



**The African Journal of Monitoring and Evaluation**

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2025: Vol 3(1), pp. 280-320

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The Regional Center for Project Management and Evaluation Training

eISSN 2958-9436

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Received: 22/07/2025, Revised: 15/08/2025, Accepted: 02/09/2025



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# **Participatory Monitoring and Evaluation Practices and Implementation of School Based Peace Education Programs in Public High Schools in Bungoma County, Kenya**

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## **ABSTRACT**

Effective policy implementation is vital for creating a harmonious and functional society. This study examined the influence of participatory monitoring and evaluation (M&E) practices on the implementation of school-based peace education programs in public primary schools in Bungoma County, Kenya. The research sought to address the persistent challenge of ineffective program implementation despite ongoing efforts. Explanatory sequential mixed method design was adopted. The study employed a mixed-methods approach to gather both quantitative and qualitative data. The target population consisted of 306 participants, including principals, teachers, and peace club patrons. A total sample size of 175 participants was selected using a combination of simple random and purposive sampling techniques. Data were collected using self-administered questionnaires for teachers and principals, and a key informant interview (KII) guide for education officers. A pilot study was conducted in a neighboring Busia County with 27 participants to ensure the reliability and validity of the instruments, yielding a Cronbach's alpha of 0.8478. Data were analyzed using descriptive statistics (frequencies, percentages, means, standard deviations) and inferential statistics (Pearson correlation and regression analysis). The study null hypothesis at a 0.05 level of significance. The combined influence of all four practices on program implementation was found to be statistically significant ( $p<0.05$ ). The study concluded that participatory M&E, through its various stages, significantly enhances the implementation of peace education programs. The findings are expected to inform policymakers and educators on strategies to improve program effectiveness and promote a culture of peace in schools.

**Keywords:** Participatory Monitoring and Evaluation Practices, Implementation of School Based Peace Education Programs, Public High Schools, Bungoma County, Kenya

## INTRODUCTION

### Background of the Study

Governments and development agencies prioritize peace education in schools to foster national cohesion, equip future leaders with conflict resolution skills, and promote social justice and tolerance to reduce violence and instability (Lahti, 2025; Nwokah, 2025; Masunda, 2025). This proactive approach prevents the escalation of conflicts by addressing their root causes, such as inequality and prejudice (Lahti, 2025; Nwokah, 2025; Masunda, 2025), through a curriculum that emphasizes understanding, empathy, and the development of emotional intelligence. Peace education is a process of teaching the knowledge, skills, attitudes, and values needed to create a more peaceful society by preventing conflict, resolving conflicts peacefully, and fostering conditions conducive to peace. It aims to cultivate a culture of respect, understanding, and cooperation, promoting non-violence and social justice (Lahti, 2025; Nwokah, 2025; Masunda, 2025).

Principles of peace education programs (Özel & Sümer, 2025; Salomon, 2002; Salomon & Nevo, 2005) include fostering tolerance and respect for diversity, promoting human rights and social justice, developing critical thinking and conflict resolution skills, encouraging empathy and nonviolence, and cultivating a holistic understanding of peace that extends beyond the absence of war to encompass a just, harmonious society (Özel & Sümer, 2025; Salomon, 2002; Salomon & Nevo, 2005). Programs often integrate these principles through experiential and democratic learning, fostering collaboration and a peaceful school environment to inspire long-term behavioral change for a better world.

School-based peace education programs are important for building a peaceful society (Istianah, Darmawan, Sundawa, Fitriasari & Shamim, 2025; Education & Education, 2025; Bacha, 2025) by instilling values like tolerance, respect, and empathy, fostering conflict transformation, and equipping students with critical thinking and emotional intelligence to resolve conflicts constructively. These programs promote a safe and harmonious learning environment, decrease violence and dropout rates, and connect school initiatives with community efforts to create a culture of peace (Istianah, Darmawan, Sundawa, Fitriasari & Shamim, 2025; Education & Education, 2025; Bacha, 2025).

The Ministry of Education in Kenya did develop the Education Sector Policy on Peace Education around 2014, with the goal of fostering peace, promoting respectful coexistence in diverse communities, and equipping learners with skills to prevent and resolve conflicts, including addressing school-based violence. The development of this policy involved a collaborative process with key stakeholders to create an initial framework and draft document. The policy aims to impart knowledge, values, and attitudes that enhance peace, such as communication, cooperation, and respect for human dignity. It seeks to integrate themes of peace education into the curriculum to help learners become responsible citizens. A significant objective is to combat school-based violence and conflicts by cultivating an environment of harmony and mutual respect.

Kenya's peace education policy is deeply rooted in public participation principles, requiring research into participatory monitoring and evaluation (M&E) practices within school-based peace education programs to ensure their effectiveness and alignment with national goals. This approach

leverages the Constitution of Kenya's emphasis on public involvement, fostering a culture of peace through collaborative efforts in designing, implementing, and evaluating educational initiatives. The Education Sector Policy on Peace Education aligns with these principles, aiming to promote peace and national cohesion by involving all stakeholders in peace-building efforts. To ensure the successful implementation of peace education, it is crucial to understand how effective participatory M&E practices can contribute to the programs' outcomes.

### **Research Problem**

Schools in Kenya face various forms of violence and conflict, including gender-based violence, ethnic conflict, domestic violence, and school-related violence, which significantly harm education outcomes by causing absenteeism, trauma, reduced access, resource loss, and poor academic performance. Schools in Bungoma County have been affected by violence and conflict, which disrupt learning and impose costs on the community. Factors contributing to these issues include resource competition, political differences, bullying, gender-based violence, domestic violence impacting student behavior, and a lack of effective peace education. Addressing these challenges requires a focus on peace education, better enforcement of authority, transformative teaching methods, and community-based solutions to foster peaceful coexistence and reduce school unrest. To address this, Kenya has implemented Peace Education Programs (PEPs) to promote peace and national cohesion, but challenges remain in ensuring trained teachers and effective implementation. Moreover, the Ministry of Education has established policies supporting participatory approaches in education, including for peace education, and promotes stakeholder involvement in policy conceptualization, design, and evaluation to ensure effectiveness and relevance, which is a core principle of participatory M&E.

While studies have explored Participatory Monitoring and Evaluation (PME) and Peace Education (PE), there is a limited number of studies specifically examining the relationship between PME practices and the implementation of school-based PE programs in Kenya, particularly at the county level. Research in this area is needed, as PME is recognized for its potential to enhance project success by involving stakeholders, and the integration of PE into Kenyan schools is a government priority to address conflict.

Peace education research presents a contextual gap for Kenya because many studies were conducted in different socio-cultural and political environments, leading to a potential mismatch between the findings and the specific realities of Kenya's educational system. Kenyan research indicates issues like ethnic imbalance and structural inequalities contributing to conflict, suggesting that peace education needs context-specific integration. To address this, the current research should on Kenya's unique challenges and educational infrastructure to develop and implement more relevant and effective school based peace education programs in public primary schools, including enhanced teacher training and comprehensive policy frameworks.

Substantial conceptual gaps exist in peace education research, particularly regarding the very definition and practical application of "peace education" itself, alongside challenges in its implementation, funding, teacher training, and integration into curricula. While advancements have been made in understanding peace education's philosophical aspects and link to social justice, a significant gap remains between theoretical frameworks and their effective, context-specific implementation in diverse socio-political landscapes. Conceptual gaps in peace education research

is addressed through clear definition of the concept of concept of peace education.

There are significant theoretical gaps in peace education research, with many studies lacking a strong theoretical foundation, often being divorced from relevant social science theory and research. To address this, the current study incorporates foundational theories provides a clear, explicit model for how peace education programs lead to desired outcomes.

There are documented methodological gaps and challenges in peace education research, with many studies suffering from a lack of robust methodology, often failing to connect theory and practice effectively, or to incorporate diverse participant perspectives. To address this, the current research employs rigorous pragmatic research mythology approach and process, thereby improving the validity and relevance of findings.

Based on these challenge and research gaps, the overall research question for this study is: What is the relationship between participatory monitoring and evaluation practices and implementation of peace education programs in public primary schools in Bungoma County in Kenya?

### **Value of the Study**

The research on participatory monitoring of peace education informs policy by revealing implementation challenges, suggesting solutions like enhanced teacher training and resources, and establishing the significance of community involvement for the success of the Kenya Education Sector Policy on Peace Education. This information is crucial for improving program effectiveness, leading to better peace outcomes in schools and contributing to national cohesion. Participatory monitoring provides concrete evidence of what works and what doesn't in implementing peace education programs. This allows policymakers to refine the Kenya Education Sector Policy on Peace Education by understanding the real-world challenges faced by teachers and pupils.

This research supports theory development by providing empirical data that tests and refines existing theories, such as Social Interdependence Theory, the Integrative Theory of Peace, Constructive Controversy Theory, and Theory of Change. It also facilitates theory testing by assessing how well general theories of implementation apply to the specific context of peace education in Kenyan schools. Finally, the research promotes theory elaboration by identifying context-specific factors and relationships, like the influence of school leadership or specific teaching methods, which add depth and nuance to broader peace and implementation theories.

This research on participatory monitoring of peace education in Kenya's public primary schools promotes effective project management and monitoring and evaluation by fostering stakeholder collaboration, shared learning, and accountability, ultimately leading to improved project outcomes and more inclusive decision-making processes. This collaborative approach allows stakeholders to collectively identify issues, gather and analyze data, and take corrective actions, thereby enhancing the effectiveness and sustainability of the peace education initiatives.

Last but not least, this research on participatory monitoring of peace education in Kenya suggests several areas for further investigation, including extending studies to private schools and other counties, exploring the impact of cultural practices and learning resources on peace education, and

a deeper analysis of the specific factors influencing its implementation, such as teacher training and school leadership. Studies also highlight the need to assess the effectiveness of participatory monitoring itself in improving peace education outcomes, as well as ways to strengthen the broader implementation of peace education in the curriculum.

## **REVIEW OF RELATED LITERATURE**

### **Theoretical foundation**

The Integrative Theory of Peace (ITP) serves as the central anchor theory, conceptualizing peace as a multi-faceted state encompassing psychological, social, political, ethical, and spiritual dimensions. Social Interdependence Theory examines how individuals' goals are linked to others' actions, while Constructive Controversy Theory details how structured disagreement can lead to better solutions. A Theory of Change explains how an intervention is expected to produce desired outcomes by outlining the causal links and underlying assumptions.

#### **Integrative Theory of Peace**

The Integrative Theory of Peace (ITP), developed by Danesh (Danesh, 2006), posits that peace is a multi-faceted state-psychological, social, political, ethical, and spiritual-and that all human states of being, including peace, are profoundly shaped by our personal and collective worldview. This theory emphasizes that for peace to be achieved, individuals and communities must engage in deep reflection to transform their worldviews (Danesh, 2006; Danesh, 2011), moving from conflict-based perspectives to a unity-based worldview that fosters trust and cooperation across various levels of human existence, from intrapersonal to global (Danesh, 2011).

The Integrative Theory of Peace is highly relevant because its core idea-that peace is a complex psychosocial, moral, and spiritual reality (Danesh, 2006; Danesh, 2011)-provides a comprehensive framework for understanding and implementing peace education in Kenyan primary schools. This theory informs the design of participatory monitoring and evaluation (M&E) by emphasizing the need to involve communities, validate local resources, and promote shared learning for long-term, sustainable peace, rather than focusing solely on the absence of violence. For research, it encourages a holistic approach to evaluating peace education, going beyond mere curriculum delivery to assess its impact on transforming mindsets, fostering empathy, and building justice within the school and wider community (Danesh, 2006; Danesh, 2011).

