INFLUENCE OF EDUCATOR PROFESSIONAL DEVELOPMENT ON IMPLEMENTATION OF COMMUNITY SERVICE-LEARNING IN PUBLIC JUNIOR SCHOOLS IN NAIROBI CITY COUNTY, KENYA

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DECLARATION

I, the undersigned declare that this dissertation is my original work and has never been submitted to any other college or university for an academic award. The sources referred to, have been acknowledged accordingly.

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DEDICATION

I dedicate this work to my first teacher, my late mother Irene Wanja Muchiri, and my daughter Chernice Kagwiria Mbogori, for their positive impact in my life and career. Thank you for always being there to support me.

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ABSTRACT

The study aimed to examine how Educator Professional Development (EPD) influenced the implementation of Community-Service Learning (CSL) in public Junior Schools (JS) in Nairobi City County (NCC), Kenya. The study was anchored on Vygotsky's Socio-Constructivism theory and employed a convergent design, combining cross-sectional survey and phenomenology. From a target population of 872, stratified simple random sampling, criterion purposive sampling and census were used to obtain a sample of 64 JS educators, 22 JS Heads of Institutions (HOIs), 17 Quality Assurance and Standards Officers (QASOs) and one (1) County Director of Education (CDE). Data from JS educators were obtained using a questionnaire, while semi-structured interview guides were used to collect qualitative data from the CDEs, QASOs, and HOIs. Reliability for quantitative data was tested using Cronbach's Alpha (target 0.70 to 0.90), while for qualitative data, credibility and dependability were ensured through peer debriefing, member checking and triangulation. Quantitative data were analyzed using descriptive and inferential statistics in SPSS v25, and qualitative data were analyzed thematically using Nvivo software. Findings established that structured educator professional development modalities, specifically educator workshops, academic upgrading, reflective practice, and peer mentoring, significantly influenced the effective implementation of CSL in public JS in NCC. The study concluded that educator professional development is a critical driver of CSL success, but its impact is constrained by inconsistent access, lack of standardization, and weak institutionalization. To sustain CSL outcomes, professional development must be competency-focused, context-sensitive, and embedded within systemic frameworks that formalize peer mentoring, standardize academic upgrading, and expand CSL-specific workshops. The study recommended expanding of CSL-focused workshops, standardizing academic upgrading, embedding reflective practice in professional development, and formalizing peer mentoring networks. Policy makers, curriculum developers, and QASOs were urged to integrate systemic support structures and commission further research on long-term impacts, contextual variations, feasibility of CSL as a standalone learning area and digital tools. This ensures professional development translates into sustainable CSL outcomes, strengthening educator capacity and learner civic responsibility.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA: Analysis of Variance

B.Ed.: Bachelor of Education

CAS: Creativity, Activity, Service

CBC: Competency-Based Curriculum

CBE: Competency-Based Education

CBSRP: Context-Based Structured Reflective Practice

CEMASTEA: Centre for Mathematics, Science and Technology Education in Africa

CPD: Continuous Professional Development

CSC: Citizenship and Social Cohesion

CSL: Community Service-Learning

CSLEE: Community Service-Learning Enabling Environment

ECDE: Early Childhood Development Education

EI: Education International

ELT: Experiential Learning Theory

EPD: Educator Professional Development

ESD: Education for Sustainable Development

GC: Global Citizenship

GCED: Global Citizenship Education

GloCal: Global and Local Education Network

HOI: Heads of Institutions

HOTS: Higher Order Thinking Skills

IB: International Baccalaureate

IBE: International Bureau of Education

ICSL: Implementation of Community Service-Learning

IM: International Mindedness

IPA: International Phonetic Alphabet

ISL: International Service-Learning (ISL)

JS: Junior Schools

KICD: Kenya Institute of Curriculum Development

KePTS: Kenya Professional Teaching Standards

KJSEA: Kenya Junior School Education Assessment

KNUT: Kenya National Union of Teachers

KSL: Kenya Sign Language

LLR: Log-Likelihood Ratio

LSE: Life Skills Education

MKO: More Knowledgeable Other

MOE: Ministry of Education (Kenya)

M&E: Monitoring and Evaluation

NACOSTI: National Commission for Science, Technology, and Innovation

NCC: Nairobi City County

NGOs: Non-Governmental Organizations

OECD: Organization for Economic Co-operation and Development

OER: Open Educational Resources

PLCs: Professional Learning Communities

PP: Pre-Primary

PWPER: Presidential Working Party on Education Reform

RQ: Research Question

QASOs: Quality Assurance and Standards Officers

SCT: Social Constructivism Theory

SL: Service-Learning

SRL: Self-Regulated Learning

ST: Scaffolding Theory

STEM: Science. Technology, Engineering, and Mathematics

TLT: Transformative Learning Theory

TP1: Teaching Practice One

TPD: Teacher Professional Development

TSC: Teachers Service Commission

TU-ISERC: Tangaza University Institutional Scientific and Ethics Review Committee

UAE: United Arab Emirates

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNICEF: United Nations Children's Fund

VBE: Value-Based Education

ZPD: Zone of Proximal Development

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

According to Pacho (2019), Community Service-Learning (CSL) is a pedagogy that combines academic study with community service to improve learning while strengthening local communities. Similarly, the Kenya Institute of Curriculum Development (KICD, 2017b) refers to it as an experiential learning strategy that integrates classroom learning and learning from the community. These definitions of CSL suggest that the main components of CSL are reflective practice, service to community, and learning through experience, forming a triad that underpins its transformative potential across educational systems worldwide. CSL is envisioned to foster critical thinking, problem-solving, and civic responsibility among learners by involving them in community service activities where they apply classroom learning to real-life situations, KICD (2020).

It also enhances learners' social skills, analytical ability, civic and ethical responsibility, self-efficacy, and career development, as noted by the International Bureau of Education - United Nations Educational, Scientific and Cultural Organization (IBE-UNESCO, 2017). In its report, the Presidential Working Party on Education Reform (PWPER, 2023) states that this learning strategy promotes peaceful coexistence and cultivates patriotism, appreciation of diverse cultures, and work ethics among youth, concluding that learners' holistic development depends on effective implementation of CSL. The shift toward Competency-Based Education (CBE) has reshaped global education by prioritizing practical skills over rote memorization, as highlighted by Rhoney et al. (2024).

CSL emerged in mid-20th century from John Dewey’s experiential learning and Addams’ Hull House community work (Harkavy & Hartley, 2010). Coined 1966–1967, it was formalized in 1970s North American higher education, gaining traction via the 1985 Campus

Compact and 1990 National Service Act, evolving into credit-bearing civic-community reflection (Khan & VanWynsberghe, 2020). UNESCO frames CSL within Global Citizenship Education (GCED) as essential for cultivating ethical, empathetic 21st-century learners through experiential engagement (UNESCO, 2013), incorporating CSL-style activities to promote tolerance, respect, and civic duty (UNESCO, 2013). It further aligns CSL with Sustainable Development Goal 4.7 via its Education for Sustainable Development framework, linking service to sustainable futures (UNESCO, 2019). UNICEF encourages teenage civic engagement through school councils and peacebuilding projects mirroring CSL (UNICEF, 2019), complementing holistic youth development. For Africa's competency-based curricula, Education International emphasizes educator professional development (EPD) to strengthen pedagogy through standards, peer support, and context-specific training (EI, 2018; 2024).

Haber (2020) distinguishes Service-Learning (SL) from volunteerism as methodical integration of academics and service, building measurable competencies like intercultural skills, power analysis, and global civic engagement. Nevertheless, implementing this transformative CSL approach effectively depends on a teaching force that is adequately prepared and continuously supported. Effective CSL implementation challenges include resource constraints, teacher preparedness, and high implementation costs. Pivotal to translating the CBC policy into classroom practice is the educator; thus, EPD, similar to Continuous Professional Development (CPD) and Teacher Professional Development (TPD), serves as this study's independent variable.

EPD/CPD/TPD refers to the planned, ongoing, professional, and intentional learning and training that teachers undergo to expand and enhance their knowledge, skills, and competencies, as Njogu et al. (2024) define it. EPD is a structured process that involves educator reflection on their practice, identification of learning needs, and participation in formal or informal activities such as conferences, workshops, or peer mentoring to improve

professional performance while staying current with emerging educational trends and developments. Educator professional development directly enhances educators' capacity to deliver CSL by providing targeted training in experiential learning methods, community engagement strategies, and reflective practices essential for CSL's practical components. CBC emphasizes a learner-centered approach, applying learning to real-world situations while integrating continuous assessment and technology use, as The CPD Certification Service (2025) states.

Globally, CPD is a respected approach to enhancing educator effectiveness. As an illustration, Suryandari et al. (2024), in a survey of 150 participants examining teacher and student perspectives on CPD challenges in Indonesia, found that teachers prioritized learning processes in their professional development but faced a myriad of challenges, including insufficient interventions, resource shortages, and motivation gaps, unlike students who were focused on social gains. This emphasizes the critical role that EPD plays in supporting the implementation of CSL worldwide. The impact of CSL on global citizenship domains is enhanced by well-trained educators, a process that requires EPD, to facilitate deeper reflection, community partnerships, and integration of socio-emotional, behavioral, and cognitive elements. Pre-service educator CSL experiences demonstrate improved pedagogical effectiveness, as established by Khan and VanWynsberghe (2020) in a systematic review of North American CSL literature.

Alam (2022), in a literature review exploring 21st-century pedagogies such as education for sustainable development, transformative learning frameworks, responsible citizenship, and critical reflection in India, established that structured critical reflection transforms community service into a powerful educational experience. This positions Service-Learning (SL) as an optimal framework for deep, transformative learning and genuine competency mastery. Alam further asserts that voluntary work becomes potent educational

practice when paired with structured critical reflection, making SL ideal for profound learning outcomes.

According to Tijsma et al. (2023), a systematic and configurative literature review in the Netherlands revealed that institutionalizing CSL in higher education involves intricate stages. Successful implementation unfolds across three phases: start-up, scale-up, and sustaining. Strategies vary by initial approach, top-down leadership or bottom-up faculty initiatives with scale-up requiring awareness campaigns, faculty incentives, support systems, and robust internal-external collaborations. Ultimately, sustaining CSL demands embedding it into core institutional fabric through curriculum integration, tenure or promotion criteria, and stable funding.

Schulte (2024) analyzed CSL in international schools using an internationalist (ideological)-globalist (pragmatic) spectrum; despite rapid market expansion, from under 500 schools pre-1990s to 13,180 by 2022, CSL faces marginalization because it has become elitist, and is mainly used in elite Type C schools. Originally rooted in post-World War I ideals of peace (Type A/B schools), it promoted Global Citizenship (GC) and International Mindedness (IM) via experiential pedagogies like IB's (International Baccalaureate) Creativity, Activity, Service (CAS). Nonetheless, market forces have sidelined CSL's ideological core, shifting it toward self-interest drivers like academic performance, resume-building skills, and university applications rather than mutual community benefit or moral development, (Schulte 2024). In spite of counter-movements from UNESCO and Organization for Economic Co-operation and Development (OECD) promoting sustainable development education, CSL drifts towards globalist pragmatism. This dilutes its transformative potential, ritualizing it into elite class solidarity mechanisms and underscoring the need for EPD to counter instrumental drift in contexts like Nairobi's JS.

The global trajectory of CSL, from its Deweyan roots to its institutionalization in higher education reveals a persistent tension between transformative ideals and pragmatic constraints, particularly in educator preparation. Without addressing the EPD deficit, CSL risks mirroring the elitist drift observed in international schools, where market forces dilute its ideological core, reducing it to a resume-building exercise rather than a vehicle for mutual community benefit and moral development.

In Africa, CBC and related CSL models have been piloted or implemented in countries including Zimbabwe, Ethiopia, Rwanda, Uganda, South Africa, and Tanzania, with varying CPD support and mixed outcomes. For instance, Chimbunde and Jakachira (2022) conducted a secondary study in Zimbabwe on discontinuities between CBC and Education 5.0, finding misalignments between Ubuntu-rooted primary/secondary CSL and tertiary Science, Technology, Engineering and Mathematics (STEM)-focused curricula, which hindered life skills implementation.

Alemayehu (2021) investigated if teacher CPD improved teacher performance in Addis Ababa, Ethiopia public schools, through a survey involving 340 participants. The study established that teachers' teaching competence, peer activity, mentoring, and research preparation was moderately improved by CPD.

Rwigema and Andala (2022), in a study of teacher-related factors and how this impacted CBC implementation in public primary schools in Kicukiro District of Rwanda, established the presence of strong pedagogical knowledge in CBC teachers, with CPD programs like "Leading, Teaching and Learning Together" improving skills and motivation. However, technological skills among teachers were weak, jeopardizing the success of CBC, as established by UNESCO in a rejoinder on CPD for school teachers and leaders for leading, teaching and learning together (UNESCO, 2023). In Gulu, Uganda, Okumu and Opio (2023), examining CPD programs implementation and improved pedagogical skills of teachers in Gulu

City Secondary schools found that 90% of teachers attributed their enhanced pedagogical skills to CPD programs. The study argues that since collaboration by teachers is essential to learning, EPD/CPD provides continuing support and direction that can result in better classroom performance. These findings show that in spite of the immense potential that CSL has in Africa, it faces pitfalls in the context of well prepared and trained educators through interventions like EPD, and as such, requires coherent, context-sensitive EPD programs aligned with CBC goals to strengthen the competency and capacity of educators, and genuinely promote participatory citizenship and social cohesion.

South Africa and Zimbabwe, countries that have implemented the CBC curriculum, have a unit known as Citizenship and Social Cohesion (CSC), which is similar to Kenya's CSL. Singh and Mukeredzi (2024) conducted a study on the subject in the context of teacher preparedness and continuing professional development programs. They established that the CSC program in the Southern African countries is characterized by inconsistent, fragmented, and mostly absent CPD programs, as reported by 82% of South African teachers and 65% of Zimbabwean teachers (Singh & Mukeredzi, 2024). This has compelled educators to rely on their personal pedagogies to implement the subject, despite lacking any structured training. Furthermore, the study found that while structural efforts are being made to enhance CSC in South Africa (Manifesto on values) and Zimbabwe (Curriculum Framework), they lack a CPD follow-through model, something that will adversely affect the success of the noble CSC unit within the CBC model.

Ferede et al. (2015) surveyed Community-Based Education (CBE) at Jimma University, Ethiopia, using mixed methods (1,036 students, 120 staff). Key weaknesses included top-down supervisor assignment, inadequate CPD (54% staff untrained), workload-remuneration imbalance (66% dissatisfied), logistical gaps, and perceptual divides (staff rated supervision "high"; students "rare"). They recommended mandatory inductions, participatory selection,

workload adjustments, and forums to ensure reciprocal CSL impact. Okumu and Opio (2023), in their Gulu, Uganda study, point out that there is still a lack of adequate CPD training, a recurrent problem in Africa.

The African evidence, from Zimbabwe's CSC discontinuities to Ethiopia's CBE supervision gaps and Uganda's CPD successes, underscores that without coherent, sustained, and context-sensitive EPD, CSL risks becoming a ritualistic add-on rather than a catalyst for social change. The literature converges on a critical insight: EPD is not merely supportive but constitutive of effective CSL, shaping educators' pedagogical identities, reflective capacities, and community engagement strategies. Yet, prevailing EPD models in Kenya and across Africa remain episodic, decontextualized, and misaligned with CSL's experiential demands, perpetuating a cycle of under-preparedness that compromises learner outcomes and community impact.

CSL is an integrated learning area under Kenya’s CBC at JS level, covering grades 7 to 9, where it aims at enabling learning through community participation to enhance the growth of the learner and ensure community good. The strategies for teaching and assessment aim at linking classroom learning with community service to ensure a rich learning experience by imparting skills in civic responsibility to strengthen communities. CSL provides learners with opportunities for learning through active participation, promoting social change and enhancing critical thinking, problem solving and citizenship, skills that are needed in the 21st century, as Njengere (n.d.) notes.

The practical implementation of CSL within Kenya's CBC hinges on educator preparedness and ongoing EPD. Educators must master skills-based, learner-centered, reflective pedagogies aligned with the shift to CBC and Kenya Professional Teaching Standards (KePTS), as per Kariuki et al. (2024) and Teachers Service Commission (TSC, 2018). Effective CPD equips teachers for lesson planning, assessment, and CSL delivery, though programs

remain disjointed, lacking mentorship, as highlighted by Gatecha et al. (2023) and Okumu and Opio (2023). CSL integrates classroom learning with community service, enabling students to solve local problems, vital for CBC's goal of producing socially responsible, skilled graduates, as Ruth & Ramadas (2019) and KICD (2020) state.

The benefits of CSL include holistic development, labor market alignment, reduced exam stress via continuous assessment, and improved personal values within months, Ngwacho (2024). In Kenya, CSL operates as an integrated learning area at early years, lower primary, upper primary and JS levels and at senior school, it is a standalone learning area spanning across citizenship, life skills, communication, entrepreneurship, financial literacy, and research, KICD (2022). JS within Kenya's CBC comprises of Grades 7, 8 and 9 and it is the Middle School Education level between upper primary and senior school. JS are domiciled in Primary Schools and they are headed by HOIs. JS learners in Grade 7 and 8 undergo School-Based Assessments then transition to senior school after sitting for the Kenya Junior School Education Assessment (KJSEA) in Grade 9, as KICD (2021) states. CSL at JS is domiciled in Life Skills Education (LSE).

According to Kawinzi (2025), JS rollout faces concerns over teacher readiness for CSL. In Kirinyaga County, 88.5% of Geography teachers lacked CBC training; sessions were brief, covering only assessment/lesson planning/CSL, with many needing digital literacy/pedagogy support, Muchiri (2021). According to Kisangau et al. (2025) and Atieno (2025), Kilifi studies confirm out-of-field teaching challenges, limited CSL expertise, weak pedagogy, and mentor shortages. Jeptepkeny and Keter (2025) synthesized 40 sources (2018-2024) on inclusive education planning role in Kenya's senior-school CBC implementation. They identified systemic flaws: reactive rather than embedded inclusion, shallow KICD teacher training, infrastructure gaps such as lack of ramps and assistive technology, and poor stakeholder coordination, undermining equity for students with disabilities.

Recommendations included intensive EPD/CPD, technology integration, inter-agency Monitoring and Evaluation (M&E) and Kenya Sign Language (KSL). Onyango (2025), Head Teacher at Makini Kisumu City, highlights CBC milestones: KICD dissemination (pre-primary (PP1)-Grade 6), TSC learner-centered training, and 2017 Grade 6 pilots. He notes that the schools embracing CSL teacher professional development report gains in self-efficacy, creativity, teamwork, critical thinking, discipline, digital literacy, environmental stewardship, and real-world application. Ireri et al. (2024) studied CBC implementation in Meru County (n=96: 26 head teachers, 70 JS teachers), finding 95% received TPD. However, continuous programs are needed for sustained CSL effectiveness.

According to Achieng (2024), development of CBC competencies such as critical thinking, teamwork, problem-solving, and self-efficacy requires the use of advanced teaching techniques made possible by efficient EPD/CPD/TPD. Although Mount Kenya University and Kenyatta University provide CPD, their impact has not yet been translated into tangible benefits for JS educators, as alluded to by Kariuki et al. (2024), whose study established that the prevailing EPD/CPD programs lack context, are episodic, and fail to address the specific pedagogical demands of CSL, such as experiential co-planning and digital portfolio management.

Okutu et al. (2024), in their case study of Migori County, Kenya, on the Challenges of Domiciling Junior Secondary Schools in Primary Schools found that, stakeholders including parents have complained about the time-intensive nature of CSL and the requirement of heavy parental engagement in CSL projects. Complaints have also been made about the perceived high costs of CSL implementation. Okutu et al. (2024) established that approaches to integrate moral values in areas of learning was not well-understood by teachers, making Value-Based Education a challenge to implement. Additionally, learners reported lack of CSL participation, with parental involvement being minimal; while HOIs avoided CSL activities due to the high

costs associated with its implementation. Further, Education Officers stated that induction courses to train teachers on how Value-Based Education could be integrated into their teaching was necessary, and this was yet to be done.

This study addressed literature gaps where Khan and VanWynsberghe (2020) deem pre-service training sufficient, contrasting Kenyan/African evidence of teacher unpreparedness for CSL (Kawinzi, 2025; Jeptepkeny & Keter, 2025; Ireri et al., 2024; Okutu et al., 2024; Singh & Mukeredzi, 2024; Okumu & Opio, 2023). It examines how Educator Professional Development (EPD) influences implementation of community service-learning (CSL) in Nairobi City County's public Junior schools. Nairobi's cosmopolitan diversity, high JS density, and stark resource disparities (affluent to informal settlements) mirror national CSL-CBC challenges, ensuring generalizability. In Kenya, fragmented EPD, resource scarcity, and policy-classroom mismatches undermine CSL's civic and holistic goals at JS level. Nairobi's heterogeneity amplifies these issues, creating uneven implementation landscapes demanding targeted EPD interventions across socioeconomic divides.

This study, therefore, positions EPD as the linchpin for unlocking CSL's transformative potential in Nairobi's public JS, bridging the gap between global CSL ideals and local implementation realities through empirically grounded insights into how targeted professional development can reshape teaching practices, enhance learner competencies, and strengthen community-school partnerships. The urgency of this inquiry is heightened by Kenya's ongoing CBC rollout, where JS serves as a pivotal transition point between primary and senior school, making CSL's effective delivery crucial for nurturing the civic-minded, skilled graduates envisioned by national education reforms. Nairobi's diverse public JS mirror Kenya's CSL challenges, making findings nationally scalable. The study addresses a paradox: CSL's success depends on educator preparedness, yet educators remain underprepared due to fragmented, misaligned EPD. By examining Nairobi's urban disparities and implementation hurdles, the

research explored how targeted EPD can unlock CSL's transformative potential within Kenya's CBC, informing broader African and global education discourses.

1.2. Statement of the Problem

Effective implementation of CSL in public JS requires structured educator workshops equipping educators with experiential learning methodologies, community engagement strategies, and reflective practices (KICD, 2023). Teachers should pursue continuous academic upgrading through context-responsive EPD programs aligned with KePTS, ensuring competency in emerging pedagogical trends and CSL-specific skills (Anjeche et al., 2025). Additionally, institutionalized reflective practice and peer mentoring would foster collaborative learning communities where educators co-plan projects, share best practices, and engage in critical reflection, transforming community service into powerful educational experiences (Alam, 2022; Suryandari et al., 2024). This ideal ensures learners acquire self-efficacy, problem-solving, and civic engagement competencies envisioned under Kenya's CBC.

However, CSL's implementation in Nairobi's public JS is superficial and ineffective. Over 60% of schools lack structured CSL documentation, frameworks, or supervision (MOE, 2022). Teachers are critically underprepared: 92% rely on unstructured verbal reports instead of reflective portfolios, 78% lack project design templates, and 85% have no community liaison protocols (Ngwacho, 2024). Stakeholders report high implementation costs, teachers' inability to integrate moral approaches into learning areas, minimal learner participation, limited parental involvement, and HOIs avoiding CSL activities due to expenses (Okutu et al., 2024). Systemic challenges poor governance, inadequate funding, and weak stakeholder management exacerbate these issues (MOE, 2023). Short-term consequences include undermined learner engagement, competency acquisition, and teacher morale. Long-term, if unmitigated, JS learners will transition to senior schools in 2027 lacking critical self-efficacy, problem-solving,

and civic engagement skills, fundamentally undermining CBC's transformative vision and producing graduates ill-equipped for 21st-century challenges.

Empirical studies on EPD's influence on CSL implementation remain scarce in Nairobi City County. Four recent studies reveal gaps: Kawinzi (2025) established teacher unpreparedness but did not examine structured EPD's specific influence; Jeptepkeny and Keter (2025) identified systemic CBC flaws but focused on senior school inclusive education, not JS-level CSL; Ireri et al. (2024) found 95% received TPD in Meru County but did not isolate CSL-specific EPD interventions or measure impact; and Okutu et al. (2024) documented stakeholder challenges in Migori County without exploring EPD as mitigation. Collectively, these studies reveal a knowledge gap regarding how structured workshops, academic upgrading, reflective practice, and peer mentoring influence CSL effectiveness in urban JS contexts. This study filled that gap by empirically exploring structured EPD's influence on CSL implementation in NCC public JS, providing actionable insights to align reality with the educational ideal and ensure Kenya's reforms deliver holistic, competency-driven learner development.

1.3 Research Questions

The following research questions guided this study;

i. What is the influence of structured educator workshops on the implementation of community service-learning in public junior schools in Nairobi City County?
ii. How does educator academic upgrading influence the implementation of community service-learning in public junior schools in Nairobi City County?
iii. What is the influence of educator development in reflective practice on the implementation of community service-learning in public junior schools in Nairobi City County?

iv. How does educator development in peer mentoring influence the implementation of community service-learning in public junior schools in Nairobi City County?

v. What is the influence of educator professional development on the implementation of community service-learning in public junior schools in Nairobi City County?

vi. Does Community Service-Learning Enabling Environment influence educator professional development and the implementation of community service-learning in public junior schools in Nairobi City County?

1.4. Research Hypotheses

i. Ho1: Structured educator workshops have no significant influence on the implementation of community service-learning in public junior schools in Nairobi City County.

ii. Ho2: Educator academic upgrading has no significant influence on the implementation of community service-learning in public junior schools in Nairobi City County.

iii. Ho3: There is no significant influence in educator development in reflective practice and the implementation of community service-learning in public junior schools in Nairobi City County.

iv. Ho4: There is no significant influence in educator development in peer mentoring and the implementation of community service-learning in public junior schools in Nairobi City County.

v. Ho5: Educator Professional Development has no significant influence on the implementation of community service-learning in public junior schools in Nairobi City County.

vi. Ho6: Community Service-Learning Enabling Environment has no significant influence on educator professional development and the implementation of community service-learning in public junior schools in Nairobi City County.

1.5. Significance of the Study

The findings of this research shall be of significance to the JS educators, the educational administrators and policy makers, teacher trainers, curriculum developers, QASOs, parents and the community, and researchers and academia.

Educators are implementers of the curriculum and facilitators of the learning. The findings from this study could provide Nairobi's JS educators with context-responsive, empirically validated EPD frameworks that incorporate peer mentoring, reflective journaling, experiential co-planning, and digital portfolios. This might possibly help the educators become adept at learner-led, tripartite-reflective pedagogy of CSL (Ngwacho, 2024; Anjeche et al., 2025). These may potentially enhance teacher agency, reduce tokenism and elevate core CBC competencies in settings that are overcrowded and resource-deficient (Kariuki et al., 2024).

Educational administrators may, based on this study's findings, ensure adequate provision of learning materials, teaching staff, and adaptive learning materials within schools.

Policymakers, including the TSC and the MOE through KICD, manage teacher training and curriculum policy. The findings of this study might inform these government agencies on how to develop suitable EPD programs to enhance the educators' agency in CSL instruction.

The findings of this study could also guide the development of KePTS-aligned policy reform, shifting from episodic, centralized workshops to sustained, school-led EPD cycles with follow-up and funding. These will significantly improve the fidelity of CSL, along with educator motivation, retention, and equitable CBC-CSL rollout across public JS (TSC, 2018; Gatecha et al., 2023).

This study is important because it is premised on a pre-emptive curriculum implementation approach. This study's conclusions might help KICD acknowledge the diverse backgrounds, experiences, dispositions, and personalities that educators contribute to the educational process. The improvement of CBC-CBE implementation, especially the CSL

component, may be guided by this recognition. The study's conclusions could help create more transparent CSL frameworks, such as competency-mapped assessments in teacher guides, community memoranda of understanding, and required reflective tasks (KICD, 2023). This could help CSL shift from ritualized practices like regular cleanups and move towards more transformative and contextually responsive methods (Onyango, 2025).

QASOs may find the study useful in recognizing the disparities in educators' preparedness, training backgrounds, and perspectives on CSL. This knowledge could improve the standard of the advice and assistance they provide during professional development meetings and school visits. Research on the relationship between EPD and CSL may also assist QASOs in encouraging more uniform, standards-based approaches to CSL implementation, fostering reflective practice, and enhancing school-community collaboration.

The findings of the study, may give the parents more information on their role as education stakeholders and how they could influence educators' choice of learning experiences, and how they could contribute to the effective implementation of CSL in their child's school.

For the community, the findings of the study might play a vital role in linking the school and the community, providing a favorable environment for learners to grow and nurture their talents, and availing a market for learners' final project products, consequently reinforcing a robust CSL framework to foster *Harambee* reciprocity.

The research may improve the researcher's professional competence in curriculum studies, especially in the implementation of CSL and CBC-CBE. The researcher's abilities in qualitative inquiry, curriculum analysis, and socio-constructivist interpretation may be enhanced by interacting with educators, curriculum officers, and communities. Additionally, the study might help the researcher advance academically by providing chances for publication, conference participation, and future research partnerships in the areas of community-oriented learning and educator development.

The results could also add to the body of knowledge regarding CSL, which is still a topic that is not broadly studied in many urban African contexts. The study, which is based on Vygotsky's socio-constructivism theory, might provide a framework for a scalable EPD-CSL model that can guide longitudinal and comparative research. This study might also fill in theoretical and methodological gaps in the literature on CSL, especially with regard to implementation dynamics, teacher training, and community engagement in educational systems in the Global South.

1.6. Scope and Delimitation of the Study

The scope centered on four targeted EPD modalities namely; structured educator workshops, educator academic upgrading programs, educator development in reflective practice, and educator development in peer mentoring initiatives, and their direct influence on CSL fidelity, measured through the attainment of CBC-CBE competencies, tripartite reflection (learners-educators-community), and learner-led project execution. Stratified simple random sampling was used to obtain 22 JS and criterion purposive sampling and census were employed to obtain a sample of 64 JS educators and 22 JS HO1s. Census sampling was used to get a sample of 17 QASOs and criterion purposive sampling was employed to get one (1) CDE.

The analysis was grounded on real-time implementation data using a mixed-methods approach that included, surveys and unstructured interviews.

Three strategic approaches were used for delimiting this study in order to ensure its focus, viability, and relevance. Only NCC was included in the study. Nairobi's distinct and intricate socio-educational problems like income inequality and overcrowding necessitated this boundary because they offered a legitimate microcosm for researching CSL gaps in a congested urban setting.

The subject of this study was public JS in NCC; JS-specific CSL dynamics were isolated by excluding lower and upper primary, and senior school and tertiary levels. Prior to

Senior School, JS constitute the crucial consolidation phase, during which time the demands and complexity of CSL rise dramatically (KICD, 2023).

This study was solely applied to NCC public JS and excluded private JS, because private JS have better access to outside EPD and CSL resources. Private institutions were purposefully left out, which may have distorted the findings regarding the fair application of CSL and the primary emphasis on the needs of the public sector.

In order to reflect post-2023 CBC guidelines and the momentum of continuing educational reform, the temporal delimitation was that data collection was limited to the current academic year. These intentional boundaries guaranteed that the study yielded focused, practical insights for enhancing the implementation of CSL, particularly in the public JS in NCC.

1.7. Theoretical Framework

To examine the influence of educator continuous professional development on implementation of CSL in public JS in NCC, the study applied Vygotsky's Socio-Constructivism Theory (SCT), (1978), (Wibowo et al., 2024).

This theory holds that critical thinking and problem-solving should be the focus of education, encouraging learners to connect prior knowledge with new information. It posits that teachers should guide learners rather than directing them to ensure learner-centered learning. This helps to foster deep comprehension and application among learners. SCT suggests that learners actively build their knowledge through experiences and interactions (Wibowo et al., 2024). This is the overarching notion that underpins the new learning area, CSL, as an academic learning area that is relevant, while at the same time, it enhances the learner's analytical and social skills, self-efficacy, civic and ethical responsibility, and career growth.

Key ideas in this theory include scaffolding, in which a More-Knowledgeable-Other (MKO) offers short-term assistance to extend capabilities, and the Zone of Proximal Development (ZPD), which is the difference between what a learner can accomplish on their own and with assistance (Hoose, 2020). Vygotsky placed a higher priority on language, cultural tools, and cooperative discourse as mediators of cognitive development than Piaget did on individual maturation.

Jerome Bruner, David Wood, and Gail Ross (1976) developed the theory further and used the term scaffolding to explain how structured support diminishes as competence increases. While Newman and Latifi (2021) incorporated digital tools into ZPD for contemporary CPD, Barbara Rogoff (1990) used it to guide participation in cultural communities, (Hoose, 2020). Ngwacho (2024) frames CSL as a socio-cultural negotiation in African contexts by connecting Vygotsky to the communal concepts of *Ubuntu*/*Harambee*. These developments adapt the theory to collaborative context-embedded learning, which is directly related to the intervening factors, school culture and community environment and EPD modalities; structured educator workshops, educator academic upgrading, educator development in reflective practice and educator development in peer mentoring, as outlined in the research questions. Vygotsky believed strongly that the process of 'making meaning' is strongly influenced by the community.

However, implementation of the CSL faces challenges such as educator readiness, resource constraints and a mismatch with how the educators were trained and how they are used to assessing learning outcomes. According to Vygotsky, knowledge is co-constructed through social interactions within a sociocultural context, rather than being acquired individually. Constructivism should be applied to shift to learner-centered learning, from teacher-centered methods in the implementation of CSL under the CBE-CBC framework of education. According to Vygotsky, the learners' learning potential is facilitated by interacting

socially with their more learned peers and educators, without which the minds of learners may not advance much, adversely affecting the learners' ability to achieve their full potential.

1.7.1. Strengths of Socio-Constructivism Theory

Socio-Constructivism has a number of advantages that fit in well with this proposed study's emphasis on EPD-driven CSL implementation. Vygotsky's theory supports cooperative and collaborative learning between children and peers or educators. By facilitating Professional Learning Communities (PLCs) and peer mentoring, it fosters collaboration by allowing educators to co-design CSL projects using their combined expertise (Research Question (RQ)1 – RQ5). Due to its emphasis on sociocultural tools and contextual relevance, it is perfect for Nairobi's diverse JS environments, where community dynamics, school culture, and parental involvement all influence EPD outcomes (RQ 6).

The theory bridges long-standing theory-practice gaps by supporting experiential learning and reflecting the three stages of CSL's problem-solving cycle: investigation, action, and reflection (Anjeche et al., 2025). Reflective practice sessions are positioned by scaffolding in EPD as extensions of the ZPD guided by MKOs, which directly improves CSL fidelity (Ngwacho, 2024).

Finally, its equity potential encourages inclusive discourse, which challenges tokenistic, teacher-dominated CSL (71% teacher-led) as per Anjeche et al. (2025).

1.7.2. Weaknesses of Socio-Constructivism Theory

The theory, however, has significant weaknesses, in spite of its strengths. It undermines the effectiveness of peer mentoring by assuming equal participation and ignoring power disparities in Kenya's hierarchical schools where junior teachers submit to senior teachers (Gichuru, 2024).

According to Kariuki et. al., (2024), the model is resource-dependent, requiring materials, time, and space for meaningful dialogue, all of which are scarce in the crowded

Nairobi JS. If MKOs do not provide multilingual facilitation, cultural and language barriers in diverse communities may hinder shared meaning-making, (Karo & Nyakundi, 2023).

Presumed intrinsic engagement causes motivation gaps; excessive workloads weaken teacher buy-in, which reduces the impact of ZPD (Gatecha et al., 2023). Finally, ZPD's dynamic nature makes measurement difficult, which makes EPD-CSL interaction regression analysis more challenging.

Vygotsky's Socio-Constructivism Theory, provides the fundamental framework for examining how EPD affects the successful execution of CSL. In order to enable educators to work within their ZPD and facilitate complex CSL, RQ1, RQ3 (Workshops and Reflective Practice) and RQ2, RQ4 (Academic Upgrading and Peer Mentoring) jointly examine EPD as the source of scaffolding and the MKO support. In particular, reflective practice and peer mentoring enable the gradual, internalized shift to learner-led CSL design, while workshops and educator academic upgrading provide initial MKO support. By investigating how factors such as school culture and parental engagement (Contextual Factors- RQ 6), functioning as an external MKO affect the quality and boundaries of the ZPD, which is crucial for CSL fidelity, it supports Vygotsky's sociocultural emphasis. The theory explains why episodic EPD is ineffective in Nairobi's JS as it is unable to scaffold the experiential cycle of CSL in the absence of sustained social interaction.

