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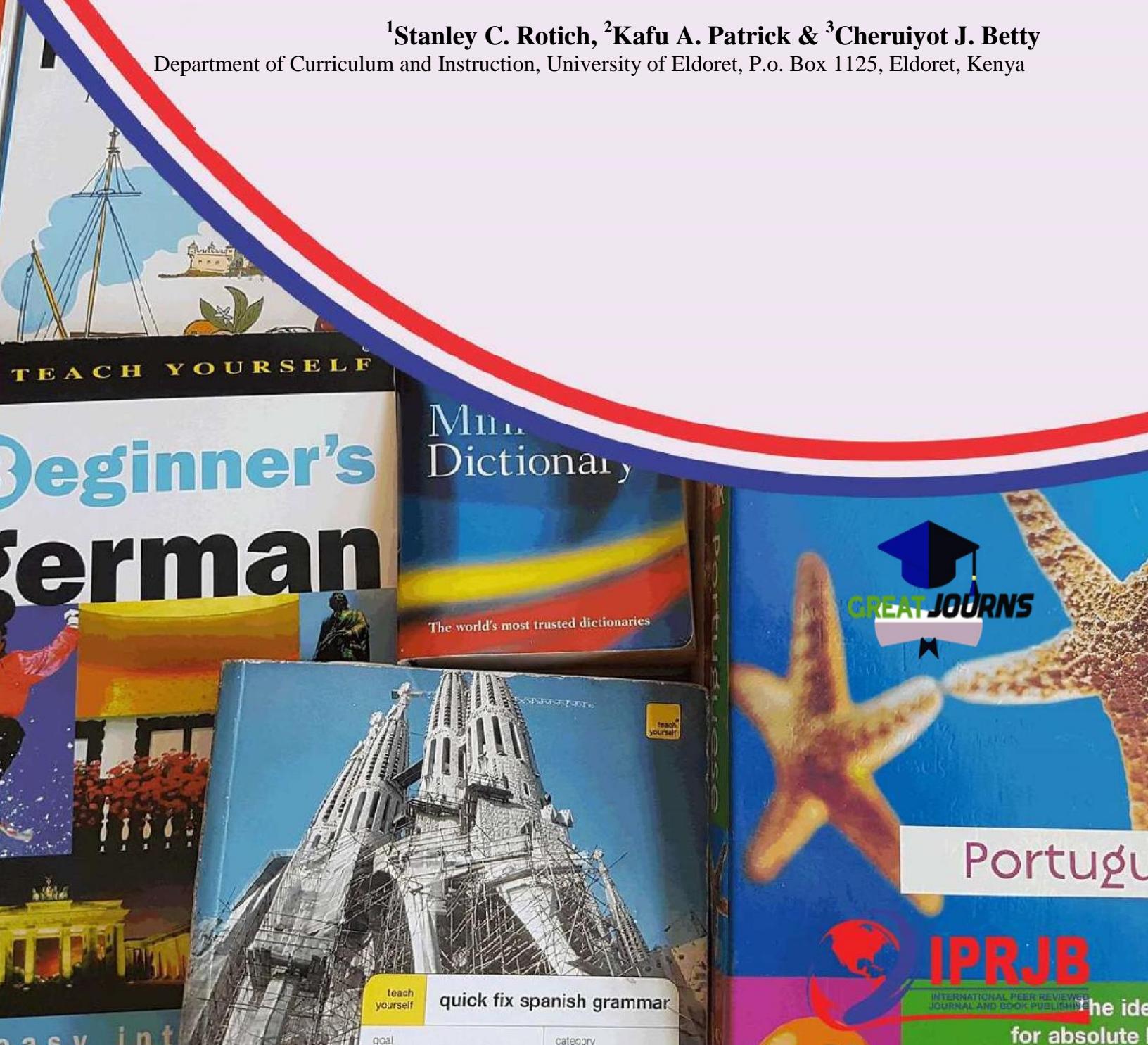
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Influence of Teachers' Professional Knowledge on the Development of Creativity and Innovativeness among Teachers in Selected Public Primary Schools in Kericho County, Kenya