The theory's understanding of peace as encompassing survival, safety, freedom, justice, and interconnectedness allows for M&E to assess whether programs are addressing the deeper psychosocial and spiritual needs of the community, not just the absence of overt conflict. It supports participatory M&E by advocating for an approach that respects and validates the human and cultural resources within a given setting. This means involving teachers, pupils, and parents in the evaluation process, ensuring buy-in and ownership of the peace initiative.

By integrating different dimensions of peace, the theory helps M&E systems design indicators that can track a project's long-term impact on transforming relationships, fostering justice, and promoting well-being, which is crucial for peacebuilding. The theory encourages the creation of peace education programs that address a broad spectrum of knowledge, skills, attitudes, and values needed to transform mindsets and behaviors that contribute to conflict. It highlights the need to train teachers not just in peace education content but also to cultivate their own emotional

intelligence and ability to foster a peaceful learning environment that promotes empathy and mutual respect.

The Integrative Theory of Peace provides a strong conceptual foundation for researchers designing studies on peace education (Danesh, 2006; Danesh, 2011) in Kenyan schools, guiding them to use mixed-methods and participatory approaches to capture the complex realities of peace. The theory's emphasis on evolving from self-centeredness to a universal awareness of our shared humanity aligns with the goal of equipping young people to be responsible citizens and future peace-makers who value justice and environmental care. It encourages research that goes beyond superficial implementation to explore how peace education is understood and experienced within the local cultural and social context, validating and building on existing community strengths. The theory provides a lens for evaluating whether peace education programs lead to genuine, long-term transformations in attitudes, relationships, and social structures, rather than just mere adherence to curriculum (Danesh, 2006; Danesh, 2011).

### **Social Interdependence Theory**

Social Interdependence Theory is a framework by Morton Deutsch and elaborated by David and Roger Johnson that explains how structuring goals influences interaction and outcomes between people (Johnson & Johnson, 2005; Johnson & Johnson, 2008). It posits that individuals' success is linked to others' actions, and different goal structures lead to either positive (cooperative) or negative (competitive) interdependencies. Key applications are in cooperative learning, where positive interdependence, individual accountability, promotive interaction, social skills, and group processing are vital for achieving greater learning, positive relationships, and psychological health.

Social Interdependence Theory is highly relevant to peace education programs because it provides a framework for transforming competitive relationships into cooperative ones, which are essential for achieving consensual peace (Johnson & Johnson, 2005; Johnson & Johnson, 2008). By structuring activities around cooperative goals and mutual benefit, peace education programs can cultivate positive interdependence, teaching individuals to work together, resolve conflicts constructively, and foster a sense of a shared future and long-term common good (Johnson & Johnson, 2005; Johnson & Johnson, 2008). The theory posits that the way goals are structured dictates how people interact. In peace education, this means shifting from competitive to cooperative goal structures. When individuals' actions affect each other's goal achievement, it creates interdependence. Peace education fosters positive interdependence by aligning individuals' goals, encouraging them to cooperate for mutual benefit.

Social Interdependence Theory offers a practical and research-validated approach for peace education, providing the theoretical underpinnings and practical procedures needed to move from conflict to cooperation and to build sustainable peace (Johnson & Johnson, 2005; Johnson & Johnson, 2008). Social Interdependence Theory is highly relevant to research on participatory monitoring and evaluation (PM&E) and peace education programs in Kenyan primary schools because it provides a framework for fostering collaboration and shared goals among stakeholders, such as students, teachers, and parents, essential for the success of both PM&E and peace education initiatives. The theory emphasizes that individuals work together towards a common goal, a concept directly applicable to how PM&E utilizes collective assessment and how peace education promotes a sense of interconnectedness and mutual benefit, turning classrooms into environments

of mutual support rather than competition.

### **Constructive Controversy Theory**

Constructive Controversy Theory proposes that intellectual disagreements within a cooperative framework lead to higher-quality and more creative solutions than consensus or conflict. Key assumptions include the belief that opposing viewpoints create conceptual uncertainty and epistemic curiosity (Johnson & Johnson (2014); Tjosvold, 2014; Vollmer & Seyr, 2013), which prompts individuals to seek out and integrate information from other perspectives. This process, if conducted with cooperation and rational argumentation, results in better understanding, more creative outcomes, improved knowledge retention, and positive personal development (Johnson & Johnson 2014; Tjosvold, 2014; Vollmer & Seyr, 2013).

Constructive Controversy Theory is highly relevant to research on participatory monitoring and evaluation (PM&E) and peace education in Kenya because it explains how engaging different stakeholders in constructive debate and disagreement can lead to deeper understanding, innovative solutions, and greater buy-in for programs like peace education. In the context of peace education, Participatory M&E involves stakeholders collaboratively defining evaluation issues, collecting and analyzing data, and taking corrective actions, a process that benefits from the structured, evidence-based disagreement promoted by constructive controversy theory to identify the most effective peace-building strategies.

Constructive controversy theory posits that disagreement, when managed constructively, can foster greater cognitive complexity and lead to more thorough analysis and better solutions. In PM&E, this means that differing viewpoints from various stakeholders (teachers, students, community members, and even external evaluators) can highlight blind spots and drive innovation in monitoring and evaluation processes. The theory emphasizes the importance of exploring and questioning different perspectives. This aligns perfectly with the goal of PM&E to generate shared knowledge by involving diverse stakeholders in the process of defining evaluation issues, collecting and analyzing data, and identifying corrective actions.

Constructive controversy theory encourages stakeholders to engage with and challenge ideas, leading to a deeper understanding and shared commitment to the program's outcomes. This fosters a sense of co-ownership and empowers communities to take action based on the insights gained, which is crucial for the successful implementation of peace education initiatives.

Peace education in Kenya aims to address deep-rooted conflicts and promote peaceful coexistence. Constructive Controversy Theory provides a framework for how diverse community members can engage in resolving these conflicts by exploring, analyzing, and reframing their positions and interests in a structured manner. The theory's emphasis on questioning and seeking more adequate perspectives can help in developing an epistemic curiosity among students and teachers, encouraging them to question existing beliefs and actively seek new information related to peace and conflict resolution.

By creating a platform for constructive dialogue, the theory supports the principle that peace building must involve and validate the human and cultural resources within the community. This allows for the inclusion of varying viewpoints, even potentially conflicting ones, into the ongoing

process of peace education and implementation. The integration of peace education in primary schools requires solutions tailored to the local context. Constructive controversy theory facilitates this by encouraging stakeholders to debate and co-create solutions that are responsive to the specific needs and aspirations of the community, thus enhancing the effectiveness of the peace education programs.

### **Theory of Change**

Theory of change (ToC) is a structured framework that outlines how and why a specific intervention or program is expected to achieve its desired outcomes. It's a roadmap that clarifies the causal relationships and assumptions behind a project, guiding its planning, implementation, and evaluation. Key assumptions in a Theory of Change (ToC) are the essential, unproven beliefs about cause-and-effect relationships, necessary conditions, and external factors that must be true for an intervention to achieve its intended impact. These include causal assumptions (how activities lead to outcomes), contextual assumptions (external factors like political or social conditions), and operational assumptions (resource availability and stakeholder buy-in). Explicitly identifying and testing these assumptions is crucial for effective program design, monitoring, and learning.

Theory of Change (ToC) is highly relevant to research on participatory monitoring and evaluation (PM&E) and peace education in Kenyan primary schools because it provides a roadmap for understanding how and why the program is expected to work. For research, it clarifies the program's intended causal pathways, which informs the development of relevant PM&E indicators and methods to track the program's effectiveness and impact on peace education. This helps researchers understand if the program's activities are leading to the desired changes in students' attitudes, behaviors, and community peace, and how to adapt the program based on evidence gathered during implementation.

ToC makes explicit the assumptions about how implementing peace education will lead to desired outcomes, such as increased conflict resolution skills and fostering a culture of peace among students. This provides a structured framework for the research, helping to identify critical assumptions to test. By outlining the logical steps and indicators of change, the ToC directly informs the design of the participatory monitoring and evaluation process. It helps determine what data needs to be collected from stakeholders (teachers, pupils, community members) to assess progress and impact. The ToC helps research to understand not just the implementation of peace education itself, but also its ripple effects on students' attitudes toward non-violence, justice, and compassion. This is crucial for assessing the long-term impact of such programs in a conflict-prone region like parts of Kenya.

### **Empirical Literature Review**

#### **Participatory Monitoring and Evaluation Planning and Implementation of Peace Education Programs in Public Primary Schools**

Participatory M&E planning is a collaborative process where all key stakeholders, especially beneficiaries, are actively involved in designing, implementing, and using monitoring and evaluation (M&E) frameworks and activities for a project or program (Sigouin, Porzecanski, Betley, Gazit, Lichtenthal, Cheng, & Mahajan, 2025; Reodique, 2025). This approach moves

beyond a top-down model, empowering participants by enabling them to contribute their local knowledge, question the process, suggest corrective actions, and take ownership of the project's outcomes (Sigouin, et al, 2025; Reodique, 2025). By integrating diverse perspectives and facilitating joint learning, participatory M&E planning can lead to more relevant, effective, and sustainable results that are tailored to local needs and contexts.

Participatory Monitoring and Evaluation (PM&E) Planning (Guijt, Arevalo & Saladores, 1998; Parkinson, 2009; De Coning & Romita, 2009) for peace education programs strengthens programs by empowering local communities to lead data collection and analysis, leading to more relevant, timely, and reliable findings (De Coning & Romita, 2009). This approach improves accountability and transparency by giving stakeholders a voice in decision-making and resource allocation. PM&E also facilitates deeper learning and adaptation by promoting shared understanding and early problem identification, ultimately contributing to more effective and sustainable peace-building outcomes (Gijt, Arevalo & Saladores, 1998; Parkinson, 2009; De Coning & Romita, 2009). By embedding the principles of participation, empowerment, and collective learning into the M&E process, PM&E contributes to building the capacity for self-assessment and continued improvement within the community. This long-term perspective supports the sustainability of peace education efforts beyond the project lifecycle (Gijt, Arevalo & Saladores, 1998; Parkinson, 2009; De Coning & Romita, 2009).

Participatory M&E planning for school-based peace education programs results in more accurate assessments of program impact, increased program relevance and effectiveness, enhanced stakeholder ownership and empowerment, and stronger partnerships within the community and school. By involving students, teachers, and parents, these programs gain deeper insights into needs and priorities, leading to informed decision-making and program adjustments that better meet the community's needs for peace.

### **Participatory M&E Data Collection and Implementation of Peace Education Programs in Public Primary Schools**

Participatory M&E data collection is an approach where project stakeholders, are actively involved in designing, collecting, analyzing, and using data for monitoring and evaluation activities (Gallagher, 2009; Xu & Maitland, 2019; de Vos, Preiser & Masterson, 2021). Participatory M&E data collection improves projects by ensuring local relevance, building community capacity and ownership, fostering accountability, enabling continuous learning, and promoting stakeholder empowerment (Gallagher, 2009; Xu & Maitland, 2019; de Vos, Preiser & Masterson, 2021). By involving beneficiaries and local communities directly in the monitoring and evaluation process, it provides a more accurate understanding of project dynamics, leads to better-informed decisions, and increases the likelihood of sustainable project success (Preiser & Masterson, 2021; Gallagher, 2009; Xu & Maitland, 2019).

Participatory M&E data collection for school peace education programs fosters a comprehensive understanding of a program's impact by including diverse perspectives, enhancing local context (Icban, 2025; De Coning & Romita, 2009; Bacha, 2025) relevance, and building ownership among participants like students and teachers. Key advantages include improved transparency, accountability, knowledge transfer, empowerment of stakeholders, and more effective program adaptation based on community insights (Icban, 2025; De Coning & Romita, 2009; Bacha, 2025).