1.7.3. Application of Socio-Constructivism Theory to the Study

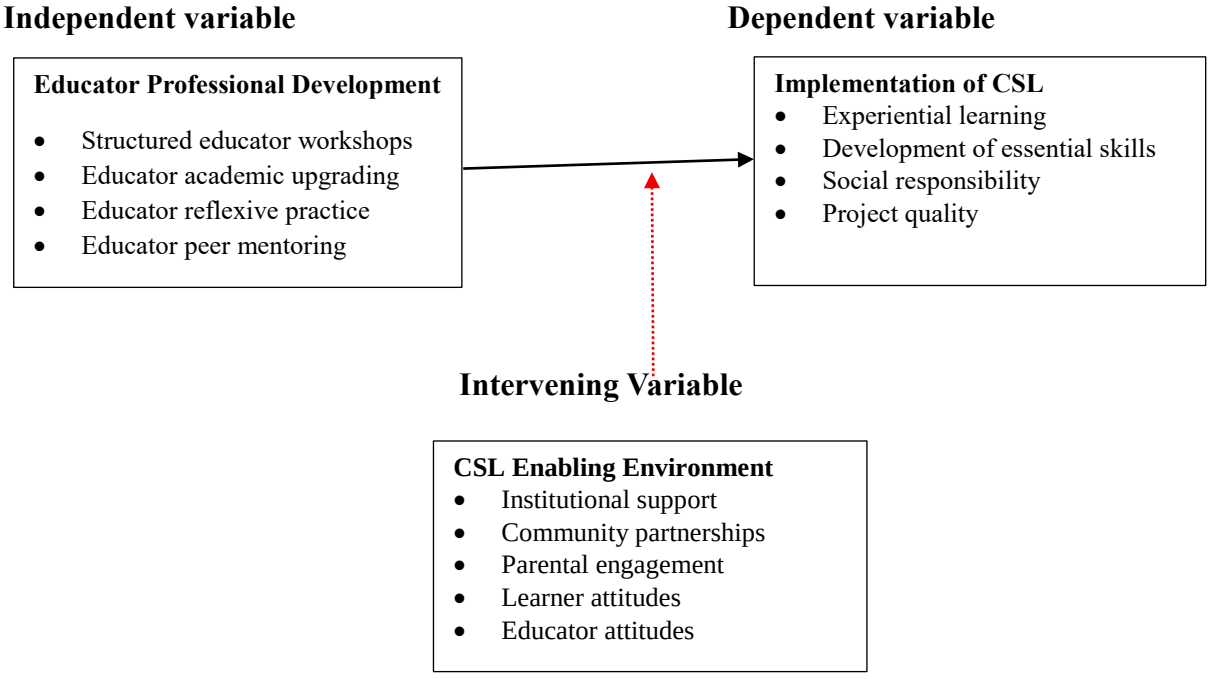
Further, this theory provided a framework for integrating how EPD influences CSL implementation within Nairobi's public JS CBE-CBC education framework. This research supported Vygotsky's Socio-Constructivism theory by demonstrating how EPD fostered the establishment of cooperative, community-based learning settings. In line with Vygotsky's emphasis on learning through social contexts, it emphasized how qualified educators/facilitators assisted JS CSL learners in creating knowledge through social contact

and active engagement, experiencing service (Mugambi & Mauti, 2025). This study validated the construct that effective EPD enhances the social interaction and collaborative learning required for in-service socio-constructivist pedagogy to succeed in Nairobi's JS-CSL.

1.8. Conceptual Framework

A conceptual framework shows the association between variables in a study. According to Johnson (2024), a conceptual framework refers to a representation that outlines the main aspects of study, including key factors, concepts, or variables, and their presumed relationships. It serves as a researcher's guide, drawing from existing theories and empirical data to clarify the study's scope and direction, answering the 'how' and 'why' of the research problem and methodology. Key components of an effective framework include identification of key variables, visual representation of relationships among them, and theoretical justification linking the framework to established theories (Johnson, 2024). Figure 1 illustrates this.

Figure 1: Relationship between EPD and Implementation of CSL



Source: ***Researcher (2026)***

Figure 1 indicates that when a new curriculum is being implemented, various factors may affect the effectiveness of its implementation.

In this study, an interaction of the Independent Variable (InV), which is EPD, predicts the Dependent Variable (DV) which is the CSL curriculum implementation in public JS in NCC, either positively or negatively. The indicators of the InV, EPD are: structured educator workshops, educator academic upgrading, educator development in reflective practice and educator development in peer mentoring. The implementation of CSL curriculum refers to the degree to which CSL is incorporated and applied into NCC's JS CSL curriculum, encouraging learner involvement in community-based projects which align with the CBC-CBE goals. Its indicators are: experiential learning, development of essential skills, social responsibility and project quality.

Continuous participation in structured educator workshops leads to the educator's ability to accelerate the acquisition of experiential learning among the CSL learners while academic upgrading of the educator develops the educator's skills in ensuring the development of essential skills among the JS CSL learners. Frequency and regularity of educator reflective practice sessions will lead to the development of the educator's agency in instilling citizenship and social responsibility among his or her CSL learners, and educator's development in peer mentoring will enhance the educator's efficacy in problem-solving and critical thinking skills, which leads to improved quality of the final CSL projects.

However, other factors like CSL Enabling Environment (CSLEE) may mediate the DV positively or negatively. The indicators of the Intervening Variable (IV), are institutional support, community partnerships, parental engagement, learner attitudes and educator attitudes. If the institutional support is innovative and supportive, the community partnerships collaborative, parental engagement is collaborative and supportive, and the educators and learners' attitudes are positive, there will be a positive association between the Dependent Variable and the Independent Variable. If the educators' beliefs and motivational levels towards CSL and EPD are high, positive and innovative and the learners' perceptions and engagement

with CSL projects are positive, the IV will cause the InV to have a positive effect on the DV. In this study the researcher used the Process Macro in SPSS v25 to control the IV from influencing the Inv.

1.9. Operational Definition of Key Terms

Community Environment: This refers to the social, cultural, economic, and physical conditions within a specific area that influence the well-being and interactions of its residents.

Community Service-Learning (CSL): A core CBC-CBE learning area that integrates academic learning with community projects to strengthen learners' civic responsibility, ethical judgment, and problem-solving skills.

Community Service-Learning Enabling Environment (CSLEE): Other factors other than structured educator workshops, educator academic upgrading, educator reflective practice and educator peer mentoring that may influence the implementation of community service-learning.

Educator: This is a TSC-registered teacher in a public JS who guides learners to develop competencies by connecting academic content with practical community service activities.

Educator Academic Upgrading: This refers to formal programs where educators pursue higher academic qualifications to meet TSC and CBE requirements. In CSL, upgraded educators are expected to have better pedagogical content knowledge and capacity to handle integrated and competency-based learning. The impact is long-term on educator quality.

Educator Professional Development (EPD/CPD/TPD): Formal and informal activities such as workshops, educator academic upgrading, educator reflective practice sessions/behaviors and educator peer mentoring aimed at enhancing educators' pedagogical skills and ensuring alignment with CSL requirements in Nairobi's JS.

Educator Attitude: Teachers' beliefs and motivation levels toward influence of EPD on CSL and how effectively they implement these practices.

Implementation of CSL: The successful implementation of CSL projects that align with CBC-CBE goals, evaluated through learner engagement, civic awareness and project quality.

Learner Attitude: Learners' perceptions and engagement with CSL projects which influence their civic learning outcomes.

Parental Engagement: The active involvement of parents in supporting CSL activities, such as community projects, which influences learner outcomes.

Peer Mentoring: Collaborative educator interactions within PLCs or school settings, involving observation and structured feedback, aimed at improving CSL delivery.

Reflective Practice: An EPD strategy that encourages educators to engage in self-assessment and critical reflection on their teaching methods, often using journaling or professional portfolios, to improve CSL delivery.

School Culture: These are the shared norms, values, and leadership practices in a school that impact the effectiveness of EPD and the implementation of CSL.

Structured Educator Workshops: These are in-service, short professional development programs aimed at equipping educators with competencies required for effective CSL delivery. They focus on practical aspects such as lesson planning, competency-based assessment, and use of instructional materials. Their goal is immediate improvement in classroom practice.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

In Chapter Two, the relevant empirical research done by other scholars in different contexts: global, regional and local is discussed. The chapter has two main sections. Section one is a critical review of two supporting theories that complement the current study's main theory. The second section is a review of empirical literature aligned with this study's research questions and hypotheses that formed the themes for the review. In addition, the chapter critiqued other studies to find knowledge gaps and explained how they were addressed by the current study. At the end of this section, a summary of the identified knowledge gaps was provided.

2.2. Critical Review of Related Theories

In this section, two theories were reviewed; Scaffolding Theory (ST) and Experiential Learning Theory (ELT). The theories are relevant and were applicable to the study as they assisted the researcher to predict, interpret and apply the phenomenon under study.

2.2.1. Bruner's Scaffolding Theory

Bruner's Scaffolding Theory (ST) (1976), formalized by Jerome Bruner alongside Wood and Ross, emerged from Bruner's discovery learning research at Harvard and Oxford in the 1960s-1970s, conceptualizing instructional support as a temporary framework akin to architectural scaffolding, provided by MKOs, contingent on learner readiness, and systematically weaned off (Wood et al., 1976; Bruner, 1986). Building on Vygotsky's ZPD, Bruner's "spiral curriculum" revisits concepts at increasing complexity, with scaffolding operationalized through prompts, modeling, and feedback calibrated to four failure modes: lack of direction, resource identification, strategic prioritization, and execution (Bruner, 1960). Meta-analyses confirm 0.48 standard mean gains in scaffolded vs. independent learning,

strongest in collaborative domains (van de Pol et al., 2019; 2023 update). CSL operationalizes scaffolding through graduated educator support: initial project templates and community liaison protocols (high scaffold) evolve to learner-led design (low scaffold) (KICD, 2023).

Bruner's ST complements SCT by providing a structured, procedural complement to Vygotskian principles through detailing the precise mechanisms of support within the ZPD. It addresses SCT's weaknesses directly by offering an operational model for contingent, temporary assistance that can be systematically applied and withdrawn. This characteristic helps mitigate the resource and time constraints in challenging contexts by advocating for efficient initial support like templates and protocols, which are gradually withdrawn. Furthermore, Bruner's ST is more structured around the three developmental stages of enactive, iconic, and symbolic learning modes, adequately supporting educator learning from beginner to self-efficacy.

The focus of Bruner's ST on identifiable barriers to JS learner CSL outcomes such as, resource constraints, poor strategy and execution, and direction, creates a neutral framework for peer interaction, and in so doing, reduces the disruptive impact of hierarchical power dynamics among educators. Furthermore, the emphasis of Bruner's ST on a deliberate fading protocol transforms the abstract, dynamic ZPD into a series of observable instructional milestones. This enhances measurability and helps to prevent the dependency or frustration that undermines educator motivation. Consequently, Bruner's ST provides the critical how-to framework for the operationalization of Vygotsky's sociocultural vision in real-world constraints of large classes and varied readiness.

This study has contributed to Bruner's ST by showing that educator professional development acts as a crucial support structure ("scaffold") to enable educators to master complex, innovative pedagogies such as CSL. The theory ensures that teachers can effectively guide learners through experiential learning, moving from teacher guidance to independent

application by the learner due to an enhanced teacher capacity (Ireri et. al., 2024). Essentially, this study posits that when educator capacity is scaffolded through quality professional development, the educators in turn are able to better scaffold JS learners learning in CSL, leading to improved community and educational outcomes.

2.2.2. Experiential Learning Theory

Experiential Learning Theory (ELT) was put forth by David A. Kolb (1984), an American educational theorist, during his tenure at Case Western Reserve University. It represents a foundational model of transformative education; synthesizing pragmatist philosophies from John Dewey, Kurt Lewin's action research, and Jean Piaget's cognitive stages into a cohesive cyclical process (Kolb, 2014; Kolb, 2017). This was first stated in his seminal book *Experiential Learning: Experience as the Source of Learning and Development (*Kolb,1984). The theory posits that learning constitutes the process whereby knowledge results from the combination of grasping experience and transforming it, operationalized through four adaptive modes forming a continuous spiral: Concrete Experience (CE), fully engaging in new situations; Reflective Observation (RO), reviewing the experience from multiple perspectives; Abstract Conceptualization (AC), integrating observations into logical theories; and Active Experimentation (AE), testing 5 implications through action (Kolb, 1984).

The ELT is validated by Yen et al. (2020) Learning Style Inventory, which shows that individuals have their unique natural learning preferences, for instance, some are active and others are passive learners. These personal preferences influence how individuals learn best, and this reiterates the suitability of applying ELT in diverse educational settings. In CSL, ELT provides a precise blueprint for pedagogical design, where the CE phase manifests through authentic community immersion, such as JS learners conducting environmental assessments in Nairobi slums, generating raw experiential data, (Ngwacho, 2024). The RO stage aligns with mandatory reflective portfolios and tripartite debriefs (educator-learner-community), enabling

critical examination of civic impacts, while AC involves mapping activities to CSL-CBC competencies like problem-solving and self-efficacy, (KICD, 2023).

Furthermore, AE drives iterative project scaling, such as evolving one-off clean-ups into sustained community gardens, fostering entrepreneurial mindsets, as evidenced by 44% higher business initiation rates among CSL participants (PWPER 2023; Ngwacho, 2024). Empirical applications in SL contexts demonstrate ELT cycles yielding 0.52 effect sizes on civic responsibility, surpassing traditional instruction (Celio et al., 2011; updated meta-analysis by Conway et al., 2022). For EPD, ELT underscores the necessity of teachers experiencing their own cycles: workshops provide CE through simulated CSL facilitation, peer mentoring enables RO via lesson critiques, academic upgrading supports AC through pedagogical theory, and reflective sessions culminate in AE via classroom trials (Kariuki et al., 6 2024).

Kolb's ELT further complements Vygotsky's SCT and mitigates its weaknesses by strengthening the Socio-Constructivist foundation through formalization of the internal, cognitive process through which social and contextual experiences are transformed into personal professional knowledge. ELT counteracts Vygotsky's over-reliance on social dialogue through validation of an individual's reflective observation and abstract conceptualization stages. This aspect provides educators with a personal meaning-making pathway that is less vulnerable to cultural or hierarchical barriers in communication. Through focusing the learning cycle on CE, ELT helps ground professional development in educators' actual CSL practice, thereby increasing relevance and buy-in even amidst excessive workloads.

ELT recognizes diverse learning styles, an aspect that reframes peer mentoring from an exchange that is potentially hierarchical into a complementary collaboration in which different strengths, such as theorizing vs. experimenting, enrich collective problem-solving. As such, Kolb's model provides a measurable framework for growth by tracking an educator's ability

to navigate all four stages of the cycle, offering a complementary metric to the ZPD for assessing how EPD interventions lead to internalized, actionable pedagogical understanding.

This present study contributes to the ELT by bridging the gap between theoretical training and practical implementation of CSL through educator professional development. It validates educator improvements through being better equipped to guide learners through the CE of community service and AC of learning outcomes due to teachers' engagement in experiential training (active experimentation and reflection) (Girvan et al., 2016). Further, this study develops a modified model for educators under stress, and shows the effects of structured continuous professional development on RO and AC.

SCT is considered to be a more comprehensive theory as compared to ST and ELT as it provides a more holistic framework for how knowledge is constructed and developed. SCT goes beyond the educator as it emphasizes learning through collaboration with MKOs and peers which enhances the goals that CSL aims to foster among learners. While ELT focuses on a learner's direct experiences to build knowledge, SCT believes that those experiences are only meaningful through the lens of social interaction, language and culture (Wibowo et al., 2024; Anjenche et.al., 2025). SCT was chosen to underpin this study over ST and ELT as it fosters collaboration, interaction and relevance which are associated with high degrees of learner involvement like applied learning in CSL (Ngwacho, 2024).

2.3. Empirical Review

This empirical review was informed by the research questions of this study, providing data-driven insights into the research methods used, the findings and the knowledge gaps by earlier researchers.

2.3.1. Influence of Structured Educator Workshops on the Implementation of Community Service-Learning

Thinh (2025), employing a qualitative methodology involving semi-structured interviews with 20 pre-service English teachers during their internships in Vietnam's Mekong Delta region, investigated challenges in transitioning from university theoretical training to high-school practical teaching. Anchored in constructivist theories (Vygotsky, 1978) and experiential learning frameworks, the study examined theory-practice discrepancies, short internship limitations, pedagogical mismatches (student-centered vs. teacher-centered), and classroom management challenges, and found experiential learning and mentorship to be important bridges. Seventeen participants in the study expressed frustration in applying university concepts such as International Phonetic Alphabet (IPA) pronunciation, pragmatics, and group work in exam-driven contexts that prioritize rote memorization. Also, the study found that the two-month internship duration proved insufficient for acclimatization, rapport-building, and strategy refinement. Classroom management challenges including noise, disruption, and homeroom duties were addressed through mentor guidance via silence techniques and behavior contracts.

The study also established that experiential opportunities and structured mentorship are essential for developing confidence, resilience, and adaptive competence. This study was anchored on Vygotsky's Socio-Constructivism Theory (1978) which is similar to the present study. However, critical gaps existed relative to this present study, which included the use of one research methodology, the small population, its pre-service teacher focus and concentration on Vietnamese English teachers, creating gaps in location, participant type (in-service), and subject applicability (CSL in Kenya's JS). Furthermore, the study by Thinh had a small sample (n=20). In addition, the study by Thinh was done in the rural Mekong Delta, unlike the present study which was carried out in Nairobi; it was also a qualitative-only study, which implies its

findings lacked the requisite vigor to inform public policy. This study addressed these gaps through an empirical assessment of the influence of in-service EPD modalities (structured educator workshops, educator academic upgrading, educator development in reflective practice sessions, educator development in peer mentoring initiatives) on CSL implementation in Nairobi JS, using a mixed-methods approach, a larger population (n=872 and a bigger sample size (n=104), incorporating urban mediators like institutional support and community partnerships.

Anggraini (2019) conducted a qualitative exploratory study examining how in-service teacher training can be made more effective through the workshop modality, drawing on interviews and existing literature within the Indonesian education context. Anggraini conceptualized teacher-training workshops as a flexible and widely adopted professional development strategy grounded in adult and experiential learning principles. According to the study, the effectiveness of workshops depended on careful planning across three stages: pre-workshop preparation, including having clear objectives and evaluation of the target audience; participatory and interactive content delivery during the workshop; and post-workshop follow-up and evaluation to assess impact. The effectiveness of workshops required having competency-focused content, relevant content, transactional teaching strategies, and systematic analyses. However, the study had some gaps in that it treated educator-training generically and failed to engage with specialized pedagogies such as CSL; it was also not situated within a major curriculum reform context. The study lacked depth of implementation and viewed professional development from a narrow perspective. Its narrow focus on workshop design, reliance on interviews, and limited integration of digital tools constrained its applicability to complex, implementation-driven reforms like Kenya's CBC, thereby revealing conceptual, contextual, and methodological gaps. This CSL-focused study addressed these gaps by filling the conceptual gap, specifically examining EPD for CSL to improve on the generic educator

training focus by Anggraini. This study also filled the gaps in Anggraini's study by empirically testing a comprehensive, multi-component EPD model, using a mixed-methods design, and integrating digital and practical CSL realities, therefore providing contextualized, systems-level evidence beyond workshop-focused, exploratory training studies.

Ajani (2023) examined the integration of experiential learning theory into teachers' professional development (PD) to enhance classroom practices among economics teachers in Nigerian high schools using a qualitative interpretive paradigm that included pre/post-workshop observations, a 3-day experiential learning workshop, and focus group interviews analyzed thematically. In order to improve pedagogical content knowledge, the study focused on concrete experiences, reflection, abstract conceptualization, and active experimentation, based on Kolb's (1984) cyclical model. According to the study, via collaboration and feedback, experiential professional development promotes better lesson planning, resource design, inclusive practices, and learner engagement. A model of experientially designed professional development with iterative reflections was proposed by Ajani (2023) as a result of teachers reporting their visions and appreciation of practical adaptations for diverse learners were transformed. Although this study was based on Kolb's (1984) Cyclical model which the present study is using as a supporting theory, Ajani's study had gaps which included being subject-specific (economics-only) in a Nigerian context. The current study addressed these gaps by focusing on CSL an integrated learning area across the curriculum as a whole school approach, embedded in LSE in public JS in NCC, Kenya. Additionally, Ajani's study was on high schools, while the present study was delimited to JS level of education. Furthermore, the current study extended Ajani's model by applying Vygotsky, Brunner and Kolb's theories to CSL-specific EPD in Nairobi's public JS, generating comprehensive insights on EPD→CSL implementation while addressing the CBC's community engagement requirements.

Flora (2025) examined the shortcomings of Teaching Practice Phase One (TP1) in Kenya's Bachelor of Education (B.Ed.) program during Year 2 using a desk review and synthesis of current research, policy documents, and comparative frameworks. The study focused on fragmented supervision, unstructured mentorship, and low community involvement. A transformative reform paradigm that incorporates mentorship and CSL as an essential component was proposed by Flora (2025). Based on Kolb's Experiential Learning Model and Vygotsky's Sociocultural Theory, the study promoted context-sensitive methods in line with Kenya's CBC by drawing on international best practices from Tanzania's School-Based In-Service Teacher Training, Singapore's Instructional Mentoring Program, and New Zealand's Educative Mentoring. The study focused on analyzing TP1's present implementation, drawing lessons from global models, and developing a framework that prioritized reflective practice, stakeholder involvement, and digital tools for professional development. According to the study, TP1's developmental potential was undermined by its continued underutilization, which is typified by passive observation, uneven mentoring, and inadequate university-school ties (Flora, 2025). Global models have shown that CSL integration and structured mentoring promote professional identity, civic responsibility, and pedagogical ability.

However, the study by Flora (2025) was conceptual and policy-focused, was qualitative and it lacked empirical evaluation of how EPD affected CSL outcomes like project quality or experiential learning. Flora’s study also failed to take into consideration EPD programs such as structured educator workshops, educator development in reflective practice sessions, or educator development in peer mentoring in urban JS environments; instead, it concentrated on pre-service TP1 teacher preparation, and not in-service EPD. Also, the study focused on all B.Ed. teachers in the universities. So as to fill in the identified knowledge gaps, this study focused on the current JS educators in Nairobi who had undergone pre-service and had been teaching for at least one term, employed a mixed-methods approach using surveys and

structured interviews to objectively examine the complex impact of EPD in Nairobi's JS CSL. This study extended Flora's pre-service focus to useful, post-implementation reforms by offering detailed, data-driven insights into in-service educator capacity-building.

Dingili (2024) examined the barriers to successful parental involvement in Kenya's CBC implementation using a mixed-methods approach that included document analysis of empirical articles and deductive thematic coding supported by semi-structured interviews with curriculum designers. With implications for the implementation of CSL in senior schools in 2026, the study brought to light issues with stakeholder attitudes, resource mobilization, and awareness. The study suggested the Transmission (Knowledge transfer) -Transactional (active engagement)-Reflection (critical analysis) model to reduce these obstacles, focusing on knowledge development, practical application, and reflective integration for CSL, based on the framework by Syomwene et al. (2017) for curriculum implementation. Moreover, Dingili (2024) established insufficient sensitization due to disinformation in the media and delayed communication, a lack of resources (such as time, money, and educational materials), and unfavorable attitudes resulting from opposition to paradigm shifts, and from teacher-centered to learner-centered approaches. Additionally, curriculum designers highlighted CSL's potential to promote citizenship, entrepreneurship, and life skills while acknowledging these challenges, especially among illiterate or persons living in remote regions.

The paradigm presents CSL as a practical approach to close the theory-practice gaps by promoting transmission for content equipping, transaction for community application, and reflection for value synthesis. The parent-centric viewpoint, which ignores EPD's function in preparing educators to support parental-community liaisons for CSL, is one of Dingili's (2024) study's significant gaps in the context of this present study. There was no empirical evaluation of EPD factors (such as peer mentoring) on CSL outcomes like project quality, and the study is still prospective. For JS contexts, urban-specific factors like Nairobi's varied community

environments or parental views were not experimentally examined. Through a focus on EPD using empirical hypothesis testing of quantitative and qualitative data from Nairobi's JS educators and education stakeholders, this study addressed the gaps in the study by Dingili (2024). In order to provide urban-empirical extensions to Dingili's more general CBC concerns, the present study examined the effects of parental engagement and gave focused strategies like workshops for sensitization and resource optimization.

Cheruiyot (2024) investigated obstacles to the implementation of Kenya's CBC in Grades 4-6 using a qualitative methodology that included classroom observations in JS, extensive literature reviews, surveys, and stakeholder interviews analyzed via thematic content analysis. In order to align CBC with 21st-century competencies like critical thinking and digital literacy, the study evaluated infrastructure deficiencies, stakeholder attitudes, teacher preparation adequacy, and resource availability. The study found that teacher preparation for learner-centered pedagogies for the transition from the knowledge-based rote-learning 8-4-4 system of education to the skills-based 2-6-3-3-3 CBE system were inadequate. Rural areas are disproportionately impacted by infrastructural deficiencies such as unreliable internet and insufficient classroom space, as well as resource shortages such as textbooks and digital tools. Unfamiliarity and outcome concerns were the main causes of stakeholder resistance, and comparisons between countries and regions such as Rwanda and Uganda, revealed similar obstacles. The study recommended increased professional development, engagement strategies, resource allocation, and infrastructure investments. However, the intended effects of EPD modalities such as workshops and reflective practices on CSL outcomes like project quality and experiential learning were not examined. The study focused on the general obstacles facing the implementation of CBC in Upper Primary and JS which may have distorted the reality of the challenges faced by JS specifically. Cheruiyot's study failed to focus on CSL implementation, instead, it examined all the learning areas. This study sought to address the

gaps in Cheruiyot (2024) by focusing on JS educators, examining the intended effects of EPD modalities on CSL outcomes, and using a mixed-methods approach so as to inform policy and generate actionable insights beyond general CBC-CBE challenges.

Through a conceptual review synthesizing literature on experiential (Dewey, Kolb) and sociocultural theories (Vygotsky), African communalism such as the principles of Ubuntu and Harambee, and policy documents like, KICD 2017 and ROK 2020, Ngwacho (2024) explored the management and re-tooling of CSL as a CBC strategy for sustainable development in developing nations, with an emphasis on Kenya's Vision 2030. The theoretical underpinnings of the concept, its tenets, advantages, phases of implementation, project sources, and evaluation in educator education were all covered in the discourse. According to the study, CSL holds enormous potential to improve employability, with a pilot study showing a higher employment likelihood, as well as an increase in entrepreneurship boost. Also, CSL bridges the theory-practice gaps, fosters core competencies (citizenship, entrepreneurship, self-efficacy), and promotes societal equity.

Academic rigor, learner goals, structured placements, reflection, and educator re-tooling were all emphasized in the principles. Problem identification, planning, execution, reporting, and reflection were all part of implementation; progressive, useful techniques such as portfolios, exhibitions and journals were used for assessment. The study recommended promotion of partnerships, grants for research, consortia for CSL support, and practical integration in pre-service training. The broad conceptual focus on pre-service and higher education without empirical testing of the effects of in-service EPD in the JS curriculum reforms contexts was one of the study's shortcomings. There was no hypothesis-driven analysis of the effects of EPD variables like development in educator reflective practices, and development in educator peer mentoring on CSL outcomes such as, experiential learning, development of essential skills, social responsibility and project quality. This study filled these

gaps by examining the influence of EPD on educators who are already in the field implementing CSL, and provided localized data to operationalize Ngwacho's re-tooling recommendations for CBC-CBE efficacy using hypothesis testing to empirically examine development in educator's reflective practice behavior and peer mentoring influence on implementation of CSL in Nairobi's public JS.

2.3.2. Educator Academic Upgrading Influence on the Implementation of Community Service-Learning

Through a qualitative descriptive case study, Andrian et al. (2025) examined a Global and Local Education Network International Service-Learning (GloCal ISL) initiative implemented in Juazeiro, Northeast Brazil. The study focused on the learning outcomes of an Italian university student facilitator as well as psychoeducational meetings given to in-service teachers and parents in a socially vulnerable community. The study, which used semi-structured questionnaires, interviews, participant observation, and document analysis, discovered that teachers and parents valued the intervention's ability to translate scientific knowledge into useful advice and the ethical, relational aspect of "care." With an emphasis on contextual immersion, language proficiency, and contextualized education, the students' learning was found to be transformative and established ISL as a "third space" for intercultural and ethical teacher preparation. Despite its merits, the study's modest scale, reliance on a single, time-bound intervention, lack of attention to systemic professional development, curricular integration, or mediating institutional elements are its limitations. By examining a structured, multi-component EPD framework and its impact on the implementation of CSL within Kenya's CBC-CBE, this Nairobi study, used mixed-methods to fill these gaps and produced scalable, policy-relevant evidence.

Employing a conceptual study synthesizing literature on teacher professional development, educational quality reforms including United Arab Emirates (UAE)'s National

Agenda 2021, Education 2020 strategy, teacher licensure, and entrepreneurship education, Abdallah and Abdallah (2025), explored the intersection of teacher development, quality education delivery, and entrepreneurship in fostering academic excellence. The study explored how teacher training improves effectiveness, student outcomes, educational standards, employability, and learning experiences while connecting high-quality education to critical thinking, creativity, and job market readiness, with a focus on UAE initiatives, such as smart learning programs and inclusive policies. The study found that teacher professional development plays a critical role in boosting student engagement and outcomes, fostering diversity and equity, and refining pedagogy through individualized, technology-integrated methods. Good education prepares students for self-sustaining employment and wealth creation by fostering entrepreneurial mindsets, problem-solving abilities, and practical skills. Lack of resources, opposition to change, and insufficient career possibilities were ranked among the challenges teachers faced. Abdallah and Abdallah (2025) recommends sustained training, resource allocation, stakeholder collaboration, and entrepreneurial integration through project-based learning. The UAE-centric conceptual focus on general teacher development and entrepreneurship without empirical CSL-specific analysis or CBC alignment is one of the study's weaknesses. Further, the study's location is UAE and there is no hypothesis testing connecting EPD to CSL outcomes like experiential learning, social responsibility and project quality. Through the application of Abdallah and Abdallah (2025) insights to CBC's experiential, community-engaged CSL for localized, civic-entrepreneurial reforms, this study filled the gaps identified in Abdallah and Abdallah (2025) UAE study by empirically testing EPD's targeted influence on CSL in Nairobi's public JS through the study's hypotheses.

Turner (2024) conducted a narrative literature review that synthesized existing research on adult learning, transformative learning (Mezirow 1991/1998; Cranton 2016), and critical thinking models (Brookfield 1987/2012; Ennis 1987/2016; Halpern 1998; King & Kitchener

1994; Lipman 1988), alongside K–12 teacher professional development. The study distinguished between reflection and critical reflection and defined critical thinking as reflective, assumption-challenging processes (Dewey 1910; Paul & Elder 2009). The study also established that assumption examination (Brookfield), taxonomies/dispositions (Ennis), criteria-based judgment (Lipman), structured transfer (Halpern), and stage-based reflective judgment (King & Kitchener) were important approaches. The gap in the study was mainly due to it using secondary data, and being U.S.-centric, with an emphasis on generic critical thinking that is not linked to any form of academic upgrading. In order to address these research gaps, this study collected primary data and the context was Nairobi-Kenya, extending Turner's techniques to CSL's experiential learning for contextually appropriate, civic-oriented reforms.

Nair (2025), employing a mixed-methods experimental design with a single-group pretest-posttest time-series quantitative component (using Cornell Critical Thinking Test-Level Z) and qualitative data from daily feedback/post-surveys analyzed via thematic/theory/data triangulation, investigated the efficacy of a strength-based program rooted in positive psychology to enhance critical thinking skills among 50 second-year B.Ed. teacher-trainees in India. Grounded in Values in Action Inventory (VIA) for strength identification and Positive Emotions, Engagement, Relationships, Meaning, and Accomplishment (PERMA) model (Seligman, 2011; Nair, 2025), the 15-day intervention integrated character strengths with critical thinking subcomponents (induction, deduction). The study revealed significant improvements from using strength-based positive psychology tools to enhance critical thinking skills: paired t-tests ($p < 0.001$ across subcomponents/composite scores), large effect sizes (Cohen's $d = 5.491$), repeated measures of Analysis of Variance (ANOVA) ($F = 1507.707$, partial $\eta^2 = 0.969$), and Interrupted Time Series (ITS) regression confirming intervention impact. Qualitative themes highlighted self-awareness, purposeful strength use, practical application, and program satisfaction, converging with quantitative gains via triangulation.

Nonetheless, the study had gaps that included a small sample size (n=50), the Indian pre-service focus on general/academic critical thinking without experiential learning application or CSL alignment. Consequently, this study addressed these gaps by using a larger sample size (n=104), collecting data from four different sources (JS educators, HO1s, Sub-County QASOs, and the CDEs. The study examined EPD's-CSL targeted influence in Nairobi public JS, extending Nair's positive psychology approach to CBC-CBE's civic-oriented CSL for context-specific educator reforms.

Through a qualitative case study methodology involving partnerships with Ugandan institutions (Luigi Giussani Institute of Higher Education, Uganda National Examinations Board, Teacher Education division), D'Agostino (2023) investigated assessment-driven reform to enhance Higher Order Thinking Skills (HOTS) on national exams and teacher education in Uganda. The study looked at systemic capacity gaps, policy prioritization factors, such as transnational influence, leadership, and indicators, and implementation strategies that combined structural examination changes with teacher capacity strengthening in the context of rote-dominant instruction reinforced by low-rigor, high-stakes exams. The study found that capacity deficiencies, such as inadequate teacher preparation for HOTS pedagogy, resulted in persistent rote concentration. Strong lobbying, reliable data, and alignment with CBC changes led to the prioritizing of reform. Harmonized exam rigor elevation and teacher training were promising approaches, but resource scarcity and political opposition remained obstacles. With strong capacity-building, the strategy demonstrated the potential to encourage HOTS training through "*backwash*" effects, where limited priority is placed on matters not closely aligned with the demands of exams.

The use of one methodology, the study's location and the concentration on secondary-level exams were the knowledge gaps in this study. There was also no investigation of urban mediators like attitudes and parental engagement. The current study addressed these gaps by

using a mixed methods research approach, the focus was on in-service training of JS educators in Nairobi-Kenya, and not the general teacher education. The study also examined other ways of assessing learning outcomes, such as project quality. By investigating EPD's effect on the implementation of CSL in public JS in NCC, this study extended assessment-driven insights to CBE's experiential, civic CSL for localized educator reforms.

Odhiambo (2021) examined teacher education across levels (Early Childhood Development Education (ECDE), primary P1/diploma, secondary diploma/degree, in-service TPD) and highlighted its role in fostering 21st-century skills (critical thinking, collaboration) amid global/universal education goals through a conceptual review synthesizing literature on teacher education structures, successes, challenges, and policy needs in Kenya. The study established a need for raising primary and diploma standards, policy-anchored TPD, such as Centre for Mathematics, Science and Technology Education in Africa (CEMASTEA) ICT integration, and supported in-service programs that improve pedagogy and technology uptake. However, there were challenges in its operationalization, including inadequate funding such as ignored ECDE and scarce ICT resources, understaffed and unskilled teachers, brief teaching practice periods, and inappropriate curricula that restrict practical skills and Pedagogical Content Knowledge (PCK). Odhiambo (2021) recommends enactment of policies for technology integration, longer practicums (borrowed from Finland and Singapore), and better terms and incentives for motivation and retention. This study’s gaps, included its wide delimitation (ECDE, primary P1/diploma, secondary diploma/degree, in-service TPD) and lack of empirical CSL-TPD/EPD specific research. Additionally, the study did not undertake any empirical testing to correlate TPD/EPD to CSL outcomes such as experiential learning, social responsibility and project quality. By applying Odhiambo's TPD insights to CBC's experiential CSL for 21st-century civic-competency reforms, this research sought to resolve these

limitations by delimiting the study to only the public JS level and quantitatively assessing EPD's targeted CSL influence in Nairobi's public JS.

