusive learning environment by eliminating bias in language, examples, and materials. Third, the use of comparative analysis encourages students to develop critical thinking by examining various theories and perspectives, which broadens their intellectual horizons. Lastly, sensitivity to students' socio-cultural factors is vital, as understanding cultural diversity and social norms creates a more respectful and effective learning atmosphere. Together, these elements form a comprehensive framework that not only improves academic outcomes but also promotes a more inclusive, thoughtful, and engaging educational experience for all students.

Practical Implications for CRS Teachers

This study offers valuable insights for Christian Religious Studies (CRS) teachers, emphasizing the enhancement of teaching practices through visual instructional materials (McKnight et al., 2016; Narkabilova & Davidova, 2022). The integration of such resources is shown to improve learning outcomes while addressing the varied learning needs of students. By incorporating technologies like smartphones and computers into their teaching methods, CRS educators can adapt to modern educational trends, fostering more engaging and effective learning environments. This approach not only enhances the delivery of the CRS curriculum but also aligns with contemporary pedagogical practices that support active student participation (Eden & Adeniyi, 2024; Hidayat & Firmanti, 2024). Ultimately, the adoption of these innovative teaching tools enables teachers to create more dynamic and inclusive classrooms that better meet the needs of diverse learners, improving both academic achievement and overall student engagement.
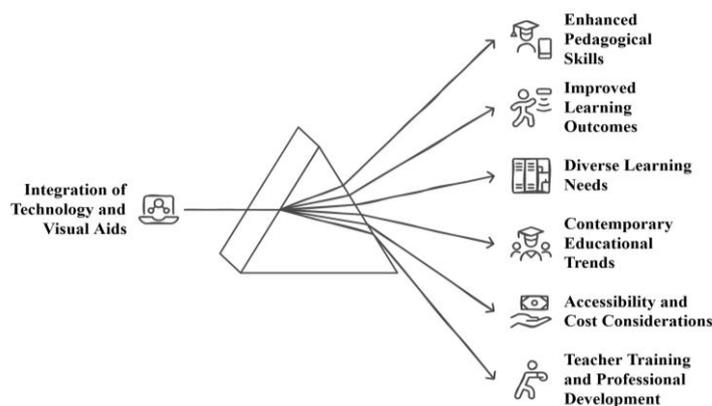
The integration of technology and visual aids in education is often praised for enhancing learning experiences, but their practical application requires critical consideration. The assumption that technology is universally accessible and cost-effective for all educational settings may not be realistic (Stamer et al., 2023; Alghamdi et al., 2023). In resource-limited environments, the costs associated with acquiring, implementing, and maintaining technology can be prohibitive. This financial burden may hinder underfunded schools from adopting these tools, potentially exacerbating existing educational inequalities rather than addressing them (Selwyn, 2012; Afzal et al., 2023; Kamalov et al., 2023). This challenge underscores the importance of considering the socio-economic context when advocating for technology integration. To ensure that the educational gap is not widened, equitable access to technology must be prioritized. Thus, tailored approaches and adequate funding strategies are necessary to support schools in a way that promotes inclusivity and equal opportunities for all students.

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) and Morris (2010) 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 4. 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.

ACKNOWLEDGEMENT

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