Involving students, teachers, and community members in data collection gives them a voice in assessing the program's progress and effectiveness (Sevón, Mustola, Siippainen & Vlasov, 2025; Piolanti, Schmid, Fiderer, Ward, Stöckl & Foran, 2025). This fosters a sense of co-ownership and responsibility, which is crucial for the long-term success (Sevón, Mustola, Siippainen & Vlasov, 2025; Piolanti, et al, 2025) of peace education. By including diverse perspectives from those directly affected by the peace education program, the data collected is more likely to reflect the real-world context and nuances of the school environment (Icban, 2025; De Coning & Romita, 2009; Bacha, 2025). This helps tailor the program to specific challenges and opportunities for promoting peace. Feedback from participants during the M&E process provides valuable insights into what is working and what isn't. This information can be used to make timely adjustments and course corrections, making the program more responsive and effective (Icban, 2025; De Coning & Romita, 2009; Bacha, 2025).

The process of negotiating and jointly assessing project results builds trust among different stakeholders, including students, teachers, parents, and community leaders (Sevón, Mustola, Siippainen & Vlasov, 2025; Piolanti, et al, 2025). This collaborative environment promotes mutual learning and a shared understanding of peace education goals and strategies. A participatory approach shifts the M&E process from being "done to" participants to being "done with" them (Gallagher, 2009; Xu & Maitland, 2019; de Vos, Preiser & Masterson, 2021). This democratization of the evaluation process empowers beneficiaries by giving them more agency in deciding how progress is measured and how results are acted upon. When stakeholders are actively involved in the M&E process, they are more likely to remain engaged with the peace education program and committed to its goals, which contributes to its long-term sustainability.

### **Participatory M&E Data Analysis and Implementation of Peace Education Programs in Public Primary Schools**

Participatory M&E data analysis is a process where project stakeholders, especially primary beneficiaries, collaboratively analyze monitoring and evaluation data to gain shared insights and identify necessary actions (Reodique, 2025). This approach moves beyond traditional top-down analysis by emphasizing stakeholder ownership, empowerment, and collective knowledge generation through shared control over the M&E process and its results. Key techniques include facilitated self-assessments, analysis of participant stories, and using checklists to verify findings against evidence (Reodique, 2025).

Participatory M&E data analysis empowers communities by involving them in data collection and interpretation, fostering ownership, and building local capacity for project sustainability (Reodique, 2025). It improves data relevance and accuracy by providing unique local insights, enhances downward accountability to beneficiaries, and leads to more responsive and effective project design and implementation by identifying local needs and issues early on. This collaborative approach ultimately leads to stronger social sustainability and more impactful development outcomes (Reodique, 2025).

Participatory M&E data analysis offers several strengths for school-based peace education programs (Icban, 2025; Singh, 2024; Özel & Sümer, 2025) by enhancing ownership and accountability, fostering learning and adaptation, building trust and empowerment among stakeholders, improving the relevance and inclusivity of interventions, and ensuring transparency

and resource management. By actively involving teachers, students, and community members in the M&E process, these programs can generate more practical insights, promote collaborative solutions, and create a more sustainable environment for peace-building efforts (Icban, 2025; Singh, 2024; Özel & Sümer, 2025).

Involving students, teachers, and parents in analyzing M&E data for peace education programs fosters ownership, enhances program effectiveness by providing diverse perspectives on implementation and outcomes, and builds trust within the school community(Icban, 2025; Singh, 2024; Özel, & Sümer, 2025).This collaborative approach ensures the data accurately reflects real-world experiences, leads to more relevant adjustments, and promotes sustainability by empowering stakeholders to collectively identify challenges and solutions for peace education(Icban, 2025; Singh, 2024; Özel, & Sümer, 2025).

When students, teachers, and parents participate, the analysis is enriched by different lived experiences and practical insights, ensuring the program remains relevant to the school context and fostering a sense of ownership and commitment to the program (Icban, 2025; Singh, 2024; Özel, & Sümer, 2025). This multi-stakeholder analysis provides a more comprehensive understanding of the program's strengths and weaknesses, enabling the identification of obstacles and the validation of program logic to make necessary adjustments to activities and approaches (Icban, 2025; Singh, 2024; Özel & Sümer, 2025). Based on the collaborative analysis, program adjustments can be made to improve the curriculum, teaching methods, and overall program design to better meet the needs of the school community.

### **Participatory Utilization of M&E Findings and Implementation of Peace Education Programs in Public Primary Schools**

Participatory utilization of Monitoring and Evaluation (M&E) findings for school-based peace education programs involves actively engaging stakeholders, including students, teachers, and community members (Özel & Sümer 2025; Arcinas, 2025), in the entire M&E process to interpret findings, identify areas for improvement, and foster collective ownership of the program's success. This approach moves beyond traditional top-down evaluation to empower participants, leading to more relevant and sustainable peace-building initiatives within schools. This approach enables stakeholders-including students, teachers, and community members-to collaboratively identify program successes and failures, leading to informed decision-making, more responsive interventions, and stronger community commitment to peace education goals. A few empirical studies have examined this critical variable.

The purpose of Momanyi's (2018) study was to monitor and evaluate the implementation of peace education in primary schools in Uasin Gishu County, Kenya, and to determine the relationship between these activities and the effective implementation of the peace education program. The study aimed to assess how well peace education was being put into practice and how monitoring and evaluation efforts contributed to its success. The study used a survey research design with a mixed-methods approach. Data was collected using questionnaires, interview schedules, focused group discussions, and document analysis from primary school headteachers, teachers, and pupils, with multiple regression models used for analysis. The study found that the participatory utilization of M&E findings was lacking, with various stakeholders not adequately involved in the M&E process. Key findings included a deficiency in training and capacity building for teachers and other

stakeholders in participatory M&E, highlighting a general lack of collaboration in developing and using M&E information. The study concluded that more training and inclusive M&E processes are needed to foster better implementation and outcomes of peace education programs.

Taylor (2015) analyzes the practical challenges and opportunities of using monitoring and evaluation (M&E) in peacebuilding contexts to improve information-based interventions, particularly in the complex and volatile environments where such efforts are often undertaken. The study aimed to provide a deeper understanding of how M&E can be a valuable tool for building knowledge on successful peacebuilding approaches and for adapting interventions to rapidly changing situation. The researcher used a qualitative, reflective, and action-oriented design that involves case studies and a Theory of Change-informed approach.

The findings suggest that for M&E to enhance peacebuilding interventions, it must move beyond traditional, top-down approaches to embrace participatory methods that empower local communities in the M&E process itself, fostering ownership and greater effectiveness of peace efforts. The study highlights that meaningful stakeholder engagement is crucial for the participatory utilization of M&E results. While the study highlights the need for participatory monitoring and evaluation (PM&E), a significant gap remains in understanding how to ensure meaningful and active beneficiary participation at all stages of the M&E process, from data collection and analysis to the development of action plans.

### **Implementation of Peace Education Programs in Schools**

Implementing school-based peace education is important because it promotes a culture of peace by teaching non-violent conflict resolution skills, fostering empathy, and instilling values like human dignity and rights, which helps prevent violence and prepares students for constructive community and national participation (Istianah, Darmawan, Sundawa, Fitriasari & Shamim, 2025; Education & Education, 2025). These programs provide a critical learning environment to address societal violence, equipping students to become responsible citizens who can analyze conflicts, build positive relationships, and contribute to broader social justice and development goals.

Masunda' (2025) investigated the specific peace-building challenges affecting Zimbabwe, especially after the 2017 coup and the resulting "New Dispensation. It connects peace education with the broader concepts of social justice, exploring how education can address inequalities and foster a more inclusive environment. The research utilizes the 4Rs framework (Redistribution, Recognition, Representation, and Reconciliation) to assess how education can tackle social and economic injustices and promote peace. The researcher used a qualitative paradigm, an inductive research approach, and a case study design focusing on the Harare Urban District. Data were collected through in-depth interviews with various stakeholders, including victims of political violence, policymakers, and members of civil society, to understand their lived experiences and the multifaceted role of peace education in a divided society. Key findings suggest a need for integrated, non-partisan peace education from primary to university levels, along with government monitoring of non-formal initiatives to counter their misuse by political parties and civil society organizations. The study was undertaken in Zimbabwe; a country whose context is different from that of Kenya.

Ndwandwe (2024) explored the barriers to implementing peace education in South African

secondary schools. Using a qualitative approach with data from interviews and focus groups in the Western Cape, the study aimed to understand the practical challenges preventing successful integration of peace education within the formal school system, leading to insights into financial, time, parental, and teacher-related obstacles. The study identified financial limitations, insufficient time allocation, societal violence, lack of parental involvement, and negative attitudes as key hindrances. A primary gap in the study is its limited scope regarding the role of school leadership, as the study focused on teacher perspectives rather than leadership challenges, and the findings were self-reported, potentially subject to social desirability bias. Moreover, the study was in South Africa, whose contexts are different from that of Kenya.

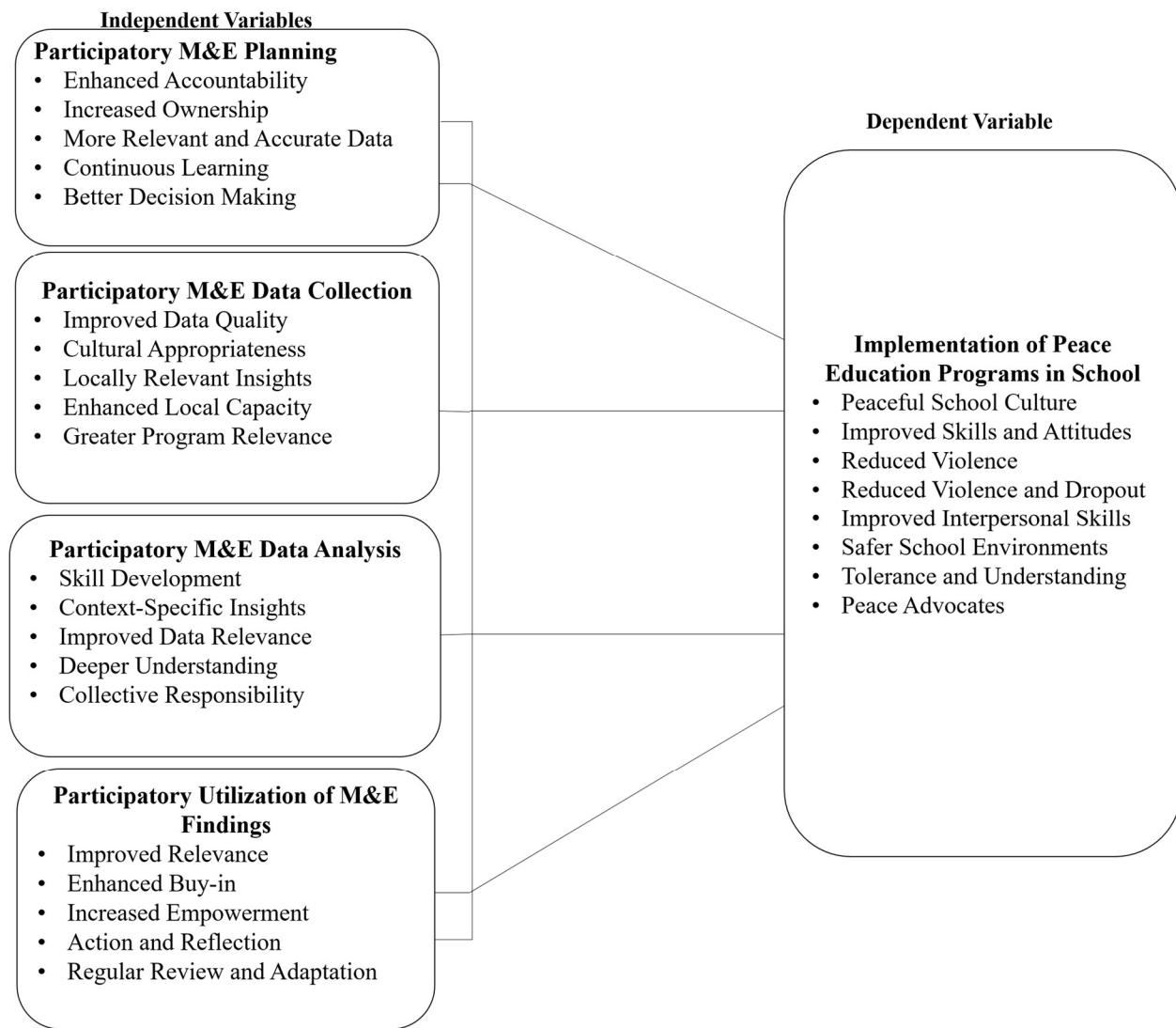
The study by Özal and Sümer (2025) aimed to identify the challenges in adapting a peace education program for a new context, such as a diverse student population, by analyzing the existing program and cultural factors to create a more relevant and effective approach. The research highlighted the need for culturally sensitive content, effective delivery methods, and collaboration between educators and communities to foster a lasting culture of peace and harmony. There are no search results available for a 2025 study by Özal and Sümer on Peace Education Program Adaptation, so the research methods used in that specific study cannot be identified. The study found that adapting peace education programs requires a holistic approach that goes beyond simply modifying a single program, emphasizing the importance of cultural competencies, social skills, and systemic strategies to foster a peaceful and harmonious school environment. The program should be tailored to the specific needs and cultural context of the students, incorporating elements like conflict resolution and empathy to promote social cohesion and resilience. For true sustainability, integration into national curricula, teacher training, and broader community and policymaker collaboration are essential.