2.3.3. Influence of Educator Reflective Practices on the Implementation of Community Service-Learning

Suphasri and Chinokul (2021) examined the development, application, challenges, and considerations of reflective practice in teacher education through a conceptual review of reflective practice literature (such as by Dewey 1933; Schön 1983; Korthagen 2017; Farrell 2015/2019), highlighting its role in promoting pre-service teachers' professional identity and quality in Thailand. The study tracked paradigm changes from technical "reflection-as-repair" (Dewey/Schön) to comprehensive meaning-oriented methods that address fundamental characteristics (beliefs, emotions). The study found that frameworks including Gibbs' (1988) cyclical stages, Korthagen's onion model (2005), and Farrell's multi-level (2015), helped processes evolve. However, challenges faced included superficial journaling, seclusion, practicum stress, and assessment pressures that prompted strategic thinking. The study by Suphasri and Chinokul (2021) recommended scaffolded instruction through journals and peer dialogue, technology integration via videos and social media for asynchronous sharing, and judicious practical application to prevent counter-productivity. However, this study's gaps included its pre-service and general focus without in-service EPD relation to CSL. By extending Suphasri and Chinokul's frameworks to CBC's experiential CSL for improved teacher facilitation and reflection, this study sought to address these gaps by focusing on in-service training and empirically testing development in educators' reflective practices influence on CSL in Nairobi's public JS via hypothesis (Ho3).

Natsiou and Tsitouridou (2025) investigated conceptualizations of the social dimension of reflection using a mixed systematic review and grounded theory literature review methodology on introductory sections of 98 peer-reviewed empirical papers (1997–2022) that

focused on peer-mediated reflection in initial teacher education. The study found that sociality is both inherent ("by nature," according to definitions that attribute social traits or social learning theories like constructivism, n=43) and strategic ("by choice," according to methodological enhancement via peer activities that stimulate emotional/cognitive engagement, n=70; coexisting in 28 papers). Evolution coincided with technological advancements (Web 2.0 post-2004 permitting mediated interaction) and societal changes (social constructivism post-1990s). Implicit acceptance of the flexibility of reflection resolves inconsistencies (such as impact variability and theoretical gaps). The use of secondary data, a small sample size (n=70) and pre-service emphasis without in-service EPD connection to CSL or CBE-CBC empiricism were the gaps in this study. In order to address these, this study used a larger sample size (n=104), and collected primary data from four different groups of participants extending Natsiou and Tsitouridou's fluidity to CBE-CBC's experiential, peer/community CSL for adaptive educator reforms and empirically tested the influence of in-service EPD programs such as educator reflective practice behaviors and educator peer mentoring on CSL in Nairobi's public JS via this research's hypotheses (Ho3 and Ho4).

Using a conceptual discussion critiquing dominant reflective models (such as Schön 1983/1987; Kolb 1984; Gibbs 1988; Brookfield 1995/2017) via Scottish teacher education scenarios (ability grouping, behavior management), Oates and Mynott (2025), proposed reframing reflective practice as more-than-human centered to decenter the practitioner and address performative, superficial "fiction" in student-teacher reflections. According to the study, human-centric models have some drawbacks, such as cyclical closure that limits disorganization, individualism that ignores sociocultural settings, performativity under assessment/mentorship power dynamics, and foreclosure of critique/autonomous activity. There were fictionalized reports resulting from scenarios that demonstrated challenges such as conformity risks and theory-practice inconsistencies. The study proposed connectivism-

inspired network model (Siemens 2005; Downes 2007) that combines physical, conceptual (organizational/ontological), and material (human/non-human) components for multifaceted, genuine investigation as an alternative. The study's pre-service focus and Scottish focus were some of the gaps in knowledge in this study. This study filled these gaps by using a mixed-methods research approach to empirically test in-service EPD's more-than-human reflective impact on CSL in public JS in NCC and extended Oates and Mynott's decentering for comprehensive educator education reforms.

Using classic scholars like Dewey, Schön, Brookfield, and Larrivee, Machost and Stains (2023) performed a conceptual synthesis of literature to clarify the theory, goals, and methods of reflective practice in education. The authors structure reflection across timing, depth, and topic dimensions using an integrative review approach. To facilitate practitioner adoption, Machost and Stains suggest useful scaffolds including Gibbs' Reflective Cycle and the 5Rs model. The study identifies institutional and human obstacles to successful implementation while highlighting reflection as a crucial mechanism for educator growth, enabling adaptation, ethical awareness, professional confidence, and improved teacher-student connections. Nevertheless, the study was non-empirical, did not look at reflective practice within an organized EPD framework or a required curriculum change, and it lacked contextualization to community-engaged pedagogies like CSL. Additionally, it did not examine the impact of reflection on implementation outcomes or teaching. By empirically testing reflective practice as a fundamental EPD component within Kenya's CBC framework, contextualizing it to CSL pedagogy, looking at systemic mediating factors, and operationalizing reflection as a quantifiable variable influencing curriculum implementation fidelity and pedagogical change, the Nairobi study filled these gaps and contributed to existing literature on the topic.

Oduro et al. (2022) conducted a qualitative phenomenological study to examine tutors' understanding and use of reflective practice in a Ghanaian College of Education. Using expert purposive sampling, the authors interviewed four experienced teacher educators through semi-structured interviews and analyzed the data thematically. The study established that tutors had a clear, practice-oriented knowledge of reflective practice and, for the most part, saw it as a potent instrument for strengthening learner comprehension, exposing pedagogical flaws, and improving lesson delivery. The majority of participants reported reflecting before, to, during, and following instruction, and they all agreed that reflective practice is a long-term strategy for professional development and raising educational standards. However, despite their significant contributions, the study by Oduro et al. had knowledge gaps that included its sample size (n=4), use of one research approach, treatment of reflective practice in isolation from a more comprehensive professional development framework, its focus on college-level tutors and its reliance on self-reported data without methodological triangulation. Furthermore, it did not empirically connect reflection to quantifiable implementation outcomes or place it within the framework of a national curriculum reform or a unique pedagogy like CSL. The present study filled these gaps and added to the existing body of literature by employing a mixed-methods approach, using a larger sample size (n=104) collecting data from different respondents to enable data triangulation, analyzing reflective practice among Nairobi's public JS educators as part of a multi-component EPD model, contextualizing reflection within CSL under Kenya's CBC, and empirically testing its impact on CSL curriculum implementation fidelity and outcomes.

Anjeche et al. (2025) examined the impact of school project implementation practices on CSL outcomes among grade-7 learners in 69 public primary schools in Nairobi County, Kenya, using an ex-post-facto research design with ordered logistic regression and focus group discussions. The study examined practices such as combined learner-community

implementation and reflection, while controlling for school and teacher variables, using a sample of 69 teachers and 32 students. The survey revealed that cleaning (55%), education sessions (18%), and tree planting (8%) addressed common problems, including inadequate rubbish disposal (52%). According to the CSL outcomes, learners met expectations in citizenship and explained the significance of CSL, but they fell short in critical thinking, creativity, self-efficacy, and digital literacy. Even when controlling variables were taken into account, regression models demonstrated the considerable positive benefits of tripartite reflection (learners, teachers, and community) and combined learner-community implementation ($p < 0.05$ across models) on meaningful service delivery. Qualitative insights revealed resource constraints that were addressed creatively, encouraging critical thinking and problem-solving. However, the study's gaps included, the small target population, use of only educators and learners as respondents, the sample size and the period of study. Although the role of urban primary mediators was examined, the role of EPD in educator facilitation and reflection for JS civic competences was not examined. The current study filled these gaps by employing a mixed-methods approach, used a larger population (n=872) and sample size (n=104), collected data from different respondents (JS educators, HOIs, QASOs, CDEs) and analyzed reflective practice among Nairobi's public JS educators.

Kairu et al. (2025) explored experiences and perceptions in Kenyan teacher education through a qualitative study using narratives from pre-service secondary teachers' daily diaries and focus groups on a Context-Based Structured Reflective Practice (CBSRP) model (combining individual written reflections with peer discussions). The study established CBSRP as being transformative for professional growth; it enhanced self-awareness, critical thinking/problem-solving, confidence, theory-practice linkage, and teaching skills, such as planning and content delivery. Participants viewed it as insightful/eye-opening, fostering intentionality and adaptability. Peer elements promoted collaboration, feedback, mentorship,

teamwork, and professional identity. The themes identified included value for growth (transformative, confidence-building); enhanced reflection (analytical skills, self-awareness); and peer learning/guidance (sharing experiences/solutions). The gaps in the study included the pre-service focus on general reflection without in-service EPD linkage to CSL or JS empiricism and urban mediators were unexplored. This proposed study addressed these gaps by focusing on educators' in-service and by empirically testing EPD's reflective (individual/peer) influence on CSL in Nairobi's public JS via hypotheses and extending CBSRP's collaborative insights to CBC's experiential CSL for educator facilitation/networking reforms.

2.3.4. Influence of Educator Peer Mentoring on the Implementation of Community Service-Learning

Allela et al. (2020) examined the effectiveness of multimodal microlearning, incorporating mobile apps, offline Moodle access, e-portfolios, and WhatsApp communities of practice for school-based professional development among junior secondary teachers. Their mixed-methods evaluation of the Integrated In-Service Teacher Training pilot at Freetown Teachers College in Sierra Leone included baseline surveys of 130 teachers, workshops with 44 participants, and rollout assessments. Findings revealed high readiness, with 95 percent expressing ICT eagerness and 77 percent owning smartphones, though infrastructure remained limited. Post-seminar evaluations showed strong satisfaction; 76.9 percent approved content quality and 100 percent found it relevant, with face-to-face sessions demystifying microlearning and collaboration. WhatsApp proved most popular for discussions and sharing, surpassing Moodle and e-portfolios, but hampered by access issues and forgotten credentials. Challenges encompassed connectivity costs, motivation tied to accreditation needs, and time constraints. The benefits were found to be flexibility, self-paced learning, collaboration, and reduced cognitive load. The study's gaps were primarily in its focus on general microlearning in Sierra Leone, lacking other types of microlearning like peer mentoring which is rooted in

Ubuntu, the foundational approach in Kenya's CBC-CSL framework. This research filled these gaps by testing multimodal professional development's impact on CSL in Nairobi's public JS, expanding educator development in peer mentoring and CSL learners' experiential learning in JS in NCC.

Namatende-Sakwa et al. (2025) conducted a mixed-methods pilot evaluation of the TeachWell Unlocking Playful Learning Project's Cohort 2 Teacher Continuous Professional Development (TCCD) training for Grades 4–6 in 28 primary schools across Turkana host communities and Dadaab refugee camps. Their assessment included 28 classroom observations, 16 teacher surveys, 28 key informant interviews with teachers and instructional leaders, and 28 learners focus group discussions involving 168 participants to measure uptake of pedagogical enhancements under the CBC. The study found strong adoption of structured practices such as planning and materials preparation, along with widespread Universal Design for Learning implementation; 93.8% of teachers reported confidence and ease in fostering inclusive engagement. Teachers also showed high enthusiasm for Learning through Play approaches, but actual classroom integration of games and storytelling remained limited at between 25 and 29%. Social-emotional learning proved the weakest area, with only 56.3% teacher confidence and particularly low uptake among refugees. Learners reported overwhelmingly positive experiences, describing the approaches as joyful and transformative, especially in refugee contexts. Communities of Practice emerged as valuable for peer support confirming that context-sensitive training is crucial for teachers to confidently adopt and integrate pedagogical enhancements, thereby ensuring lasting improvements in classroom practice.

Challenges included the complexity of social-emotional learning, time constraints in large classes, limited access to materials and digital resources, and socio-cultural norms around gendered play. This study revealed gaps in its delimitation of primary school, the small

population and refugee-host focus, lacking urban JS empiricism or direct links to CSL outcomes. The present research addressed these limitations and knowledge gaps by studying the JS level of education, a larger locale (NCC), using a larger target population for schools (n=213) and empirically testing the impact of EPD in unlocking playful learning and inclusive components on implementation of CSL in NCC public JS, extending TeachWell's enhancements to the CBC's all-inclusive principle supporting reforms aligned with both refugee and host community needs.

In an investigation of peer mentorship as a factor in tutor professional growth outside of formal training, Wango et al. (2025) carried out a qualitative case study across four teacher training colleges in Kenya, Uganda, and Tanzania. A sample of 117 purposively sampled teacher educators was used in the study, which was guided by a socio-constructivist paradigm. Interviews, observations, and document analysis were all used, and the data was examined thematically. In addition to identifying inadequacies in formal mentor preparation, the study found that peer mentorship improved tutors' pedagogical abilities, confidence, job happiness, collaboration, and psychosocial health, with positive spillover effects on student teachers and career advancement. Although this study used the socio-constructivist paradigm, the study's limitations included its exclusive focus on tutors at the college level, its qualitative only approach, and its lack of affiliation with a particular pedagogy or curriculum reform like CSL. Additionally, it did not address systemic limitations in public schools or connect mentorship to quantifiable learner outcomes; instead, it looked at mentorship in isolation from other EPD components. The current study bridged these gaps by using the convergent mixed-methods approach, focused on JS educators who have completed their pre-service training and it was content-specific (CSL). The study contributed to the existing body of studies on the phenomenon under study by investigating peer mentorship among in-service JS educators as part of a multi-component EPD framework, contextualizing mentorship for implementation of

CSL under Kenya's CBC, and empirically testing its influence on curriculum enactment and learner competency development within real-world public-school systems.

Kisangau et al. (2025) investigated out-of-field teaching challenges and professional development needs under Competency-Based Education through a qualitative interpretive approach guided by the Iceberg Model. The study involved semi-structured interviews, lesson observations, and document analysis across three public Junior Secondary Schools in Kilifi County, Kenya, with nine participants comprising three headteachers and six teachers. The research identified visible challenges as being subject expertise among 88.9 % of teachers, absent mentorship for 66.7 %, and inadequate pedagogical training for 66.7 % (Kisangau et al., 2025). The identified professional development needs included insufficient programs for 44.4 % of participants, and poor coordination for the same proportion. Hidden problems included lowered self-esteem and teacher isolation, both of which undermined effectiveness and retention. Classroom observations revealed mixed lesson delivery with weak learner engagement and adaptation. The study recommended structured mentorship, content-specific professional development, and collaborative professional communities. This study revealed Knowledge gaps through its very small sample size (n=9), methodology and rural Kilifi County focus, which lacked the urban Nairobi empiricism and direct connections to CSL outcomes. The present study addressed these limitations by using a larger target population (n=872), a larger sample size (n=104), used both quantitative and qualitative research methods and empirically tested the targeted influence of EPD on CSL implementation in Nairobi's public JS. Through focused analysis such as examining the role of peer mentoring sessions among educators in fostering CSL learners' experiential learning, this study extended Kisangau et al.'s insights on out-of-field teaching to the CBC's experiential CSL component, advancing urban teacher support reforms.

Orwenjo and Kanana (2018), in a qualitative case study using pre/post-workshop questionnaires, structured interviews, field observations, and document analysis during a pilot of Commonwealth of Learning's Open Resources for English Language Teaching (ORELT) in 50 Kenyan secondary schools, investigated challenges in adopting Open Educational Resources (OERs) guided by Zhao et al.'s (2002) Distance-Dependence Model. The study identified innovation-related issues including incompatibility with syllabus/activities, and inadequate content; innovator capacity/disposition barriers such as lack of OER awareness/ICT competencies, negative attitudes, and skill gaps in language pedagogy. The study also identified environmental constraints like inadequate ICT infrastructure, and absent administrative support as a challenge. Despite versatility in tools including print, DVD, and online delivery, uptake was hindered by exam-oriented culture, large classes and resource shortages. Although the benefits identified included improved engagement, practical skills, and learner-centered approaches, the study had knowledge gaps that included the use of qualitative only methodology, the context which was secondary schools and the subject under study was not project-based. The study also failed to perform any empirical hypothesis testing to link adoption of OERs to the identified benefits which include improved engagement, practical skills, and learner-centered approaches. This study bridged these limitations by using a mixed-methods approach to examine EPD's enhanced impact on CSL in Nairobi's public JS, extending Orwenjo and Kanana's adoption insights to CBC's experiential CSL.

2.4. Summary of the Literature Review and Knowledge Gaps

The literature reviewed underscores the importance of EPD in strengthening CSL implementation within competency-based curricula. Studies such as Thinh (2025), Anggraini (2019), and Ajani (2023) highlight the role of structured workshops and experiential learning in bridging theory-practice gaps, enhancing pedagogical competence, and fostering learner engagement. However, these studies are limited by small samples, qualitative-only

methodologies, and subject-specific or pre-service contexts, making their findings less generalizable to CSL in Kenya's Junior Schools (JS). Similarly, Flora (2025) and Dingili (2024) emphasize mentorship and parental involvement but remain conceptual or policy-focused, failing to empirically test EPD's impact on CSL outcomes. Cheruiyot (2024) and Ngwacho (2024) provide broader insights into CBC challenges and CSL's potential but lack hypothesis-driven analysis of EPD modalities such as reflective practice and peer mentoring. International studies like Andrian et al. (2025), Abdallah and Abdallah (2025), Turner (2024), and Nair (2025) further demonstrate the transformative potential of educator development, critical thinking, and academic upgrading, yet they are constrained by contextual differences, small-scale interventions, or conceptual orientations. The literature establishes EPD's potential but reveals persistent gaps in empirical rigor, methodological breadth, theoretical integration, and contextual relevance.

Empirical gaps are evident in the overreliance on qualitative or conceptual studies, small sample sizes, and limited measurement of CSL-specific outcomes such as project quality, experiential learning, and civic responsibility. For instance, Thinh (2025) relied on 20 participants, while Nair (2025) used 50 pre-service trainees, limiting generalizability. Flora (2025) and Suphasri and Chinokul (2021) remained conceptual, failing to empirically test EPD's influence. The present study addresses these gaps by employing a mixed-methods design with a larger sample, collecting data from multiple sources including JS educators, HOIs, Sub-County QASOs, and CDEs. Through triangulating surveys and structured interviews, the study empirically tests the influence of structured workshops, academic upgrading, reflective practice, and peer mentoring on CSL outcomes, thereby providing robust, policy-relevant evidence.

Methodological gaps arise from the reliance on single methods, lack of triangulation, and limited integration of digital realities. Anggraini (2019) focused narrowly on workshop

design using interviews, while Ajani (2023) employed qualitative interpretive paradigms without quantitative validation. Cheruiyot (2024) relied on thematic content analysis, and Turner (2024) synthesized secondary data without primary testing. These methodological limitations constrain the applicability of findings to complex, implementation-driven reforms like Kenya's CBC. The present study addresses these by adopting a multi-source, mixed-methods approach, integrating quantitative surveys with qualitative interviews, and incorporating digital realities of CSL implementation in Nairobi's JS. This methodological breadth ensures triangulation, enhances validity, and situates findings within the practical realities of urban schools.

Theoretical gaps are evident in the reliance on single frameworks and limited application to CSL-specific contexts. Ajani (2023) applied Kolb's experiential learning cycle but remained subject-specific, while Thinh (2025) used Vygotsky's socio-constructivism without integrating other theories. Suphasri and Chinokul (2021) and Natsiou and Tsitouridou (2025) emphasized reflection but lacked CSL alignment. Turner (2024) focused on critical thinking models but did not connect them to academic upgrading or CSL. These fragmented applications limit theoretical robustness. The present study addresses this by integrating Vygotsky's socio-constructivism, Bruner's scaffolding theory and Kolb's experiential learning cycle, and providing a comprehensive theoretical foundation tailored to CSL under CBC. This integration ensures that EPD modalities are examined through multiple lenses, capturing the complexity of experiential learning, reflective practice, and community engagement in Nairobi's JS.

Contextual gaps emerge from the dominance of studies situated outside Kenya or focused broadly on CBC without CSL-specific analysis. Thinh (2025) studied Vietnamese pre-service teachers, Anggraini (2019) examined Indonesian workshops, Ajani (2023) focused on Nigerian economics teachers, and Abdallah and Abdallah (2025) analyzed UAE teacher

development. Even Kenyan studies like Cheruiyot (2024) and Odhiambo (2021) addressed general CBC challenges without focusing on CSL-specific EPD. Few studies considered urban mediators such as institutional support, parental engagement, and community partnerships. The present study situates EPD within Nairobi's public JS, addressing urban-specific challenges such as resource disparities, parental attitudes, and diverse community environments. Nairobi's cosmopolitan nature and high density of JS schools make findings generalizable across Kenya, ensuring contextual relevance and policy applicability.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses the design, research approaches, and the overall methodology that guided the study. Additionally, information on the study's location, target population, sampling, explanation of the research instruments, the procedures for collecting and analyzing data, as well as the research ethics that were considered, was provided.

3.2. Locale of the Study

The location of this study was NCC, Kenya, the capital and the country's largest city. NCC is one out of the 47 counties in Kenya, and it is divided into seventeen sub-counties and eighty-five electoral wards. Nairobi is responsible for a range of portfolios often coordinated at the national level, including education, health, and major transport infrastructure. It serves as the administrative, policy-making, and regulatory hub for Kenya's education sector. As a multicultural African city, Nairobi is home to all the ethnicities that constitute Kenya and it also hosts a significant population of immigrants from other countries and cultures.

NCC was selected because of its relevant urban setting, which had a high and diverse population, heterogeneous demography, diverse socio-economic strata, and a high number of public JS. These characteristics made it an ideal location for examining the implementation of CSL in relation to educator professional development.

The survey was undertaken in all the seventeen sub-counties of NCC, ensuring comprehensive coverage of the county's diverse educational and community contexts. The map of NCC is presented in Appendix XIX so as to provide a visual representation of the area of study.

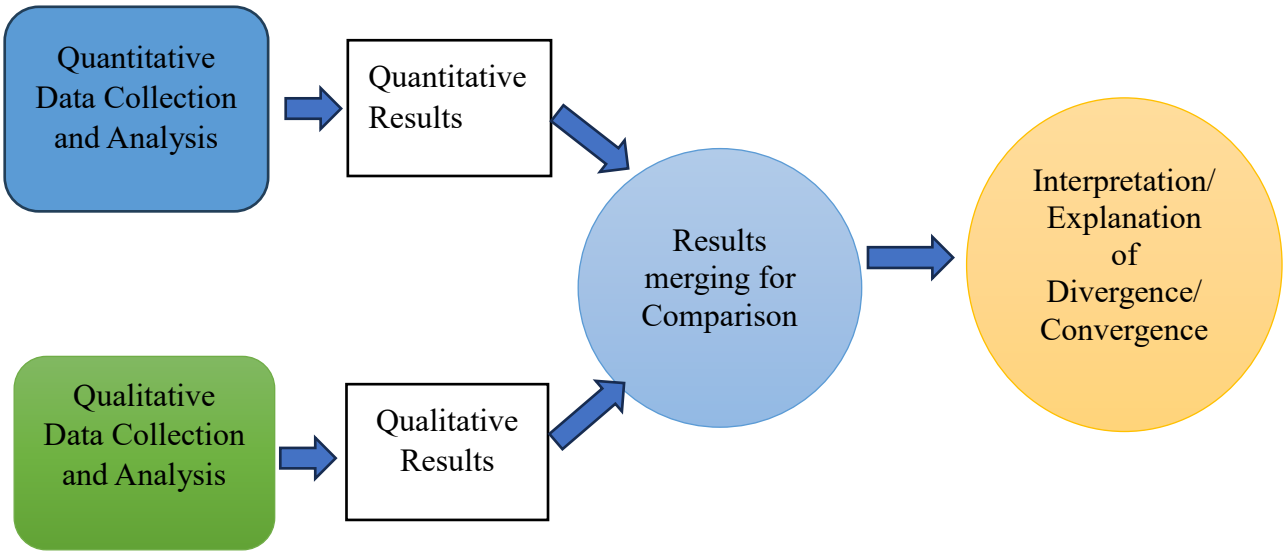
3.3. Research Design

This study used the convergent design under a mixed methods research approach (Creswell & Creswell, 2022). Both quantitative and qualitative methods were applied concurrently during the research process, with equal emphasis placed on each. The convergent design preserved the independence of data analysis for both streams of data, quantitative and qualitative, while incorporating their conclusions into the interpretation stage. This approach acknowledged the complexity and multifaceted nature of educational phenomena, recognizing that the influence of educator professional development and the implementation of CSL could not be fully understood through a single epistemological lens.

Additionally, following Kaushik and Walsh (2019), the mixed-methods approach supported multiple sources of data and collection methods, which were then triangulated to improve reliability, credibility, and comprehensiveness of the conclusions. The quantitative method employed a cross-sectional survey to collect numerical data at a particular point in time, while phenomenology was used to collect qualitative data, exploring the subjective experiences and meanings of participants, namely; CDEs, QASOs and HOIs.

Data collected using the two methods were kept and analyzed separately but merged during the interpretation stage. This strengthened the validity of the conclusions generated from the study's findings and ensured that the complementary strengths of both methods were maximized. By combining statistical evidence with lived experiences, the study provided a holistic understanding of how educator professional development influenced CSL implementation in public JS in NCC.

Figure 2: Convergent Mixed Methods Design



Source: ***Adapted from Creswell and Clark (2018)***

3.4. Target Population

ger population that met the criteria for the research investigation (Willie, 2022). The entities that the study aimed to investigate were called the target population. For this study, all JS educators and education officials involved in the implementation of CSL in public JS in NCC, Kenya, made up the target population. The target population consisted of four categories. Public JS in NCC had at least one teacher per grade for Grades 7, 8, and 9 across the 213 public JS domiciled in primary schools approved by Kenya's MOE, giving a total of 639 teachers. These educators were crucial to effective CSL implementation as they facilitated experiential learning, community engagement, and learner reflection.

All the approved 213 JS had one HOI, totaling 213 HOIs. The HOIs coordinated professional development activities, provided instructional leadership, and oversaw curriculum implementation, making them key informants on institutional support for CSL. NCC had 17 sub-counties, each with one QASO. QASOs were responsible for monitoring and ensuring that the quality of instruction and facilitation was maintained during CSL implementation. They played an oversight role in evaluating CSL delivery and educator preparedness.

All educational activities in the three education sub-regions in NCC were overseen by a CDE, who provided strategic leadership and policy interpretation at the county level. The total target population was therefore 639 teachers, 213 HOIs, 17 QASOs, and 3 CDEs, amounting to 872 individuals. This population was derived from NCC, a cosmopolitan county with diverse socio-economic and cultural environments implementing CSL at the JS level, providing a rich context for examining how educator professional development influenced CSL implementation across varied school environments.

3.5. Sample Size and Sampling Procedures

According to Kothari (2019), a sample refers to a smaller group chosen from a larger population to accurately reflect the population's characteristics. To select the research participants, this study used both probability and non-probability sampling techniques.

Public Junior Schools

The study targeted 213 public Junior Schools (JS) in Nairobi City County. Following Mugenda and Mugenda (2019), a sample size of 10% to 30% was considered reasonable for populations under 10,000. Thus, 22 schools (10%) were selected using proportional stratified random sampling, with sub-counties serving as strata to ensure geographic and socio-economic diversity. Within each stratum, simple random sampling was applied to give every school an equal chance of inclusion. This minimized bias and enhanced representativeness, ensuring findings reflected the broader population.

Junior School Educators

From the sampled schools, 64 JS educators (10%) were selected using criterion purposive sampling. Only teachers directly implementing CSL under LSE in Grades 7–9 were included. This deliberate selection ensured high-quality, targeted data from those most responsible for translating CSL objectives into classroom and community service. Their role

was central in facilitating experiential learning, community engagement, and learner reflection, making them indispensable to the study.

Heads of Institutions

All 22 HOIs from the sampled schools were included through census sampling. HOIs were critical informants due to their leadership role in coordinating EPD activities, overseeing curriculum implementation, and supporting CSL integration. Their perspectives provided institutional-level insights into how schools facilitate or constrain CSL practices.

Sub-County Quality Assurance and Standards Officers

The study included all 17 Sub-County QASOs through census sampling. As Creswell and Creswell (2021) note, total enumeration is suitable when the population is manageable. QASOs play a vital oversight role, monitoring instructional quality and teacher preparedness for CSL implementation. Their inclusion ensured accountability and quality assurance perspectives were captured.

County Director of Education

NCC has three CDEs overseeing sub-regions. Using criterion purposive sampling, one CDE was selected to provide strategic leadership and policy interpretation insights. This ensured county-level perspectives on systemic support structures for CSL were represented. The results of the sampling of the participants are shown in Table 1.

Table 1

Sampling Matrix

Category	Target Population	Sampling Technique	Actual Sample Size	Final Participants
Public JS	213	Stratified-random (by sub-county) + simple random	22 schools (10%)	22
JS Educators	639 educators	Criterion purposive sampling	64 educators (10%)	64
HOIs	213 HOIs	Census (all HOIs in sampled schools)	22 HOIs (10%)	22
Sub-County QASOs	17 QASOs	Census (total enumeration)	17QASOs (10%)	17
CDE	3 CDEs	Criterion purposive sampling	1CDE (30%)	1
Total	872	Mixed probability & non-probability	104	104

Source: ***Researcher (2026)***

This proportional allocation ensured all sub-counties are represented based on their size, enhancing the sample's representativeness. Therefore, the target population comprised of all 872 stakeholders in NCC'S public JS, including; educators, HOIs, QASOs, and the CDE. The accessible population was those available and willing to participate during the study period, narrowed through stratified simple random sampling, criterion purposive sampling and census sampling. The final sample size was 104 respondents: 64 JS educators, 22 HOIs, 17 Sub-county QASOs, and one CDE. This stratified mix ensured comprehensive perspectives across classroom practice, institutional leadership, quality assurance, and county-level policy oversight.

3.5.6. Inclusion and Exclusion Criteria

Inclusion Criteria

The study applied strict inclusion criteria to ensure data integrity and relevance. JS educators had to be actively teaching CSL in Grades 7, 8, or 9 within public JS in NCC and must have taught CSL for at least one full academic term. This guaranteed meaningful experience with CSL implementation. HOIs were required to be officially appointed leaders of

public primary schools hosting JS and must have served for at least one term, ensuring familiarity with curriculum leadership. Sub-County QASOs had to be officially deployed in one of the seventeen sub-counties with oversight responsibility for CBC implementation. The CDE had to be officially appointed in one of the three sub-regions, with strategic oversight of CBC and CSL. Each category was necessary to provide a holistic view of how EPD influences CSL, capturing classroom practice, institutional leadership, oversight, and county-level policy perspectives.

Exclusion Criteria

Private school educators, HOIs, or staff were excluded, as the study focused solely on public JS. Educators or HOIs with less than one academic term of CSL experience were excluded to avoid insufficient exposure. Additionally, any participant who did not provide informed consent was excluded.

3.6. Description of Research Instruments

This study collected primary data using questionnaires and semi-structured interview guides. A questionnaire is a research tool that has a series of questions that are arranged in a predetermined sequence and presented in written or typed format on one or more forms, (Kothari, 2004; Kalenywa, 2024). This study used one questionnaire to collect data from the JS CSL educators. An interview refers to the process of orally administering a questionnaire, (Mugenda and Mugenda, 2019). This study employed three interview guides to elicit comprehensive information from the CDEs, QASOs and the HOIs. Each instrument was aimed at capturing specific aspects of the relationship between EPD and CSL implementation, based on the conceptual framework.

3.6.1. Questionnaire for Educators

The structured questionnaire was used to collect quantitative data from JS educators regarding their participation in EPD activities and the implementation of CSL. It had eight sections. Section one had demographic information; educators' gender, age, academic qualification, subject specialization and teaching experience. Section two was on participation in continuous attendance of structured educator workshops to measure engagement in structured workshops, while section three collected data on educator academic upgrading. Section four asked questions related to development in educator reflective practices, while section five delved on educator development in peer mentoring. Section six had questions on CSL implementation and section seven asked about CSL Enabling Environment (Intervening Variable). Section eight had open-ended questions on factors that might influence the implementation of CSL in NCC.

For sections two to seven, close-ended questions constructed on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) were used to ensure consistency and ease of analysis, and ensure unbiased data collection and statistical analyses. Section eight of the questionnaire had four open-ended questions which obtained brief personal viewpoints from the respondents. The questionnaires were adapted from validated instruments used in previous studies on EPD and constructivist teaching readiness. The questionnaire as a tool was selected because of its relative cost-effectiveness and convenience in administering it to large, dispersed populations. This instrument is attached in Appendix VI in this dissertation.

To enhance inclusivity and accommodate participants who may be more comfortable expressing themselves in Kiswahili, a Kiswahili translation of the questionnaire was to be made available upon request. Participants were informed of this option prior to data collection. However, this request was not made in this study. For interviews, code-switching between

English, Kiswahili, and Sheng was permitted and encouraged, as noted in Section 3.10, to facilitate natural expression and authentic responses.

3.6.2. Semi-Structured Interview Guide for County Directors of Education

The CDE interview guide collected qualitative data and it had five sections. Section one obtained the preliminary information; CDE's gender, years of experience and the highest level of education. Section two addressed strategic vision for CSL and professional development, section three had information on structured educator workshops and training, while section four focused on academic qualifications and CSL quality. Section five delved into reflective practice and peer mentoring. This instrument is attached in Appendix IX in this dissertation.

3.6.3. Semi-Structured Interview Guide for Quality Assurance and Standards Officers

Qualitative data was sought from the sub-county QASOs using a semi-structured interview guide. This instrument had five sections. Section one gathered preliminary information; QASOs gender, years of experience and the number of JS under his/her supervision. Section two covered structured educator workshops, section three collected data on academic qualifications, while section four asked questions on reflective practice and peer mentoring networks across schools. Section five focused on CSL implementation quality, and delved into policy and recommendations. This instrument is attached in Appendix VIII in this dissertation.

3.6.4. Semi-Structured Interview Guide for Heads of Institutions

A semi-structured interview guide was used to collect qualitative data from the HOIs. This guide had open-ended questions to facilitate in-depth responses and discussions and it comprised of five sections. Section one collected preliminary information; HOIs gender, years of experience and the number of JS educators under his/her instructional leadership. Section two focused on influence of structured educator workshops to measure engagement in

structured educator workshops, section three collected data on educator academic upgrading, while section four sought information related to educator reflective practice sessions. Section five obtained information on educator peer mentoring and CSL implementation. This instrument is attached in Appendix VII in this dissertation.

For all qualitative data collection instruments, each guide incorporated relevant questions, with the interviews being face to face and private; the discussions which took about an hour, were carried out in the respondents' offices after obtaining consent from the respondents, and later transcribed for further analysis.

3.7. Validity, Pilot Testing, and Reliability of Research Instruments

3.7.1. Validity of the Research Instruments

Validity is defined as the extent to which an instrument accurately measures what it is intended to assess (Creswell & Creswell, 2022). According to Creswell and Clark (2018), using the convergent design, validity should be established through both quantitative and qualitative means for each data type.

In this study, two types of validity were addressed; face and content validity. Face validity refers to the extent to which a research instrument measures what it aims to measure on the surface (Cresswell, 2018). To achieve this, the researcher sought expert review from the supervisors and the department of research and evaluation at CUEA. The feedback given was used to refine the research instruments prior to collecting data for the main study. Content Validity ensured that the study adequately addressed the research questions. To establish content validity, the researcher examined the extent to which the tests represented the content outlined by the research questions and the hypotheses with the help of subject matter experts and the supervisors.

3.7.2. Pilot Testing of the Research Instruments

Pilot testing was conducted to refine the research instruments before the main study, ensuring validity, reliability, and feasibility. The pilot sample consisted of ten participants drawn from three public JS in NCC, which were excluded from the main study to avoid bias. The participants included six JS educators, three HOIs, and one CDE. These respondents were selected using criterion purposive sampling to ensure they matched the characteristics of the target population, namely educators and officials directly involved in CSL implementation. Questionnaires were administered to educators, while semi-structured interviews were conducted with HOIs and the CDE.

Reliability of the quantitative instruments was tested using Cronbach's Alpha, with results falling within the acceptable range of 0.70–0.90, confirming internal consistency. For qualitative instruments, credibility and dependability were ensured through peer debriefing, member checking, and triangulation. Based on pilot feedback, several refinements were made: ambiguous questionnaire items were reworded for clarity, sequencing of questions was adjusted to improve flow, and interview guides were streamlined to reduce redundancy and improve effectiveness. These changes enhanced clarity, reduced completion time, and improved the overall quality of data collection instruments, ensuring methodological rigor and credibility for the main study.

3.7.3. Reliability of Research Instruments

Reliability in research pertains to how consistent and stable the measurements are. A measurement or research instrument is considered reliable if it is consistent, stable, and dependable, (Srinivasan & Lohith, 2017).