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ABSTRACT

This study investigates the influence of teachers' professional knowledge on the development of creativity and innovativeness among teachers in selected public primary schools in Kericho County, Kenya. Recognizing the critical role that educators play in fostering a conducive environment to creative thinking and innovative practices, the study focuses on assessing various dimensions of professional knowledge, including pedagogical content knowledge, instructional strategies, and ongoing professional development. Findings indicate that teachers with a robust foundation in professional knowledge exhibit higher levels of creativity and are more likely to implement innovative teaching methods. By utilizing a content analysis framework, this research examines existing literature and empirical data, identifying key components of professional knowledge that contribute to fostering creativity in educational contexts. Employing a systems approach theory, the study contextualizes teachers' knowledge within the broader educational ecosystem, highlighting the interactions between curriculum, pedagogy, and teacher development. Furthermore, the pragmatic philosophical paradigm underpins the research, emphasizing practical outcomes and the usability of findings in real-world educational settings. Data collection involves mixed methods, combining quantitative surveys with qualitative interviews, allowing for a comprehensive exploration of teacher perceptions and practices regarding creativity. Preliminary findings indicate a significant correlation between professional knowledge and creative teaching methods, suggesting that targeted teacher training and professional development programs can enhance innovative practices. The study concludes with recommendations for policy and practice, advocating for a curriculum that equips teachers with the necessary knowledge and skills to nurture creativity and innovativeness among their students, ultimately contributing to the holistic educational goals in Kenya. This research is vital for educational stakeholders aiming to improve teaching effectiveness and student outcomes in primary education.

Keywords: Teachers' professional knowledge; Creativity; Innovativeness; Public Primary Schools; Kericho County; Kenya

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1.0 INTRODUCTION

The role of teachers has evolved significantly over decades, particularly in the context of fostering creativity and innovativeness among students. In the educational landscape of Kenya, particularly in Kericho County, the quality of teachers' professional knowledge plays a crucial role in shaping pedagogical practices that can enhance creative and innovative outputs in the classroom (Mugambi & Mugo, 2021). This paper aims to establish the influence of teachers' professional knowledge on the development of creativity and innovativeness among teachers in selected public primary schools in Kericho County.

1.1 Background of the Study

In the contemporary educational landscape, fostering creativity and innovativeness has become a pivotal objective, particularly within the framework of primary education. The ability to nurture these essential qualities in students is increasingly viewed as vital for preparing them to thrive in a rapidly evolving world characterized by complexity and change. Consequently, educators play a fundamental role in cultivating an environment that encourages creative thinking and innovative practices among learners. This study aims to investigate the influence of teachers' professional knowledge on the development of creativity and innovativeness among teachers in selected public primary schools in Kericho County, Kenya.

Teachers' professional knowledge encompasses a spectrum of competencies, skills, and understandings that educators possess, which directly inform their instructional practices and pedagogical choices. This includes subject matter knowledge, pedagogical content knowledge, and an understanding of learners' diverse needs and abilities. A well-rounded pool of professional knowledge equips teachers with the tools to design engaging, meaningful learning experiences that can stimulate creative expression and promote innovative problem-solving strategies among students.

Research indicates that teachers' belief systems and their levels of knowledge significantly influence their teaching strategies, which in turn impacts student engagement and learning outcomes. In the context of primary education in Kenya, where there is a growing emphasis on implementing curriculum reforms aimed at enhancing critical thinking, creativity, and innovation, understanding the potential relationship between teachers' competencies and their ability to inspire these traits in students is of paramount importance.

Despite the acknowledged significance of teachers' roles in shaping creative and innovative capacities in young learners, there is a dearth of empirical research examining this relationship specifically within the Kenyan context. Kericho County, with its unique socio-cultural dynamics and educational challenges, presents an intriguing case for such an exploration. Insights gleaned from this study are expected to contribute to the existing body of knowledge, inform policy decisions, and guide professional development initiatives aimed at equipping teachers with the requisite knowledge and skills necessary to foster creativity and innovation.

This study endeavours to fill a critical gap in understanding how teachers' professional knowledge impacts their capacity to nurture creativity and innovativeness in primary school settings. By focusing on public primary schools in Kericho County, this research seeks to unveil the intricacies of this relationship and ultimately provide recommendations that could enhance educational practices and outcomes in the region.

1.2 Rationale of the study

The rationale for this study stems from the growing recognition of the critical role that teachers' professional knowledge plays in enhancing educational outcomes, particularly in fostering creativity and innovativeness among students. In the context of public primary schools in Kericho County, Kenya, where education remains a vital component for socio-economic

development, it becomes paramount to investigate how teachers' understanding and application of pedagogical concepts influence their ability to cultivate creative and innovative thinking in their students. Research indicates that teachers who possess a deep understanding of their subject matter and effective teaching strategies can better engage their students, encouraging them to think creatively and develop problem-solving skills. Furthermore, with the increasing demands for educational reform and the integration of 21st-century skills, examining this relationship becomes critical to enhancing teachers' programs and professional development initiatives. Through this study, insights into the dynamics between teachers' professional knowledge and the enhancement of creativity and innovativeness can not only contribute to academic literature but also provide practical implications for policy and practice aimed at improving the quality of education in the region. Ultimately, the findings could catalyze empowering teachers, enriching the learning environment, and preparing students for the challenges of a rapidly changing world.