The study by Haris and Mufidah (2025) aimed to investigate how civic education programs influence and increase religious tolerance among elementary school students in the 21st century. The purpose was to understand the practical implementation of civic education in fostering a more tolerant society, likely focusing on the Indonesian context as indicated by the study's themes and the journal's background. The study used a qualitative and narrative approach. The Study found that implementing civic education in elementary schools in Indonesia can effectively increase religious tolerance by shaping children's character and attitudes to value diversity, which is critical for a multicultural society like Indonesia. The study highlights the importance of civic education as a tool for teaching principles of religious tolerance from a young age, aiming to foster citizens who can coexist peacefully despite different beliefs.

Istianah, Darmawan, Sundawa, Fitriasari & Susanti (2025) investigated how to create a peaceful school environment by understanding the role of various factors, particularly social and cultural diversity, and to identify effective strategies for fostering positive relationships, tolerance, and conflict resolution among students from different backgrounds within the school setting. The researchers used a mixed methods approach combining qualitative and quantitative data collection. The study found that effective peace education often requires teachers to be trained in conflict resolution, diversity awareness, and creating a safe and inclusive learning environment. The study emphasized the importance of providing teachers with the necessary support and professional development. The study highlighted the need for further research into specific areas such as different geographical and cultural contexts, long-term impacts of peace education initiatives, and

the integration of peace education across various school subjects.

## **Conceptual Framework**



**Figure 1: Conceptual Framework**

## **METHODOLOGY**

This section presents the research philosophy, design, population of study, sample size and sampling methods, data collection instruments, validity and reliability of data collection instruments, operationalization of study variables, and data analysis methods.

### **Research Philosophy**

This study is grounded on Positivism. Positivism, as a research philosophy, emphasizes the use of scientific methods to study the social world, focusing on observable and measurable data to establish objective truths (Dulal, 2025; Park, Konge & Artino Jr, 2020). It assumes that a single,

objective reality exists and can be understood through systematic observation and analysis, often using quantitative methods. Positivism provides a framework for conducting research that emphasizes objectivity, measurability, and the application of scientific principles to understand the social world (Dulal, 2025; Park, Konge & Artino Jr, 2020).

Using a positivism research philosophy is important in this investigation because it emphasizes objective, quantifiable data to establish causal relationships between participatory monitoring and evaluation (PM&E) practices and the implementation of school-based peace education programs. This objective approach allows for generalizable inferences, and replication to identify the most effective strategies, providing evidence-based insights for policymakers, educators, and program implementers to improve peace education programs.

### **Research Design**

This study adopted an explanatory sequential mixed methods design (Subedi, 2016; Toyon, 2021). The study was carried out in two distinct phases: the first phase involved collecting and analysing quantitative data, followed by a second phase where qualitative data was gathered and analyzed to explain, elaborate on, or provide more in-depth context for the initial quantitative findings. The design offers deeper insights into the "how" and "why" by first providing a broad quantitative overview of how participatory monitoring and evaluation (M&E) influences peace education programs, followed by in-depth qualitative exploration to explain the observed relationships and underlying processes (Subedi, 2016; Toyon, 2021). Explanatory sequential mixed methods design allows for the development of a comprehensive understanding that goes beyond either method alone, enabling this study to identify factors contributing to or hindering peace program implementation and to understand the experiences of stakeholders involved.

### **Population of Study**

The target population for this study are 306 registered public high schools in Bungoma County. The Ministry of Education requires all schools in Kenya to implement school based peace education programs.

**Table 1.1. Population of Study**

School Category	No. of Peace Education Programs	Total No. of Education Programs
National Schools	4	4
Extra-County Schools	12	12
County Schools	260	260
<b>Total</b>	<b>306</b>	<b>306</b>

*Source: Ministry of Basic Education, 2025 Records*

### **Sample Size and Sampling Methods**

This study used a sample of 175 high schools from a target population of 306 schools in Bungoma County to evaluate school-wide peace education programs. The sample size was determined using the Krejcie and Morgan Table of Sample Size Determination. A combination of simple random (Kirk & Beaujean, 2025), stratified, (Cohen, 2025) and purposive sampling methods (Nyimbili & Nyimbili, 2024) was used to select schools. Stratified sampling accounts for the diverse categories and geographical locations of schools, while purposive sampling targeted schools with a history of both violence and peace to gather rich qualitative data on their peace programs.

### Data Collection Instruments

Data was collected using a combination of methods: a 5-Likert scale questionnaire (Davis, Rhind & Jowett, 2025; Salim & Azo, 2025) delivered via WhatsApp for quantitative data, and a separate interview guide for qualitative data gathered through in-depth conversations (Panyasai & Ambele, 2025; Westland, Vervoort, Kars, & Jaarsma, 2025), also conducted via WhatsApp for continuity and familiarity with the messaging platform. This hybrid approach allows for both scalable, structured data collection and rich, and contextualized insights into respondents' experiences, leveraging WhatsApp's familiarity and cost-effectiveness while mitigating some limitations through a complementary qualitative method.

### Pilot Testing of Instruments

Pilot testing was conducted in one of the neighboring Busia County. Ten percent of the sample size was allocated for pilot testing. Stangor (2011) recommends that a pre-test sample of a tenth of the total sample with homogenous characteristic is appropriate for a pilot study. Since the total sample size for this study was 175, 17 questionnaires equivalent to 10% of the total population sample was used for pilot study. The results of the pilot test informed necessary adjustments, such as refining unclear perception statements and instructions, eliminating irrelevant questions, adding new and more targeted statements, and moderating language.

### Validity of Instruments

Validity as described by Maina (2012) is the extent to which the collected data gives a true measurement/ description of social reality. Measurement of validity was done by examining the content, criterion and construct of the instrument to ensure accurate measurement, design and statistical conclusion. To establish content validity, two specialists in the area of study who are the research supervisors from the University of Nairobi were given the instruments to examine the instrument's items relevance and consistence to the objectives by rating each item on a scale of very relevant (4), relevant (3), somewhat relevant (2), and not relevant (1). Content Validity Index (CVI) was used to determine validity.

$$CVI = \frac{\text{Sum of item rated 3 or 4}}{\text{Number of Questionnaire items}}$$

CVI= Items rated 3 or 4 by both experts divided by the total number of items in the questionnaire. The results summarized in Table 1.2 were obtained.

**Table 1.2: Experts Rating of Instruments**

		Supervisor I					
		1	2	3	4	Total	
Supervisor II	1	0	0	0	0	0	0
	2	0	5	0	0	0	5
	3	1	0	5	9	15	
	4	1	0	14	15	30	
	Total	2	5	19	24	50	

Table 1.2 shows that validity index:  $CVI = (19+24)/50 = 0.860$ , which is acceptable since it was more than the threshold of 0.7 recommended by Cohen and Swerdlik (2010). Hence out of any

ten items used in this study, at least seven of them measured what they were intended to measure. Construct validity was evaluated by examining whether a consistent significant proportion of high scores in items investigating independent variables correlated positively or negatively with scores in items investigating the dependent variable. This was done by comparing several scores from different subjects.

### **Reliability of the Research Instruments**

The reliability of the research instruments was established to ensure their consistency in yielding similar results when repeatedly applied to the same target population. A pilot study was conducted to confirm this reliability. The stability of the instruments over time was determined using a pre-test reliability method. Subsequently, a re-test was performed on the corrected questionnaire to ensure it met the recommended reliability threshold of  $\alpha \geq 0.70$ , as suggested by Cronbach and Azuma (1962), before being used in the main study.

The study utilized Cronbach's alpha coefficient to assess the reliability of the rating-scaled questionnaire. Items were carefully reviewed and deleted as necessary to maximize their reliability coefficient. The resulting coefficients were then compared against a threshold of  $\alpha \geq 0.70$ , which is the recommended coefficient test for reliability according to Cohen and Swerdlick (2010). The reliability output results are presented in Table 1.3.

**Table 1.3: Reliability output results**

Scale	No. of Items	Alpha
Participatory M&E Planning	10	0.883
Participatory M&E Data Collection	10	0.841
Participatory M&E Data analysis	10	0.854
Participatory Utilization of M&E Findings	10	0.789
Implementation of School Based Peace Education Programs	10	0.872
<b>Overall</b>	<b>50</b>	<b>0.8478</b>

The reliability of the research instruments was a crucial step to ensure the study's findings were consistent and trustworthy. A pilot study was conducted to confirm that the questionnaires would produce stable results if administered multiple times. The study used Cronbach's alpha coefficient to measure internal consistency, which determines how closely related a set of items are as a group. A Cronbach's alpha of 0.70 or higher is generally considered acceptable for research purposes.

As shown in Table 1.3, the reliability analysis yielded strong results across all scales. The overall Cronbach's alpha was 0.8478, which is well above the 0.70 threshold. This indicates a high level of reliability for the entire instrument, which comprised a total of 50 items. The consistently high alpha values across all scales confirm that the research instruments were reliable and suitable for data collection in this study on the implementation of school-based peace education programs.

## **Data Analysis Techniques**

This study employed descriptive and inferential statistics to analyze data. Descriptive statistics involved quantitative and qualitative data analysis while inferential statistics involved testing of research hypotheses using correlation and regression analysis. These are further explained in detail in the following sub-sequent sub-themes:

### **Descriptive Statistics**

Descriptive statistics describes and summarizes data into distribution of scores or measurements such as measures of central tendency, measures of dispersion, frequencies and percentages and tables.

In quantitative data, the data was collected on each independent variable and dependent variable which are the subject of investigation. It contained a total of 54 items comprising of 4 items in the demographic characteristics section and each of the 5 variables having 10 items structured to generate Likert response options measured on a 5-point ordinal scale ranging from the lowest score “1” strongly disagree (SD) to the highest score “5” strongly agree (SA)

In qualitative data, the data from interview guide was recorded appropriately for further processing based on themes. Responses were coded and analyzed for themes and compared to the variables to validate quantitative results. Data was summarized into daily briefs after each interview sessions. This was followed by description of the responses to produce an interim report on areas that require additional information and requisite data sourced for systematic analysis and interpretation.