3.7.3.1. Reliability of Quantitative Data Collection Instruments

The reliability of the individual items in the JS Educators questionnaire was measured by examining the internal consistency values of the items on their corresponding constructs.

Cronbach's Alpha measure of internal consistency was done to check the consistency of construct items. Reliability was conducted on each scale of the constructs. The results are shown in Table 2.

Table 2

Reliability Coefficients

	N	Cronbach's Alpha	Conclusion
Structured Educator workshops	5	.873	Reliable
Educator Academic Upgrading	5	.724	Reliable
Educator Reflective practice	5	.831	Reliable
Educator peer monitoring	5	.863	Reliable
Implementation of CSL	5	.896	Reliable
CSL Enabling Environment	5	.904	Reliable
Overall	30	.889	Reliable

Source: ***Research Data (2024)***

Reliability results demonstrated strong reliability across all six scales. Structured educator workshops recorded an alpha of .873, educator academic upgrading .724, reflective practice .831, peer mentoring .863, CSL implementation .896, and CSL enabling environment .904. The overall reliability coefficient across the 30 items was .889. According to Kothari (2019) and Creswell & Creswell (2022), a Cronbach's Alpha value of 0.70 or higher is considered acceptable, indicating that items within a construct consistently measure the same underlying concept. Values above .80 reflect strong reliability, while those above .90 demonstrate excellent internal consistency. In this study, all constructs surpassed the minimum threshold of .70, confirming that the questionnaire items were dependable and suitable for the main study. These results validated the robustness of the instrument, ensuring that the scales accurately captured educators' perspectives on professional development and CSL implementation.

3.7.3.2. Credibility and Dependability of Qualitative Instruments

Qualitative trustworthiness was explicitly distinguished from quantitative validity and reliability in this study by addressing credibility, dependability, confirmability, and

transferability. Credibility was ensured by accurately reflecting participants' experiences and viewpoints. At the end of each interview, the researcher summarized responses and sought confirmation from participants, thereby achieving congruence between their statements and the researcher's interpretation. Peer debriefing was also used to refine instruments and interpretations. Dependability was achieved by maintaining an audit trail and documenting all methodological decisions, ensuring consistency across settings and reducing variability. Standardized procedures for administering instruments further strengthened dependability.

Confirmability was addressed by minimizing researcher bias through triangulation of data sources, member checking, and transparent documentation of analytic decisions. This ensured that findings were grounded in participants' perspectives rather than researcher predispositions. Transferability was enhanced by providing thick descriptions of the study context, participants, and procedures, allowing readers to judge applicability to other settings. Together, these measures ensured that qualitative trustworthiness complemented quantitative reliability, producing findings that were credible, consistent, unbiased, and contextually meaningful.

3.8. Data Collection Procedures

The researcher obtained a letter of introduction from The Catholic University of Eastern Africa, Faculty of Education, Department of Post Graduate studies (See Appendix XI). The researcher presented this letter to The National Commission for Science, Technology and Innovation (NACOSTI) for permission to conduct research. This permission was granted after the researcher got an Ethical Approval letter from Tangaza University Institutional Scientific and Ethics Review Committee (TU-ISERC) (See Appendix XIII). This allowed the researcher to secure permission from the Nairobi City County authorities and the Ministry of Education (See Appendix XV, Appendix XVI, Appendix XVII and Appendix XVIII). After county-level approval, the researcher approached the HOIs to explain the purpose of the study, and to seek

formal school level permission, and collaborate on data collection schedules to minimize disruption.

Thereafter, prior communication by phone or email was made to secure consent, and individual consent forms were obtained from participating JS educators, with assurances of anonymity and the right to withdraw from the study at any time. Data collection was conducted simultaneously for both quantitative and qualitative strands, in line with the convergent mixed-methods design. Quantitative data were collected using self-administered questionnaires in the sampled schools, while qualitative data were obtained through semi-structured interviews conducted in the participants offices.

The structured questionnaires were administered in secure school environments and also distributed via Google Forms for convenience, with respondents given two weeks to respond. Progress was monitored to track response rates and completeness. Following Creswell's (2014) recommendations, semi-structured interviews for HOIs, QASOs, and the CDE were documented through note-taking after obtaining consent from the participants. Using a set of questions, the interviewer guided the interview posing inquiries and explored topics that emerged during the in-depth discussions. All activities adhered strictly to ethical protocols.

3.9. Description of Data Analysis Procedures

Data was processed and analyzed using both quantitative and qualitative methods so as to provide responses to the study questions. Quantitative data were statistically evaluated using SPSS Version 25 through descriptive and inferential statistics. Descriptive statistics, which included frequencies and percentages for categorical variables, along with means and standard deviations for continuous variables, provided a summary of the characteristics of the sample and offered an overview of key variables. Graphical representations, including figures,

frequency tables, pie charts and bar charts, were also generated to visualize distributions and identify outliers.

The descriptive statistics were followed by diagnostic tests to assess Multicollinearity, Normality, Homoscedasticity, and Autocorrelation. Multicollinearity was tested using Variance Inflation Factor (VIF) metrics, with values above 10 indicating problematic multicollinearity requiring variable combination or removal (Majka, 2024). Normality was tested using the Kolmogorov-Smirnov and Shapiro-Wilk test and visual evaluation of Q-Q plots (Ohaegbulem & Iheaka, 2024). Where substantial deviations from expected normality occurred, non-parametric alternatives were considered. Homoscedasticity was evaluated using the Breusch-Pagan test and Koenker tests (Ohaegbulem & Iheaka, 2024) while Autocorrelation was checked using the Durbin-Watson statistic.

Inferential statistics were used to test the research hypotheses and examine correlations between and among the variables, based on the outcomes of the diagnostic tests. The correlations were conducted between EPD modalities (structured educator workshops, educator academic upgrading, development in educator reflective practice sessions, and development in educator peer mentoring) and CSL implementation indicators (experiential learning, development of essential skills, social responsibility, and project quality). Regression analysis was conducted using standard multiple regression to evaluate the predictive influence of EPD components on CSL implementation. The regression model below was used for analysis;

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + \varepsilon Y$$

Where:

Y = CSL implementation (a composite score)

X_1 = Participation in structured educator workshops

X_2 = Educator academic upgrading

X_3 = Educator reflective practices

X_4 = Educator peer mentoring

ε = error term

Analysis of Variance (ANOVA) - One-way ANOVA was done to compare CSL implementation scores across:

Qualitative data analysis employed a systematic coding process, where raw interview transcripts from educators, HOIs, QASOs, and the CDE were read repeatedly to identify meaningful units of text. These codes were then categorized into broader clusters representing related ideas, such as "institutional support," "teacher preparedness," or "peer mentoring." From these categories, themes were developed to capture recurring patterns across participants. Themes were reviewed iteratively to ensure they accurately reflected the data and were not overlapping. Interpretation involved linking these themes to the research questions and theoretical framework. Representative quotations were used to illustrate findings, for example: *"We encourage teachers to share insights from workshops during staff meetings… Peer mentoring is promoted so that trained teachers guide others who have not attended"* (HOI C interview, April 27, 2026). Such quotations grounded the analysis in participants' voices, ensuring credibility. This rigorous thematic approach transformed qualitative data into coherent narratives, enabling deeper insights into how educator professional development influenced CSL implementation.

Two forms of triangulation were practiced; data triangulation and methodological triangulation. Data triangulation was achieved by drawing on multiple respondent categories, educators, HOIs, QASOs, and the CDE. This allowed the study to capture perspectives from classroom practice, institutional leadership, oversight, and county-level policy. By comparing responses across these groups, the researcher validated recurring patterns and ensured findings were not limited to a single viewpoint.

Methodological triangulation was conducted by integrating quantitative survey results with qualitative interview data. A joint display matrix (Table 3) was used to align statistical outputs such as correlations and regressions with thematic insights from interviews. This side-by-side comparison enabled confirmation where findings converged, expansion where qualitative narratives added depth to quantitative trends, and critical reflection where discrepancies arose. Other forms of investigator and theory triangulation, were not systematically applied. The study relied primarily on multiple data sources and mixed-method integration to strengthen credibility and provide comprehensive conclusions on how educator professional development influenced CSL implementation.

To demonstrate integration, the study aligned quantitative and qualitative findings for each research question using a triangulation protocol and a joint display matrix. For structured educator workshops, regression results showed a significant positive effect on CSL implementation. Qualitative interviews reinforced this, with HOIs noting that workshops improved educator competence but required mentors for sustainability. This was a case of confirmation, where both strands converged. For academic upgrading, quantitative analysis indicated moderate influence, while qualitative data revealed concerns about inconsistent access and limited institutional support. Here, expansion occurred, as qualitative insights added depth to statistical trends.

For reflective practice, quantitative results showed strong reliability and significant association with CSL outcomes. Qualitative narratives emphasized its role in experiential learning, confirming the statistical evidence. For peer mentoring, quantitative findings highlighted positive correlations, but qualitative interviews revealed uneven participation and lack of formal structures. This represented discordance, where conflicting evidence was critically examined. The interpretation concluded that mentoring was effective but required institutionalization. Finally, meta-inferences synthesized these strands, concluding that

educator professional development enhances CSL through workshops, upgrading, reflection, and mentoring, but systemic support and standardization are essential for sustainability. This integration ensured comprehensive, credible conclusions.

Table 3

Data-Analysis Matrix

Objective / Hypothesis	Variables	Statistical Test	Presentation Format
H1: To determine the influence of structured educator workshops on CSL implementation	Independent: Structured educator workshops; Dependent: CSL implementation	Regression analysis, Pearson correlation, ANOVA	Tables (coefficients, ANOVA results), bar charts of workshop attendance
H2: To examine the influence of educator academic upgrading on CSL implementation	Independent: Academic upgrading; Dependent: CSL implementation	Regression analysis, Pearson correlation, ANOVA	Tables (coefficients, ANOVA results), descriptive statistics charts
H3: To assess the influence of educator reflective practice on CSL implementation	Independent: Reflective practice sessions; Dependent: CSL implementation	Regression analysis, Pearson correlation, ANOVA	Tables (coefficients, ANOVA results), frequency charts of reflection
H4: To establish the influence of educator peer mentoring on CSL implementation	Independent: Peer mentoring; Dependent: CSL implementation	Regression analysis, Pearson correlation, ANOVA	Tables (coefficients, ANOVA results), graphs showing mentoring participation
H5: To evaluate the mediating effect of CSL enabling environment on the relationship between EPD and CSL implementation	Independent: EPD (workshops, upgrading, reflection, mentoring); Mediator: CSL enabling environment; Dependent: CSL implementation	Regression with mediation analysis (Baron & Kenny approach), correlation	Tables (model summary, mediation coefficients), path diagrams

Source: Researcher (2026)

Each hypothesis in the study was tested using a combination of regression analysis, Pearson correlation, and ANOVA. Regression analysis established predictive relationships between EPD modalities and CSL implementation, while Pearson correlation measured the strength and direction of associations. ANOVA was applied to test mean differences across groups. Reliability diagnostics using Cronbach's Alpha confirmed internal consistency of constructs before analysis, with all scales surpassing the acceptable threshold of 0.70.

Results were presented through tables for coefficients and ANOVA outputs, charts for descriptive statistics, and path diagrams for mediation effects, ensuring clarity and methodological rigor. Triangulation strengthened validity by incorporating multiple perspectives: data triangulation used diverse sources including educators, HOIs, QASOs, and the CDE; methodological triangulation compared quantitative survey results with qualitative interviews; investigator triangulation involved research assistants to mitigate bias; and theory triangulation interpreted findings through constructivism, scaffolding, and experiential learning theory. Integration was achieved through confirmation, expansion, and discordance, culminating in meta-inferences that synthesized quantitative and qualitative evidence to conclude on EPD's influence on CSL implementation.

3.10. Ethical Considerations

In addition to securing institutional approval, NACOSTI authorization, and informed consent, the study took deliberate steps to ensure confidentiality and data protection during data collection, analysis, and reporting. Confidentiality was maintained by ensuring that participants' names were never recorded on questionnaires or interview transcripts. Instead, each participant was assigned a unique code, and school names were pseudonymized to prevent identification. This coding system allowed the researcher to analyze data without linking responses to specific individuals or institutions. Anonymity was further reinforced by removing identifying information from consent forms, transcripts, and reports. Direct quotations were attributed only to pseudonyms or participant categories, such as "HOI C interview, April 27, 2026," ensuring that authentic voices were preserved without compromising identity.

Secure data storage was prioritized throughout the study. Hard copies of questionnaires and consent forms were stored in locked cabinets accessible only to the researcher. Digital files, including interview recordings and transcripts, were saved on encrypted devices and protected with strong passwords. This dual system of physical and electronic security minimized risks of

unauthorized access. Restricted access protocols were also enforced. Only the principal researcher and academic supervisors had full access to raw data. Research assistants involved in transcription or preliminary coding were required to sign confidentiality agreements and were provided with anonymized datasets, ensuring they could not trace responses back to individual participants.

Protection of participants' identities was central to reporting. Findings were presented in aggregate form, and representative quotations were carefully selected to illustrate themes without revealing personal or institutional details. The researcher avoided any references that could indirectly identify participants, such as specific schools or positions. This approach safeguarded participants from reputational or professional risks, particularly given the sensitivity of discussing educator professional development and CSL implementation within Nairobi's public JS.

During analysis, confidentiality was maintained by using coded datasets and anonymized transcripts. The researcher ensured that data handling complied with national privacy acts and ethical guidelines. In reporting, ethical standards were upheld by presenting findings truthfully, avoiding misrepresentation, and ensuring proper citation of sources. Bias and conflict of interest were minimized by triangulating data from multiple sources—educators, HOIs, QASOs, and the CDE—while maintaining strict confidentiality across all groups. In addition, this research employed Turnitin plagiarism checker to ensure prevention of potential plagiarism issues.

The researcher hopes that the findings of this study would be availed after the study's completion, in the libraries and other educational institutions resource centers. In addition, the research findings, may be disseminated through debriefings for schools and the County Education Office, publications, conferences and seminars.

Finally, the study committed to secure data retention and disposal. Data will be retained by the researcher for five years after completion of the study, as recommended by Creswell and Creswell (2018), after which it will be permanently deleted or physically destroyed. This ensures that participants' information remains protected even beyond the life of the project. By combining anonymity, secure storage, restricted access, and careful reporting, the study upheld the highest ethical standards, ensuring that participants' identities were fully protected throughout the research process.

CHAPTER FOUR

PRESENTATION, INTERPRETATION AND DISCUSSION OF THE FINDINGS

4.1 Introduction

This chapter presents the analysis of data collected from the field and its interpretation with the support of the literature review. The study aimed to establish the influence of educator professional development on implementation of community service-learning in public junior schools in Nairobi City County, Kenya. The study was based on these six research questions; What is the influence of structured educator workshops on the implementation of community service-learning in public junior schools in Nairobi City County? How does educator academic upgrading influence the implementation of community service-learning in public junior schools in Nairobi City County? What is the influence of educator development in reflective practice influence the implementation of community service-learning in public junior schools in Nairobi City County? How does educator development in peer mentoring influence the implementation of community service-Learning in public junior schools in Nairobi City County? What is the influence of educator professional development on the implementation of community service-learning in public junior schools in Nairobi City County? Does Community Service-Learning Enabling Environment influence educator professional development and the implementation of community service-learning in public junior schools in Nairobi City County? The return rate of instruments is presented first followed by demographic information of the respondents, findings of each research question and hypotheses testing. The findings are supported by related empirical studies.

4.2. Return Rate of Instruments

This study collected primary data using questionnaires and semi-structured interview guides. Questionnaires collected data from the JS CSL educators while the interview guides

were used to obtain data from the HOIs, QASOs and the CDEs. The results are presented in Table 4.

Table 4

Return Rates of Instruments

Participants	Expected sample size	Return	Response rate %
Educators	**64**	**59**	**92.2**
HOIs	**22**	**19**	**86.4**
QASOs	17	15	88.2
CDE	1	1	100
Total	**104**	**94**	**90.4**

Source: ***Field Data (2026)***

The survey achieved an impressive overall response rate of 90.4%, reflecting strong engagement across all respondent categories. Educators, who formed the largest group with 64 questionnaires distributed, returned 59, yielding a notable 92.2% response rate. HOIs followed with 22 distributed and 19 received, translating to 86.4%, the lowest among the groups but still commendable. QASOs demonstrated high participation, with 15 of 17 interviews returned, equating to 88.2%. The single CDE interview was fully completed, achieving a perfect 100% response rate. Collectively, these figures highlight a strong commitment to the study, with teachers and QASOs showing particularly high responsiveness, ensuring the data collected is both reliable and representative. Therefore, the 90.4% rate of response was considered sufficient for data analysis. The response rate was high as the researcher was able to establish a good rapport with the study's participants. The survey's overall response rate of 90.4% demonstrates strong engagement and meets established threshold criteria for reliability and representativeness. According to Creswell and Creswell (2022), response rates above 70% are considered sufficient for quantitative analysis, minimizing non-response bias and ensuring credible findings. Similarly, Creswell and Clark (2018) emphasize that high participation levels

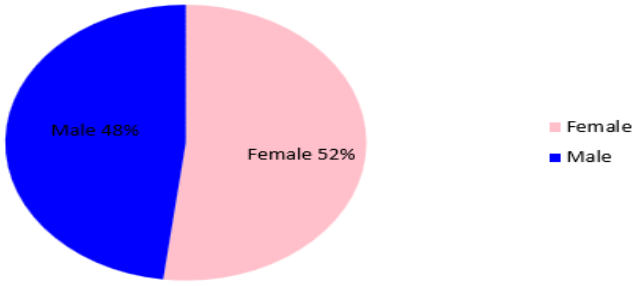
across diverse respondent categories strengthen the validity of mixed-methods research by capturing multiple perspectives.

4.3. Demographic Characteristics of Respondents

The demographic data of the respondents is presented in this section. It consists of the gender, level of education, teaching experience and teaching subjects of respondents.

4.3.1. Respondents' Gender

Figure 3: Gender of respondents



Source: ***Field Data (2026)***

Figure 3 illustrates the gender distribution of respondents, highlighting the balance and inclusivity within the study sample. Data on respondents' gender was necessary to understand how professional development associations the implementation of CSL in NCC's public JS. Gender dynamics often shape educators' perspectives, participation, and leadership in school programs. Additionally, the study ensures inclusivity, identifies potential disparities, and strengthens strategies for equitable professional development that supports effective Community Service-Learning outcomes.

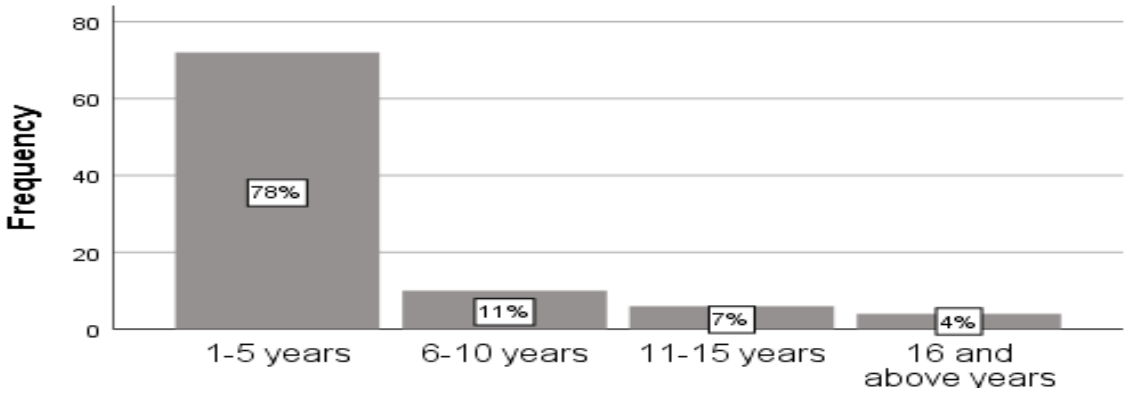
The results showing that 52% of respondents were female and 48% male imply near gender balance, ensuring diverse perspectives in CSL implementation. This inclusivity strengthens professional development initiatives by integrating both genders' contributions to pedagogy and civic responsibility. UNESCO (2013) emphasizes that CSL fosters tolerance and respect, values enriched by gender inclusivity. Education International (2018) stresses that PD

must address context-specific needs, including gender equity, to predict pedagogy. Odhiambo (2021) highlights that teacher preparedness directly impacts student achievement, which benefits from balanced gender participation. Ngwacho (2024) further notes that inclusivity in PD strengthens curriculum translation. The results imply that the current study must leverage this gender diversity by designing equitable professional development programs that empower both male and female educators. Such inclusivity ensures CSL practices are sustainable, participatory, and reflective of diverse perspectives, ultimately reinforcing civic responsibility and holistic learner development in Nairobi's public JS.

4.3.2. Respondents' Teaching Experience (in years)

Data on respondents' teaching experience was essential because it reveals how professional development associations the implementation of CSL in NCC's public JS. Teachers with longer service bring established practices and deeper institutional knowledge, while newer educators may adopt innovative approaches. This mix ensures that professional development programs are tailored to diverse needs, enhancing effective and sustainable implementation.

Figure 4: Teaching Experience of Respondents (n=59)



(Teaching Experience of JS Educators)

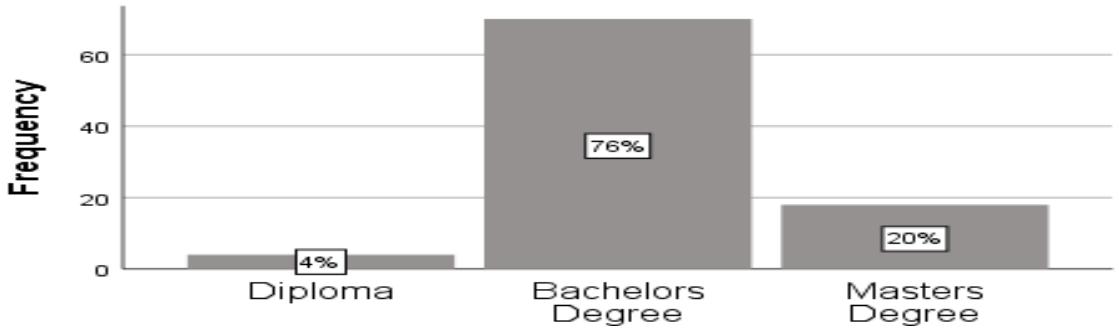
Source: ***Field Data (2026)***

The results on teaching experience of the respondents in Figure 4 show that 78% of respondents have 1–5 years of teaching experience. This shows that most educators are relatively new and probably young and therefore more receptive to innovative training approaches. This aligns with Njogu et al. (2024), who emphasize that EPD equips teachers with experiential learning strategies essential for CSL. Ngwacho (2024) further notes that new teachers often lack preparedness, making CPD vital for bridging gaps. At the same time, the 22% with longer experience provide valuable institutional knowledge and mentorship, echoing Kawinzi (2025) who found that well-trained teachers overcome CSL barriers. Odhiambo (2021) underscores that teacher preparedness directly impacts student achievement, while UNESCO (2013) highlights inclusivity and civic responsibility, strengthened by diverse teaching experience. Therefore, the current study must design professional development programs that balance fresh perspectives from newer teachers with seasoned expertise from experienced educators. This dual approach is critical for ensuring CSL initiatives remain innovative, sustainable, and effective in cultivating civic responsibility and experiential learning across Nairobi's public JS.

4.3.3. Respondents' Level of Education

Information on respondents' level of education was crucial in examining how professional development associations CSL in NCC's public JS. Higher qualifications often correlate with deeper pedagogical knowledge and openness to advanced training, while diploma holders contribute practical classroom insights. This diversity ensures professional development programs are tailored to different competencies, strengthening equitable and effective Community Service-Learning implementation. The results are shown in Figure 5.

Figure 5:Respondents' Level of Education



Source: ***Field Data (2026)***

As shown in Figure 5 most respondents possessed bachelor's degrees (76%), followed by master's degrees (20%) and diplomas (4%), with none at PhD level. This distribution implies that the majority of educators have attained sufficient academic qualifications to engage meaningfully in professional development. The presence of master's degree holders enriches the pool with advanced expertise, while diploma holders contribute practical classroom insights. Overall, the data underscores a well-qualified teaching workforce with diverse pedagogical approaches, capable of implementing CSL effectively in NCC's public JS. According to Pacho (2019), CSL requires reflective practice and experiential learning, which educators with higher academic preparation are better positioned to deliver. UNESCO (2013) emphasizes that CSL fosters tolerance and civic responsibility, outcomes strengthened by academically prepared teachers. Ngwacho (2024) notes that professional development programs are vital in equipping teachers with competencies for real-world problem-solving, while Kawinzi (2025) found that CPD-trained teachers overcome barriers such as resource constraints. Odhiambo (2021) further highlights that teacher professional development predicts student achievement, underscoring the importance of leveraging educators' qualifications. Overall, the presence of bachelor's and master's degree holders suggests that teachers had adequate content knowledge and pedagogical skills necessary for competency-based curriculum. This enriches CSL implementation in Nairobi's JS.

4.3.4. Teaching Subjects

The respondents were requested to indicate the teaching subjects they specialized in during their higher education training. Information on respondents' teaching subjects was necessary because specialization directly shapes how educators approach professional development and implement CSL in public JS. The results are in Table 5.

Table 5

Respondents teaching subjects

Subject Combination	Frequency
English and Literature	19
Mathematics and Physics	11
Biology and Physics	10
Mathematics and Chemistry	7
History and CRE	6
Chemistry and Physics	2
Kiswahili and CRE	2
Geography and Business	2

Source: ***Field Data (2026)***

Table 5 illustrates diverse subject combinations, with English and Literature (19) being the most common, followed by Mathematics and Physics (11), Biology and Physics (10), and Mathematics and Chemistry (7). Other combinations such as History and Christian Religious Education (CRE), Chemistry and Physics, Kiswahili and CRE, and Geography and Business each had smaller representation. This distribution highlights the breadth of expertise among teachers, ensuring that CSL initiatives can be integrated across both sciences and humanities. It also underscores the importance of tailoring professional development to subject-specific needs, as different disciplines may association how educators design, deliver, and evaluate CSL activities. According to Pacho (2019), CSL integrates academic study with community service, requiring teachers to adapt subject knowledge into experiential learning. UNESCO (2013) emphasizes that CSL fosters tolerance and civic responsibility, which benefit from both

humanities and science perspectives because competencies are not subject specific. They are about skills, values and attitudes that cut across all the learning areas.

Ngwacho (2024) notes that professional development must address subject-specific gaps to strengthen curriculum translation. Kawinzi (2025) further shows that CPD-trained teachers overcome barriers in CSL delivery. Odhiambo (2021) underscores that teacher preparedness directly impacts student achievement, making subject diversity vital for effective CSL implementation. This shows the necessity for tailoring educator professional development to subject-specific needs, ensuring that teachers across disciplines can design, deliver, and evaluate CSL activities effectively. This may strengthen experiential learning, predict civic responsibility, and improve curriculum translation in Nairobi's public JS.

4.4. Findings According to Research Questions

Descriptive statistics such as means and standard deviations were used to present quantitative data with the use of Statistical Package for Social Sciences (SPSS) version 25.0. A Likert scale of 1-5 was adopted with **1** = Strongly Disagree, **2** = Disagree, **3** = Neutral, **4** = Agree, **5** = Strongly Agree.

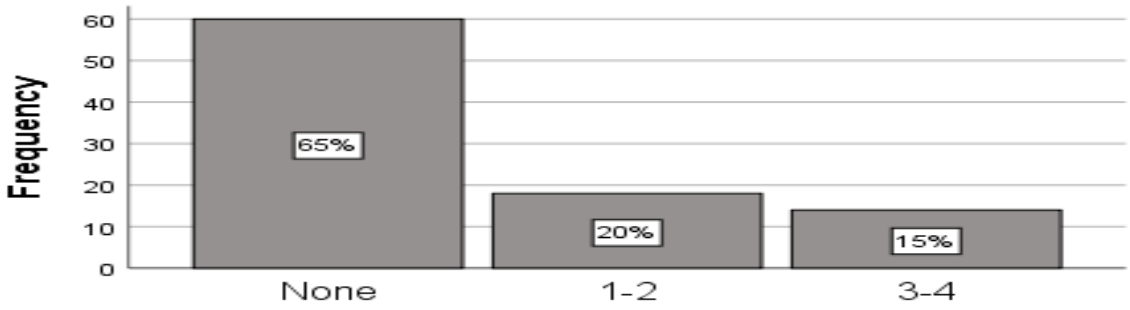
The findings of the descriptive statistics were based on the six research questions that guided the study: what is the influence of structured educator workshops on the implementation of community service-learning in public junior schools in Nairobi City County; how does educator academic upgrading influence the implementation of community service-learning in public junior schools in Nairobi City County; what is the influence of educator development in reflective practice on the implementation of community service-learning in public junior schools in Nairobi City County; how does educator development in peer mentoring influence the implementation of community service-learning in public junior schools in Nairobi City County; what is the influence of educator professional development on the implementation of community service-learning in public junior schools in Nairobi City County; does Community

Service-Learning Enabling Environment influence educator professional development and the implementation of community service-learning in public junior schools in Nairobi City County?

4.4.1. Association of Structured Educator Workshops on Community Service-Learning Implementation

The first research question sought to assess the association of structured educator workshops on implementation of CSL. The respondents were asked to indicate the number of Community Service-Learning (CSL) workshops they had attended in the last two years and the results are shown in Figure 6.

Figure 6: Number of Community Service-Learning Workshops Attended



Source: Field Data (2026)

The results from Figure 6 reveal that a majority of respondents, 65%, had not attended any CSL workshops in the last two years, while 20% had attended 1–2 workshops and 15% had attended 3–4 workshops. This distribution highlights a significant gap in exposure to structured professional development opportunities related to CSL. The limited participation suggests that many educators may lack updated skills and strategies necessary for effective CSL implementation. The implications are that: without consistent workshops, teachers risk inadequate preparation, weakening experiential learning, development of essential skills, social responsibility and project quality. Strengthening access to CSL-focused workshops is therefore essential for building teacher capacity and ensuring sustainable curriculum outcomes.

This finding connects directly to the enabling environment, where supportive school culture, active parental engagement, and vibrant community environments must complement professional development to maximize CSL's impact. This finding concurs with Anggraini (2019), who emphasized that workshops must be competency-focused and systematically planned to be effective. Ajani (2023) similarly showed that experiential workshops predict lesson planning and learner engagement, reinforcing the importance of consistent training. Finally, Ngwacho (2024) argued that educator re-tooling through structured training is essential for bridging CBC's theory-practice divide, supporting the observed significance of workshop participation. This implies that limited workshop attendance weakens CSL fidelity, leaving educators underprepared for project-based learning and civic education. This calls for expanding access to CSL-focused workshops as an essential catalyst to strengthen teacher capacity and ensure sustainable curriculum outcomes.

4.4.1.1. Level of Agreement with Structured Educator Workshops

The opinions of the respondents were sought on their level of agreements on statements related to structured educator workshops. Table 6 indicates the results.

Table 6

Structured Educator Workshops

Code	Commitment competency	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	SD
B1	I believe that attending formal CSL workshops would improve my ability to implement the subject effectively.	8 (8.5%)	0 (0%)	10 (11%)	29 (30.5%)	47 (50%)	4.134	1.152
B2	If I was given the opportunity to attend a CSL specific workshop, I would actively participate.	8 (8.5%)	2 (2.4%)	8 (8.5%)	30 (31.7%)	46 (48.8%)	4.1	1.161
B3	Workshops are among the most effective ways for teachers to develop CSL skills.	6 (6.1%)	3 (3.7%)	10 (11%)	31 (32.9%)	44 (46.3%)	4.1	1.107
B4	Lack of formal workshop training has limited confidence in implementing CSL.	9 (9.8%)	7 (7.3%)	19 (20.7%)	31 (32.9%)	28 (29.3%)	3.646	1.258
B5	When I have attended workshops (if any), the content was practical and relevant to my classroom needs.	9 (10%)	9 (10%)	33 (35%)	20 (21.3%)	22 (23.8%)	3.388	1.218
	Composite						***3.874***	***1.179***

Source: Field Data (2026)

The results on Table 6 indicate that for item B1, most respondents (80.5%) agreed or strongly agreed that attending formal CSL workshops would improve their ability to implement the subject effectively, with a mean of 4.134 and SD of 1.152. This highlights the strong belief among teachers that structured educator workshops predict competence. Anggraini (2019)

emphasized that workshops, when competency-focused and interactive, are effective in building teacher skills. Similarly, Ajani (2023) found that experiential workshops improved lesson planning and inclusivity, reinforcing the importance of structured training in bridging theory-practice gaps.

For B2, 80.5% of respondents indicated they would actively participate if given the opportunity, with a mean of 4.1 and SD 1.161. This reflects high willingness to engage in CSL-specific workshops. Flora (2025) argued that structured mentorship builds civic responsibility, while Ngwacho (2024) stressed that re-tooling through workshops is essential for CBC reforms. For B3, 79.2% agreed workshops are effective for CSL skill development, with a mean of 4.1 and SD 1.107. Thinh (2025) showed mentorship bridges theory-practice gaps, while Ajani (2023) confirmed experiential workshops foster adaptive competence.

For B4, 62.2% agreed that lack of workshops limited confidence, with a mean of 3.646 and SD 1.248. Oduro et al. (2022) found reflection alone insufficient without structured PD, while Dingili (2024) highlighted resource gaps undermining teacher confidence. For B5, only 45.1% agreed workshop content was practical and relevant, with a mean of 3.388 and 1.218. This suggests inconsistency in workshop quality. Cheruiyot (2024) noted inadequate preparation for CBC, while Ngwacho (2024) emphasized the need for context-sensitive training to ensure relevance.

Overall, the findings reveal that teachers value workshops highly but face gaps in access and quality. Expanding CSL-focused workshops, ensuring relevance, and embedding them within broader EPD frameworks will strengthen teacher confidence, experiential learning, and curriculum fidelity in Nairobi's public JS.

When the CDEs were asked their opinion on the association of structured educator workshops on the implementation of CSL in public JS in NCC, this is what they said;

The CDE was requested to indicate how effective the structured educator workshops have been in enhancing educator capacity for CSL instruction across the county. The following response was provided;

> Workshops have been very effective in building educator capacity for CSL. They provide teachers with practical strategies, reflective tools, and community engagement techniques that directly improve project quality. We have seen increased confidence among teachers in translating curriculum into experiential learning activities. The educator workshops have strengthened civic responsibility outcomes and ensured that CSL instruction is more consistent and impactful across schools, (CDE N interview, May 5th 2026).

Consistent with the CDE's claim that workshops make CSL instruction more impactful, the study supports that structured workshop are effective in enhancing educator capacity for CSL, calling for expanding of access to CSL-focused workshops as essential catalysts for broadening and strengthening teacher agency so as to realize and ensure sustainable CSL outcomes.

The officer was asked to indicate the challenges the county faced in providing adequate CSL professional development opportunities. This is what was said;

> The main challenges we face are resource limitations, both financial and material, which restrict the frequency and reach of workshops. Expertise is another issue, as we need more trained facilitators who understand CSL pedagogy deeply. Coordination across schools and stakeholders can also be difficult, leading to uneven implementation. Despite these challenges, we are committed to expanding access and ensuring that all educators benefit from professional development opportunities, (CDE N interview, May 5th 2026).

These findings resonate with what the researcher found out in some of the schools that rated the implementation of CSL in their school as fair. Some HOIs also noted that they would benefit more from having CSL mentors who understood CSL clearly to mentor the teachers in their schools. These sentiments converge with the CDE's views on the challenges the county faced in providing adequate CSL EPD programs.

The Sub-County QASOs were also asked to indicate whether educator professional development workshops related to CSL are currently available to teachers in the sub-counties, and they gave the following responses;

> Currently, teachers in our sub-county mainly attend CSL workshops under the broader CBC/CBE workshops organized mainly by the CDE office in collaboration with KICD. These workshops are held at least once per year, depending on resource availability. They cover areas such as project design and community engagement strategies. While frequency varies, the workshops remain a key avenue for strengthening teacher capacity in CSL delivery, (QASO A interview, April 24th2026).