1.3 Objectives of the study

- i. To Evaluate Teachers' Professional Knowledge
- ii. To Assess Creativity and Innovativeness Among Teachers
- iii. To Analyze the Relationship Between Professional Knowledge and Creativity
- iv. To Examine Factors Enhancing or Hindering Creativity

2.0 LITERATURE REVIEW

The role of teachers' professional knowledge in shaping educational outcomes has been a pivotal area of research in educational studies. This literature review synthesizes existing literature on the relationship between teachers' professional knowledge and the development of creativity and innovativeness, particularly in the context of public primary schools in Kenya. This literature review aims to explore the influence of teachers' professional knowledge on their creativity and innovativeness, focusing on selected public primary schools in Kericho County, Kenya. Recent studies highlight the intricate relationship between educators' content mastery, pedagogical skills, and the ability to implement creative teaching strategies.

2.1 Contextual Factors in Kericho County

The educational landscape in Kericho County presents unique challenges and opportunities. Factors such as cultural perceptions of education, available resources, and administrative support significantly influence teachers' professional knowledge (Ibrahim & Abubakar, 2019). In contexts where schools face socio-economic challenges, teachers often have limited access to ongoing professional development, which can hinder their ability to implement creativity-promoting practices (Pillai, 2020). The integration of local cultural elements into teaching practices has the potential to boost creativity, as noted by Njeru (2018), which highlights the importance of contextual relevance in professional training for teachers.

2.2 Evaluation of Teachers' Professional Knowledge

Teachers' professional knowledge encompasses both content knowledge and pedagogical skills, which have been shown to significantly influence educational outcomes. In a study by Wang et al. (2020), it was found that teachers with robust professional knowledge are better equipped to

facilitate learning and adapt instructional methods, leading to more innovative classroom practices. Similarly, Adeyemi et al. (2021) indicated that professional development programs that enhance teachers' subject matter expertise and pedagogical strategies promote a culture of innovation within schools. This underscores the importance of continuous professional development and its potential impact on enhancing teachers' creativity in the classroom.

2.3 Assessment of Creativity and Innovativeness among Teachers

Creativity in teaching goes beyond individual artistry; it encompasses the ability to adapt and innovate instructional practices to meet diverse learning needs. According to Kwan et al. (2022), teachers who engage in reflective practices and seek to continuously improve their teaching methods tend to exhibit higher levels of creativity. Furthermore, research by Fennell and Rantala (2023) highlights that creative teachers often employ a variety of teaching strategies that engage students and foster a conducive learning environment. However, creativity can be stifled by rigid curricular demands and standardized testing, necessitating a supportive school culture where innovative teaching practices are encouraged.

2.4 Relationship Between Professional Knowledge and Creativity

Understanding the relationship between professional knowledge and creativity is paramount for fostering an innovative educational environment. Recent findings indicate that a strong foundation in professional knowledge correlates with higher levels of creativity and innovation among teachers. As noted by Hardy et al. (2023), teachers who possess in-depth professional knowledge are more likely to experiment with new ideas and methodologies. This connection suggests that enhancing teachers' expertise may catalyze creative thinking and innovative instructional practices.

2.5 Factors Enhancing or Hindering Creativity

Several factors can influence the creativity of teachers, both positively and negatively. Institutional support, administrative leadership, and collaboration among peers have been identified as crucial enhancers of creativity (Sullivan & Kearn, 2024). Conversely, factors such as a lack of resources, limited access to professional development opportunities, and an oppressive school environment can stifle creativity (McKenzie et al., 2022). The work environment in Kericho County's public primary schools may reflect similar dynamics, necessitating an investigation into the specific conditions that support or hinder teachers' creative practices. Moreover, external pressures, such as policy mandates and outcome-oriented assessments, may restrict teachers' abilities to be innovative in their teaching methods (Richards & Hart, 2021). Identifying these barriers is essential for cultivating an atmosphere where creativity thrives, thus improving the overall quality of education in public primary schools located in Kericho County. Continuous professional development is vital in enhancing teachers' professional knowledge. Programs centred on creative teaching methodologies have shown positive results globally (Darling-Hammond et al., 2017). In Kenya, initiatives aimed at enhancing teacher training, such as those implemented by the Kenya Institute of Curriculum Development (KICD), focus on equipping teachers with skills to foster creativity and innovation

among students (Aloka et al., 2020). However, the effectiveness of these programs often relies on the commitment and capacity of teachers to engage with new concepts and practices actively.