### **Inferential Statistics**

Pearson correlation co-efficient was used to test relationship between the independent variables and dependent variable, in order to reject or fail to reject the null hypothesis. The null hypotheses were tested for significance at  $\alpha=0.05$  significance level. Sekaran’s (2006) decision criterion, according to which the Null Hypothesis is to be rejected is if  $P\text{-value} < 0.05$ ; or otherwise, it is accepted. Using the Pearson correlation p-values under 2-tailed, the following hypothesis was tested:

Model 5 for Hypothesis5;  $H_0$ : There is no significant influence of the combined participatory monitoring and evaluation practices on the implementation of peace education programs in public primary schools in Bungoma County.

Model:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$

Where:

- $Y$  = Implementation of Peace Education Programs
- $X_1$  = Participatory M&E Planning
- $X_2$  = Participatory Data Collection
- $X_3$  = Participatory Data Analysis
- $X_4$  = Participatory Utilization of M&E Findings

- $\beta_0$  = Constant term (intercept)
- $\beta_1, \beta_2, \beta_3, \beta_4$  = Coefficients for the influence of each independent variable on Y
- $\epsilon$  = Error term

**Table 1.4: Summary of Hypothesis Testing**

Objective	Hypothesis	Analytical Models	Interpretation
To establish the influence of the combined participatory monitoring and evaluation practices on implementation of peace education programs in public primary schools in Bungoma County in Kenya.	Ho: There is no significant joint influence of combined participatory monitoring and evaluation practices on the implementation of peace education programs.	Multiple Linear Regression  Model: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$	The null hypothesis is rejected if the overall F-test for the model is significant (p-value < 0.05). The joint influence is established if the regression coefficients for the independent variables are statistically significant.

### Operationalization of Study Variables

**Table 1.5: Operationalization of Study Variables**

Objectives	Variables	Indicators	Scale of Measurement	Research Approach	Types of Statistical Analysis	Tools of Data Analysis
To establish the influence of the combined participatory monitoring and evaluation practices on implementation of peace education programs in public primary schools in Bungoma County in Kenya.	Independent Variable  Participatory Utilization of M&E Findings	Improved Relevance Enhanced Buy-in Increased Empowerment Action and Reflection Regular Review and Adaptation	Interval	Quantitative/ Qualitative	Parametric / Non-parameteric	Descriptive analysis, correlation analysis, regression analysis
Implementation of peace education programs in public primary schools in Bungoma County in Kenya.	Dependent Variable  Implementation of Peace Education Programs in Schools	Peaceful School Culture Improved Skills and Attitudes Reduced Violence Reduced Violence and Dropout Improved Interpersonal	Interval	Quantitative/ Qualitative	Parametric / Non-parameteric	Descriptive analysis, correlation analysis, regression analysis

		Skills Safer School Environments Tolerance and Understanding Peace Advocates				
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## **Data Analysis Methods**

Quantitative data was analyzed using Descriptive statistics (George & Mallery, 2024) and Pearson correlation coefficient (Yu & Hutson, 2024). Descriptive statistics was used to establish the influence of participatory monitoring and evaluation (M&E) practices on the implementation of school-based peace education programs by summarizing and presenting quantitative data on the M&E practices and the progress of the peace education programs. Common descriptive statistics like frequencies, percentages, means, and measures of central tendency was employed to describe the sample characteristics, report on the extent of participatory M&E engagement, and quantify the implementation status or outcomes of the peace education programs, thereby illustrating the relationship between the two aspects of the study.

The Pearson correlation coefficient statistical tool was used to test the strength and direction of the linear relationship between participatory monitoring and evaluation practices and the implementation of school-based peace education programs. This coefficient, often referred to as Pearson's  $r$ , provides a numerical value between -1 and +1, where the sign indicates the direction (positive or negative) and the magnitude indicates the strength of the linear association between the two variables.

Qualitative data on the influence of participatory monitoring and evaluation (PM&E) practices on the implementation of school-based peace education programs was analyzed using thematic content analysis, a method that involves identifying, analyzing, and reporting patterns (themes) within the qualitative data (Anderson, 2007; Vaismoradi & Snelgrove, 2019). The study coded and categorized the data from interviews or focus groups into broader themes, revealing how stakeholder involvement in M&E affects the process, sustainability, and effectiveness of peace education programs.

## **FINDINGS**

This section presents the study's results, which are discussed in a cross-sectional manner across several thematic areas: questionnaire return rate, participants' demographic characteristics, and the four key components of participatory monitoring and evaluation (M&E) practices as they relate to peace education programs. This final thematic area combines participatory M&E practices to examine their overall effect. This final objective was also analyzed using descriptive statistics, but the inferential analysis progressed to correlation analysis and multiple regression analysis to test for significant relationships. All statistical analyses were discussed simultaneously to provide a comprehensive and integrated view of the findings.

The key informant interviews, a qualitative data collection method, provided insights that were integrated with the quantitative descriptive statistics from the questionnaires. This triangulation of both qualitative and quantitative data enhanced the validity and reliability of the study's findings.

### Questionnaire Return Rate

Out of the sample size of 175 respondents from the target population of 306, 175 questionnaires were issued to the study participants of which 164 were duly filled and returned giving a response rate of 93.71%. Table 1.6 shows the Questionnaire Return Rate for the research participants.

**Table 1.6: Questionnaire Return Rate**

Respondent	Sampled	Returned	Return rate
Number	175	164	93,71%

Based on the data in Table 1.6, the interpretation of the results is that the study achieved a very high questionnaire return rate, indicating a successful data collection process.

The high return rate of 93.71% was achieved through consistent follow-up with all sampled respondents during data collection. These return rates are considered excellent and statistically adequate for analysis. According to research methodologies by Mugenda and Mugenda (2003) and Kothari (2004), a return rate of over 50% is generally acceptable for research purposes. The return rates ensured that the data collected is highly representative of the sampled population, minimizing potential non-response bias.

### Demographic characteristics of implementation of School Based Peace Education Programs

The demographic profile of 164 respondents was necessary mainly because it serve as a foundational context for understanding the key characteristics of the study participants in relation to current study. Data were systematically collected on key variables related to their roles, The Years One Started Implementing School Based Peace Education Programs in High Schools in Bungoma County academic, Funding Sources for the School Based Peace Education Programs context and approaches Used in School Based Peace Education Programs as presented in Table 1.7

**Table 1.7: Demographic Characteristics of School Based Peace Education Programs in public High schools in Bungoma County (n=164)**

Characteristics	n(f) frequency	(%) percent
<b>Position/Role in the School Based Peace Education Programs</b>		
Principal	39	23.70
Deputy Principal	35	21.30
Mentor/Peace Club facilitator	10	6.10
Conflict Resolution Specialist		

Curriculum Consultant	<b>16</b>	9.80
Teachers	9	5.50
Others	49	29.90
	6	3.70
<b>Total</b>	<b>164</b>	<b>100</b>
<b>Years of Implementing School Based Peace Education Programs</b>		
Before 2014	55	33.5
2015-2017	50	30.5
2018-2020	35	21.3
2021-2023	15	9.1
2024-present	9	5.5
<b>Total</b>	<b>164</b>	<b>100</b>
<b>Funding Sources for the School Based Peace Education Programs</b>		
Ministry of Education	50	30.5
National Cohesion and Integration Commission	8	4.9
Non-Governmental Organizations (NGOs) and Civil Society	37	22.6
Kenya Institute of Curriculum Development	5	3.0
Parents Association/ Board of Management	49	29.9
Others	15	9.1
<b>Total</b>	<b>164</b>	<b>100</b>
<b>Approaches Used in School Based Peace Education Programs</b>		
Peace Education Clubs	30	18.3
Peer Mediation	77	47
Peaceful School Culture	11	6.7
Teacher Training	7	4.3
Integration into Curriculum	7	4.3
Awareness Raising	4	2.4
Role-Playing and Simulations	6	3.7
Conflict Resolution and Management	6	3.7
Fostering Responsible Behavior and Self-Control	<b>5</b>	<b>3.0</b>
Community Engagement	7	4.3
Promoting Cultural Competency	3	1.8

Others	4	2.4
<b>Total</b>	<b>164</b>	<b>100</b>

Based on the provided demographic data in Table 1.7 on the implementation of School Based Peace Education Programs, the results and implication of each characteristic are discussed in the following subsequent themes

### **Implementation of School based Peace Education Programs**

Implementation of School based peace education served as the dependent variable in this study. Building on both theoretical and empirical frameworks, the study identified seven key indicators of implementation of school-based education programs: Peaceful school culture, improved skills and attitude, reduced violence and dropout, improved interpersonal skills, safer school environment, tolerance and understanding and peace advocate. To measure these indicators, participants responded to a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

For primary data analysis, this ordinal scale was statistically transformed into an equidistant, or interval, scale to meet the assumptions of the parametric statistical methods used in the study. The qualitative interpretation of the results followed Nyutu's (2021) categorization, where mean scores were interpreted as follows: a point range of 1.00 - 1.80 for strongly disagree, 1.81-2.60 for Disagree, 2.61-3.40 for Neutral, 3.41-4.20 for Agree and 4.21- 5.00 for Strongly agree.

The data was then analyzed and presented using descriptive statistics, including frequencies, percentages, means, and standard deviations for each item. Both individual item means and standard deviations, as well as composite means and standard deviations, were calculated and presented in Table 1.8.

**Table 1.8: Implementation of School based Peace Education Programs**

STATEMENTS	SA	A	N	D	SD	Mean	Std. dev	skewnes
1. Effective implementation of school based peace education programs enable students to learn to resolve conflicts constructively both in classroom and beyond	49(24.4%)	76(46.3%)	19(11.6%)	19(11.6%)	10(6.1%)	3.71	1.14	-0.904
2. Effective implementation of school based peace education programs instill core values in students such as tolerance, respect for human dignity and rights, appreciation for diversity, and a sense of interdependence.	48(29.3%)	63(38.4%)	43(26.2%)	10(6.1%)	0(0.00%)	3.91	0.892	-0.344
3. Effective implementation of	40(24.4%)	64(39%)	45(27.4%)	6(3.7%)	9(5.5%)	3.73	1.05	-0.812

	school based peace education programs bring about positive behavioral changes in students, guiding them toward non-violent attitudes and behaviors.							
4	Effective implementation of school based peace education programs enable students to analyze problems critically, fostering harmony and cooperation	47(28.6%)	82(50%)	26(15.9%)	7(4.3%)	2(1.2%)	4.01	0.854 -0.91
5.	Effective implementation of school based peace education programs contribute to national goals like those in Kenya's Vision 2030 by addressing societal issues that fuel conflict, thereby promoting peace, security, and conflict management.	50(30.5%)	46(28%)	57(34.8%)	6(3.7%)	5(3.0%)	3.79	1.02 -0.491
6.	Through effective implementation of school based peace education programs, students can gain better awareness of their own emotions and mental health, as well as a deeper understanding of peace and security issues in their communities.	68(41.5%)	52(31.7%)	33(20.1%)	6(3.7%)	5(3.0%)	4.05	1.02 -1.01
7.	Effective implementation of school based peace education programs enable students to actively participate in peace activities like Peace Clubs, which allow them to openly discuss their challenges and contribute to fostering peace within their communities.	61(37.2%)	67(40.9%)	25(15.2%)	11(6.7%)	0(0.00%)	4.09	0.889 -0.75
8.	Effective implementation of school-based peace education programs empower students to be active peacebuilders.	66(40.2%)	66(40.2%)	21(21.9%)	11(6.7%)	0(0.00%)	4.14	0.885 -0.87
9.	Effective implementation of school based peace education programs help students learn to manage conflict nonviolently, resolve	57(34.8%)	33(20.2%)	25(15.2%)	24(14.6%)	25(15.2%)	3.45	1.47 --0.43

disputes, and understand different perspectives.								
10. Effective implementation of school based peace education Programs foster empathy, cooperation, and respect in students for diversity, leading to better interpersonal relationships.	83(50.6%)	49(29.9%)	26(15.9%)	1(0.6%)	5(3.0%)	4.24	0.954	-1.41
<b>Composite mean &amp; Composite standard deviation</b>						<b>3.91</b>	<b>1.06</b>	

### Descriptive Findings: Effectiveness of Peace Education (QUAN)

Based on the revised Table 1.8, the results show that school-based peace education programs are considered highly effective by the respondents. The data supports the idea that these programs significantly contribute to developing a peaceful school environment and equip students with essential skills for conflict resolution.