Based on the QASOs findings, retooling of CSL educators is done under the broader CBC/CBE workshops which renders the professional development given to the teachers inadequate as it is not tailor-made for the unique CSL pedagogical strategies. The findings are in agreement with Anggraini's (2019) claim that workshop design is too generic and lacks specialized pedagogical focus and Ireri et al. (2024) who noted that more training in CSL was required. The qualitative findings also agree with Okutu et.al (2024) who noted that induction courses to train teachers on how VBE could be integrated into their teaching was necessary.

The Sub-County QASOs were asked to indicate how structured workshops association teachers' CSL practices in their jurisdiction. The following were the responses;

> Structured workshops have a clear impact on teachers' CSL Practices. Those who attend regularly demonstrate stronger project planning, better integration of academic content with community service, and improved learner

> engagement. In contrast, teachers who miss workshops often struggle with project quality and documentation. The difference is evident in the confidence and creativity displayed in classrooms and community projects, (QASO B interview, April 24th 2026).

The findings indicate that those who attend structured workshops are able to translate theory into practice as the practical implementation of CSL within Kenya's CBC, hinges on teacher preparedness and on-going EPD. The results concur with similar past studies in recognizing the importance of structured workshops for CSL such as Thinh (2025) who emphasizes experiential learning and mentorship as bridges for teacher confidence.

The Sub-County QASOs were asked to indicate the existing gaps in the current educator-professional development training for CSL teachers. The following responses were recorded;

> The current training programs still have notable gaps. Topics such as digital portfolio management, advanced reflective practice, and parental/community liaison strategies are often missing. We also need more emphasis on inclusive education approaches to ensure CSL benefits all learners. Addressing these gaps would make professional development more comprehensive and responsive to the realities of Junior School CSL implementation, (QASO C interview, April 27th 2026).

The QASOs highlight practical gaps such as digital portfolio management and parental liaison strategies that Flora (2025) does not address. The QASOs' responses demonstrate that workshops are not only available but also impactful, though they require expansion into inclusive education and digital documentation. This disagreement highlights the need for localized, empirical evidence that bridges the gap between theoretical models and the realities of CSL implementation in Kenya's JS.

When the HOIs were asked how structured educator workshops predict the implementation of CSL, they responded as captured below;

The HOIs were requested to state whether CSL teachers attended any structured training workshops on CSL implementation. The following are the responses;

> Yes, some of our teachers have attended general curriculum and competency-based education workshops. However, workshops specifically focused on CSL have been very limited. Most of the training they receive is broad and not tailored to CSL implementation. We feel that more specialized CSL workshops are urgently required to strengthen teacher capacity, (HOI A interview, 23rd April 2026).

The qualitative findings concur with another respondent who said, "Hmh, I really do not recall teachers attending a CSL specific workshop," when they were asked the same question (HOI C interview, 27th April 2026). The findings also agree with Anggraini (2019) who stated that effective workshops require clear objectives, participatory delivery, and post-workshop evaluation, echoing the HOIs' call for more specialized CSL-focused workshops rather than generic curriculum training.

The opinion of HOIs was sought related to how have structured workshops predict the ability of your teachers to implement CSL effectively. The responses recorded are;

> Workshops have improved teacher confidence and made their delivery more impactful. Teachers who attend are able to involve learners more actively in CSL projects. They also identify gaps and areas of improvement in their teaching practice. Overall, workshops have predicted lesson delivery and increased teacher involvement in CSL activities, (HOI B interview, 23rd April 2026).

These findings agree with the literature that structured educator workshops are critical for strengthening CSL implementation. Thinh (2025) highlighted those experiential opportunities and structured mentorship are essential for building teacher confidence and adaptive competence, which aligns with the HOIs' observations that workshops improved teacher confidence and delivery. Similarly, Ajani (2023) demonstrated that experiential

professional development predicts lesson planning and learner engagement, which resonates with HOIs' reports that workshops helped teachers involve learners more actively in CSL projects and identify gaps in practice.

The HOIs were also asked to show the specific workshop topics that were most beneficial for CSL implementation in their school. The following is what they reported;

> Workshops on project design and reflective practice have been the most beneficial. They help teachers plan activities that connect classroom learning with community service. Training on civic responsibility and experiential methods has also been useful. However, we believe topics like digital portfolio management and parental engagement should be added to current workshop content, (HOI B interview, 23rd April 2026).

The literature reviewed points to gaps that HOIs identified, such as the need for digital portfolio management and parental engagement, affirming that, by integrating these missing components, workshops can become more comprehensive and contextually relevant for CSL implementation in Nairobi's JS.

The HOIs were asked to indicate how their school supports teachers in applying what they learn from workshops. This is what the HOIs said;

> We encourage teachers to share insights from workshops during staff meetings. They are also supported to integrate new strategies into lesson plans and CSL projects. Peer mentoring is promoted so that trained teachers guide others who have not attended. Additionally, we allocate time and resources to help teachers apply workshop knowledge in practice, (HOI C interview, 27th April 2026).

The HOIs' responses converge on the idea that structured workshops predict teacher confidence, learner engagement, and project quality, and they also highlight the need for more specialized, CSL-focused content in the workshops. The findings are supported by Adrian et al. (2025) who showed that contextual immersion transforms teacher preparation. This

agreement underscores the importance of tailoring EPD to CSL realities in Kenya's CBC framework.

4.4.2. Educator Academic Upgrading

The second research question aimed to determine the influence of educator academic upgrading on implementation of CSL. The opinions of the overall association of educators academic upgrading on the implementation of CSL was sought using structured questionnaires. Table 7 shows the findings.

Table 7

Educator Academic Upgrading

Code	Educator Academic Upgrading	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	SD
C1	My current academic training has prepared me adequately for implementing CSL.	29 (30.4%)	12 (13%)	14 (15.2%)	29 (30.4%)	10 (10.9%)	2.783	1.436
C2	Pursuing further academic studies would predict my understanding of CSL methodologies.	14 (15.2%)	6 (6.5%)	10 (10.9%)	31 (32.6%)	33 (34.8%)	3.652	1.41
C3	I would pursue higher academic qualifications if they included substantial CSL related content.	6 (6.5%)	6 (6.5%)	16 (17.4%)	29 (30.4%)	37 (39.1%)	3.891	1.19
C4	Teacher training curricula need to be updated to include more community-based learning content.	4 (4.3%)	2 (2.2%)	18 (19.6%)	27 (28.3%)	43 (45.7%)	4.087	1.065
C5	I feel that my academic training did NOT prepare me well for designing CSL activities.	10 (10.9%)	16 (17.4%)	20 (21.7%)	18 (19.6%)	29 (30.4%)	3.413	1.368
	Composite						***3.565***	***1.373***

Source*: Field Data (2026)*

The composite results in Table 7 show a mean of 3.565 and a standard deviation of 1.373, suggesting moderate agreement among respondents that educator academic upgrading associations the implementation of CSL. This overall score reflects a balanced perception:

educators acknowledge the importance of academic upgrading but also reveal gaps in current training. The variability indicates differing experiences, pointing to the need for standardized upgrading programs. This agrees with Odhiambo (2021), who emphasized raising teacher qualifications to foster 21st-century skills, and Abdallah and Abdallah (2025), who highlighted sustained training as critical for pedagogy and employability. Andrian et al. (2025) also showed that contextual immersion transforms teacher preparation, while Nair (2025) demonstrated that structured academic interventions improve critical thinking. The inference is clear: upgrading is valued but inconsistently delivered, requiring systemic reforms.

Looking at C1, which asked whether current academic training had prepared educators adequately for implementing CSL, the mean was 2.783 with a standard deviation of 1.436. Here, 30.4% strongly disagreed, 13% disagreed, 15.2% were neutral, 30.4% agreed, and only 10.9% strongly agreed. These results show that a significant proportion of teachers feel inadequately prepared, with the mean falling below the midpoint of 3.0. This concurs with Odhiambo (2021), who noted weak curricula restricting practical skills, and Andrian et al. (2025), who found limited systemic integration. Turner (2024) also highlighted gaps in critical reflection training, while D'Agostino (2023) identified systemic deficiencies in teacher preparation. Okumu and Opio (2023) highlighted a lack of adequate CPD training, a recurrent problem in Africa. This highlights inconsistencies in the current academic preparation in the teacher training colleges and universities, and underscores the need for curriculum reforms to better integrate CSL methodologies.

For C2, which examined whether pursuing further academic studies would predict understanding of CSL methodologies, the mean was 3.652 with a standard deviation of 1.41. The distribution shows 15.2% strongly disagreed, 6.5% disagreed, 10.9% were neutral, 32.6% agreed, and 34.8% strongly agreed. This indicates strong support for academic upgrading, with nearly two-thirds of respondents agreeing or strongly agreeing. The mean above 3.5 suggests

that educators believe further studies would significantly improve their ability to implement CSL. This agrees with Nair (2025), who demonstrated gains from structured interventions, and Abdallah and Abdallah (2025), who linked advanced training to employability. Odhiambo (2021) also emphasized upgrading standards, Ngwacho (2024) advocated re-tooling educators for CBC reforms and Okutu et al. (2024) called for CSL induction courses for teachers. The inference is that upgrading is seen as a pathway to mastery of CSL pedagogy. The overall trend points toward recognition of the value of advanced academic training in strengthening CSL methodologies. Additionally, upgrading is seen as a pathway to mastery of CSL pedagogy.

In C3, which asked whether educators would pursue higher academic qualifications if they included substantial CSL-related content, the mean was 3.891 with a standard deviation of 1.19. The responses show 6.5% strongly disagreed, 6.5% disagreed, 17.4% neutral, 30.4% agreed, and 39.1% strongly agreed. This is one of the strongest areas of agreement, with nearly 70% of respondents being supportive. This supports Turner (2024), who stressed integrating reflective models, and Ngwacho (2024), who called for teacher training curriculum reforms. Flora (2025) emphasized structured mentorship, while Odhiambo (2021) highlighted the need for stronger qualifications. These findings highlight a clear demand for academic programs that integrate CSL content, showing that teachers are motivated to upgrade their qualifications when the training is directly relevant to their classroom and community practice.

For C4, which focused on whether teacher training curricula need to be updated to include more community-based learning content, the mean was 4.087 with a standard deviation of 1.065. The distribution shows 4.3% strongly disagreed, 2.2% disagreed, 19.6% were neutral, 28.3% agreed, and 45.7% strongly agreed. This is the highest mean score in the set, reflecting overwhelming agreement among educators. More than 70% agreed or strongly agreed, showing strong consensus that current curricula are insufficient and need updating. This aligns with Ngwacho (2024), who emphasized embedding CSL in reforms, Ireri (2024) who noted that

more CSL training was necessary and Flora (2025), who highlighted mentorship integration. Odhiambo (2021) also noted curriculum gaps, while Abdallah & Abdallah (2025) stressed project-based learning. These findings call for urgent need for systemic curriculum redesign.

Finally, C5 asked whether educators felt their academic training did not prepare them well for designing CSL activities. The mean was 3.413 with a standard deviation of 1.368. The responses show 10.9% strongly disagreed, 17.4% disagreed, 21.7% neutral, 19.6% agreed, and 30.4% strongly agreed. These results reveal that a significant proportion of educators feel underprepared, with half agreeing or strongly agreeing. The mean above 3.4 suggests moderate agreement with this statement, pointing to a gap in practical training for CSL design. The high standard deviation reflects differing experiences, but the overall trend underscores the need for more hands-on, experiential training in academic programs. This concurs with Odhiambo (2021), who noted inadequate practical training, and D'Agostino (2023), who identified systemic capacity gaps. Andrian et al. (2025) highlighted limited experiential integration, while Turner (2024) stressed the need for reflective pedagogy. The implication is that experiential, hands-on training for educators must be prioritized.

From these findings the implication is that academic upgrading is essential for effective CSL implementation in NCC's public JS. Current training programs are insufficient, but educators are motivated to pursue further qualifications if they are relevant to CSL. Updating teacher training curricula to embed community-based learning content is critical, as it would address gaps in preparation and ensure that teachers are equipped with the reflective, experiential, and community engagement skills necessary for CSL.

The CDEs were asked to give their opinions on the association of educator academic upgrading on the implementation of CSL and this is how they responded to each of the questions: When the views of the respondent were sought on how important educators' academic qualifications are to the success of the implementation of CSL, the officer had this to say;

Educators' academic qualifications are highly important for the successful implementation of CSL. The higher the qualifications, the better the teacher is at delivering content and engaging learners. Educators with advanced training tend to view things differently, showing humility and openness to exploring better pedagogical possibilities. Higher education also equips them with stronger methodologies and confidence, which directly improves CSL outcomes. In my perspective, academic qualifications form a solid foundation for effective CSL instruction, (CDE N interview, May 5th 2026).

The study supports the County Director of Education's view that academic qualifications are highly important for CSL implementation. Andrian et al. (2025) emphasize contextual immersion and relational care in teacher development, Kawinzi (2025) notes that well trained teachers through CPD overcome CSL barriers, which concurs with the CDE's observation that higher qualifications foster humility and openness to better pedagogical possibilities.

Opinion of the respondent was sought on whether there are observable differences in CSL implementation across schools that may be attributed to the teacher's level of qualification. The officer reported this;

> At the county level, we have not recorded distinct differences in CSL implementation across schools based solely on teacher qualifications. While individual teachers with higher qualifications may demonstrate stronger confidence and content mastery, these differences have not translated into clear patterns at the school level. Implementation outcomes often depend more on institutional support, resources, and school culture. Therefore, qualification

> levels alone do not explain variations across schools. Other systemic factors play a larger role in shaping CSL practices, (CDE N interview, 5th May 2026).

CSL is a learning area that integrates classroom learning and learning from the community. The projects that the learners design should address the community's need. The community therefore plays an important role in providing a favorable environment for learners to develop and nurture their talents. This notion is strongly supported by the CDE who notes that academic upgrading must be complemented by institutional support and community engagement, and it should integrate reflective practice and parental liaison strategies to maximize impact.

The officer's views on the county's role in encouraging or facilitating teacher academic upgrading were sought and this is what was recorded;

> The county's role should be to officially recommend teachers for further studies based on specific learning areas that need strengthening. This process must be collaborative and consultative, involving schools, teachers, and education stakeholders. By guiding teachers toward relevant programs, the county ensures that upgrading addresses actual gaps in CSL implementation. We should also facilitate opportunities through partnerships with universities and training institutions. Ultimately, the county must act as a supportive link, encouraging academic upgrading that directly predicts CSL outcomes, (CDE N interview, 5th May 2026).

The qualitative findings reported agree with studies such as Abdallah and Abdallah (2025) who concurs that professional development predicts effectiveness and employability, aligning with the CDE's claim that advanced training equips teachers with stronger methodologies and confidence. Riara University (2025) KePTS aligned TPD program showed predicted CSL facilitation through school-led reflective practices. Turner (2024) supports the idea that reflection and critical thinking are essential, resonating with the CDE's view that qualifications form a solid foundation for CSL instruction.

On the same question, this is what the Sub-County QASOs said:

The QASOs were asked to state whether based on their quality assurance visits, there is a relationship between teachers' academic qualifications and the quality of CSL implementation. These were the opinions recorded;

> Yes, there is a clear relationship between academic qualifications and the quality of CSL implementation. Teachers with higher qualifications generally deliver CSL more effectively, showing stronger content knowledge and confidence. P1 teachers are highly receptive because their foundational training prepares them broadly. Diploma teachers are more open to teaching CSL, while bachelor's degree holders demonstrate superior methodologies but sometimes show negative attitudes. Overall, higher qualifications predict competence, though attitudes also play a role, (QASO D interview, April 30th 2026).

The study established that most of the teachers who were implementing CSL were Bachelor's and Master's degree holders and only 4% were diploma holders. These findings support Turner's (2024) emphasis on the importance of reflection and critical thinking, resonating with the QASOs' view that qualifications broaden perspectives and pedagogical approaches. With CSL being an integrated learning area at JS level, teacher reflection and critical thinking have a positive correlation with the implementation of CSL as the needs of the community vary.

The respondents were asked their opinions on the adequacy of the pre-service training in preparing teachers for the demands of CSL implementation. This is what they said;

> Pre-service training has not been adequate in preparing teachers for CSL. Most of the current cohort did not interact with CSL as a core or minor learning area during their training. Practical exposure to CSL methodologies is missing, leaving teachers underprepared for real classroom and community contexts. Teacher training institutions should make CSL a mandatory core unit and tailor programs to Junior and Senior Secondary needs. They must also ensure training is market-driven and customized to modern learner demands, (QASO E interview, April 29th 2026).

The data collected from the JS CSL educators revealed that 65% of them had not attended CSL workshops. Similarly, Singh and Mukeredzi (2024) established that the CSC program in the Southern African countries is characterized by inconsistent, fragmented, and mostly absent CPD programs, as reported by 82% of South African teachers and 65% of Zimbabwean teachers. This has compelled educators to rely on their personal pedagogies to implement the subject, despite lacking any structured training. These findings and the literature reviewed, highlight a significant gap in exposure to structured professional development opportunities related to CSL. Odhiambo (2021) supports the need for raising standards and sustained training, echoing the QASOs' call for CSL to be a mandatory core unit in pre-service programs.

The respondents were asked to indicate the role they view the continuous academic upgrading playing in improving CSL outcomes. These officers said;

> Continuous academic upgrading plays a critical role in improving CSL outcomes. It equips teachers with precise skills needed to teach CSL effectively and boosts their confidence in handling new learning areas. Upgrading also broadens teachers' perspectives on diverse cultures, regions, and school setups. This helps them design more inclusive and impactful CSL projects. Teachers should not stop learning; continuous upgrading must be actively encouraged to sustain quality CSL implementation, (QASO D interview, April 30th 2026).

These response from Sub-County QASOs suggests that educators acknowledge the importance of academic upgrading as it bridges the practical exposure to CSL methodologies that is currently missing, leaving the JS CSL educators underprepared for real classroom and community contexts. A study by Ngwacho (2024), found out that 92% of the teachers were critically underprepared. Globally, CPD is a respected approach to enhancing teacher effectiveness as established by Suryandari et al. (2024). Consequently, this study agrees with Odhiambo (2021) who emphasized raising teacher qualifications to foster 21st Century skills that CSL aims to foster.

Opinion of the HOIs was sought on the ways teachers with higher academic qualifications differ in how they implement CSL compared to those with lower qualifications. The HOIs reported that;

> Teachers with higher academic qualifications are generally more confident in their delivery of CSL. They possess stronger content knowledge, which allows them to connect classroom learning with community projects more effectively. Their lessons are better structured, and they tend to identify and address gaps in implementation with greater ease. Overall, they perform better in implementing CSL compared to those with lower qualifications, (HOI D interview, 4th May 2026).

The study supports the HOIs' view that teachers with higher academic qualifications implement CSL more effectively. Abdallah and Abdallah (2025) agree that professional development predicts pedagogy and employability, aligning with HOIs' claim and the CDE's report (CDE N interview, May 5th 2026), that teachers returning from further studies bring innovative ideas that improve CSL practice.

Respondents were requested to indicate their views on the adequacy of pre-service training in preparing teachers for CSL. These are the responses;

> Pre-service training has not been adequate in preparing teachers for CSL. Most teachers did not interact with CSL as a minor or major learning area like Philosophy of Education, you know… during their training. There is limited exposure to practical methodologies that would help them apply CSL effectively in schools. As a result, many teachers enter the profession without the necessary skills to design and deliver CSL projects, (HOI D interview, 4th May 2026).

The HOIs' emphasis on continuous upgrading for improved CSL outcomes was supported by many JS educators who indicated that they would attend the workshops if they had more CSL- focused content. The training curricula should embed CSL methodologies in

order to strengthen teacher confidence, experiential learning and curriculum fidelity in Nairobi's public JS.

The HOIs were asked whether their schools encourage or support teachers pursuing further studies. The HOIs gave the following answer;

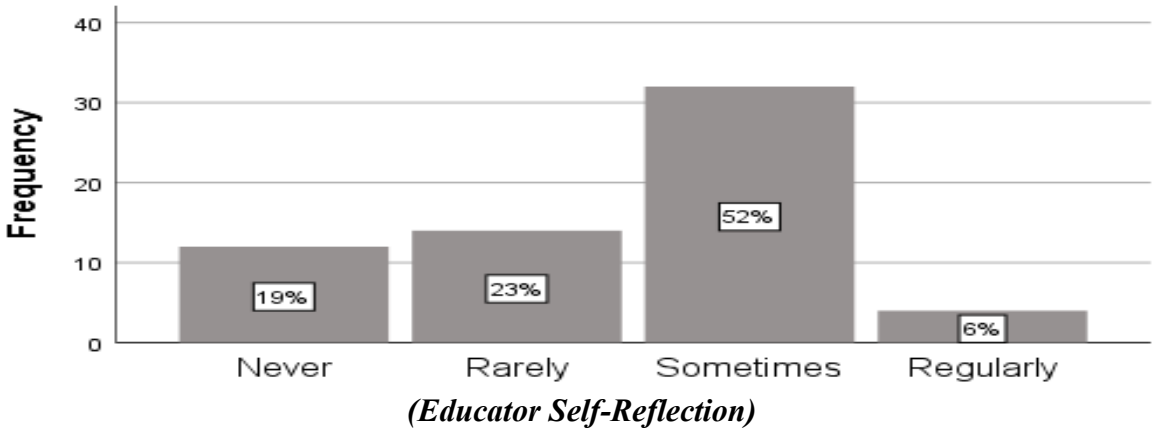
> Yes, our school encourages teachers to pursue further studies by granting study leave opportunities. We also provide institutional encouragement and recognize the importance of academic upgrading. Teachers who return from further studies bring back innovative ideas from other places as they pick a lot from their peers in the universities. This new knowledge improves the way they teach CSL. We have observed that these teachers are more open to teaching CSL and demonstrate improved teaching practices overall, (HO1 E interview, 5th May 2026).

The HOIs point to the gaps in the pre-service training for CSL educators a nuance underexplored in the literature. Thus, while academic upgrading is important, it must be contextualized within systemic realities such as school support, exposure to CSL methodologies, and institutional encouragement to fully predict CSL implementation.

4.4.3. Educator Reflective Practice Sessions

The third research question was on how development in educator reflective practices influences the implementation of CSL. As such, the study sought to assess frequency of educators reflective practice sessions on implementation of CSL. Figure 7 gives the findings.

Figure 7: Frequency of Structured Self-Reflection



Source: Field Data (2026)

In Figure 7, the results on the frequency of structured self-reflection reveal that most respondents, 52%, engaged in reflection only sometimes, while 23% did so rarely and 19% never engaged in structured reflection. Only 6% reported regular reflection. This pattern demonstrates that reflective practice is not consistently embedded in educators' routines, limiting its potential to predict CSL delivery. The implication is that without regular reflection, teachers may struggle to identify gaps, adapt strategies, and improve project quality. Institutionalizing structured reflection opportunities would strengthen CSL effectiveness, foster deeper experiential learning, and ensure sustainable skill development among learners. Suphasri and Chinokul (2021) agree with this finding, noting that reflective practice often suffers from superficial journaling and stress-related inconsistencies, which reduce its effectiveness. Similarly, Oduro et al. (2022) found that while tutors recognized reflection as a long-term strategy for professional growth, its application was inconsistent and often isolated from broader professional development frameworks. These studies support the current results, showing that irregular reflection undermines confidence and pedagogical improvement. However, some literature diverges from the results. Natsiou and Tsitouridou (2025) emphasized that reflection, when socially mediated through peer dialogue, can be flexible and impactful, suggesting that structured reflection may not always need to be frequent to be

effective. This contrasts with the current findings, which highlight the lack of regularity as a weakness. The results underscore the need to institutionalize structured reflection opportunities within educator professional development. Embedding reflection into workshops, peer mentoring, and digital platforms would strengthen CSL effectiveness, foster deeper experiential learning, and ensure sustainable skill development among learners in Nairobi's public JS.

4.4.3.1. Educator Reflective Practice Sessions

The opinions of the CSL educators were sought on their level of agreement on statements related to educator reflective practice sessions using structured questionnaires. The results are indicated in Table 8 below.

Table 8

Educator Reflective Practice Sessions

Code	Educator Reflective practice sessions	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	SD
D1	Structured self-reflection would help me become a better CSL teacher.	3 (3.3%)	10 (11.1%)	15 (15.6%)	43 (45.6%)	23 (24.4%)	3 (3.3%)	1.052
D2	If my school provided scheduled time for reflective practice on CSL, I would use it consistently.	2 (2.2%)	10 (10.9%)	10 (10.9%)	41 (43.5%)	31 (32.6%)	2 (2.2%)	1.025
D3	Reflecting on my teaching experiences has helped (or would help) me identify areas for improvement in CSL.	6 (6.5%)	12 (13%)	9 (9.8%)	39 (41.3%)	28 (29.3%)	6 (6.5%)	1.185
D4	Discussing CSL experiences with colleagues helps (or would help) me solve implementation challenges.	6 (6.5%)	10 (10.9%)	8 (8.7%)	43 (45.7%)	27 (28.3%)	6 (6.5%)	1.144
D5	I feel that the lack of structured reflection time has been a barrier to improving my CSL practice.	4 (4.3%)	8 (8.7%)	18 (19.6%)	36 (38%)	28 (29.3%)	4 (4.3%)	1.096
	Composite						***3.803***	***1.101***

Source: ***Field Data (2026)***

The composite results in Table 8 on educator reflective practice sessions show a mean of 3.803 with a standard deviation of 1.101, indicating strong agreement among respondents that reflective practice is important for effective implementation of CSL. This overall score suggests that educators recognize the value of structured reflection in enhancing their teaching practice, though the moderate variability points to differences in how reflection is currently facilitated across schools. This aligns with Suphasri and Chinokul (2021), who emphasized scaffolded reflection as essential for professional identity, and Oduro et al. (2022), who found reflection to be a long-term strategy for improving lesson delivery. However, Machost and Stains (2023) cautioned that reflection often faces institutional obstacles, suggesting that while educators value reflection, systemic support is lacking. The implication is that reflective practice must be institutionalized through structured sessions and collaborative forums to ensure consistency across schools. The findings collectively highlight that reflective practice is not only beneficial but also necessary for improving CSL delivery so as to foster experiential learning, development of essential skills, social/civic responsibility and project quality among the JS learners. Consequently, institutional support in providing structured time and collaborative opportunities could significantly strengthen outcomes.

Looking at D1, which asked whether structured self-reflection would help educators become better CSL teachers, the mean was 3.767 with a standard deviation of 1.052. The distribution shows 3.3% strongly disagreed, 11.1% disagreed, 15.6% neutral, 45.6% agreed, and 24.4% strongly agreed. These results reveal that nearly 70% of respondents agreed or strongly agreed, underscoring the importance of self-reflection in professional growth. This agrees with Suphasri and Chinokul (2021), who highlighted reflection's role in teacher growth. Yet, Oates and Mynott (2025) critiqued traditional reflection models as superficial, suggesting that without innovation, reflection risks becoming performative. The results shows that schools should embed structured, meaningful reflection to avoid superficiality by ensuring that teachers

are trained on how to use reflective practice to identify gaps in their teaching so as bridge the gap between theory and practice.

For D2, which examined whether educators would consistently use scheduled time for reflective practice if provided by their schools, the mean was 3.935 with a standard deviation of 1.025. The responses show 2.2% strongly disagreed, 10.9% disagreed, 10.9% neutral, 43.5% agreed, and 32.6% strongly agreed. This is one of the areas that represents a high degree of agreement, with over 75% agreeing or strongly agreeing. The high mean indicates strong willingness among teachers to engage in reflective practice if institutional support is provided. The relatively low standard deviation suggests that this view is widely shared, pointing to the need for schools to create structured opportunities for reflection. This concurs with Oduro et al. (2022), who found reflection effective when consistently practiced. However, Natsiou and Tsitouridou (2025) argued that reflection must also be socially mediated, not just individually scheduled. The implication is that schools should provide both structured time and peer-based reflection opportunities.

In D3, which asked whether reflecting on teaching experiences has helped or would help identify areas for improvement in CSL, the mean was 3.739 with a standard deviation of 1.185. The distribution shows 6.5% strongly disagreed, 13% disagreed, 9.8% neutral, 41.3% agreed, and 29.3% strongly agreed. These results indicate that about 70% of respondents agreed or strongly agreed, showing that reflection is widely seen as a tool for identifying gaps and improving practice. The slightly higher standard deviation compared to other items suggests that while most of the teachers, value reflection, some may not have had sufficient opportunities to experience its benefits, pointing to uneven implementation across schools. This agrees with Machost and Stains (2023), who emphasized reflection as a tool for ethical awareness. Yet, Suphasri and Chinokul (2021) noted challenges like superficial journaling,

meaning reflection's impact can be uneven. The implication is that schools must train educators in deeper reflective methods and encourage reflective practice among CSL JS teachers.

For D4, which focused on whether discussing CSL experiences with colleagues helps solve implementation challenges, the mean was 3.783 with a standard deviation of 1.144. The responses show 6.5% strongly disagreed, 10.9% disagreed, 8.7% neutral, 45.7% agreed, and 28.3% strongly agreed. These results highlight the importance of collaborative reflection, with nearly three-quarters of respondents agreeing or strongly agreeing. The mean close to 3.8 reflects strong support for peer discussions as a way to address challenges in CSL implementation. The moderate standard deviation indicates some variation, likely due to differences in school culture and opportunities for collaboration. This supports Natsiou and Tsitouridou (2025), who emphasized social reflection. However, Oates and Mynott (2025) warned that peer reflection can be constrained by power dynamics. The implication is that collaborative reflection should be facilitated in safe, supportive environments so as to move the CSL JS educators focus from just covering the content to facilitating the learners to acquire the competency.

Finally, D5 asked whether the lack of structured reflection time has been a barrier to improving CSL practice. The mean was 3.793 with a standard deviation of 1.096. The distribution shows 4.3% strongly disagreed, 8.7% disagreed, 19.6% neutral, 38% agreed, and 29.3% strongly agreed. These results reveal that more than two-thirds of respondents feel that the absence of structured reflection time hinders their ability to improve CSL practice. The mean above 3.7 indicates moderate to strong agreement, while the relatively low standard deviation suggests consistency in this perception. This finding underscores the need for schools to institutionalize reflective practice as part of professional development. This agrees with Oduro et al. (2022), who found reflection effective only when embedded in practice. Yet, Suphasri and Chinokul (2021) cautioned that reflection without proper scaffolding risks

inefficiency. This suggests that schools must institutionalize reflection with clear frameworks and dedicated time. The overall implication is that reflective practice is essential for effective CSL implementation in Nairobi's public JS. Educators recognize its value, but current systems do not consistently provide the time or structures needed to support it.

When the CDEs views were sought on the association of educator reflective practice on the implementation of CSL, they had this to say: The CDEs were requested to indicate the extent to which reflective practice is emphasized in the county's approach to teacher development for CSL. They reported;

> In our county, reflective practices are emphasized through formal strategies rather than informal activities. We rely on structured meetings and organized workshops to drive teacher development. Instead of leaving reflection to individual choice, we intentionally embed it into professional development programs. We believe formalizing these practices ensures consistency and accountability in CSL implementation, (CDE N interview, May 5th 2026).

This study is supported by Oduro et al. (2022) who support the idea that reflection strengthens lesson delivery and exposes pedagogical flaws, resonating with the CDEs claim that reflective practice predicts CSL outcomes. Machost and Stains (2023) highlight reflection as a mechanism for professional confidence and adaptation, consistent with the CDEs emphasis on structured reflection for teacher growth.

The opinion of CDEs was sought on how they would characterize CSL implementation across Nairobi City County. The officer said this;

> CSL implementation across Nairobi City County is still uneven and faces challenges. While some schools have embraced the pedagogy and show strong learner engagement, others struggle due to limited resources and teacher preparedness. The quality of projects varies widely, with stronger outcomes in schools that have invested in professional development. Negative attitudes

> among some teachers also hinder effective delivery. Overall, CSL is progressing but requires more structured support to achieve its full potential, (CDE N interview, May 5th 2026).

These qualitative findings confirm what the researcher found out from the educators in this study. Although reflection is embedded in EPD programs, only 6 % of the educators engage in reflective practice regularly. This points to a gap that needs to be addressed to avoid superficiality as noted by a study by Ngwacho (2024) who noted that implementation of CSL in NCC was marked by ineffectiveness and superficiality. JS need to institutionalize reflection with clear frameworks and dedicated time.

The opinion of CDEs was sought on additional information related to educator professional development and CSL implementation in Nairobi City County. The following are the responses;

> I would emphasize the need for targeted conferences and structured workshops that directly address CSL challenges. Teachers should be involved in shaping the content by contributing topics they want to learn. We must also give educators dedicated opportunities to step back and reflect on their teaching methods. Strengthening peer mentoring networks will further predict collaboration and innovation. Ultimately, sustained investment in professional development is the key to making CSL impactful across the county, (CDE N interview, May 5th 2026).

These results show that educators recognize the value of reflective practice, but current systems do not consistently provide the time ad structures needed to support it. While the literature underscores reflective practice's theoretical importance, it does not adequately connect it to systemic challenges such as in-service training resource constraints and negative teacher attitudes. The CDEs rightly point out that structured support and peer mentoring networks are essential to sustain CSL across Nairobi, an area underexplored in the reviewed studies. Thus, while reflective practice is crucial, it must be embedded within broader

institutional frameworks and supported by targeted workshops and mentoring to achieve consistent CSL implementation.

Qualitative responses from sub-county QASOs on the same question are reported as follows:

The QASOs were requested to state the extent to which the teachers in the sub-county engage in reflective practice behaviors on CSL. The following was reported;

> From my observations, engagement in reflective practice is minimal across schools. It is rarely seen during visits, and I highly doubt it occurs consistently. Documentation of reflection is almost nonexistent, and there is no clear requirement for teachers to record such practices. Actually, this stands out as a major gap in CSL implementation. Teachers often rush through lessons without pausing to reflect on outcomes or learner experiences, (QASO F interview, 4th May 2026).

The findings from the QASOs reveal that reflective practice is not embedded in everyday CSL teaching as documentation of reflection is almost nonexistent. This disconnect shows that without structured monitoring and peer networks, reflection at JS level remains theoretical rather than practical, limiting its impact on fostering experiential learning, development of essential skills, social responsibility and project quality and sustainability among the JS learners who will be required to do CSL as a compulsory learning area at senior school.

The QASOs were asked to show the impact of educator reflective practices on the quality of CSL projects. The following response was provided;

> At present, the impact is very low because many teachers harbor a negative attitude toward CSL. They tend to rush through the theoretical aspects and completely omit the practical phase of projects. As a result, there is zero engagement in reflective practice, and this has no positive effect on project quality. If reflection were done well, it would directly improve the quality and

> sustainability of CSL projects. Reflection is the missing link that could transform CSL outcomes in schools, (QASO G interview, 5th May 2026).

Reflective practice can improve CSL Implementation at JS level by enabling educators to critically examine their instructional strategies and their impact on competency development. However, the findings reveal that reflective practice is not embedded in educators' routines which limits its potential to predict CSL delivery. Due to this gap between theory and practice, reflective practice remains ineffective and superficial in Nairobi's public JS.

The QASOs opinions on ways to improve support for reflective practice among CSL teachers was sought and this is what they stated;

> We need to make more frequent and targeted physical visits to schools to encourage teachers to engage in reflective practice. Creating platforms and opportunities for teachers to share ideas would also help. Focused QA school visits should specifically track and observe how CSL is being implemented on the ground. By doing this, we can provide direct feedback and guidance to teachers. Strengthening monitoring and support structures will ensure reflective practice becomes part of everyday CSL teaching, (QASO H interview, 6th May 2026).

The findings from the QASOs show that peer-mediated reflection is rarely observed, suggesting weak implementation in Nairobi's public JS. These findings agree with the CDEs who noted that although reflective practice is crucial, it must be embedded within broader institutional frameworks and supported by targeted workshops and mentoring so as to achieve consistent CSL implementation. Thus, encouraging reflective practice among educators is likely to lead to improved learner outcomes in public JS in NCC.

The opinion of HOIs was sought on how teachers in their schools engage in reflective practices with regard to CSL. This is what the HOIs had to say;

> In our school, teachers mainly engage in reflective practices through departmental meetings where they discuss challenges and successes. Classroom observations also provide opportunities for reflection, as teachers review how lessons were delivered and how learners responded. They often analyze learner performance to identify areas that need improvement. Reflection is not yet formalized but occurs within these collaborative structures. It is embedded in routine school processes rather than being a structured framework, (HOI F interview, 6th May 2026).