A solid foundation of professional knowledge is essential for teachers aiming to develop creativity and innovativeness in their classrooms. The existing literature highlights a clear connection between professional development, teachers' pedagogical practices, and the nurturing of a creative learning environment. As this area continues to evolve, particularly in the context of Kericho County, ongoing research is necessary to explore the specific barriers and enablers experienced by local educators. Future studies could benefit from a focus on practical strategies for integrating professional knowledge into practices that genuinely enhance creativity and innovation in primary education. In studies conducted in Kericho County, teachers who practised reflection reported higher levels of student creativity, noting that when they adapted their teaching methods based on reflection, students showed increased engagement and innovative thinking (Koech, 2020).

2.6 Challenges Faced by Teachers

Despite the clear benefits of professional knowledge in fostering creativity and innovation, teachers in Kericho County face numerous challenges. Limited resources, large class sizes, and inadequate professional development opportunities which hinder their ability to fully harness their professional knowledge. Furthermore, the traditional education system, which often prioritizes rote learning over creative thinking, poses a challenge for teachers striving to implement innovative practices (Ng'ethe, 2020). Addressing these challenges is essential to ensure that teachers can effectively nurture creativity and innovation among their students.

2.7 Theoretical framework

The systems approach theory is a holistic framework that views an organization or problem as a complex and interconnected system. It emphasizes studying the interrelationships and interactions within the system rather than focusing solely on individual components. This approach is particularly relevant in educational contexts where various elements—such as teachers' knowledge, pedagogical strategies, institutional culture, and external influences—interact to influence overall educational outcomes.

2.8 Relevance of Systems Approach in Educational Settings

In an educational setting, the systems approach can function as a guiding framework to analyze how various elements within the educational ecosystem interact to foster creativity and innovativeness in primary school teachers. By adopting this perspective, researchers can explore the intricate relationships between teachers' professional knowledge and their ability to cultivate creativity and innovation among their students.

2.9 Context of the Study: Public Primary Schools in Kericho County, Kenya

Kericho County, known for its diverse educational landscape and unique socio-cultural dynamics, provides a distinctive backdrop for examining the interplay between teachers' professional knowledge and their creative teaching capacity. In the context of public primary

schools, where resources may be limited and classroom dynamics may vary, understanding this relationship becomes critical in promoting an educational culture that encourages creativity and innovation.

2.10 Components of the Systems Approach

The System Approach Theory in the context of establishing the influence of teachers' professional knowledge on the development of creativity and innovativeness among teachers in selected Public Primary Schools in Kericho County, Kenya, encompasses several key components. Firstly, it emphasizes the interrelatedness of various elements within the educational system, including teachers' professional knowledge, pedagogical strategies, and learning environments. Secondly, it highlights the roles of inputs, such as training, resources, and mentorship, which contribute to teachers' expertise and their ability to foster creativity and innovativeness in students. Moreover, it acknowledges the importance of feedback mechanisms, allowing for continuous assessment and improvement of teaching practices. Lastly, it integrates the socio-cultural context of Kericho County,

2.11 Teachers' Professional Knowledge

Professional knowledge encompasses pedagogical skills, content mastery, and awareness of educational theories and practices. It includes formal qualifications, continuous professional development, and informal learning experiences. The first component to explore in this system is therefore how a teacher's knowledge, including understanding learning theories and innovative teaching strategies, can impact their ability to foster a creative environment.

2.12 Teaching Strategies

Innovative teaching practices developed through professional knowledge have the potential to shape a student's learning experience. This includes collaborative learning, project-based learning, and the integration of technology in the classroom. Each strategy's effectiveness relies on the teachers' ability to implement these methods successfully.

2.13 Student Engagement

Student involvement in the learning process is critical for fostering creativity and innovativeness. The systems approach posits that engaged students are more likely to think critically and creatively. Understanding how teachers' knowledge influences students' engagement provides insights into improving educational outcomes.

2.14 School Environment

The institutional culture and support mechanisms available within public primary schools can either encourage or inhibit creativity. Elements such as administrative support for professional development, collaborative planning time among teachers, and access to resources should be considered part of the system that influences teaching effectiveness about creativity.

2.15 Community and Parental Involvement

Teachers operate within a larger social context that includes the community and families. Community expectations, cultural values, and parental support can all impact a teacher's approach to creativity in the classroom. Assessing these external factors can help provide a complete picture of the influences at play.