The results in Table 1.8 indicate that the composite mean for the implementation of school-based peace education programs is 3.91, with a composite standard deviation of 1.06. This mean score, which falls between "Agree" and "Strongly Agree" on the scale, indicates that respondents have a very positive perception of the programs' effectiveness. The low composite standard deviation suggests a high degree of consensus among respondents. These results align with the findings of the ADEA Knowledge Hub (2022) Assessment Report on peace education in Africa, which highlights the successful integration of peace education into teaching and learning programs. Additionally, the findings resonate with studies such as the one by Kester et al. (2022), who argue that effective peace education frameworks must actively engage with and incorporate local community values to be successful.

Statement 1: *“Effective implementation of school-based peace education programs enables students to learn to resolve conflicts constructively both in the classroom and beyond”*. The statement had a mean of 3.71 and a standard deviation of 1.14. A total of 76 (46.3%) respondents agreed, and 49 (24.4%) strongly agreed, for a combined 70.7% of respondents.

The high agreement rate confirms that a clear majority of respondents believe these programs are effective in teaching conflict resolution skills. The mean score is slightly below the composite mean, but the large percentage of positive responses indicates this is a key perceived benefit. The standard deviation suggests a mix of views, but the negative skewness (-0.904) shows the distribution is heavily weighted toward positive responses. These results support findings by Githara & Wanjiru (2024), who found that structured programs help students resolve conflicts constructively.

Statement 2: *“Effective implementation of school-based peace education programs instills core values in students such as tolerance, respect for human dignity and rights, appreciation for diversity, and a sense of interdependence”*. The statement had a mean of 3.91 and a standard deviation of 0.892. A combined 67.7% of respondents agreed (63, 38.4%) or strongly agreed (48,

29.3%). The mean of 3.91 is exactly equal to the composite mean, suggesting that instilling core values is a central and highly valued outcome of these programs. The low standard deviation indicates a strong consensus among respondents. The negative skewness (-0.344) confirms the positive trend. This aligns with the work of Kiplagat et al. (2025), who noted the positive influence of such policies on student behavior and values.

Statement 3: *“Effective implementation of school-based peace education programs brings about positive behavioral changes in students, guiding them toward non-violent attitudes and behaviors.”* The statement had a mean of 3.73 and a standard deviation of 1.05. A combined 63.4% of respondents agreed (64, 39%) or strongly agreed (40, 24.4%). While a clear majority of respondents agree, the mean is slightly below the composite mean, and the standard deviation is slightly higher. This indicates a positive view, but with a bit more variance in opinions. The negative skewness (-0.812) confirms a strong positive concentration. This finding support studies by a study from the ADEA Knowledge Hub (2022), which found that peace education in African countries effectively promotes non-violent attitudes and behaviors by integrating these concepts into the curriculum.

Statement 4: *“Effective implementation of school-based peace education programs enables students to analyze problems critically, fostering harmony and cooperation.”* The statement had a mean of 4.01 and a standard deviation of 0.854. An overwhelming 78.6% of respondents either agreed (82, 50%) or strongly agreed (47, 28.6%). With a mean of 4.01, this statement had one of the highest mean scores, indicating that respondents see critical thinking and cooperation as a particularly strong outcome of the programs. The very low standard deviation shows a high degree of consensus. The negative skewness (-0.91) points to a distribution heavily concentrated on the "Strongly Agree" end of the scale. These results align with the findings of the UNESCO (2022) report on peace education, which highlights that a key purpose of such programs is to foster critical thinking to address global challenges and build a culture of harmony.

Statement 5: *“Effective implementation of school-based peace education programs contributes to national goals like those in Kenya’s Vision 2030 by addressing societal issues that fuel conflict, thereby promoting peace, security, and conflict management.”* The statement had a mean of 3.79 and a standard deviation of 1.02. A combined 58.5% of respondents agreed (46, 28%) or strongly agreed (50, 30.5%). The mean is slightly below the composite mean, and the standard deviation is slightly lower. This indicates a positive view, but with more neutrality (34.8%) compared to other statements. The negative skewness (-0.491) shows a less pronounced skew than in other statements. This finding aligns with studies by the Girls’ Education Challenge (2022), which highlighted how educational policies, when well-implemented, can contribute to broader national development goals by increasing student empowerment and civic engagement.

Statement 6: *“Through effective implementation of school-based peace education programs, students can gain better awareness of their own emotions and mental health, as well as a deeper understanding of peace and security issues in their communities.”* The statement had the second-highest mean score of 4.05 and a standard deviation of 1.02. A combined 73.2% of respondents agreed (52, 31.7%) or strongly agreed (68, 41.5%). The high mean score indicates that respondents perceive these programs as highly effective in fostering self-awareness and community understanding. The low standard deviation points to a strong consensus. The negative skewness (-

1.01) shows a very strong concentration of responses toward the positive end. This study support studies by Al-Saidi (2013), which found that peace education programs are essential for helping children feel inner peace and satisfaction, which in turn reduces violent behavior.

Statement 7: " *Effective implementation of school-based peace education programs enables students to actively participate in peace activities like Peace Clubs, which allow them to openly discuss their challenges and contribute to fostering peace within their communities.* " The statement had a mean of 4.09 and a standard deviation of 0.889. A total of 78.1% of respondents agreed (67, 40.9%) or strongly agreed (61, 37.2%). This statement has the highest mean score, showing that respondents feel these programs are most effective in promoting active participation in peace-building activities. The low standard deviation confirms a high level of agreement. The negative skewness (-0.75) indicates a concentration of responses on the positive side. The findings support studies by Abbas (2015), which highlights that peace clubs are effective in strengthening students' understanding of peace and conflict management, and promote positive attitudinal change.

Statement 8: " *Effective implementation of school-based peace education programs empowers students to be active peacebuilders.* " The statement had a mean of 4.14 and a standard deviation of 0.885. A total of 80.4% of respondents either agreed (66, 40.2%) or strongly agreed (66, 40.2%). With the second-highest mean of 4.14, this statement shows that respondents strongly believe these programs successfully empower students to be peacebuilders. The very low standard deviation highlights a strong consensus. The negative skewness (-0.87) shows a clear skew toward positive responses. The results support the findings of Jabor (2017), who concluded that students are not just recipients of peace education but are also key enablers and agents of the peace process itself.

Statement 9: " *Effective implementation of school-based peace education programs help students learn to manage conflict nonviolently, resolve disputes, and understand different perspectives.* " The statement had a mean of 3.45 and a standard deviation of 1.47. A combined 55% of respondents agreed (33, 20.2%) or strongly agreed (57, 34.8%). The mean score of 3.45 is the lowest among all statements, indicating that while a majority agree, this is perceived as a weaker outcome compared to other benefits. The highest standard deviation of 1.47 shows the greatest divergence of views among respondents. The negative skewness (-0.43) is the least skewed, indicating a notable portion of negative responses. This suggests this area needs more attention, as not all students are perceived to be fully grasping these skills. These findings align with a study by the University for Peace (2018), which emphasizes that teaching non-violent conflict transformation requires a collaborative approach and consistent student engagement to be effective.

Statement 10: " *Effective implementation of school-based peace education programs fosters empathy, cooperation, and respect in students for diversity, leading to better interpersonal relationships.* " The statement had the highest mean score of 4.24 and a standard deviation of 0.954. An impressive 80.5% of respondents agreed (49, 29.9%) or strongly agreed (83, 50.6%). The highest mean of 4.24 demonstrates that respondents overwhelmingly view these programs as highly effective in fostering empathy and respect. The low standard deviation indicates a strong consensus. The negative skewness (-1.41) shows the data is heavily concentrated on the "Strongly Agree" end of the scale. This result supports the findings of Salgado (2016), which found that fostering socio-emotional skills like empathy and understanding is a key element for achieving

peace and reducing violence in school

## Phase 2. Qualitative Interpretation and Implications

These findings were also corroborated by the key informants during the interview session who had this to say in line with their experiences with the implementation of school-based peace education programs:

*"The most significant achievement in implementing peace education programs is the fostering of a supportive and non-violent school culture. Key informants explained that a strong, supportive culture is a prerequisite for any program's success. Initially, students and teachers faced challenges in openly discussing conflict, but they were able to create a safe space for dialogue. This culture of safety and acceptance is considered the most effective strategy, as without it, no peace education program, no matter how well-designed, would be able to teach students to resolve conflicts constructively, understand different perspectives, or become active peacebuilders. This aligns with the high mean scores for statements on empathy, cooperation, and active participation in peace clubs."K-001*

*"However, while the overall environment is positive, some students face specific, non-uniform challenges in fully grasping the concepts of peace education. Informants noted that some students struggle with applying non-violent conflict resolution skills in real-life situations, particularly outside the classroom. The root causes often extend beyond the school's walls, including deeply ingrained societal norms that may promote violence as a means of resolving disputes. This points to a key challenge in ensuring that positive behavioral changes and a non-violent mindset are fully integrated. The school is now using these insights to develop more targeted interventions, moving away from a one-size-fits-all approach to provide more consistent and effective support for every student."K-002*

## Phase 3: Integration of Quantitative (QUAN) and Qualitative (QUAL) Results and Conclusion

The final phase uses the Explanatory Sequential Mixed Methods Design to integrate the survey data (QUAN) on the challenges faced during the implementation of Peace Education Programs in Early Years Education Centers with the explanatory Key Informant Interviews (QUAL). This synthesis provides a comprehensive understanding of *why* the implementation challenges persist and *how* they undermine the program's intended outcomes.

### Integrated Key Findings

The integration confirms that the challenges to implementation are systemic and structural, rooted in the marginalization of Peace Education within the curriculum and the absence of a comprehensive support system for educators and resources.

#### 1. The Vicious Cycle of Teacher Competency and Systemic Deficit

The integration establishes a clear link between the perceived lack of teacher readiness and the

systemic failure to provide support. The QUAN data showed a high consensus on the lack of qualified teachers (Mean: 3.32) and the shortage of in-service training (Mean: 3.29). The QUAL findings directly explain this deficit, emphasizing that training must move beyond mere targets to become "culturally appropriate and relevant" to the local context.

Conclusion: The Talent Pool Limitation is perpetuated by a Systemic Training Deficit. The current situation creates a vicious cycle: teachers lack the specific pedagogical skills (e.g., teaching Emotional Intelligence) for effective program delivery, but the system fails to provide contextualized, structured professional development to bridge this gap. Consequently, the quality of implementation remains compromised, regardless of the educator's inherent motivation.

## 2. Resource and Time Marginalization as the Critical Operational Barrier

The integration confirms that the highest-rated structural challenges are rooted in the lack of dedicated resources and priority. The QUAN data highlighted the inadequate time and financial resources (Highest Mean: 3.43) and the dire lack of appropriate and adequate learning materials (Mean: 3.39). The QUAL data strongly corroborated this, noting challenges with "resource availability" and "time allocation."