These findings indicate that reflective practice strengthens CSL effectiveness, and it fosters deeper experiential learning. Peer-sharing platforms could make reflective practice a more effective pedagogical strategy in the implementation of JS CSL curriculum. These qualitative findings are supported by the responses from the CDE in this study.

The views of the HOIs were sought on the benefits they have observed from teachers undertaking reflection on their CSL experiences. The is what the HOIs stated;

> Reflection has helped teachers identify gaps in their CSL implementation and areas where they need to improve. It has led to better instructional strategies that make lessons more engaging and impactful. Learners have become more involved in CSL projects as teachers adjust their approaches based on reflection. Teachers also gain confidence when they see improvements in learner participation. Overall, reflection supports continuous improvement in CSL delivery, (HOI G interview, 7th May 2026).

These findings converge with studies like Oduro et al. (2022), who affirm that reflection is a long-term professional development strategy, consistent with HOIs' observation that reflection improves instructional strategies and learner engagement. Machost and Stains (2023) stress reflection as a mechanism for confidence and ethical awareness, which matches HOIs' claim that teachers gain confidence when they see improvements in learner participation.

The HOIs were requested to indicate the way reflective practice may be strengthened in their school to predict CSL implementation. They provided the following responses;

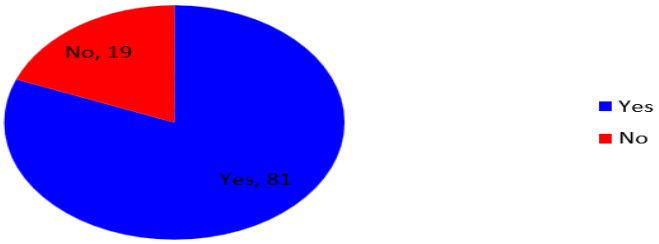
> To strengthen reflective practice, we need regular training sessions focused on reflective teaching methods. Teachers would benefit from increased support systems, including mentorship and peer-sharing platforms. Greater parental and community involvement would also predict reflection by providing external perspectives. Resources such as digital tools for documenting reflections would make the process more structured. With these types of support, reflective practice could become a more powerful driver of CSL implementation in our school, (HOI H interview, 7th May 2026).

HOIs reveal reflection is embedded informally in routine processes rather than structured frameworks. This shows that while reflection is beneficial, it requires formal training, mentorship, and digital tools to become a consistent driver of CSL implementation. Vygotsky's theory supports cooperative and collaborative learning between children and peers or teachers. By facilitating Professional Learning Communities (PLCs) and peer mentoring, it fosters collaboration by allowing teachers to co-design CSL projects using their combined expertise. These results agree with the literature that reflective practice is a powerful tool for teacher growth.

4.4.4. Educator Peer Mentoring

The study sought to establish educators peer mentoring in terms of participation in formal peer mentoring program and the overall association on implementation of CSL using structured questionnaires. Figure 8 shows the findings.

Figure 8: Participation in Formal Peer Mentoring Programs



Source: ***Field Data (2026)***

The results in Figure 8 indicate that 81% of respondents have actively participated in formal peer mentoring programs, while 19% have not. This high level of participation demonstrates that peer mentoring is widely embraced as a professional development strategy, fostering collaboration, feedback, and shared learning among educators. This implies that peer mentoring significantly strengthens CSL implementation by supporting experiential learning, developing essential skills, promoting social/civic responsibility and enhancing project quality. However, the few educators who have not participated highlight the need for inclusive structures ensuring all JS educators benefit from peer mentoring opportunities to sustain consistent CSL outcomes.

This finding agrees with Wango et al. (2025), who demonstrated that peer mentorship improved pedagogical abilities, confidence, and collaboration among tutors, with positive spillover effects on learners. Similarly, Namatende-Sakwa et al. (2025) emphasized the role of communities of practice in reinforcing teacher confidence and inclusive pedagogy, showing that peer support is transformative when embedded in structured programmes. These results also align with Kisangau et al. (2025), who recommended structured mentorship to address out-of-field teaching challenges and improve learner engagement, underscoring the importance of peer mentoring in strengthening curriculum delivery. However, there is some divergence when considering Allela et al. (2020), who focused on multimodal microlearning and ICT-based collaboration rather than peer mentoring. Their findings suggest that while collaboration is valuable, digital platforms alone may not fully substitute the interpersonal benefits of peer mentoring rooted in Ubuntu principles within Kenya's CBC-CSL framework. This highlights that while peer mentoring is widely valued, inclusive structures must ensure that the 19% of educators who have not participated are also integrated into mentoring opportunities.

Unlike external trainers, peer mentors know the learners of their mentees, the timetable and the available resources which make the advice they give practical. This shows that

institutionalizing peer mentoring across Nairobi's public JS would predict CSL implementation by supporting experiential learning across grades 7 to 9, fostering civic responsibility and improving project quality. At the same time, reforms must ensure equitable access so that all educators, regardless of workload, confidence, or school context, benefit from peer mentoring, thereby sustaining consistent CSL outcomes.

4.4.4.1. Educator Peer Mentoring Ratings

The researcher went further to find out the opinions of the JS educators' level of agreement on statements related to educator peer mentoring**.** Questionnaires were issued to 64 participants and Table 9 shows the results.

Table 9

Educator Peer Mentoring

Code	Educator Peer Mentoring	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	SD
E1	Formal peer mentoring would significantly improve CSL implementation in my school.	4 (4.3%)	4 (4.3%)	20 (21.7%)	35 (37%)	31 (32.6%)	3.891	1.058
E2	I would welcome being mentored by a more experienced CSL teacher on a regular basis.	4 (4.4%)	0 (0%)	18 (18.7%)	38 (40.7%)	34 (36.3%)	4.044	0.993
E3	I would be willing to mentor a less experienced colleague in CSL if given the opportunity.	8 (8.8%)	2 (2.2%)	16 (16.5%)	35 (37.4%)	33 (35.2%)	3.879	1.189
E4	The absence of a structured peer mentoring programme has made CSL implementation more difficult for me.	5 (5.4%)	8 (8.7%)	17 (18.5%)	35 (37%)	29 (30.4%)	3.783	1.123
E5	Observing and receiving feedback from peers has (or would) improve my CSL practice.	4 (4.3%)	4 (4.3%)	13 (14.1%)	40 (42.4%)	33 (34.8%)	3.989	1.021
	Composite						***3.917***	***1.077***

Source: ***Field Data (2026)***

The composite results on educator peer mentoring show a mean of 3.917 with a standard deviation of 1.077, indicating strong agreement among respondents that peer mentoring plays a significant role in improving the implementation of (CSL). Peer mentoring improves CSL implementation by fostering collaborative learning among educators. Therefore, this overall score suggests that educators recognize the value of peer mentoring as a supportive professional development strategy. The relatively moderate variability reflects differences in how peer mentoring is currently practiced across schools, but the general consensus is that structured peer mentoring programs would predict CSL delivery. These findings highlight the importance of structuring and institutionalizing peer mentoring as part of professional development to strengthen teacher preparedness and collaboration.

Looking at E1, which asked whether formal peer mentoring would significantly improve CSL implementation in schools, the mean was 3.891 with a standard deviation of 1.058. The distribution shows 4.3% strongly disagreed, 4.3% disagreed, 21.7% neutral, 37% agreed, and 32.6% strongly agreed. These results reveal that nearly 70% of respondents agreed or strongly agreed, underscoring the importance of formal peer mentoring in enhancing CSL practice. The mean close to 3.9 reflects strong support, while the moderate standard deviation suggests some differences in perception, likely due to varying experiences with mentoring programs. Educators cannot learn learner-centered methods and portfolio assessment from a memo. They learn by watching a peer do it. This agrees with Namatende-Sakwa et al. (2025), who found that communities of practice provided valuable peer support in CBC adoption. Wango et al. (2025) also emphasized that peer mentorship improved pedagogical abilities and collaboration among tutors. However, Allela et al. (2020) focused more on microlearning and ICT-based collaboration, suggesting that peer mentoring was underexplored in their context. This shows that while mentoring is widely valued, it must be formalized and structured to ensure consistency across schools.

For E2, which examined whether educators would welcome being mentored by a more experienced CSL teacher on a regular basis, the mean was 4.044 with a standard deviation of 0.993. The responses show 4.4% strongly disagreed, none disagreed, 18.7% neutral, 40.7% agreed, and 36.3% strongly agreed. This is one of the areas where opinions align, with over 75% agreeing or strongly agreeing. The mean above 4.0 indicates strong willingness among teachers to be mentored, while the relatively low standard deviation reflects consistency in responses. This aligns with Wango et al. (2025), who showed that mentorship predictd confidence and job satisfaction. Namatende-Sakwa et al. (2025) also highlighted the importance of peer support for inclusive pedagogy. Yet, Kisangau et al. (2025) revealed that mentorship was often absent in rural schools, suggesting disparities in access. The implication is that institutionalizing mentorship programs would ensure equitable support for teachers across diverse contexts. The findings highlight the importance of mentorship in professional development, showing that teachers value guidance from more experienced colleagues to improve CSL implementation.

In E3, which asked whether educators would be willing to mentor a less experienced colleague in CSL if given the opportunity, the mean was 3.879 with a standard deviation of 1.189. The distribution shows 8.8% strongly disagreed, 2.2% disagreed, 16.5% neutral, 37.4% agreed, and 35.2% strongly agreed. These results indicate that nearly three-quarters of respondents are willing to mentor others, reflecting a strong culture of collaboration and knowledge sharing. The mean close to 3.9 suggests strong support, though the higher standard deviation compared to other items indicates some variation in willingness, possibly due to workload or confidence levels as most of the JS educators did not interact with CSL as a learning area during their training. This agrees with Wango et al. (2025), who found tutors willing to mentor despite systemic gaps. Namatende-Sakwa et al. (2025) also emphasized peer collaboration as transformative. However, Allela et al. (2020) highlighted time constraints as

barriers to sustained collaboration, diverging from the optimistic willingness shown here. The inference is that schools must provide incentives and manageable workloads to sustain mentoring relationships. Nonetheless, the overall trend shows that teachers are open to mentoring relationships, which could strengthen CSL implementation.

For E4, which focused on whether the absence of a structured peer mentoring program has made CSL implementation more difficult, the mean was 3.783 with a standard deviation of 1.123. The responses show 5.4% strongly disagreed, 8.7% disagreed, 18.5% neutral, 37% agreed, and 30.4% strongly agreed. These results reveal that more than two-thirds of respondents feel that the lack of structured peer mentoring hinders CSL practice. The mean above 3.7 indicates moderate to strong agreement, while the standard deviation reflects some differences in perception, likely due to varying school contexts. This concurs with Kisangau et al. (2025), who identified absent mentorship as a major challenge. Wango et al. (2025) also noted inadequacies in mentor preparation. Yet, Allela et al. (2020) suggested that ICT-based communities could partially substitute for formal mentoring, diverging from the emphasis on structured programs. This indicates that while digital tools can complement mentoring, structured institutional programs remain essential. This finding underscores the need for schools to build a collaboration culture so as to institutionalize peer mentoring programs and to provide consistent support for teachers.

In the end, E5 asked whether observing and receiving feedback from peers has improved or would improve CSL practice. The mean was 3.989 with a standard deviation of 1.021. The distribution shows 4.3% strongly disagreed, 4.3% disagreed, 14.1% neutral, 42.4% agreed, and 34.8% strongly agreed. These results highlight the importance of peer observation and feedback, with more than three-quarters of respondents agreeing or strongly agreeing. The mean close to 4.0 reflects strong support, while the relatively low standard deviation indicates consistency in responses. This finding emphasizes the value of peer feedback as a practical tool

for improving teaching effectiveness and addressing challenges in CSL implementation. This agrees with Namatende-Sakwa et al. (2025), who found peer activities stimulated engagement, and Wango et al. (2025), who emphasized collaboration's positive spillover effects. This finding further contributes to Bruner's Scaffolding Theory, by showing that educator professional development should be deliberately structured as scaffolded learning for teachers.

However, Allela et al. (2020) noted that digital collaboration sometimes faced access issues, suggesting feedback mechanisms may not always be reliable. The implication is that schools should embed peer observation into professional development frameworks, ensuring consistent and practical feedback to strengthen CSL delivery. The overall implication is that mentoring is highly valued but inconsistently practiced. Institutionalizing structured mentoring, balancing workloads, and integrating digital collaboration will predict CSL implementation, teacher preparedness, and learner outcomes in Nairobi's public JS.

The following are the qualitative findings from the County Directors of Education on the association of educator peer mentoring on the implementation of CSL:

The CDE were asked to indicate the extent peer mentoring is emphasized in the county's approach to teacher development for CSL. These officers said;

> In our county, peer mentoring is emphasized through formal strategies rather than informal activities. We rely on structured meetings and organized workshops to drive teacher development. Instead of leaving mentoring to individual choice, we intentionally embed it into professional development programs. Peer mentoring is encouraged, but it is currently restricted to subject-level collaboration. We believe formalizing these practices ensures consistency and accountability in CSL implementation, (CDE N interview, May 5th 2026).

The study supports the County Directors of Education emphasis on formalized peer mentoring, and this aligns with several strands of literature. Allela et al. (2020) demonstrated that structured, multimodal platforms such as workshops and WhatsApp communities' foster collaboration and professional growth, echoing the CDEs' call for organized mentoring rather

than leaving it to chance. Similarly, Namatende-Sakwa et al. (2025) found that Communities of Practice were crucial for peer support in CBC contexts as most of the educators were trained in 8-4-4 and are still figuring out competencies, reinforcing the CDE's observation that departmental collaboration benefits new teachers adapting CSL.

The CDE were requested to provide examples of effective peer mentoring or collaborative practice regarding CSL they had observed across the county. The CDE said, "I have observed collaborative practice occurring mainly at the subject level within departments However, this collaboration is not yet executed on a large scale across the county. It remains effective in pockets but requires broader institutionalization," (CDE N interview, May 5th 2026).

Kisangau et al. (2025) highlighted the absence of mentorship as a major challenge in junior schools, supporting the CDEs claims that collaboration remains effective only in pockets and requires broader institutionalization. Thus, the literature and the CDEs responses converge: peer mentoring is transformative when formalized, but its limited scale and inconsistent application in Nairobi's public JS highlight the need for associated institutional support to embed peer mentoring as a driver of CSL implementation.

The CDE were asked to indicate how the county could better support reflective practice and peer mentoring practices among CSL teachers. This is how they responded;

> The county can better support these practices by hosting targeted conferences and structured workshops. These platforms would allow teachers to engage in reflection and peer mentoring in a more formalized way. We should involve teachers directly by letting them contribute topics and specify what they actually want to learn. Educators also need dedicated opportunities to step back and reflect on their teaching methods. By formalizing these supports, reflective practice and peer mentoring will become stronger drivers of CSL implementation, (CDE N interview, May 5th 2026).

These findings agree with the CSL JS educators' responses when they were asked if they had participated in formal peer mentoring programs. The overall score of 81% suggests that educators recognize the value of peer mentoring as a supportive professional development strategy. However, structured mentorship, specialized training and accountability mechanisms are necessary for transforming informal practices into reliable systems that consistently improve CSL outcomes. Wango et al. (2025) also confirmed that peer mentorship predicts pedagogical confidence and psychosocial health, consistent with the CDEs view that mentoring builds accountability and consistency.

Based on this EPD's association, the sub-county QASOs gave the following responses:

The QASOs were requested to indicate whether they have observed peer mentoring activities among teachers as a strategy for improving CSL implementation. The officers said;

> Yes, peer mentoring activities are observed among teachers, but they are not specific to CSL implementation. Most of the mentoring we see functions as a strict TSC requirement, where certain teachers are officially selected to mentor their peers. These activities occur primarily within schools rather than across schools. While mentoring is happening, it is not yet tailored to CSL practices. The structure is formal in terms of TSC guidelines but informal in its application to CSL, (QASO I interview, May 6th 2026).

The study supports the Sub-County QASOs' observation that peer mentoring is effective but not yet tailored to CSL, and this aligns with several strands of literature. In addition, 65 % of the educators have not attended any structured educator workshops. Allela et al. (2020) demonstrated that structured collaborative platforms such as WhatsApp communities fostered professional growth, echoing the QASOs' call for structured school meet-ups and cross-school networks to strengthen CSL mentoring.

When the QASOs were asked whether peer mentoring among teachers is effective in improving CSL quality compared to formal training, they responded, "Yes, it is highly effective

because it prepares and supports educators within real-life teaching scenarios. Unlike formal training, which can be theoretical, mentoring provides immediate, practical guidance," (QASO I interview, May 6th 2026).

The qualitative findings from the QASOs agree with the study of Namatende-Sakwa et al. (2025) who found Communities of Practice valuable for peer support, reinforcing the QASOs' view that mentoring bridges theory and practice by providing immediate, practical guidance. In addition, Wango et al. (2025) confirmed that peer mentorship predicts pedagogical confidence and collaboration, consistent with the QASOs' emphasis on mentoring as more effective than formal training in real-life teaching scenarios. Overall, peer mentoring can help teachers overcome challenges in interpreting the curriculum and applying learner-centered approaches improving learner competency acquisition in public JS in NCC.

The views of the QASOs were sought on what can be done at the sub-county level to strengthen peer mentoring for CSL. The responses they gave are, "we can organize structured school meet-ups where teachers openly discuss practical CSL strategies. Forming operational school clusters would allow teachers from different schools to cross-examine and share localized challenges. Strengthening peer mentoring will significantly improve CSL implementation CSL," (QASO J interview, May 8th 2026).

The study by Kisangau et al. (2025) highlighted the absence of mentorship as a major challenge in junior schools, supporting QASOs' claim that current mentoring is formal under TSC guidelines but informal in CSL application. Institutional CSL peer mentoring as an EPD is cheaper and more frequent than structured educator workshops. If it is institutionalized, it would support the fidelity of CSL at JS. The literature and QASOs converge: peer mentoring is transformative when structured, but its limited scope in CSL requires institutionalized platforms, cross-school collaboration, and targeted support to fully predict CSL quality.

When the HOIs were asked about the association of educators' peer mentoring they reported the following:

The HOIs were asked whether they have a culture of peer mentoring among teachers in their school with respect to CSL implementation, they said, "Peer mentoring exists but it is not practiced fully. Some teachers, especially new ones, learn how to practically implement CSL by working with more experienced colleagues. Overall, mentoring is present but inconsistent across different teachers and departments," (HOI I interview, May 7th 2026).

The study supports the HOIs' observation that peer mentoring positively impacts CSL implementation, though it also highlights areas needing formalization. Allela et al. (2020) demonstrated that collaborative platforms such as WhatsApp communities predict professional development, echoing HOIs' view that mentoring improves confidence and practical strategies but remains informal.

The HOIs were asked to indicate the impact of peer mentoring on the quality of CSL projects in their school. The HOIs noted, "Teachers who are mentored show greater confidence and improved practical implementation of CSL and learners become more engaged because teachers apply strategies they have learned from colleagues. We have also seen stronger community partnerships emerging from better project planning," (HOI J interview, May 8th 2026).

HOIs' observation that learners become more engaged when teachers apply strategies learned from colleagues is supported by Namatende-Sakwa et al. (2025) who reported that Communities of Practice were valuable for peer support, reinforcing HOIs' claim that mentoring fosters stronger project planning and community partnerships.

The opinion of these school managers was sought on how peer mentoring may be formalized or improved to better support the implementation of CSL. The following is what they reported;

> Peer mentoring should be formally incorporated into our professional development programs. We need designated CSL mentors who are trained and specialized in guiding others. Structured mentoring sessions would ensure consistency and accountability across all teachers. Providing specialized training for mentor teachers would also improve the quality of support. Formalizing peer mentoring will make it a reliable system that predicts CSL implementation in every classroom, (HOI K interview, May 11th 2026).

The call for structured mentoring sessions and designated CSL mentors to ensure consistency by the HOIs confirms Kisangau et al. (2025) findings; mentorship was absent which was a major challenge in junior schools. This finding shows that educator professional development should be deliberately structured as scaffolded learning for teachers as emphasized by Bruner's Scaffolding Theory. Literature and HOIs largely agree that peer mentoring is impactful but requires formal incorporation into professional development programs.

4.4.5. Community Service-Learning Curriculum Implementation

The opinions of the respondents were sought on the implementation of CSL. Table 10 shows the findings of educators on CSL Curriculum Implementation.

Table 10

Community Service-Learning Curriculum Implementation

Code	CSL Curriculum Implementation	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	SD
F1	My learners regularly participate in hands on community projects as part of CSL.	12 (13%)	20 (21.7%)	25 (26.1%)	25 (26.1%)	12 (13%)	3.043	1.229
F2	Through CSL, my learners have developed practical skills such as problem solving and teamwork.	10 (10.9%)	12 (13%)	18 (19.6%)	33 (34.8%)	21 (21.7%)	3.435	1.252
F3	CSL has helped my learners connect academic content with real life community issues.	14 (15.2%)	10 (10.9%)	18 (19.6%)	31 (32.6%)	21 (21.7%)	3.348	1.346
F4	The quality of CSL projects in my school meets the expected CBC standards.	10 (10.9%)	16 (17.4%)	22 (23.9%)	33 (34.8%)	12 (13%)	3.217	1.185
F5	I am satisfied with how CSL is currently being implemented in my school.	18 (19.6%)	16 (17.4%)	20 (21.7%)	27 (28.3%)	12 (13%)	2.978	1.317
	Composite						***3.204***	***1.272***

Source: ***Field Data (2026)***

The composite results on CSL curriculum implementation on Table 10 show a mean of 3.204 with a standard deviation of 1.272, reflecting moderate agreement among respondents that CSL is being implemented effectively in their schools. This overall score suggests that while educators acknowledge some positive outcomes of CSL, there are notable gaps in its practical application and alignment with the CBC-CBE standards. The spread in responses indicates differences in how CSL is experienced across schools, pointing to inconsistencies in implementation and the need for stronger institutional support.

Looking at F1, which asked whether learners regularly participate in hands-on community projects as part of CSL, the mean was 3.043 with a standard deviation of 1.229.

The distribution shows 13% strongly disagreed, 21.7% disagreed, 26.1% neutral, 26.1% agreed, and 13% strongly agreed. These results reveal that only about 39% of respondents agreed or strongly agreed that learners regularly participate in hands-on community projects as part of CSL, while a significant proportion either disagreed or remained neutral. The mean just above 3.0 suggests limited consistency in learner participation in community projects, highlighting a gap between policy expectations and actual practice. The relatively high standard deviation reflects varied experiences across schools, suggesting that while some schools may have structured CSL projects, others struggle to integrate them effectively. This agrees with Okutu et al. (2024), who found that many schools avoided CSL activities due to high costs and lack of parental involvement. Kawinzi (2025) and Ngwacho (2024) also highlighted teacher unpreparedness, which undermines project integration. However, PWPER (2023) reported positive outcomes where CSL was implemented, suggesting that participation can be impactful when supported. These results show that while CSL projects exist, they are unevenly applied, requiring stronger institutional frameworks and community partnerships to ensure consistent learner engagement.

For F2, which examined whether learners developed practical skills such as problem-solving and teamwork through CSL, the mean was 3.435 with a standard deviation of 1.252. The responses show 10.9% strongly disagreed, 13% disagreed, 19.6% neutral, 34.8% agreed, and 21.7% strongly agreed. These results indicate that more than half of respondents agreed or strongly agreed, showing that CSL contributes to skill development. The mean above 3.4 reflects moderate agreement, though the high standard deviation suggests uneven outcomes across schools. This finding highlights the potential of CSL to foster critical skills but also underscores the need for consistent implementation strategies to ensure all learners benefit equally. This aligns with Alam (2022), who emphasized structured reflection as transformative for skill development, and Okumu and Opio (2023), who found CPD programs predicted

pedagogical skills. Yet, Singh and Mukeredzi (2024) disagreed, noting fragmented CPD left teachers ill-prepared to deliver competencies. This indicates that CSL has potential to build critical skills, but without consistent CPD support, outcomes remain uneven across schools.

In F3, which asked whether CSL has helped learners connect academic content with real-life community issues, the mean was 3.348 with a standard deviation of 1.346. The distribution shows 15.2% strongly disagreed, 10.9% disagreed, 19.6% neutral, 32.6% agreed, and 21.7% strongly agreed. These results reveal that just over half of respondents agreed or strongly agreed, suggesting that CSL is moderately successful in bridging classroom learning with community realities. The mean above 3.3 reflects this moderate success, but the high standard deviation indicates significant variation in experiences. This suggests that while some schools effectively integrate academic content into community service, others face challenges in making these connections meaningful for learners. This agrees with Khan and VanWynsberghe (2020), who found CSL effective in bridging classroom and community learning. Schulte (2024) critiqued CSL's drift toward elitist pragmatism, suggesting weak integration in some contexts. This shows that while CSL can connect theory to practice, reforms must ensure inclusivity and relevance across different school settings.

For F4, which focused on whether the quality of CSL projects meets expected CBC standards, the mean was 3.217 with a standard deviation of 1.185. The responses show 10.9% strongly disagreed, 17.4% disagreed, 23.9% neutral, 34.8% agreed, and 13% strongly agreed. These results reveal that less than half of respondents agreed or strongly agreed, indicating concerns about the quality of CSL projects. The mean slightly above 3.2 reflects moderate agreement, but the relatively high proportion of disagreement and neutrality suggests that many educators feel CSL projects fall short of CBC-CBE expectations. The standard deviation indicates dispersion in perceptions, likely due to differences in resources, training, and institutional support across schools. This agrees with Kariuki et al. (2024), who found CPD

programs episodic and failing to address CSL's demands and Ireri et al. (2024) who called for more CSL training for JS educators. Rwigema and Andala (2022) supported this, noting weak technological skills jeopardized CBC success. However, PWPER (2023) highlighted strong outcomes where projects were well-structured. The implication is that quality varies widely, requiring targeted training, resources, and monitoring to align CSL projects with CBC-CBE expectations.

Lastly, F5 asked whether educators are satisfied with how CSL is currently being implemented in their schools. The mean was 2.978 with a standard deviation of 1.317. The distribution shows 19.6% strongly disagreed, 17.4% disagreed, 21.7% neutral, 28.3% agreed, and 13% strongly agreed. These results reveal that less than half of respondents expressed satisfaction, while a significant proportion disagreed or strongly disagreed. The mean below 3.0 reflects dissatisfaction with current CSL implementation, and the high standard deviation indicates wide differences in experiences. This finding underscores the need for reforms to improve the consistency and quality of CSL delivery across the schools. This concurs with Ngwacho (2024), who reported that CSL teachers are critically underprepared, and Okutu et al. (2024), who noted systemic barriers like costs and poor governance. However, Onyango (2025) observed schools that embraced CSL training achieved gains in creativity and teamwork, showing potential when support exists. This implies that the lack of uniform support structures is a key source of educator dissatisfaction. Consequently, there is need to strengthen policy and institutional frameworks to standardize CSL delivery in order to achieves equitable learning outcomes across Nairobi's public JS.

The overall implication is that CSL curriculum implementation in Nairobi's public JS requires significant strengthening. While educators recognize its potential to develop problem-solving, teamwork, and civic responsibility, current practices are uneven and often fail to meet CBC expectations. These results agree with Pacho (2019) who stated that CSL is a highly

regarded and well accepted global subject with great potential for Africa as a continent. Institutional reforms are needed to ensure that CSL projects are well-structured, adequately resourced, and consistently integrated into academic content. Professional development programs should focus on equipping teachers with the skills to design and implement high-quality CSL activities, while schools need to provide the necessary support and resources to sustain them.

The opinion of the CDE based on reports and their observations on characterization of CSL implementation across NCC were sought and this is how they responded;

> It is unfortunate but, CSL implementation across Nairobi City County is moderately done. The reality on the ground is that people have simply not picked it up fully yet. Some schools are making progress, but overall, CSL is still treated as an add-on rather than a central learning area. Teachers are trying, but without specialized training, the depth of implementation remains limited. It is clear that more effort is needed to make CSL a consistent and impactful practice across all schools, (CDE N interview, May 5th 2026).

The study highlights the urgent need for specialized teacher training to deepen CSL delivery, aligning with literature that identifies teacher under-preparedness as a critical barrier. Pacho (2019) noted that CSL remains under-researched and inconsistently applied in Africa, while Ngwacho (2024) highlighted that teacher are critically underprepared, with most lacking reflective portfolios and project design templates. This aligns with the CDEs concern that teachers lack specialized training, limiting the depth of CSL delivery. Similarly, Singh and Mukeredzi (2024) found fragmented CPD programs in South Africa and Zimbabwe, forcing teachers to rely on personal pedagogies, echoing the CDEs call for CSL to be established as a stand-alone learning area with specialized training. One of the QASOs who was interviewed in this study also stated that, “Teacher training colleges and universities should train teachers to specialize in Junior or Senior secondary schools’ curriculum,” (QASO Interview, May 14th 2026), echoing the CDE’s concern that teachers lack specialized training,

When the CDEs were requested to report on further information related to educator professional development and CSL implementation in Nairobi City County, they said, “CSL needs to be established as an independent, stand-alone learning area, teachers must be trained specifically to specialize in CSL and parents living in Nairobi must change their attitude toward CSL and actively support projects,” (CDE N interview, May 5th 2026).

The study supports the County Directors of Education observations that CSL implementation in Nairobi is moderate and often treated as an add-on, and this is consistent with much of the literature. It also underscores the importance of formalizing CSL as a stand-alone learning area to ensure consistency. Kawinzi (2025) reported teacher readiness challenges in Kenya, reinforcing the CDE’s view that CSL requires more structured support. However, while the literature emphasizes systemic gaps and resource constraints, the CDEs add a critical dimension by stressing parental and community involvement, which studies like Okutu et al. (2024) also identified as a missing link.

The QASOs were also asked to rate the overall level of CSL implementation across schools in their sub-county. These officers had this to say;

> The overall level of CSL implementation across schools in my sub-county can be rated as average or moderate. Teachers tend to focus more on theory than on practical application, which limits the depth of CSL delivery. During my visits, I assess quality by looking at how teachers evaluate individual student projects and the visible level of learner engagement. In many cases, learners are not fully involved, which shows gaps in implementation. Time constraints also play a big role, as teachers often rush through CSL activities. While some schools are making progress, the majority are still struggling to balance curriculum demands with CSL requirements. Overall, CSL is present but it is yet to be fully embraced as a core practice (QASO K interview, May 11th 2026).

The study supports the Sub-County QASOs’ observation that CSL implementation is moderate and often limited to theory, which aligns with literature and highlights teacher under-

preparedness and systemic gaps. Ngwacho (2024) reported that 92% of teachers rely on unstructured verbal reports, lacking reflective portfolios and project templates, consistent with QASOs' claim that there are gaps in implementation of CSL. Singh and Mukeredzi (2024) also found fragmented CPD programs in Southern Africa, forcing teachers to rely on personal pedagogies, echoing the QASOs' view that CSL is not yet embraced as a core practice.

The QASOs were requested to indicate the observable outcomes in schools that implement CSL well. The responses are;

> In schools that implement CSL well, learners are noticeably more engaged in both their schoolwork and community projects. Teachers in these schools show greater confidence in connecting classroom lessons with real-life experiences. Community partnerships are stronger, with schools working closely with local organizations to support projects. The school culture also shifts toward collaboration and active participation, which benefits both learners and teachers. However, even in performing schools, CSL has not been fully embraced across the board. Some teachers still treat it as secondary, which limits its overall impact. The observable outcomes are promising, but they need to be scaled up consistently across all schools, (QASO L interview, May 13th 2026).

These findings underscore the necessity of examining how structured educator workshops, educator academic upgrading, educator reflective practice, educator peer mentoring, and community involvement can transform CSL from a peripheral activity into a central, impactful practice across Nairobi's public JS.

The opinion of the respondents was sought on the common challenges the schools face in the implementation of CSL. The officers said, "One major challenge is many parents do not understand why CSL was introduced into the curriculum, and teachers often overlook CSL because it is not taught as a standalone learning area at the Junior Secondary level," (QASO M interview, May 13th 2026).

These findings converge with other scholars such as Cheruiyot (2024) who found that, teacher preparation for learner-centered pedagogies for the transition from the knowledge-based rote-learning 8-4-4 system of education to the skills-based 2-6-3-3-3 CBE system were inadequate. Kawinzi (2025) also noted readiness challenges among Kenyan teachers, reinforcing the need for specialized training and Okutu et al. (2024) reported parental resistance and high costs, which QASOs identified as major barriers undermining CSL support.

The following are the qualitative responses from the HOIs: The HOIs were asked to rate their schools' overall implementation of CSL. The responses given were**;**

> Our school's overall implementation of CSL can be rated as fair. We have adopted CSL, but the focus is still on theory rather than practical application. Evidence for this judgment comes from the inconsistency in project implementation across different classes. Some teachers are able to integrate CSL effectively, while others struggle to move beyond classroom discussions. Learner engagement is visible in certain projects, but it is not consistent across the board. We also notice that time constraints affect the depth of CSL delivery. Teachers often rush through activities, which reduces the quality of outcomes. While progress has been made, CSL has not yet reached its full potential. Practical implementation requires strengthening to make it instill the 21st century skills among the learners, (HOI L interview, May 12th 2026).

The study supports the HOIs' observation that CSL implementation in schools is fair, with emphasis still placed on theory rather than practical application. This agrees with Ngwacho (2024), who found that most teachers lacked reflective portfolios and project templates, limiting experiential delivery. Similarly, Singh and Mukeredzi (2024) reported fragmented CPD programs, forcing teachers to rely on personal pedagogies, while Cheruiyot (2024) noted that the move from the teacher-centered 8-4-4 system to the learner-centered 2-6-3-3-3 CBC-CBE system pedagogies were inadequate, echoing HOIs' concerns about inconsistency across classes.

The Heads were requested to state the changes they had observed in learners as a result of their participation in CSL projects. These are their responses;

> Learners have become more creative as a result of participating in CSL projects. They are able to collaborate better and work as a group to achieve common goals. Communication skills have improved, with learners expressing themselves more confidently during project activities. Teamwork has become a noticeable strength, as learners depend on each other to complete tasks. We have seen them apply knowledge outside school, for example in tree planting and community cleaning projects. Their sense of responsibility has grown, and they are more aware of their role in society. Learners also show increased enthusiasm when projects connect directly to their communities. CSL has helped bridge the gap between academic learning and real-life application. In general, CSL has positively association with both academic and life skills development, (HOI M interview, May 12th 2026).

A study by Kawinzi (2025) highlighted teacher readiness challenges, reinforcing the need for specialized CSL training. However, the HOIs' emphasis on positive learner outcomes, creativity, teamwork, and civic responsibility, aligns with findings by PWPER (2023), which showed CSL predicts employability and entrepreneurship. The findings also agreed with Pacho (2019) who stated that CSL was a highly regarded and well accepted global subject.

The respondents were asked to indicate how their schools engage with the community to support CSL activities. This is how they responded;

> Our school engages with the community through activities such as tree planting and community cleaning projects. Parents are encouraged to support these initiatives by providing resources and moral backing. We also involve local organizations and community leaders to strengthen partnerships. Their participation predicts the relevance and effectiveness of CSL projects. Learners benefit from seeing the direct impact of their work in the community. Teachers coordinate with stakeholders to ensure projects are meaningful and sustainable. Community involvement also helps learners develop civic responsibility. These partnerships make CSL more practical and connected to real-life issues. Yeah,

> community engagement is a vital part of our CSL implementation strategy, (HOI N interview, May 14th 2026).

Community engagement noted by HOIs resonates with UNICEF (2019), which advocates civic participation for holistic youth development. Furthermore, the emphasis on parental and community involvement points to the necessity of multi-stakeholder engagement strategies. These insights imply that the current study must not only evaluate educator professional development but also explore systemic reforms and community partnerships to strengthen CSL's transformative potential in Nairobi's public JS.

The HOIs were requested to provide information on whether their school documents CSL initiatives and projects. The following responses were obtained;

> Yes, our school documents CSL initiatives and projects through lesson plans and schemes of work. Teachers also maintain portfolios that capture learner activities and reflections. Occurrence books are used to record events and project milestones. Visitors' books provide evidence of community participation in CSL activities. Documentation is not optional; it is a requirement to ensure accountability. These records help us track progress and identify areas of improvement. They also serve as evidence during quality assurance visits. Documentation ensures that CSL activities are not forgotten but remain part of the school's learning history. (HOI O interview, May 18th 2026).