2.16 Policy and Curriculum Framework

Government policies and curriculum guidelines directly influence how teachers approach their work. In Kenya, the implementation of the Competency-Based Curriculum (CBC) aims to foster abilities such as creativity. Analyzing how teachers interpret and apply these policies within their teaching can give insights into how professional knowledge shapes their pedagogical approaches.

2.17 Methodological Considerations

Adopting a systems approach to studying this topic involves qualitative and quantitative methodologies that capture the complex interplay of the various components identified. Surveys, interviews, and case studies could be utilized to gather data from teachers in selected public primary schools. The use of mixed-methods research can provide a comprehensive understanding of the relationships among the various elements in the system.

2.18 Outcomes of the Study

The study utilizing a systems approach theory found that teachers' professional knowledge significantly influences the development of creativity and innovativeness in selected public primary schools in Kericho County, Kenya. By examining the interconnected roles of curriculum design, teacher training, and collaborative practices, the research revealed that when teachers possess a robust understanding of pedagogical strategies and content knowledge, they are better equipped to foster an environment that encourages creative thinking and innovative practices among students. The findings underscore the importance of ongoing professional development and supportive institutional frameworks to enhance educators' expertise, ultimately leading to improved educational outcomes and enriched learning experiences for students.

Furthermore, the study using a systems approach theory found that it enhances understanding of professional development needs. By identifying how professional knowledge influences creativity and innovation, stakeholders can tailor professional development programs to equip teachers with the necessary skills and confidence.

Additionally, the study employed systems approach theory in the study was found to be of pivotal Support for Innovative Teaching Practices. The findings could inform school administrations and policymakers to provide better resources and institutional support for the implementation of innovative teaching strategies. Engagement Strategies Insights into effective engagement strategies facilitated by knowledgeable teachers can help formulate best practices for maintaining high levels of student involvement and creativity in classrooms.

Recommendations for Curriculum Development. The study may reveal gaps in the current curriculum that inhibit creativity and offer recommendations for adjustments in teaching approaches that align with contemporary educational needs.

3.0 METHODOLOGY

In the study investigating the influence of teachers' professional knowledge on the development of creativity and innovativeness among teachers in selected public primary schools in Kericho County, Kenya, a mixed research methodology was employed to provide a comprehensive understanding of the complex interplay between professional knowledge and creativity. This approach integrated both quantitative and qualitative methods; quantitative data were collected through structured surveys administered to a representative sample of teachers, enabling the researchers to statistically analyze correlations and trends between levels of professional knowledge and reported creativity and innovativeness. Concurrently, qualitative insights were garnered through semi-structured interviews and focus group discussions with select teachers, allowing for a deeper exploration of personal experiences, perceptions, and the contextual factors influencing their professional practice. This triangulation of data sources not only enriched the findings but also facilitated a more nuanced interpretation of how professional knowledge fosters creativity and innovation in the educational setting, ultimately contributing to more effective teaching strategies and improved student outcomes.

4.0 CONCLUSION AND RECOMMENDATION

In conclusion, this study underscores the significant influence of teachers' professional knowledge on the development of creativity and innovativeness among teachers in selected public primary schools in Kericho County, Kenya. The findings reveal that teachers who possess a robust foundation in their subject matter and pedagogical strategies are better equipped to foster an environment conducive to creativity and innovation. Furthermore, ongoing professional development and training play a critical role in enhancing teachers' capabilities, enabling them to implement innovative teaching methodologies that engage students more effectively.

Based on these findings, several recommendations are made for stakeholders in the education sector. First, it is essential for the Ministry of Education and educational administrators to prioritize ongoing professional development programs tailored to address the specific needs of teachers in public primary schools. These programs should focus on contemporary pedagogical practices, creative teaching strategies, and the integration of technology in the classroom.

The schools are recommended to foster a culture of collaboration and knowledge sharing among teachers. Establishing professional learning communities can provide educators with opportunities to exchange ideas and best practices, thereby enhancing their professional knowledge and pedagogical skills.

Furthermore, the study recommended that policymakers consider incentives for teachers who demonstrate exemplary creativity and innovation in their teaching practices. Recognizing and rewarding these efforts can motivate educators to strive for excellence and enhance student learning outcomes.

Finally, the school can be recommended for equipping teachers with the necessary professional knowledge and support is pivotal to cultivating creativity and innovation in the educational landscape of Kericho County. By implementing these recommendations, stakeholders can

contribute to the overall improvement of teaching and learning experiences, thereby promoting a more vibrant and dynamic educational ecosystem for future generations.

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