Conclusion: Financial and Time Marginalization is the most critical operational impediment. The lack of budgetary priority prevents centers from procuring necessary visual aids and books, forcing educators to rely on abstract instruction rather than the child-friendly, experiential methods (like Arts and Crafts) essential for early years education. Compounded by teacher overload (Mean: 3.21), this lack of dedicated support results in the superficial integration of peace concepts instead of deep, transformative learning.

## 3. Fragmentation and the Absence of Institutional Commitment

The study confirms that a lack of standardized commitment undermines program fidelity. The QUAN data showed significant agreement on the lack of a standardized method (Mean: 3.29) and the failure of mainstreaming (Mean: 3.09). The QUAL findings explained the consequence, noting that without "co-ownership and mutual accountability," programs risk meeting superficial targets instead of addressing the actual socio-emotional needs of children.

Conclusion: Adoption Fragmentation and Program Fidelity Challenges stem from the lack of a clear, standardized institutional mandate. When Peace Education is seen as "voluntary or donor-driven," as the QUAN data suggests, individual interpretation dictates implementation. This inconsistency prevents the scaling of best practices, makes program outcomes unreliable, and ultimately hinders the system's ability to measure its overall impact on the children's socio-emotional development.

## **The Joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

The study sought the perspectives of study participants on the joint effect of participatory monitoring and evaluation practices on implementation of peace education programs in public primary schools in Bungoma County in Kenya. This was the fifth objective the study sought to

establish. The results are presented in Table 1.9

**Table 1.9: The Joint Influence of participatory monitoring and evaluation practices on implementation of peace education programs in public primary schools in Bungoma County in Kenya.**

Joint participatory monitoring and evaluation practices and implementation of peace education programs in public primary schools in Bungoma County in Kenya.	n	Mean	Standard deviation
Participatory monitoring and evaluation planning	164	3.73	1.11
Participatory data collection	164	3.68	1.14
Participatory data analysis	164	3.73	1.14
Participatory utilization of M&E findings	164	3.84	1.10
<b>Composite mean &amp; standard deviation</b>	<b>164</b>	<b>3.75</b>	<b>1.12</b>

The results from Table 1.9 consistently demonstrate a positive perceived joint effect of participatory monitoring and evaluation practices on the implementation of peace education programs. All four factors—participatory monitoring and evaluation planning, participatory data collection, participatory data analysis, and participatory utilization of M&E findings—show high mean scores, underscoring their significant contribution.

The factor with the highest mean score is participatory utilization of M&E findings, with a mean of 3.84 and a standard deviation of 1.10, indicating its strong, consistent perceived influence. Participatory monitoring and evaluation planning and participatory data analysis both have a mean of 3.73 and a standard deviation of 1.11 and 1.14, respectively. Participatory data collection has a mean of 3.68 and a standard deviation of 1.14. The composite mean for these factors is 3.75, with a standard deviation of 1.12, further confirming their overall positive impact.

These findings imply that a comprehensive and participatory approach to monitoring and evaluation is critical for the successful implementation of peace education programs. The community and school stakeholders have established strong foundations to support these programs, performing well in crucial areas that directly influence their effectiveness. This provides a solid groundwork for future interventions and policy development.

### **Correlation Analysis of the Joint Participatory monitoring and evaluation practices on implementation of peace education programs**

In order to determine the correlation between the joint effect Participatory monitoring and evaluation practices on implementation of peace education programs, Pearson correlation coefficient was run on the scores of each scale. The respondent at 95% level of confidence computed the total scores of the scales as a summation of the individual scores on each item. The

results obtained are indicated in Table 1.10

**Table 1.10: Correlation Analysis of the Joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

Joint participatory monitoring and evaluation practices and implementation of peace education programs		Implementation of peace education programs
Participatory monitoring and evaluation planning	<i>Pearson Correlation</i> <i>Sig. (2-tailed)</i> <i>n</i>	0.481* 0.000 164
Participatory data collection	<i>Pearson Correlation</i> <i>Sig. (2-tailed)</i> <i>n</i>	0.439* 0.000 164
Participatory data analysis	<i>Pearson Correlation</i> <i>Sig. (2-tailed)</i> <i>n</i>	0.693 0.000 164
Participatory utilization of M&E findings	<i>Pearson Correlation</i> <i>Sig. (2-tailed)</i> <i>n</i>	0.402 0.000 164
Overall joint participatory monitoring and evaluation practices and implementation of peace education programs	<i>Pearson Correlation</i> <i>Sig. (2-tailed)</i> <i>n</i>	0.803* 0.000 164

\*Significant at 0.05 level (2-tailed)

Table 1.10 reveals that all four independent variables—participatory monitoring and evaluation planning, participatory data collection, participatory data analysis, and participatory utilization of M&E findings—have a statistically significant positive linear relationship with the implementation of peace education programs. The correlation coefficients show the strength of these individual relationships: participatory monitoring and evaluation planning has a positive correlation of  $r=0.481$ , participatory data collection shows a positive correlation of  $r=0.439$ , participatory data analysis has a positive correlation of  $r=0.693$ , and participatory utilization of M&E findings has a positive correlation of  $r=0.402$ .

These findings suggest that each factor has a pronounced individual association with the implementation of peace education programs. Crucially, the overall joint influence of these four factors yields a strong positive correlation of  $r=0.803$  with the implementation of peace education programs. This highlights that while each factor individually contributes positively, their combined influence is substantially more impactful.

The consistently low p-values ( $p=0.000$ ) across all correlations (both individual and joint) provide very strong evidence that these observed relationships are not due to random chance. This leads to the rejection of the null hypothesis and the acceptance of the alternative hypothesis.

Therefore, the study concludes that there is a significant relationship between the joint influence of participatory monitoring and evaluation practices and the implementation of peace education programs. These findings are consistent with the work of Kioko, R. & Mutisya, F. (2022), who found that a combination of participatory processes and stakeholder involvement significantly improved the effectiveness of educational programs.

### **Regression Analysis of joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

Multiple linear regressions were adopted to investigate the joint influence of participatory monitoring and evaluation practices on the implementation of peace education programs. It was necessary to get the views of the study participants on the effect of joint influence of participatory monitoring and evaluation practices on the implementation of peace education programs

### **Model summary of joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

The model summary sought to determine how Joint participatory monitoring and evaluation significantly or insignificantly influence implementation of peace education programs. The regression model output statistics results are shown in Table 1.11.

**Table 1.11: Regression Analysis of joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

<b>Model Summary</b>					Table 4.27
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	
1	0.803 <sup>a</sup>	0.645	0.636	0.3012	

a. Predictor: Joint participatory monitoring and evaluation practices presents the regression model summary for the joint influence of participatory monitoring and evaluation practices on the implementation of peace education programs. The model demonstrates a very strong positive multiple correlation with an R-value of 0.803. This confirms that these practices, when combined, have a substantial association with improved implementation of peace education programs.

The  $R^2$  value of 0.645 indicates that 64.5% of the variation in the implementation of peace education programs can be explained by the joint influence of these participatory monitoring and evaluation practices. The Adjusted  $R^2$  of 0.636 further suggests that approximately 63.6% of the variance is genuinely accounted for by these factors, even after adjusting for the number of predictors in the model.

The Standard Error of the Estimate is 0.3012, which means that, on average, the model's predictions for implementation scores are off by about 0.3012 units from the actual observed scores. This indicates a high level of precision in the model's predictions.

The implications of these results are clear: a holistic strategy that simultaneously addresses and integrates participatory monitoring and evaluation will lead to the most impactful improvements in implementing peace education programs. These findings support studies, such as the 2023 work by Onyango, T. et al., which found that a strong focus on community participation in educational program monitoring was a key factor in successful implementation.

### **An ANOVA of the Joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

The study sought to establish whether the regression model is best fit for predicting implementation of peace education programs after use of Joint Participatory monitoring and evaluation practices. The regression ANOVA output statistics results are shown in Table 1.12.

**Table 1.12: An ANOVA of the Joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

Mod	Sum	of	Df	Mean	F	Sig.
el				Squares	Square	
1	Regression	26.220	4	6.555	72.240	0.000 <sup>b</sup>
	Residual	14.428	159	0.091		
	Total	40.648	163			

Dependent Variable: Implementation of peace education programs.

Predictors: (Constant), Joint Participatory monitoring and evaluation practices

An ANOVA was performed as part of the multiple linear regression analysis to determine if the joint influence of participatory monitoring and evaluation practices significantly explains the variance in the implementation of peace education programs.

The ANOVA results confirm that the overall regression model is statistically significant,  $F(4, 159) = 72.240$ , with a significance value of  $p=0.000$ . This finding suggests that the combined effect of participatory monitoring and evaluation practices significantly predicts the implementation of peace education programs.

The analysis shows that the variation in implementation scores explained by the model (Sum of Squares for Regression = 26.220) is substantially larger than the unexplained variation (Sum of Squares for Residual = 14.428), providing strong evidence that these variables collectively have a real impact. This allows us to reject the null hypothesis and conclude that the model is a good fit for the data.

### **Coefficients for the Regression of Joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

The study sought to determine whether there was effect of Participatory monitoring and evaluation practices on implementation of peace education programs. The regression coefficients results are in Table 1.13.

**Table 1.13: Coefficients for the Regression of joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs**

Model	Coefficients				
	Unstandardized Coefficients		Standardize d Coefficient	t	Sig.
	B	Std. Error			
Constant	0.673	0.241		2.788	0.008
Participato ry monitoring and evaluation planning	0.416	0.058		7.143	0.000
Participato ry data collection			0.370		
Participato ry data analysis	-0.397	0.062	-0.542	-6.377	0.000
Participato ry utilization of M&E findings	0.788	0.069	0.977	11.256	0.000
	0.060	0.049	0.069	1.238	0.213

a. Dependent Variable: **implementation of peace education programs**

Table 4.29 presents the coefficients from the multiple linear regression analysis, detailing the unique contribution and significance of each Participatory Monitoring and Evaluation (PM&E) practice on the Implementation of School-Based Peace Education Programs, while controlling for the influence of the other practices.

## DISCUSSION

### Interpretation of Results

#### 1. Participatory Data Analysis (PDA): The Primary Driver.

With the largest standardized coefficient ( $\beta=0.977$ ) and a high significance ( $p=0.000$ ), PDA is the most powerful positive predictor of implementation success.

This confirms that the act of stakeholders jointly interpreting data and deriving shared meaning is the single most critical factor that translates PM&E activities into improved implementation.

## 2. Participatory M&E Planning (PMEP): A Key Foundational Factor.

PMEP has a significant positive influence ( $\beta=0.370, p=0.008$ ).

Effective participatory planning provides a solid framework, making the subsequent implementation steps clearer and more feasible.

## 3. Participatory Data Collection (PDC): The Counter-Intuitive Negative Effect.

PDC has a statistically significant negative relationship ( $\beta=-0.542, p=0.000$ ) with implementation when controlling for the other factors.

This is a critical finding. It suggests that while data collection is necessary, if the process is highly participatory without the necessary structure, training, or dedicated time, it may become an overburden or distraction for teachers and students, *hindering* implementation rather than helping it. The sheer effort of collecting data may be perceived as time-consuming administrative work that detracts from core program delivery.

## 4. Participatory Utilization of M&E Findings (PUMEF): Not a Unique Predictor.

PUMEF is not statistically significant ( $p=0.213$ ).

This does not mean utilization is unimportant. It suggests that the positive influence of utilizing findings is largely already accounted for by the Data Analysis and Planning stages. Once stakeholders participate in the powerful act of *analyzing* the data (PDA), the subsequent utilization *action* may not provide significant additional predictive power to the model.