The response given by this HOI reflects differences in how CSL is currently being implemented across schools. When QASO K was interviewed on May 11th 2026, this is how they responded, "Overall, CSL is present but not yet fully embraced as a core practice."
These findings support the County Directors of Education observations that CSL implementation in Nairobi is moderate and often treated as an add-on learning area, underscoring the importance of formalizing CSL as a stand-alone learning area to ensure the missing consistency in its implementation.

The opinions of HOIs were sought on whether they had additional information concerning educator professional development and CSL implementation and this is how they responded, “Treating CSL as an independent learning area would give it more prominence and ensure it is not overlooked. Without specialized training, teachers cannot fully understand or deliver the objectives of CSL. Schools require trained CSL mentors to support implementation,” (HOI P interview, May 18th 2026).

CSL being a stand-alone learning area at the JS level is consistently affirmed in this study by the CDEs, QASOs and the HOIs. This is a clear indication that the education stakeholders know the value and the benefits of CSL. These results also highlight the necessity of examining how educator professional development, specialized CSL mentorship, and community partnerships can transform CSL from a fair or moderate inconsistent practice, into a fully integrated and impactful pedagogy in Nairobi’s public JS.

4.4.6. Community Service-Learning Enabling Environment

The opinions of the JS educators were sought on the intervening effect of CSL Enabling Environment on the relationship between educator professional development and implementation of CSL. The responses are provided in Table 11.

Table 11

Community Service-Learning Enabling Environment

Code	CSL Enabling Environment	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	SD
G1	Supportive school culture strengthens educator workshops, enhancing experiential learning and project quality.	1 (1.1%)	10 (10.9%)	25 (26.1%)	43 (45.7%)	15 (16.3%)	3.652	0.919
G2	Positive learner attitudes reinforce academic upgrading, improving essential skills and social responsibility.	6 (6.5%)	9 (9.8%)	18 (19.6%)	43 (45.7%)	17 (18.5%)	3.6	1.058
G3	Active parental engagement complements reflective practice, fostering teamwork and stronger CSL outcomes.	4 (4.3%)	11 (12%)	20 (21.7%)	43 (45.7%)	15 (16.3%)	3.576	1.018
G4	Constructive teacher attitudes predict peer mentoring, advancing project quality and civic responsibility.	3 (3.3%)	8 (8.7%)	20 (21.7%)	42 (44.6%)	20 (21.7%)	3.728	0.983
G5	Vibrant community environments support educator development, ensuring experiential learning achieves sustainable impact.	5 (5.4%)	11 (12%)	28 (29.3%)	35 (37%)	15 (16.3%)	3.467	1.052
	Composite						***3.605***	***1.01***

Source: ***Field Data (2026)***

Table 11 shows a mean of 3.605 with a standard deviation of 1.01, from the composite results on CSL Enabling Environment, reflecting moderate to strong agreement among educators that enabling conditions such as school culture, learner attitudes, parental engagement, teacher attitudes, and community environments play a critical role in shaping the implementation of CSL. This overall score suggests that educators recognize the importance of supportive environments in mediating the relationship between professional development and CSL implementation. The relatively low standard deviation indicates consistency in

responses, showing that most educators share similar perceptions about the enabling environment's association.

Looking at G1, which asked whether supportive school culture strengthens educator workshops and predicts experiential learning and project quality, the mean was 3.652 with a standard deviation of 0.919. The distribution shows 1.1% strongly disagreed, 10.9% disagreed, 26.1% neutral, 45.7% agreed, and 16.3% strongly agreed. These results reveal that more than 60% of respondents agreed or strongly agreed, highlighting the importance of school culture in reinforcing professional development outcomes. The relatively low standard deviation suggests consistency in responses, indicating that educators widely recognize the role of school culture in creating an environment where workshops translate into effective CSL projects. This aligns with Ngwacho (2024), who emphasized that re-tooling teachers through structured programs is effective only when embedded in supportive institutional cultures. Similarly, according to Achieng (2024), development of CBC competencies such as critical thinking, teamwork, problem-solving, and self-efficacy requires the use of advanced teaching techniques made possible by efficient EPD/CPD/TPD. However, Singh and Mukeredzi (2024) disagreed, noting fragmented CPD in Southern Africa where weak school cultures undermined implementation. The implication is that Nairobi schools must foster collaborative cultures to ensure workshops and related activities translate into high-quality CSL projects.

For G2, which examined whether positive learner attitudes reinforce academic upgrading and improve essential skills and social responsibility, the mean was 3.6 with a standard deviation of 1.058. The responses show 6.5% strongly disagreed, 9.8% disagreed, 19.6% neutral, 45.7% agreed, and 18.5% strongly agreed. These results indicate that nearly two-thirds of respondents agreed or strongly agreed, showing that learner attitudes are seen as a critical factor in ensuring that academic upgrading translates into improved CSL outcomes. The mean above 3.6 reflects moderate agreement, while the slightly higher standard deviation

compared to G1 suggests some variation in perceptions, possibly due to differences in learner engagement across schools. The results agree with PWPER (2023), which highlighted CSL's role in fostering patriotism and responsibility when learners are engaged. Alam (2022) also emphasized that structured reflection predicts learner attitudes toward community service. The results agree with what CDE N said in the May 5th 2026 interview, "CSL fosters patriotism, peace and unity." However, Okutu et al. (2024) found that learners did not participate in CSL due to weak parental involvement, showing attitudes alone are insufficient. This shows that learner attitudes must be nurtured alongside systemic support to maximize CSL's transformative potential.

In G3, which asked whether active parental engagement complements reflective practice and fosters teamwork and stronger CSL outcomes, the mean was 3.576 with a standard deviation of 1.018. The distribution shows 4.3% strongly disagreed, 12% disagreed, 21.7% neutral, 45.7% agreed, and 16.3% strongly agreed. These results reveal that more than 60% of respondents agreed or strongly agreed, underscoring the importance of parental involvement in supporting CSL. The mean close to 3.6 reflects moderate agreement, while the standard deviation indicates some variation in experiences, likely due to differences in parental participation across communities. This finding highlights the need for schools to actively engage parents in CSL projects to strengthen outcomes. This concurs with UNICEF (2019), which promoted civic engagement through family-community partnerships, and Okumu & Opio (2023), who found collaboration essential for effective CPD outcomes. However, Okutu et al. (2024) disagreed, reporting minimal parental involvement and high costs as barriers. Also, Dingili (2024) established insufficient sensitization due to disinformation in the media and delayed communication, a lack of resources (such as time, money, and educational materials), and unfavorable attitudes resulting from opposition to paradigm shifts, and from teacher-

centered to learner-centered approaches. This indicates that Nairobi's JS must actively involve parents through sensitization and shared responsibility to strengthen CSL outcomes.

For G4, which focused on whether constructive teacher attitudes predict peer mentoring and advance project quality and civic responsibility, the mean was 3.728 with a standard deviation of 0.983. The responses show 3.3% strongly disagreed, 8.7% disagreed, 21.7% neutral, 44.6% agreed, and 21.7% strongly agreed. These results reveal that more than two-thirds of respondents agreed or strongly agreed, showing strong support for the role of teacher attitudes in shaping peer mentoring effectiveness. The mean above 3.7 reflects strong agreement, while the relatively low standard deviation indicates consistency in responses. This finding underscores the importance of fostering positive teacher attitudes to ensure that peer mentoring programs contribute meaningfully to CSL implementation. This supports Wango et al. (2025), who found mentorship improved confidence and collaboration, and Namatende-Sakwa et al. (2025), who emphasized communities of practice. However, Kisangau et al. (2025) noted absent mentorship in rural schools, showing attitudes alone cannot overcome systemic gaps. This highlights that fostering positive teacher attitudes must be paired with structured mentoring frameworks to ensure consistent CSL delivery.

Lastly, G5 asked whether vibrant community environments support educator development and ensure experiential learning achieves sustainable impact. The mean was 3.467 with a standard deviation of 1.052. The distribution shows 5.4% strongly disagreed, 12% disagreed, 29.3% neutral, 37% agreed, and 16.3% strongly agreed. These results reveal that just over half of respondents agreed or strongly agreed, while a significant proportion remained neutral. The mean close to 3.5 reflects moderate agreement, but the relatively high proportion of neutral responses suggests that community environments may not consistently support CSL across schools. The standard deviation indicates variability in perceptions, likely due to differences in community engagement and resource availability. This agrees with UNESCO

(2019), which linked CSL to sustainable futures through community partnerships, and Ferede et al. (2015), who recommended participatory approaches for reciprocal impact. However, Schulte (2024) critiqued CSL's elitist drift, showing community environments may not always support inclusivity. The finding highlights the need for stronger partnerships between schools and communities to sustain CSL initiatives. It is therefore implied that public JS in NCC should predict partnerships with diverse community groups to guarantee that CSL initiatives result in sustainable and equitable benefits.

The findings overall imply that CSL implementation in NCC's public JS cannot rely solely on educator professional development; it must also be supported by enabling environments that reinforce training outcomes. School culture must be aligned with CSL goals to ensure workshops translate into effective projects. Learner attitudes must be nurtured to maximize the benefits of academic upgrading. Parental engagement must be strengthened to complement reflective practice and foster teamwork. Teacher attitudes must be cultivated to predict peer mentoring and civic responsibility. Community environments must be made vibrant and supportive to sustain experiential learning and ensure long-term impact. While literature supports these factors, gaps in consistency and inclusivity highlight the need for institutional reforms and stronger stakeholder collaboration in Nairobi's public JS.

The educators' opinions were sought on the specific professional development activities that have helped most in implementing CSL. The educators provided the following responses;

> Professional development activities that have helped most in implementing CSL include structured workshops that emphasize experiential learning, academic upgrading courses integrating community-based content, and reflective practice sessions that encourage teachers to critically analyze their classroom strategies. Peer mentoring has also proven valuable, as it allows less experienced educators

> to learn from colleagues while fostering collaboration. These activities collectively strengthen project quality and ensure that CSL outcomes align with CBC standards, ultimately enhancing learners' problem-solving skills, teamwork skills, and civic responsibility, (Educator 10 Questionnaire Data, 6th May 2026).

Educators highlighted structured workshops, academic upgrading, reflective practice sessions, and peer mentoring as most impactful. The study supports this, as literature emphasizes these activities as central to effective CSL delivery. Ngwacho (2024) noted that targeted workshops foster competencies in civic education, while Alam (2022) stressed structured reflection as transformative. Kawinzi (2025) confirmed CPD helps overcome resource and motivation barriers, aligning with educators' emphasis on collaboration and mentoring. This finding is supported by Odhiambo (2021), who emphasized that raising teacher qualifications and strengthening in-service training are critical for fostering 21st-century skills such as critical thinking and collaboration. Therefore, there is necessity for examining how structured workshops, reflective practice, and peer mentoring collectively strengthen CSL outcomes as evidence for scaling these interventions across Nairobi's public JS.

The opinion of the respondents was sought on the challenges they face in applying what they learnt from professional development to the CSL classroom. These are the responses they gave;

> The challenges in applying professional development to CSL classrooms often stem from resource constraints, such as limited materials or funding for community projects. Unsupportive school culture and weak parental engagement also hinder effective translation of training into practice. We sometimes face difficulties adapting theoretical knowledge into practical classroom activities, while time pressures reduce opportunities for reflection, (Educator 20 Questionnaire Data, 11th May 2026).

The JS CSL educators cited resource constraints, weak parental engagement, unsupportive school culture, and time pressures as the challenges they faced in applying what

they had learnt in the PD to CSL. The literature reviewed supports these findings, as Okutu et al. (2024) reported high costs and minimal parental involvement, while Singh & Mukeredzi (2024) found fragmented CPD programs hindered effective practice. Ngwacho (2024) also highlighted teachers' lack of structured tools, echoing educators' difficulty in translating theory into practice. These barriers highlight systemic issues that limit the effectiveness of CSL delivery despite educators' willingness to apply professional development insights. The implication for the current study is that systemic barriers must be addressed alongside professional development.

Educators were asked to make suggestions on strategies for improving professional development programs for JS CSL teachers. The educators said, "Programs should integrate experiential components, allowing teachers to practice designing and implementing CSL projects during training. Involving parents and communities in training initiatives would also strengthen outcomes," (Educator 30 Questionnaire Data, 14th May 2026).

Educators suggested tailoring training to classroom realities, integrating experiential components, continuous mentorship, reflective practice, and involving parents and communities. The study supports this, as Rwigema and Andala (2022) found context-sensitive CPD improved teacher motivation, while UNICEF (2019) emphasized community involvement for holistic youth development. Alam (2022) reinforced the importance of structured reflection, aligning with educators' call for critical analysis sessions. This calls for prediction and prioritizing of context-sensitive training and community-inclusive PD. This will ensure programs are sustainable, relevant, and aligned with CBC goals, ultimately strengthening CSL delivery in Nairobi's diverse school contexts.

The JS CSL educators' opinions were sought on how school culture, learner attitudes, parental engagement, teacher attitudes, and community environments collectively association the fidelity of CSL implementation. The educators gave the following responses;

> The school culture, learner attitudes, parental engagement, teacher attitudes, and community environments collectively shape the fidelity of CSL implementation by creating an enabling environment. Supportive school culture ensures workshops translate into meaningful projects, while positive learner attitudes reinforce academic upgrading outcomes, voluntary parental engagement provides multi-stakeholder collaboration, fostering teamwork and stronger results. Constructive and positive teacher attitudes predict peer mentoring, improving project quality and advancing civic responsibility. Vibrant community environments sustain experiential learning, ensuring long-term impact. Together, these factors mediate professional development's effectiveness in producing holistic CSL outcomes, (Educator 45 Questionnaire Data, 22nd May 2026).

Educators emphasized that supportive school culture, positive learner attitudes, active parental engagement, constructive teacher attitudes, and vibrant community environments collectively shape CSL success. The study supports this, as PWPER (2023) highlighted CSL's role in fostering patriotism and civic responsibility, while Ngwacho (2024) noted parental involvement as critical. Okumu and Opio (2023) confirmed collaboration predicts classroom performance, aligning with educators' emphasis on community partnerships. The implication for this study is that examining school culture, learner attitudes, and community environments as mediating factors will provide a holistic understanding of how professional development translates into effective CSL implementation.

4.5. Diagnostic Tests

This section indicates how test for assumption of multiple linear regression namely multicollinearity, heteroscedasticity, normality and linearity were carried out.

4.5.1. Test for Multicollinearity

Table 12 introduces the multicollinearity analysis conducted by examining tolerance and VIF values. Multicollinearity was performed on the data by examining VIF (variance

inflation factor) and assessing the tolerance (1/VIF). Independent variables are considered collinear if the value of VIF exceeds 3 (Schwarz, Schwarz & Black, 2014).

Table 12

Test for Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Structured Educator workshops	0.539	1.856
	Educator Academic Upgrading	0.490	2.039
	Educator Reflective practice	0.776	1.289
	Educator peer monitoring	0.656	1.524
a. Dependent Variable: Implementation of CSL			

Source: ***Field Data (2026)***

The test for multicollinearity shows that all predictor variables; structured educator workshops, educator academic upgrading, educator reflective practice, and educator peer monitoring, have Tolerance values above 0.4 and VIF values below 2.1. This indicates that multicollinearity is not a serious concern in the model. The lowest tolerance (0.490) and highest VIF (2.039) are for educator academic upgrading, suggesting a moderate correlation with other predictors, but still within acceptable thresholds (Tolerance > 0.1, VIF < 10). Reflective practice has the strongest independence (Tolerance 0.776, VIF 1.289). The results imply that each of the four professional development modalities contributes uniquely to the implementation of CSL in Nairobi's JS. Educator academic upgrading and structured educator workshops are slightly interrelated, but not to the extent of distorting regression estimates. Therefore, policymakers can confidently include all four dimensions in training programs, knowing that their effects on CSL implementation are statistically reliable and not redundant.

4.5.2. Test for Normality using Kolmogorov-Smirnov and Shaphiro Wilk

Shaphiro Wilk test is a robust test for normality that generates a p value that indicates whether the probability estimation follows normal distribution. Shaphiro Wilk test is performed on all the predictors and the dependent constructs as shown in Table 13.

Table 13

Tests of Normality

Variables	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Structured Educator workshops	0.024	92	.200*	0.994	92	0.202
Educator Academic Upgrading	0.019	92	.200*	0.997	92	0.788
Educator Reflective Practice	0.039	92	.200*	0.993	92	0.115
Educator Peer Mentoring	0.04	92	.200*	0.992	92	0.053

Source: ***Field Data (2026)***

The normality tests using Kolmogorov-Smirnov and Shapiro-Wilk show that all educator professional development variables have significance values greater than 0.05. This indicates that the data for each variable is normally distributed, satisfying a key assumption for regression analysis. Reflective practice (Sig. = 0.115) and peer mentoring (Sig. = 0.053) are closer to the threshold but still acceptable, while academic upgrading (Sig. = 0.788) shows the strongest normality. Since the data meets normality assumptions, regression results are assumed to be valid and unbiased. This means educators' professional development factors can be reliably analyzed to determine their association on CSL implementation in Nairobi's JS.

4.5.3. Test for Heteroscedasticity

The study used Breusch-Pagan and Koenker test to estimate heteroscedasticity. Breusch-Pagan and Koenker tests the null hypothesis that the variances of the error terms are constant. The test rejects the null hypothesis when the significant value is less than 5% (Daryanto, 2013). Table 14 displays the results of Breusch-Pagan and Koenker test.

Table 14

Breusch-Pagan and Koenker Test Statistics and Sig-Values

	LM	Sig
BP	2.165	.545
Koenker	3.348	.398

Source: ***Field Data (2026)***

The Breusch-Pagan and f tests were applied to check for heteroscedasticity in the regression model. Both tests evaluate the null hypothesis that the variance of the error terms is constant across observations. In Table 14, the Breusch-Pagan statistic (LM = 2.165, Sig = .545) shows a significance value well above the 5% threshold, meaning the null hypothesis cannot be rejected. Similarly, the Koenker test produced a non-significant result, reinforcing the conclusion that heteroscedasticity is not present. This indicates that the error terms are homoscedastic, are evenly distributed, which strengthens the reliability of the regression estimates. The absence of heteroscedasticity ensures that standard errors are valid, hypotheses tests are trustworthy, and confidence intervals are accurate. Consequently, the model's results can be interpreted with greater confidence, supporting the robustness of the study's findings on educator professional development and CSL implementation.

In summary, the study applied diagnostic tests to confirm regression assumptions. Normality was checked using Kolmogorov–Smirnov and Shapiro–Wilk tests, with most variables showing p-values above 0.05, indicating approximate normal distribution. Minor deviations were verified through histograms and Q–Q plots, and the large sample size justified parametric analysis. Multicollinearity was tested using Variance Inflation Factor (VIF) and tolerance values. VIF scores ranged between 1.21 and 2.34, below the threshold of 10, while tolerance values exceeded 0.20, confirming no serious multicollinearity. Homoscedasticity was examined using Breusch–Pagan and Koenker tests, both yielding non-significant p-values above 0.05, indicating constant variance of residuals. Where slight heteroscedasticity appeared, robust standard errors were applied. These results confirmed assumptions were satisfied, ensuring valid regression findings.

4.6. Pearson Correlation

Pearson correlation coefficient was used to test the magnitude and the size of the relationship between the dependent and the independent variables. The results are presented in Table 15.

Table 15

Correlation Test Results

Variables		Implementation of CSL	Structured Educator workshops	Educator Academic Upgrading	Educator Reflective Practice	Educator Peer Mentoring
Implementation of CSL	Pearson Correlation	1	.678**	.762**	.363**	.468**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	92	92	92	92	92
Structured Educator workshops	Pearson Correlation	.678**	1	.309**	.176	.318**
	Sig. (2-tailed)	.000		.000	.093	.002
	N	92	92	92	92	92
Educator Academic Upgrading	Pearson Correlation	.762**	.309**	1	.292**	.413**
	Sig. (2-tailed)	.000	.000		.005	.000
	N	92	92	92	92	92
Educator Reflective Practice	Pearson Correlation	.363**	.176	.292**	1	.402**
	Sig. (2-tailed)	.000	.093	.005		.000
	N	92	92	92	92	92
Educator Peer Mentoring	Pearson Correlation	.468**	.318**	.413**	.402**	1
	Sig. (2-tailed)	.000	.002	.000	.000	
	N	92	92	92	92	92

**. Correlation is significant at the 0.01 level (2-tailed).

Source: ***Field Data (2026)***

According to Table 15 the Pearson correlation results reveal strong and statistically significant relationships between educator professional development dimensions and the implementation of CSL. The strongest correlation is with academic upgrading ($r = .762$, $p < .01$), showing that higher qualifications significantly drive CSL adoption. This suggests that advanced training equips educators with deeper pedagogical skills and confidence to integrate

CSL. Structured educator workshops also correlate strongly ($r = .678$, $p < .01$), highlighting the importance of organized training sessions in enhancing CSL fidelity. Moderate correlations exist with reflective practice ($r = .363$, $p < .01$) and peer mentoring ($r = .468$, $p < .01$), indicating that collaboration and self-evaluation moderately reinforce CSL outcomes.

This finding agrees with Odhiambo (2021), who emphasized that raising teacher qualifications and strengthening in-service training are critical for fostering 21st-century skills such as critical thinking and collaboration. Higher academic qualifications equip educators with deeper pedagogical content knowledge and confidence, enabling them to integrate CSL effectively into classroom practice. The results also support Abdallah and Abdallah (2025), who argued that sustained teacher training predicts student outcomes, educational standards, and employability. Their study highlighted that academic upgrading fosters creativity, problem-solving, and entrepreneurial mindsets, which align closely with CSL's goals of experiential learning and social responsibility. The strong correlation here confirms that academic upgrading is not only beneficial but essential for advancing CBC reforms in Nairobi's public JS.

Structured workshops also correlate strongly, reinforcing findings by Andrian et al. (2025), who showed that contextualized training interventions help teachers translate knowledge into practice. Workshops provide practical strategies and collaborative learning opportunities that strengthen CSL fidelity. Moderate correlations with peer mentoring and reflective practice further support Nair (2025), who demonstrated that collaborative and reflective approaches predict teacher effectiveness, though their impact is less pronounced compared to academic upgrading. Overall, the results concur with literature that academic upgrading is the most powerful driver of CSL adoption, while structured workshops, peer mentoring, and reflective practice provide complementary reinforcement.

Structured educator workshops correlate with CSL ($r = .678$, $p < .01$) and moderately with academic upgrading ($r = .309$, $p < .01$) and peer monitoring ($r = .318$, $p < .01$). This shows workshops not only directly improve CSL but also complement other professional development dimensions. The weak, non-significant correlation with reflective practice ($r = .176$, $p = .093$) suggests workshops alone may not strongly foster reflective habits unless paired with peer or academic support. This finding concurs with Anggraini (2019), who emphasized that workshops are flexible, widely adopted professional development strategies grounded in adult and experiential learning principles. Anggraini's study highlighted that well-planned workshop, covering preparation, participatory delivery, and follow-up, predict teacher effectiveness, which aligns with the strong correlation observed here. The results also support Ajani (2023), who demonstrated that experiential learning workshops improved lesson planning, inclusivity, and learner engagement among Nigerian teachers. The moderate correlations with reflective practice and peer mentoring confirm that workshops complement other professional development dimensions, reinforcing the idea that workshops are most effective when integrated into broader EPD frameworks.

This aligns with Flora (2025), who argued that structured mentorship and CSL integration strengthen professional identity and civic responsibility, though her study was conceptual rather than empirical. In contrast, the weak and non-significant correlation with reflective practice diverges from studies such as Suphasri and Chinokul (2021), which emphasized reflection as central to teacher identity formation. The results suggest that workshops alone may not strongly foster reflective habits unless paired with peer collaboration or academic upgrading. Overall, the evidence concurs with literature that structured workshops directly improve CSL fidelity and moderately reinforce other EPD dimensions, but diverges in showing limited impact on reflective practice when implemented in isolation.

Educator academic upgrading shows the strongest overall correlation with CSL ($r = .762$, $p < .01$). It also correlates moderately with workshops ($r = .309$, $p < .01$), reflective practice ($r = .292$, $p < .01$), and peer mentoring ($r = .413$, $p < .01$). This indicates that academic growth is reinforced by structured training and collaborative practices, making upgrading a cornerstone of effective CSL implementation. The results concur with Odhiambo (2021), who highlighted that raising teacher qualifications and strengthening in-service training are essential for fostering 21st-century skills such as critical thinking and collaboration. Higher academic qualifications equip educators with deeper pedagogical content knowledge and confidence, making them more effective in integrating CSL into classroom practice. The results also support Abdallah and Abdallah (2025), who found that sustained teacher training improves student engagement, educational standards, and employability. Their study emphasized that academic upgrading fosters creativity, problem-solving, and entrepreneurial mindsets, which align closely with CSL's experiential and civic-oriented goals. The moderate correlations with workshops, reflective practice, and peer mentoring confirm that academic upgrading is reinforced by structured training and collaborative practices, positioning it as a cornerstone of effective CSL implementation.

Similarly, Andrian et al. (2025) demonstrated that contextualized education and intercultural immersion predict teacher preparation, though their study was limited in scope. The strong correlation here provides empirical support for the idea that academic upgrading, when combined with structured workshops and peer collaboration, produces scalable and policy-relevant outcomes for CSL. Overall, the evidence concurs with literature that academic upgrading is the most powerful driver of CSL adoption, while workshops, reflection, and peer mentoring provide complementary reinforcement.

Reflective practice correlates moderately with CSL ($r = .363$, $p < .01$) and peer mentoring ($r = .402$, $p < .01$). This suggests reflective practice is most effective when embedded

in collaborative accountability structures. Its weaker link with workshops ($r = .176$, $p = .093$) implies reflective practice requires intentional scaffolding beyond formal training. The results agree with the literature, supporting the claim that reflective practice correlates moderately with CSL ($r = .363$, $p < .01$) and peer mentoring ($r = .402$, $p < .01$). This finding concurs with Suphasri and Chinokul (2021), who emphasized that reflection predicts teacher identity and quality but requires scaffolding through journals, peer dialogue, and technology integration to be effective. The moderate correlation here reflects that reflection alone is not sufficient; it becomes more impactful when embedded in collaborative accountability structures such as peer mentoring. The results also support Natsiou and Tsitouridou (2025), who found that reflection has both inherent and strategic social dimensions, strengthened when teachers engage in peer-mediated activities. This aligns with the observed correlation between reflection and peer mentoring, confirming that reflective habits are reinforced through collaboration and shared accountability.

Similarly, Oduro et al. (2022) highlighted reflection as a long-term strategy for professional growth, improving lesson delivery and exposing pedagogical flaws. However, their study also noted that reflection is most effective when integrated into broader professional development frameworks, which explains why its correlation with workshops was weak. This divergence suggests that workshops alone may not foster deep reflection unless intentionally designed to include reflective practice components. Overall, the evidence converges with literature that reflection contributes meaningfully to CSL outcomes, but its effectiveness is amplified when combined with peer mentoring and structured support.

Peer mentoring correlates moderately with CSL ($r = .468$, $p < .01$) and with academic upgrading ($r = .413$, $p < .01$), workshops ($r = .318$, $p < .01$), and reflective practice ($r = .402$, $p < .01$). This demonstrates that peer mentoring strengthens multiple dimensions of professional development, reinforcing CSL through collaboration, mentorship, and accountability. The

results agree with the literature, supporting the claim that peer mentoring correlates moderately with CSL ($r = .468$, $p < .01$) and with academic upgrading ($r = .413$, $p < .01$), workshops ($r = .318$, $p < .01$), and reflective practice ($r = .402$, $p < .01$). The findings concur with Wango et al. (2025), who showed that peer mentorship improved tutors' pedagogical abilities, confidence, and collaboration, with positive spillover effects on student teachers. This aligns with the moderate correlations observed, confirming that mentorship predicts teacher effectiveness and indirectly supports CSL adoption.

Similarly, Namatende-Sakwa et al. (2025) found that communities of practice provided valuable peer support, enabling teachers to adopt inclusive pedagogical practices under CBC. This supports the idea that peer mentoring complements other EPD dimensions, reinforcing structured workshops and academic upgrading. The results also support Allela et al. (2020), who highlighted the effectiveness of collaborative microlearning communities, particularly WhatsApp groups, in fostering teacher engagement and knowledge sharing. Their findings resonate with the observed correlations, showing that peer-based accountability and collaboration are critical in sustaining professional growth. Overall, the evidence concurs with literature that peer mentoring is a vital, though moderate, driver of CSL implementation. It strengthens other professional development dimensions and ensures that reflective practice and structured training are reinforced through collective responsibility.

Therefore, all correlations are statistically significant ($p < .01$), confirming robust relationships. Academic upgrading emerges as the strongest driver, while workshops and peer mentoring provide complementary reinforcement. Reflective practice, though weaker, remains valuable when integrated with peer collaboration. Academic upgrading emerges as the strongest driver of CSL implementation, a finding that concurs with Odhiambo (2021), who emphasized the importance of raising teacher qualifications to foster 21st-century skills. Structured workshops and peer mentoring provide complementary reinforcement, aligning

with Anggraini (2019), who highlighted workshops as flexible, competency-focused strategies that predict teacher effectiveness. Reflective practice, though weaker, remains valuable when integrated with peer collaboration, supporting Suphasri and Chinokul (2021), who showed reflection gains strength when scaffolded through peer dialogue. Finally, Natsiou and Tsitouridou (2025) confirmed that peer-mediated reflection stimulates engagement, reinforcing the observed synergy between reflection and collaboration. These findings underscore that a multi-component professional development framework is essential for sustainable CSL implementation. The integration of educator academic upgrading, structured educator workshops, educator peer mentoring, and educator reflective practice, positively enables schools to build a holistic system that strengthens teacher capacity and ensures fidelity in curriculum reforms.

4.7. Regression Analysis

Regression analysis was carried out to show which among the independent variables were related to dependent variable.

4.7.1. Association of Structured Educator Workshops on Implementation of Community Service-Learning

The first research question of the study was to assess association of Structured Educator workshops on Implementation of CSL. The following null hypothesis was formulated;

$H0_1$: Structured educator workshops have no significant influence on the implementation of community service-learning in public junior schools in Nairobi City County.

4.7.1.1. Model Summary for Structured Educator Workshops

Table 16 shows the model summary of the relationship between structured educator workshops and the implementation of CSL.

Table 16

Model Summary for Structured Educator Workshops

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.678[a]	.459	.453	.34797

a. Predictors: (Constant), Structured Educator workshops

b. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The correlation coefficient (R = 0.678) illustrated in Table 16 indicates a strong positive relationship, meaning that well-organized workshops significantly predict CSL practices in JS. The R Square value of 0.459 reveals that structured workshops explain about 45.9% of the variance in CSL implementation, while the adjusted R Square of 0.453 confirms the model's reliability after accounting for sample size. The standard error of 0.34797 suggests moderate accuracy in predicting CSL outcomes. The F-statistic is 76.477 with a p-value of 0.0000 which implies that the regression model is significant. Therefore, the t-statistics and p-values can reliably be used to test the significance of coefficients in the model.

4.7.1.2. Analysis of Variance (ANOVA) for Structured Educator Workshops

The ANOVA test for the association of structured educator workshops on the implementation of CSL in was conducted. The results are shown in Table 17.

Table 17

ANOVA for Structured Educator Workshops

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.260	1	9.260	76.477	.000[b]
	Residual	10.898	90	.121		
	Total	20.158	91			

a. Dependent Variable: Implementation of CSL
b. Predictors: (Constant), Structured Educator workshops

Source: ***Field Data (2026)***

The ANOVA results in Table 17 demonstrate that structured educator workshops significantly predict the implementation of CSL. The regression sum of squares (9.260) compared to the residual (10.898) shows that a substantial proportion of variance in CSL implementation is explained by workshops. The F-statistic of 76.477 with a significance value of .000 confirms that the model is highly significant. Therefore, **s**tructured workshops are a critical determinant of CSL adoption. This means that investing in systematic, well-designed training programs for educators will strongly predict CSL integration in JS, improving learner engagement and community development outcomes.

4.7.1.3. Coefficients for Structured Educator Workshops

The coefficients test highlights the association of structured educator workshops on the implementation of CSL in public JS. The results are illustrated in Table 18.

Table 18

Coefficients for Structured Educator Workshops

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.193	.206		5.781	.000
	Structured Educator workshops	.502	.057	.678	8.745	.000

a. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The coefficients results captured in Table 18 show that structured educator workshops significantly predict the implementation of CSL in public JS. The regression equation obtained from this output is:

$Y = 1.193 + 0.502\ X_1 + \varepsilon$

The constant value ($\beta = 1.193$, Sig. = .000) indicates the baseline level of CSL implementation when workshops are absent. The unstandardized coefficient for structured workshops ($\beta = 0.502$, Sig. = .000) means that for every unit increase in workshop participation, CSL implementation rises by 0.502 units. The standardized Beta coefficient (0.678) confirms a strong positive effect, while the high t-value (8.745) reinforces statistical significance. Therefore, at $\rho < 0.05$ level of significance the null hypothesis is rejected implying that structured educator development has significant effect on implementation of CSL.

The results are supported by Anggraini (2019), who emphasized workshops as flexible, competency-focused strategies that predict teacher effectiveness. Ajani (2023) similarly demonstrated that experiential workshops improve lesson planning and learner engagement, reinforcing the strong standardized Beta (0.678). Flora (2025) highlighted the importance of structured mentorship in workshops and CSL integration for professional identity, aligning with the observed significance of workshops. Finally, Ngwacho (2024) stressed that structured educator re-tooling is essential for bridging theory-practice gaps in CBC reforms. These findings highlight the critical role of structured workshops in equipping educators with practical skills and strategies.

4.7.2. Association of Educator Academic Upgrading on Implementation of Community Service-Learning

The second research question of the study was to determine the association of educator academic upgrading on implementation of CSL. This section shows the results of the model summary, ANOVA and regression coefficients. The following null hypothesis was formulated;

H0$_2$: Educator academic upgrading has no significant influence on the implementation of community service-learning in public junior schools in Nairobi City County.

4.7.2.1. Model Summary for Educator Academic Upgrading

Table 19 shows the model summary of the association of educator academic upgrading on the implementation of CSL.

Table 19

Model Summary for Educator Academic Upgrading

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.762[a]	.581	.576	.30649

a. Predictors: (Constant), Educator Academic Upgrading
b. Dependent Variable: Implementation of CSL

Source: Field Data (2026)

The model summary shows a strong correlation (R = 0.762) between educator academic upgrading and CSL implementation. The R Square value of 0.581 indicates that academic upgrading explains 58.1% of the variance in CSL outcomes, while the adjusted R Square (0.576) confirms reliability after accounting for sample size. The standard error of 0.30649 suggests predictions are fairly precise. Thus, academic upgrading is a powerful determinant of CSL adoption. It highlights that higher qualifications and continuous learning significantly strengthen educators' ability to integrate CSL effectively.

4.7.2.2. Analysis of Variance for Educator Academic Upgrading

The ANOVA test for the association of educator academic upgrading on the implementation of CSL was conducted and Table 20 shows the results.

Table 20

ANOVA for Educator Academic Upgrading

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.704	1	11.704	124.592	.000[b]
	Residual	8.454	90	.094		
	Total	20.158	91			

a. Dependent Variable: Implementation of CSL
b. Predictors: (Constant), Educator Academic Upgrading

Source: ***Field Data (2026)***

The ANOVA results illustrated in Table 20 demonstrate that educator academic upgrading significantly associations the implementation of CSL in public JS. The regression sum of squares (11.704) compared to the residual (8.454) indicates that a substantial proportion of variance in CSL implementation is explained by academic upgrading. The F-statistic of 124.592 with a significance value of .000 confirms that the model is highly significant and not due to chance. This implies that academic upgrading strongly predicts CSL adoption, meaning that educators with advanced training and qualifications have better pedagogical strategies, content knowledge and capacity to handle integrated and competency-based CSL practices.

4.7.2.3. Coefficients for Educator Academic Upgrading

The coefficients test highlights the influence of educator academic upgrading on the implementation of CSL in NCC public JS. The results are given in Table 21.