## The Predictive Regression Model

The combined influence of the four PM&E practices on the implementation of peace education programs is captured by the following multiple linear regression equation:

$$Y=0.673+0.416(PMEP)-0.397(PDC)+0.788(PDA)+0.060(PUMEF)$$

Where:

$Y$  = Implementation of Peace Education Programs

PMEP = Participatory M&E Planning

PDC = Participatory Data Collection

PDA = Participatory Data Analysis

PUMEF = Participatory Utilization of M&E Findings

Interpretation of Unstandardized Coefficients (B)

A one-unit increase in the effectiveness of Participatory Data Analysis (PDA) is predicted to cause the largest increase of 0.788 units in program implementation, holding all other factors constant.

A one-unit increase in Participatory M&E Planning (PMEP) is predicted to increase program implementation by 0.416 units.

A one-unit increase in Participatory Data Collection (PDC) is associated with a predicted *decrease* of 0.397 units in program implementation.

The B coefficient for \*\*PUMEF}\$(0.060) is effectively zero, confirming its lack of unique predictive value in this joint model.

## CONCLUSION AND RECOMMENDATIONS

This section presents summary of findings, conclusions and recommendations. In the summary of findings, the results for each of the hypothesis in the study are presented for the research objective. The conclusions presented in this section were guided by the research objective and informed by the findings, analysis, interpretation and discussions in the study. Recommendations based on the results for policy and practice and for methodology as well as suggestions for further research are made.

### Summary of Findings

The fifth research objective was to examine the Joint Influence Participatory monitoring and evaluation practices on implementation of peace education programs. The composite mean and composite Standard deviation for the combined influence of Participatory monitoring and evaluation practices on implementation of peace education programs were 3.75 and 1.12, respectively. This implies that, using the Likert scale, the respondents agreed that these four factors jointly and positively influence the implementation of peace education programs. The overall perception of this combined influence is high and positive.

The overall correlation coefficient of determination for the Joint Influence Participatory monitoring and evaluation practices on implementation of peace education programs was found to be  $r=0.803$  with a p-value of  $0.000<0.05$ . This implies that, from the views of the participants in the study, the results indicated that there was a significant joint relationship between the combined factors and the implementation of peace education programs. This led to the rejection of the null hypothesis ( $H_0$ : There is no significant relationship between the Joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs) and the acceptance of the alternative hypothesis. The  $R^2$  value of 0.645 indicates that approximately 64.5% of the variance in the implementation of peace education programs can be explained by the joint

influence of these four variables.

The ANOVA results from the study participants' views indicated that the regression model for the Joint Influence of Participatory monitoring and evaluation practices on implementation of peace education programs was statistically significant ( $F(4,159)=72.240$  and  $p\text{-value}=0.000<0.05$ ). This confirms that the model is a good fit for the data and that the independent variables, when considered together, are significant predictors of the dependent variable.

The multiple linear regression coefficients result revealed that there was sufficient evidence that Participatory monitoring and evaluation practices jointly and significantly influence the implementation of peace education programs.

## **Conclusion**

This research objective was to examine the extent to which the joint influence of participatory monitoring and evaluation practices on the implementation of peace education programs. The Multiple linear regression coefficients as well as the Pearson correlation results indicated that there was a significant joint influence of participatory monitoring and evaluation practices on the implementation of peace education programs. The p-values implied that there was a significant joint influence of participatory monitoring and evaluation practices on the implementation of peace education programs.

## **Recommendations**

### **Future Research and Methodology**

Future studies should leverage this research to further investigate the causal pathways and combined effects of these variables. Researchers could use a longitudinal design to track peace education programs over time, providing deeper insights into how the influence of each factor evolves. Additionally, qualitative research could explore the specific mechanisms of participatory M&E in greater detail, providing rich contextual data to complement the quantitative findings.

### **Areas for Further Research**

Based on the findings and contributions of this study, which focused on the influence of participatory monitoring and evaluation practices on the implementation of peace education programs, here are key suggestions for future research:

1. This research focused on the implementation of peace education programs in public primary schools in Bungoma County, Kenya. Future studies should replicate this work in other counties or regions, both within Kenya and in other countries, to see if the identified relationships hold true. This would help determine if the influence of participatory monitoring and evaluation practices is consistent across various socio-economic, cultural, and administrative environments
2. With the increasing role of technology in education and conflict resolution, future research should assess how digital platforms influence the factors studied here. For example, a study could explore the impact of online learning tools, digital platforms for collaborative M&E, or mobile apps for collecting real-time feedback from students and teachers. Such research would provide crucial insights into how technology can be used to improve the implementation and sustainability of peace education programs.

3. This study identified specific aspects of participatory M&E as key factors. Future research could empirically examine other potential variables that might influence the implementation of peace education programs. Possible factors to investigate include: Teacher training and capacity, including how a teacher's knowledge and skill in conflict resolution affect program delivery
4. This study provided a snapshot of the relationships at a single point in time. A future longitudinal study could follow a cohort of schools over several years. This would provide valuable insights into how the influence of participatory M&E practices changes over time, as well as how initial conditions and external shocks (like changes in funding or political instability) impact long-term program success and implementation.

## References

Anderson, R. (2007). Thematic content analysis (TCA). *Descriptive presentation of qualitative data*, 3, 1-4.

Arcinas, M. (2025). AI-Enhanced Peace Education: AI's Impact on Student Learning Practices in Higher Education. In Impacts of AI on Students and Teachers in Education 5.0 (pp. 125-154). *IGI Global Scientific Publishing*.

Bacha, A. A. (2025). Transforming Societies through Peace Education: *Lessons from Rwanda for Post-Conflict Reconstruction*.

Cohen, M. P. (2025). Stratified sampling. In International encyclopedia of statistical science (pp. 2704-2708). Berlin, Heidelberg: Springer Berlin Heidelberg. *Ann. Inst. Stat. Math.*, 6(1), 1-36.

Danesh, H. B. (2006). Towards an integrative theory of peace education. *Journal of peace education*, 3(1), 55-78.

Danesh, H. B. (2011). Human needs theory, conflict, and peace. *The encyclopedia of peace psychology*, 4, 63-67.

Davis, L., Rhind, D., & Jowett, S. (2025). Surveys and questionnaires. In *Research Methods in Sports Coaching* (pp. 199-211). Routledge.

De Coning, C., & Romita, P. (2009). Monitoring and evaluation of peace operations. *International Peace Institute (IPI)*.

de Vos, A., Preiser, R., & Masterson, V. A. (2021). Participatory data collection. The Routledge handbook of research methods for social-ecological systems, 119.

Dulal, T. D. (2025). Application of Positivism and Post Positivism Approach in Contemporary Research. *International Journal of Applied Research and Sustainable Sciences*, 3(4), 305-314.

Education, A. P., & Education, S. (2025). Educators as Catalysts for Peace.

Gallagher, M. (2009). Data collection and analysis. Researching with children and young people:

*Research design, methods and analysis*, 65-127.

George, D., & Mallery, P. (2024). IBM SPSS statistics 29 step by step: A simple guide and reference. Routledge.

Guijt, I., Arevalo, M., & Saladores, K. (1998). Participatory monitoring and evaluation. *PLA Notes*, 31(2), 28.

Icban, A. (2025). Principal's Management Style in Institutionalization of Peace Education: *Basis for Teacher Development*.

Istianah, A., Darmawan, C., Sundawa, D., Fitriasari, S., & Shamim, A. (2025). Research Trends in Peace Education as a Pillar in Creating a Safe and Comfortable Learning Environment: A Bibliometric Study. *IJORER: International Journal of Recent Educational Research*, 6(2), 582-601.

Istianah, A., Darmawan, C., Sundawa, D., Fitriasari, S., & Susanti, R. P. (2025). The Key to Building Peaceful Schools in the Context of Social and Cultural Diversity. *Journal of Iuridica Pancasila*, 1(3), 129-139.

Johnson, D. W., & Johnson, R. T. (2005). New developments in social interdependence theory. *Genetic, social, and general psychology monographs*, 131(4), 285-358.

Johnson, D. W., & Johnson, R. T. (2008). Social interdependence theory and cooperative learning: The teacher's role. In The teacher's role in implementing cooperative learning in the classroom (pp. 9-37). Boston, MA: Springer US.

Kirk, R. E., & Beaujean, A. A. (2025). Simple random sample. In *International encyclopedia of statistical science* (pp. 2333-2335). Springer, Berlin, Heidelberg.

Lahti, I. (2025). Creating a Culture of Peace through Basic Education.

Masunda, O. C. (2025). Peace Education 4.0: A Curriculum Framework for Africa.

Momanyi, R. K. (2018). Monitoring and evaluation of peace education and implementation in primary schools in Uasin Gishu County, Kenya. *International Academic Journal of Social Sciences and Education*, 2(1), 168-180.

Ndwandwe, N. D. (2024). Barriers to implementing peace education in secondary schools in South Africa. *Journal of Peace Education*, 21(2), 164-184.

Nwokah, L. K. (2025). Peace, Peace Culture and Moral Education as a Panacea for Sustainable Nation-Building. *Educational Advancement and Development Journal*, 1(1), 146-151.

Nyimbili, F., & Nyimbili, L. (2024). Types of purposive sampling techniques with their examples and application in qualitative research studies.

Özel, D., & Sümer, Z. (2025). Peace Education Program Adaptation. *Journal of Ethnic and Cultural Studies*, 12(2), 231-251.

Panyasai, P., & Ambele, E. A. (2025). Developing Interview Guide in Qualitative Research: Problems and Solutions from a Needs Analysis Doctoral Study. *rEFLections*, 32(1), 576-594.

Parkinson, S. (2009). Power and perceptions in participatory monitoring and evaluation. *Evaluation and program planning*, 32(3), 229-237.

Piolanti, A., Schmid, I. E., Fiderer, F. J., Ward, C. L., Stöckl, H., & Foran, H. M. (2025). Global prevalence of sexual violence against children: *A systematic review and meta-analysis*. *JAMA pediatrics*.

Reodique, K. M. (2025). Enhancing Participation of Children in Schools: A Social Worker's Perspective. *Asean Social Work Journal*.

Salomon, G. (2002). The nature of peace education: Not all programs are created equal. *Peace education: The concept, principles, and practices around the world*, 296, 3-13.

Sevón, E., Mustola, M., Siippainen, A., & Vlasov, J. (2025). Participatory research methods with young children: a systematic literature review. *Educational review*, 77(3), 1000-1018.

Sigouin, A., Porzecanski, A. L., Betley, E., Gazit, N., Lichtenthal, P., Cheng, S. H., ... & Mahajan, S. L. (2025). Enabling participatory monitoring and evaluation: Insights for conservation practitioners and organizations. *Conservation Science and Practice*, 7(4), e70032.

Singh, P. (2024). Making Peace Possible with Young Changemakers: *An Impact and Evaluation Study*.

Subedi, D. (2016). Explanatory sequential mixed method design as the third research community of knowledge claim. *American Journal of Educational Research*, 4(7), 570-577.

Taylor, M. (2015). Reflections on using monitoring and evaluation to enhance information interventions for peace. *In Communication and Peace* (pp. 179-191). Routledge.

Toyon, M. A. S. (2021). Explanatory sequential design of mixed methods research: Phases and challenges. *International Journal of Research in Business and Social Science*, 10(5), 253-260.

Vaismoradi, M., & Snelgrove, S. (2019). Theme in qualitative content analysis and thematic analysis.

Westland, H., Vervoort, S., Kars, M., & Jaarsma, T. (2025). Interviewing people on sensitive topics: challenges and strategies. *European Journal of Cardiovascular Nursing*, 24(3), 488-493.

Yu, H., & Hutson, A. D. (2024). Inferential procedures based on the weighted Pearson correlation coefficient test statistic. *Journal of applied statistics*, 51(3), 481-496.