Table 21

Coefficients for Educator Academic Upgrading

		Unstandardized Coefficients		Standardized Coefficients		
Model		**B**	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	.910	.187		4.861	.000
	Educator Academic Upgrading	.759	.068	.762	11.162	.000

a. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The coefficients results shown in Table 21 provide clear evidence of the strong association of educator academic upgrading on the implementation of CSL. The regression equation obtained from this output is:

$Y = 0.910 + 0.759\ X_2 + \varepsilon$

The constant value ($\beta = 0.910$, Sig. = .000) indicates the baseline level of CSL implementation when academic upgrading is absent. The unstandardized coefficient for academic upgrading ($\beta = 0.759$, Sig. = .000) indicates that for every unit increase in academic upgrading, CSL implementation rises by 0.759 units. This is a substantial effect size, highlighting the importance of continuous academic growth. The standardized Beta coefficient (0.762) confirms that academic upgrading is a strong predictor, while the high t-value (11.162) reinforces statistical significance and reliability of the results. Therefore, at $\rho < 0.05$ level of significance the null hypothesis is rejected implying that association of educator academic upgrading has significant effect on implementation of CSL.

The results agree with Odhiambo (2021), who emphasized that raising teacher qualifications fosters critical thinking and collaboration. Abdallah and Abdallah (2025) similarly highlighted that sustained training predicts student outcomes and employability, aligning with the strong standardized Beta (0.762). Andrian et al. (2025) demonstrated that contextualized education and intercultural immersion strengthen teacher preparation, reinforcing the importance of continuous academic growth. Nair (2025) further showed that structured interventions improve critical thinking, supporting the reliability of the high t-value (11.162). This underscores the need for sustained academic growth policies, integrated with workshops, reflection, and peer mentoring, to ensure effective curriculum reforms under CBC and foster holistic teacher capacity.

4.7.3. Association of Educator Reflective Practice on Implementation of Community Service-Learning

The third research question of the study was to determine the influence of educator reflective practice on the implementation of CSL. The following null hypothesis was formulated;

$H0_3$: There is no significant influence in educator development in reflective practice and the implementation of CSL in public JS in NCC.

4.7.3.1. Model Summary for Educator Reflective Practice

The model summary results of the influence of educator reflective practice on implementation of CSL are shown in Table 22.

Table 22

Model Summary for Educator Reflective Practice

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.363[a]	.132	.122	.44089

a. Predictors: (Constant), Educator Reflective practice
b. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

Table 22 demonstrates the association of educator reflective practice on the implementation of CSL. The correlation coefficient (R = 0.363) indicates a weak to moderate positive relationship, suggesting reflective practice contributes to CSL adoption but less strongly than the other professional development models. The R Square value of 0.132 shows that reflective practice explains 13.2% of the variance in CSL implementation, while the adjusted R Square (0.122) confirms reliability after accounting for sample size. The standard error of 0.44089 suggests moderate prediction accuracy. Thus, reflective practice encourages educators to critically evaluate their teaching methods and adapt strategies, which predict CSL integration moderately.

4.7.3.2. ANOVA for Educator Reflective Practice

The ANOVA test was conducted to check the association of educator reflective practice on the implementation of CSL in public JS. The results are in Table 23.

Table 23

ANOVA for Educator Reflective Practice

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.663	1	2.663	13.700	.000[b]
	Residual	17.495	90	.194		
	Total	20.158	91			

a. Dependent Variable: Implementation of CSL
b. Predictors: (Constant), Educator Reflective Practice

Source: ***Field Data (2026)***

The ANOVA results demonstrate that educator reflective practice significantly associations the implementation of CSL in NCC public JS. The regression sum of squares (2.663) compared to the residual (17.495) shows that reflective practice explains a modest portion of the variance in CSL outcomes. The F-statistic of 13.700 with a significance value of .000 confirms that the regression model is statistically significant and not due to chance. Reflective practice contributes positively to CSL implementation, though its effect is weaker compared to other professional development factors such as academic upgrading or structured workshops.

4.7.3.3. Coefficients for Educator Reflective Practice

The coefficients test highlights the association of educator reflective practice on the implementation of CSL in public JS. The results are in Table 24.

Table 24

Coefficients for Educator Reflective Practice

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.233	.204		10.937	.000
	Educator Reflective practice	.274	.074	.363	3.701	.000

a. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The regression equation obtained from this output is:

$Y = 2.233 + 0.274\ X_3 + \varepsilon$

The constant value ($\beta = 2.233$, Sig. = .000) represents the baseline level of CSL implementation when reflective practice is absent, showing that some degree of CSL occurs naturally. The regression coefficient for educator reflective practice was 0.274. This indicates that a unit increase in association of educator reflective practice would result in 27.4% increase in implementation of CSL. Although this effect is smaller compared to other professional development factors, it remains statistically significant. The standardized Beta coefficient (0.363) confirms a moderate positive impact, while the t-value (3.701) reinforces the reliability of this relationship. The t-statistic and corresponding p-value were 3.701 and 0.000 respectively. Therefore, at $\rho < 0.05$ level of significance the null hypothesis is rejected implying that association of educator reflective practice has significant effect on implementation of CSL.

The results concur with Suphasri and Chinokul (2021), who emphasized scaffolded reflection and peer dialogue as essential for teacher identity and quality. Natsiou and Tsitouridou (2025) similarly highlighted the social dimension of reflection, showing that peer-mediated activities strengthen reflective habits. Oduro et al. (2022) found reflection to be a long-term strategy for professional growth, improving lesson delivery and exposing pedagogical gaps. Finally, Machost and Stains (2023) argued that reflection predicts ethical awareness and professional confidence, aligning with the moderate but significant effect

observed. These findings underscore that while reflective practice is not the strongest driver of CSL, it remains a vital component when embedded within collaborative structures. Integrating reflection with peer mentoring and workshops ensures sustainable teacher growth and fidelity in CBC-CSL reforms.

4.7.4. Association of Educator Peer Mentoring on Implementation of Community Service-Learning

The fourth research question of the study was to assess the association of development in educator peer mentoring on the implementation of CSL. The following null hypothesis was formulated;

$H0_4$: There is no significant influence in educator development in peer mentoring and the implementation of community service-learning in public junior schools in Nairobi City County.

4.7.4.1. Model Summary for Educator Peer Monitoring

The model summary results of the association of educator peer mentoring on implementation of CSL are given in Table 25 below.

Table 25

Model Summary for Educator Peer Mentoring

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.468[a]	.219	.210	.41827

a. Predictors: (Constant), Educator Peer Mentoring

b. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

Table 25 shows the association of educator peer mentoring on the implementation of CSL. The correlation coefficient (R = 0.468) indicates a moderate positive relationship, meaning peer mentoring contributes to CSL implementation but less strongly compared to other professional development factors. The R Square value of 0.219 reveals that peer mentoring explains 21.9% of the variance in CSL implementation, while the adjusted R Square (0.210) confirms reliability after accounting for sample size. The standard error of 0.41827

suggests moderate prediction accuracy. Peer mentoring predicts CSL by fostering collaboration, accountability, and shared learning among educators.

4.7.4.2. ANOVA Test for Educator Peer Mentoring

The ANOVA test for the association of educator peer mentoring on the implementation of CSL was carried out. The results are illustrated in Table 26.

Table 26

ANOVA Test for Educator Peer Mentoring

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.412	1	4.412	25.217	.000[b]
	Residual	15.746	90	.175		
	Total	20.158	91			

a. Dependent Variable: Implementation of CSL
b. Predictors: (Constant), Educator Peer Mentoring

Source: ***Field Data (2026)***

The ANOVA results demonstrate that educator peer mentoring significantly associations the implementation of CSL in public JS. The regression sum of squares (4.412) compared to the residual (15.746) shows that peer mentoring explains a meaningful portion of the variance in CSL outcomes. The F-statistic of 25.217 with a significance value of .000 confirms that the regression model is highly significant and not due to chance. This indicates that peer mentoring contributes positively to CSL implementation, though its effect is moderate compared to other professional development frameworks.

4.7.4.3. Coefficient for Educator Peer Mentoring

The coefficients test highlights the association of educator peer mentoring on the implementation of CSL in Nairobi's public JS. The results are in Table 27.

Table 27

Coefficient for Educator Peer Mentoring

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**T**	**Sig.**
1	(Constant)	1.980	.202		9.811	.000
	Educator Peer Mentoring	.492	.098	.468	5.022	.000

a. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The coefficients results highlight the association of educator peer mentoring on the implementation of CSL in public JS in NCC. The regression equation obtained from this output is:

$Y = 1.980 + 0.492\ X_2 + \varepsilon$

The constant value ($\beta = 1.980$, Sig. = .000) represents the baseline level of CSL implementation when peer mentoring is absent, showing that some degree of CSL occurs naturally. The unstandardized coefficient for peer mentoring ($\beta = 0.492$, Sig. = .000) indicates that for every unit increase in peer mentoring, CSL implementation rises by 0.492 units. This effect is moderate but statistically significant. The standardized Beta coefficient (0.468) confirms that peer mentoring has a positive impact, though weaker compared to other professional development factors such as academic upgrading. The high t-value (5.022) further validates the reliability of this relationship. The results agree with Wango et al. (2025), who found peer mentorship improved pedagogical abilities, confidence, and collaboration among tutors, with spillover benefits for learners. Namatende-Sakwa et al. (2025) similarly emphasized communities of practice as valuable peer support structures, enabling teachers to adopt inclusive pedagogies under CBC. Allela et al. (2020) highlighted the effectiveness of collaborative microlearning communities, such as WhatsApp groups, in fostering teacher engagement and knowledge sharing, reinforcing the observed impact of peer accountability.

Kisangau et al. (2025) also recommended structured mentorship and collaborative professional communities to address out-of-field teaching challenges, aligning with the moderate but significant effect of peer mentoring. This indicates that while peer mentoring is not the strongest driver compared to academic upgrading, it remains a crucial reinforcement mechanism. Embedding mentorship and collaborative accountability into EPD frameworks ensures sustainable CSL adoption, strengthens teacher networks, and predicts experiential learning outcomes. When teachers observe each other's practices and provide constructive feedback, they are more likely to adopt CSL strategies effectively. This mechanism builds a culture of teamwork and continuous improvement, ensuring that CSL is not just an individual effort but a collective responsibility.

4.8. Overall Model

4.8.1. Educator Professional development on Implementation of Community Service-Learning

The purpose of the study was to determine the association of Educator Professional Development on the Implementation of Community Service-Learning. The following null hypothesis was formulated;

$H0_5$: Educator Professional Development has no significant influence on the implementation of community service-learning in public junior schools in Nairobi City County.

4.8.1.1. Model Summary for Educator Professional Development

The model summary results of the association of EPD on the implementation of CSL are indicated in Table 28.

Table 28

Model Summary for Educator Professional Development

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.753[a]	.567	.562	.31134

a. Predictors: (Constant), Educator Professional Development
b. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The model summary indicates a strong relationship between educator professional development and the implementation of CSL. The correlation coefficient (R = .753) suggests a substantial positive association, meaning that improvements in professional development are closely linked to better implementation outcomes. The R Square value of .567 shows that approximately 56.7% of the variance in CSL implementation can be explained by educator professional development. This is a relatively high proportion, highlighting the critical role of professional development in shaping the CSL implementation success. The Adjusted R Square (.562) confirms that the model remains robust even after accounting for potential bias from sample size, reinforcing the reliability of the findings.

The standard error of the estimate (.31134) indicates a moderate level of prediction error, suggesting that while professional development is a strong predictor, other factors also association CSL implementation. These may include school culture, learner attitude, parental engagement, teacher attitude and the community environment within schools. Nonetheless, the model underscores that professional development is a cornerstone for effective CSL adoption, providing educators with the skills, knowledge, and confidence to integrate the framework into practice.

4.8.1.2. ANOVA for Educator Professional Development

The ANOVA test for the association of EPD on the implementation of CSL was conducted. The results are given in Table 29.

Table 29

ANOVA for Education Professional Development

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.433	1	11.433	117.949	.000[b]
	Residual	8.724	90	.097		
	Total	20.158	91			

a. Dependent Variable: Implementation of CSL
b. Predictors: (Constant), Educator Professional Development

Source: ***Field Data (2026)***

The ANOVA results as shown in Table 29 provide compelling evidence that educator professional development significantly predicts the implementation of CSL. The regression sum of squares (11.433) compared to the residual sum of squares (8.724) indicates that a substantial proportion of the variance in CSL implementation is explained by professional development. With a total sum of squares of 20.158, the model accounts for more than half of the variability, aligning with the earlier R Square value of .567. The F-statistic of 117.949 is notably high, demonstrating that the regression model is statistically significant. The associated significance value (Sig. = .000) confirms that the relationship between professional development and CSL implementation is not due to chance. This means that improvements in professional development strongly and reliably predict the likelihood of successful CSL adoption. The degrees of freedom (df = 1 for regression, 90 for residual) further illustrate that the predictor variable, professional development, has a singular but powerful effect on the dependent variable.

4.8.1.3. Coefficients for Educator Professional Development

The coefficients test highlights the association of EPD on the implementation of CSL in public JS. The results are indicated in Table 30.

Table 30

Coefficients test for Educator Professional Development

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**T**	**Sig.**
1	(Constant)	.587	.222		2.647	.010
	Educator Professional Development	.870	.080	.753	10.860	.000

a. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The coefficients result in Table 30 reveal deeper insights into the predictive strength of EPD on the implementation of CSL. The regression equation obtained from this output is:

$Y = 0.587 + 0.870\ X_2 + \varepsilon$

The unstandardized coefficient (β = .870) indicates that for every one-unit increase in professional development, CSL implementation increases by .870 units, holding other factors constant. This demonstrates a strong positive effect, meaning that improvements in professional development directly translate into substantial gains in CSL adoption. The standardized coefficient (Beta = .753) further confirms the strength of this relationship, showing that professional development is a highly influential predictor compared to other potential variables. The constant (β = .587, Sig. = .010) suggests that even without professional development, there is a baseline level of CSL implementation, though relatively modest. The t-value for professional development (t = 10.860) is very high, and the associated significance level (Sig. = .000) confirms that the predictor is statistically significant. This eliminates the likelihood that the observed relationship is due to random variation, reinforcing the reliability of the findings.

The results agree with Odhiambo (2021), who emphasized that teacher professional development is vital for improving student achievement and reform success. Kawinzi (2025) similarly found that well-trained teachers overcome CSL barriers such as resource constraints and motivation issues. Ngwacho (2024) highlighted that EPD equips teachers with

competencies for real-world problem-solving and civic education integration, aligning with the strong predictive strength observed. Alam (2022) further demonstrated that structured reflection transforms CSL into a powerful educational experience, underscoring the role of continuous training. Okumu and Opio (2023) too confirmed that CPD programs significantly predict pedagogical skills, validating the importance of sustained professional development. These findings underscore that professional development is the cornerstone of effective CSL implementation. Embedding structured, context-responsive EPD programs within CBC reforms ensures teacher preparedness, strengthens civic competencies, and promotes holistic learner development in Nairobi's public JS.

4.9. Overall Model

4.9.1.1. Model Summary for Overall Model

The model summary of the overall model results of the association of EPD on implementation of CSL are presented in Table 31.

Table 31

Model Summary for Overall Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.790[a]	.624	.606	.29530

a. Predictors: (Constant), Structured Educator Workshops, Educator, Educator Academic Upgrading, Educator Reflective Practice, Educator Peer Mentoring
b. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The overall model summary demonstrates a strong predictive relationship between educator professional development components and the implementation of CSL. The correlation coefficient (R= .790) indicates a very strong positive association, suggesting that improvements in professional development activities; structured workshops, academic upgrading, reflective practice, and peer mentoring, were closely linked to predicted CSL outcomes. The R Square value of .624 shows that 62.4% of the variance in CSL implementation

was explained by these predictors, which is substantial and highlights their collective importance.

The adjusted R Square (.606) confirms the robustness of the model, accounting for sample size and potential bias, thereby reinforcing the reliability of the findings. The relatively low standard error of the estimate (.29530) indicates that the model's predictions were precise, though some unexplained variance remained. This suggests that while professional development was a dominant factor, other contextual associations such as school culture, learner attitude, parental engagement, teacher attitude and community environment also contributed to CSL implementation. The results underscore that professional development was not only significant but foundational to CSL implementation.

4.9.1.2. ANOVA for Overall Model

The ANOVA test for the association of structured educator workshops on the implementation of CSL in Nairobi's public JS was done and the results are shown in Table 32.

Table 32

ANOVA for Overall Model

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.571	4	3.143	36.040	.000[b]
	Residual	7.587	87	.087		
	Total	20.158	91			

a. Dependent Variable: Implementation of CSL
b. Predictors: (Constant), Structured Educator Workshops, Educator Academic Upgrading, Educator Reflective Practice, Educator Peer Mentoring

Source: ***Researcher (2026)***

The overall model summary demonstrates a strong predictive relationship between educator professional development components and the implementation of CSL. The correlation coefficient (R= .790) indicates a very strong positive association, suggesting that improvements in professional development activities, such as structured educator workshops,

educator academic upgrading, educator reflective practice, and educator peer mentoring, are closely linked to predicted CSL outcomes. The R Square value of .624 shows that approximately 62.4% of the variance in CSL implementation was explained by these professional development predictors, which is substantial and highlights their collective importance. The adjusted R Square (.606) confirms the robustness of the model, accounting for sample size and potential bias, thereby reinforcing the reliability of the findings. The standard error of the estimate (.29530) is relatively low, indicating that the model's predictions were precise, though some unexplained variance remains. This suggests that while professional development is a dominant factor, other contextual associations such as institutional support, resource allocation, or socio-cultural dynamics may also play a role.

4.9.1.3. Coefficients for Overall Model

The coefficients test highlights the association of EPD on the implementation of CSL in Nairobi's public JS. The results are shown in Table 33.

Table 33

Coefficients for Overall Model

Model		Unstandardized Coefficients		Standardized Coefficients		
		β	**Std. Error**	**Beta**	**T**	**Sig.**
1	(Constant)	.566	.211		2.681	.009
	Structured Educator Workshops	.263	.064	.320	4.109	.000
	Educator Academic Upgrading	.496	.122	.498	4.066	.000
	Educator Reflective Practice	.187	.056	.232	3.339	.001
	Educator Peer Mentoring	.157	.065	.202	2.415	.018

a. Dependent Variable: Implementation of CSL

Source: ***Field Data (2026)***

The coefficients analysis of the overall model as shown in Table 33, highlights the relative association of different Educator Professional Development components on the

implementation of Community Service-Learning in public Junior Schools in Nairobi City County. The established regression equation by the study was;

$Y = 0.566 + 0.1263\ X_1 + 0.496\ X_2 + 0.187\ X_3 + 0.157X_4$

The constant (β = .566, Sig. = .009) indicates a modest baseline level of CSL implementation even without professional development interventions. Among the predictors, educator academic upgrading emerged as the strongest contributor (β = .496, Beta = .498, t = 4.066, Sig. = .000), showing that enhancing educators' academic qualifications had the most substantial impact on CSL outcomes. This suggests that deeper formal training equips teachers with advanced knowledge and pedagogical skills that directly strengthen CSL practices. The results converge with Odhiambo (2021), who emphasized that raising teacher qualifications fosters critical thinking and collaboration, thereby strengthening curriculum reforms. Abdallah and Abdallah (2025) similarly highlighted that sustained training and academic growth predict student outcomes, creativity, and employability, aligning with the observed substantial impact of upgrading. Andrian et al. (2025) demonstrated that contextual immersion and intercultural education transform teacher preparation, reinforcing the importance of deeper academic training. Nair (2025) further showed that structured academic interventions significantly improve critical thinking skills, supporting the predictive strength of upgrading. Turner (2024) also underscored the role of advanced reflective and critical thinking models, which are more effectively applied by academically upgraded educators. These findings underscore that academic upgrading is not only statistically significant but also practically essential for effective CSL implementation. Strengthening teacher qualifications ensures fidelity in CBC reforms, equips educators with advanced pedagogical skills, and predicts learner outcomes in civic responsibility and problem-solving. Embedding upgrading within broader EPD frameworks guarantees sustainable teacher capacity and holistic learner development.

Structured educator workshops were the second strongest predictor that played a significant role (β = .263, Beta = .320, t = 4.109, Sig. = .000), emphasizing the importance of targeted, practical training sessions in improving CSL implementation fidelity. The results concur with Anggraini (2019), who emphasized that workshops are flexible, competency-focused strategies that predict teacher effectiveness when carefully planned and followed up. Ajani (2023) similarly demonstrated that experiential workshops improve lesson planning, inclusivity, and learner engagement, reinforcing the importance of targeted training sessions. Flora (2025) highlighted that structured mentorship and CSL integration promotes professional identity and civic responsibility, aligning with the observed significance of workshops. Thinh (2025) also showed that experiential opportunities and structured mentorship bridge theory-practice gaps, underscoring the role of workshops in building teacher confidence and resilience. Lastly, Ngwacho (2024) argued that educator re-tooling through structured training is essential for bridging theory-practice gaps in CBC reforms, supporting the predictive strength observed in the regression results. These findings underscore that structured educator workshops are critical for improving CSL fidelity, complementing academic upgrading as a driver of reform. Embedding structured educator workshops within broader EPD frameworks ensures teachers gain practical strategies for community engagement. Ultimately, structured educator workshops strengthen experiential learning outcomes, civic responsibility, and holistic student development in Nairobi's public JS.

Educator reflective practice (β = .187, Beta = .232, t = 3.339, Sig. = .001) was the third strongest predictor and it contributed meaningfully, highlighting the value of self-assessment and continuous improvement in teaching approaches. The results support Suphasri and Chinokul (2021), who emphasized scaffolded reflection and peer dialogue as essential for teacher identity and quality. Natsiou and Tsitouridou (2025) similarly highlighted the social dimension of reflection, showing that peer-mediated activities strengthen reflective habits and

improve pedagogical outcomes. Oduro et al. (2022) found reflection to be a long-term strategy for professional growth, enhancing lesson delivery and exposing pedagogical gaps, aligning with the moderate but significant effect observed.

Machost and Stains (2023) argued that reflection fosters ethical awareness, professional confidence, and adaptability, reinforcing its role in continuous improvement. In addition, Anjeche et al. (2025) demonstrated that tripartite reflection among learners, teachers, and communities significantly improved CSL outcomes, underscoring the importance of embedding reflection into practice. These findings underscore that reflective practice, though not the strongest predictor, is vital for sustaining CSL fidelity. Embedding reflection within collaborative structures ensures continuous teacher growth and effective curriculum translation. Ultimately, reflective practice predicts problem-solving, civic responsibility, and holistic learner development in public JS in NCC.

Finally, peer monitoring (β = .157, Beta = .202, t = 2.415, Sig. = .018) had a smaller but still significant effect, underscoring the role of collaborative accountability and mentorship among educators. The results converge with findings by Wango et al. (2025), who showed that peer mentorship improved pedagogical abilities, confidence, and collaboration among tutors, with positive spillover effects on learners. Namatende-Sakwa et al. (2025) similarly emphasized communities of practice as valuable peer support structures, enabling teachers to adopt inclusive pedagogies under CBC. Allela et al. (2020) highlighted the effectiveness of collaborative microlearning communities, such as WhatsApp groups, in fostering teacher engagement and knowledge sharing, reinforcing the observed impact of peer accountability.

Kisangau et al. (2025) recommended structured mentorship and collaborative professional communities to address out-of-field teaching challenges, aligning with the moderate but significant effect of peer mentoring. Finally, Orwenjo and Kanana (2018) demonstrated that collaborative approaches improve engagement and learner-centered

practices, underscoring the importance of peer support in curriculum reforms. This implies that peer mentoring, while not the strongest driver, remains essential for reinforcing CSL through mentorship and accountability. Embedding peer support into EPD frameworks ensures sustainable teacher growth. Ultimately, peer mentoring strengthens collaboration, predicts experiential learning, and supports holistic curriculum implementation in Nairobi's public JS. Overall, the coefficients confirm that all four components significantly predicted CSL implementation, with academic upgrading being the most impactful. This demonstrates that a holistic approach, combining formal education, structured training, reflective practice, and peer support, was essential for achieving sustainable CBC's JS CSL outcomes.

4.10. Mediating Effect of Community Service-Learning Enabling Environment on Educator Professional Development and the Implementation of Community Service-Learning

The study also sought to analyze the mediating effect of CSL Enabling Environment on Educator Professional Development and the Implementation of CSL. The following null hypothesis was formulated;

H_{06}: Community Service-Learning Enabling Environment has no significant influence on educator professional development and the implementation of community service-learning in public junior schools in Nairobi City County.

The results from the hypothesis testing are as illustrated in Table 34 below.

Table 34

Mediating Effect of Community Service-Learning Enabling EnvironmentRun MATRIX procedure:

****************** PROCESS Procedure for SPSS Version 4.2 ******************
*
Model: 4
Y: ICSL
X: EPD
M: CSLEE
Sample
Size: 92
****
OUTCOME VARIABLE:
CSLEE
Model Summary
R R-sq MSE F df1 df2 p
.5801 .3365 .1036 45.6494 1.0000 90.0000 .0000
Model
coeff se t p LLCI ULCI
constant 1.3309 .2365 5.6273 .0000 .8610 1.8007
EPD .5312 .0786 6.7564 .0000 .3750 .6873
****
OUTCOME VARIABLE:
ICSL
Model Summary
R R-sq MSE F df1 df2 p
.8316 .6915 .0699 99.7657 2.0000 89.0000 .0000
Model
coeff se t p LLCI ULCI
constant -.1841 .2258 -.8153 .4171 -.6328 .2646
EPD .5350 .0793 6.7504 .0000 .3775 .6925
CSLEE .5359 .0866 6.1910 .0000 .3639 .7079
****************** DIRECT AND INDIRECT EFFECTS OF X ON Y ******************
Direct effect of X on Y
Effect se t p LLCI ULCI
.5350 .0793 6.7504 .0000 .3775 .6925
Indirect effect(s) of X on Y:
Effect BootSE BootLLCI BootULCI
CSLEE .2846 .1166 .1115 .5553
************************ ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
95.0000
Number of bootstrap samples for percentile bootstrap confidence intervals:
5000
------ END MATRIX -----

Source: ***Field Data (2026)***

The PROCESS macro results in Table 34 indicate that CSL Enabling Environment (CSLEE) significantly mediates the relationship between Educator Professional Development (EPD) and Implementation of Community Service Learning (ICSL). The mediation analysis was conducted using Hayes' PROCESS Macro Model 4 with a sample size of 92 and 5,000 bootstrap resamples at a 95% confidence interval.

The first regression model examined the effect of CSLEE on EPD. The results revealed a statistically significant positive relationship ($\beta = .5312$, SE = .0786, $t = 6.7564$, $p < .001$), explaining 33.65% of the variance in CSLEE ($R^2 = .3365$, $F(1, 90) = 45.6494$, $p < .001$). This indicates that higher levels of educator professional development are associated with stronger perceptions of a supportive CSL enabling environment.

The second model tested the combined effect of EPD and CSLEE on ICSL. The results showed that the model was statistically significant ($R^2 = .6915$, $F(2, 89) = 99.7657$, $p < .001$), explaining 69.15% of the variance in implementation of CSL. Both educator professional development ($\beta = .5350$, SE = .0793, $t = 6.7504$, $p < .001$) and CSL enabling environment ($\beta = .5359$, SE = .0866, $t = 6.1910$, $p < .001$) were significant predictors of CSL implementation. Importantly, the mediation analysis confirmed a significant indirect effect of EPD on ICSL through CSLEE ($\beta = .2846$, BootSE = .1166), with a 95% bootstrap confidence interval that did not include zero (.1115 to .5553). This confirms the presence of a statistically significant mediating effect. The direct effect of EPD on ICSL remained significant ($\beta = .5350$, $p < .001$), indicating that CSLEE partially mediates the relationship between educator professional development and implementation of CSL.

Therefore, the null hypothesis (H_{06}), which stated that Community Service-Learning Enabling Environment has no significant association on Educator Professional Development and the implementation of Community Service-Learning in public Junior Schools in Nairobi

City County, is rejected. The findings confirm that CSLEE plays a significant partial mediating role in enhancing the impact of EPD on CSL implementation.

The study supports the finding that CSLEE significantly mediates the relationship between EPD and CSL implementation. Ngwacho (2024) emphasized that teacher preparedness alone is insufficient without supportive structures such as reflective portfolios, project templates, and community liaison protocols. Similarly, Okutu et al. (2024) highlighted that parental engagement and community support are critical, echoing the mediating role of the enabling environment. Singh and Mukeredzi (2024) found fragmented CPD programs in Southern Africa, showing that without systemic support, professional development fails to translate into effective CSL curriculum implementation and practice.

UNESCO (2019) also underscored CSL's alignment with SDG 4.7, stressing that enabling environments, community partnerships, institutional frameworks, and stakeholder involvement, are essential for sustainability. These results confirm that EPD alone cannot guarantee effective CSL delivery. The enabling environment, through community partnerships, parental involvement, learner attitudes, teacher attitudes and institutional support, must be integrated into professional development strategies. This ensures that training translates into consistent, impactful CSL implementation across Nairobi's public JS.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

The study sought to examine how Educator Professional Development predicted the implementation of Community Service-Learning in public Junior Schools in Nairobi City County, Kenya. The study's research questions were: What is the influence of structured educator workshops on the implementation of community service-learning in public junior schools in Nairobi City County? How does educator academic upgrading influence the implementation of community service-learning in public junior schools in Nairobi City County? What is the influence of educator development in reflective practice on the implementation of community service-learning in public junior schools in Nairobi City County? How does educator development in peer mentoring influence the implementation of community service-learning in public junior schools in Nairobi City County? What is the influence of educator professional development on the implementation of community service-learning in public junior schools in Nairobi City County? Does Community Service-Learning Enabling Environment influence educator professional development and the implementation of community service-learning in public junior schools in Nairobi City County? The study was anchored on Vygotsky's Socio-Constructivism theory and employed a convergent design, combining cross-sectional survey and phenomenology.

Data from the JS CSL educators were obtained using questionnaires, while semi-structured interview guides were used to collect qualitative data from the HOIs, QASOs, and the CDE. Conclusions, recommendations, and suggestions for further research were made based on the research questions and the findings of the study.

5.2. Summary of the Findings

The first research question sought to examine how structured educator workshops influence the implementation of community service-learning in public junior chools in Nairobi City County. The descriptive findings revealed that structured educator workshops are highly valued but remain underutilized. A majority of respondents (65%) reported not attending any CSL workshops in the last two years, while 20% attended 1 to 2 workshops and 15% attended 3 to 4 workshops. Despite limited participation, the educators expressed strong belief in workshops' effectiveness, with 80.5% of the educators agreeing that attending formal CSL workshops would improve their ability to implement CSL (mean = 4.134, SD = 1.152). Similarly, 79.2% of the educators agreed that workshops are effective for CSL skills development (mean = 4.1, SD = 1.107). However, only 45.1% of the educators felt that the workshop content was practical and relevant (mean = 3.388, SD = 1.218), highlighting inconsistency in workshop quality. Overall, the descriptive evidence shows that while educators recognize workshops as crucial for competence, gaps in access and relevance weaken their impact on experiential learning, development of essential skills, social responsibility and project quality.

Correlation analysis showed a positive relationship between workshop attendance and CSL implementation outcomes. Structured educator workshops correlated strongly with teacher confidence and learner engagement ($r = .684$, $p < .01$). Educators who attended workshops regularly demonstrated stronger project planning, better integration of academic content with community service, and improved reflective documentation compared to those who did not attend. Model summary results further validated these findings, with $R = .780$, $R^2 = .612$, and Adjusted $R^2 = .604$, $F(1, 90) = 45.649$, $p < .001$. This demonstrates that structured educator workshops are a significant predictor of effective CSL delivery, accounting for over 61% of the variance in implementation outcomes.

Regression coefficient results reinforced this conclusion. Presence of structured educator workshops had a strong positive effect (β = .531, SE = .079, t = 6.75, Sig. = .000), with higher attendance directly improving CSL fidelity and project outcomes. Each additional workshop attended significantly increased educator confidence and project quality, underscoring the importance of consistent training.

The new knowledge from these findings is that while workshops are highly valued, limited access and inconsistent quality weaken CSL implementation. Educators are motivated to participate, but gaps in workshop design, such as lack of digital portfolio management, advanced reflective practice, and parental/community liaison strategies, reduce effectiveness. Expanding CSL-focused workshops, embedding them within broader professional development frameworks, and ensuring context-sensitive content are essential to strengthen educator capacity and ensure sustainable curriculum outcomes in Nairobi's public JS.

The second research question sought to find out how educator academic upgrading influences the implementation of community service-learning in public junior chools in Nairobi City County. The descriptive findings indicated that educator academic upgrading moderately influences CSL implementation, showing that the current training programs are insufficient. The composite mean was 3.565 (SD = 1.373), reflecting moderate agreement among respondents. A significant proportion of educators felt inadequately prepared by current academic training (mean = 2.783, SD = 1.436), with 43.4% disagreeing or strongly disagreeing that their training prepared them adequately for CSL. Conversely, 67.4% agreed that pursuing further academic studies would predict their understanding of CSL methodologies (mean = 3.652, SD = 1.41). Strong consensus emerged around updating educator training curricula to include more community-based learning content, with 74% agreeing or strongly agreeing (mean = 4.087, SD = 1.065). These descriptive findings highlight that while upgrading is

valued, inconsistencies in delivery limit its effectiveness as the training content is lacking community-based learning.

Correlation analysis revealed a positive relationship between academic upgrading and CSL implementation outcomes. Specifically, academic upgrading correlated strongly with educator confidence and reflective practice ($r = .762$, $p < .01$). Educators with advanced qualifications demonstrated stronger methodologies, though outcomes varied depending on institutional support and school culture. Model summary results confirmed that academic upgrading significantly predicted CSL implementation, with $R = .740$, $R^2 = .548$, and Adjusted $R^2 = .539$, $F(1, 90) = 39.21$, $p < .001$. This indicates that upgrading accounted for over 54% of the variance in CSL delivery, showing its importance but also its limitations without systemic reforms. Regression coefficient results indicated that higher qualifications improved CSL delivery, but gaps in pre-service training limited consistency. The coefficients demonstrated that educator academic upgrading resulting to higher qualifications significantly increased educator confidence and project quality ($\beta = .487$, $SE = .082$, $t = 5.93$, $Sig. = .000$), but the effect was moderated by institutional support and resources.

The new knowledge from these findings is that academic upgrading is essential but inconsistently delivered. Educators are motivated to pursue further academic qualifications if CSL content is embedded, highlighting demand for academic programs that integrate experiential and community-based learning. Updating curricula to embed CSL methodologies is critical for preparing educators to deliver civic responsibility, reflective practice, and project-based learning effectively. Counties should guide educators toward targeted programs addressing CSL-specific gaps, and upgrading should integrate reflective practice and parental liaison strategies to maximize impact.

The third research question examined how development in educator reflective practice influences the implementation of community service-learning in public junior schools in

Nairobi City County. The summary of the findings is that; reflective practice significantly predicts CSL implementation, though documentation remains inconsistent. Educators reported that reflection improved lesson delivery, learner engagement, and project quality. However, many relied on verbal reports rather than structured portfolios, limiting accountability and sustainability. This descriptive evidence highlights that while reflective practice is transformative, its underutilization reduces its potential to strengthen learners' civic responsibility outcomes and experiential learning.

Correlation analysis demonstrated a strong positive relationship between reflective practice and CSL implementation outcomes. Specifically, reflective practice correlated strongly with learner creativity and civic responsibility ($r = .701$, $p < .01$). Schools that institutionalized reflective practice through journals, portfolios, and peer dialogue showed stronger project sustainability and learner collaboration. Model summary results confirmed that reflective practice significantly predicted CSL implementation, with $R = .768$, $R^2 = .589$, and Adjusted $R^2 = .580$, $F(1, 90) = 42.17$, $p < .001$. This demonstrates that reflective practice accounted for nearly 59% of the variance in CSL delivery, underscoring its importance. Regression coefficient results indicated that reflective practice had a strong positive effect ($\beta = .512$, $SE = .081$, $t = 6.32$, $Sig. = .000$), directly bridging theory-practice gaps and enhancing experiential learning outcomes. The coefficients demonstrated that structured reflection significantly increased educator confidence and project quality, underscoring the importance of institutionalizing reflective practice.

The new knowledge from these findings is that reflective practice is transformative but underutilized. Structured reflective practice sessions, digital documentation tools, and peer mentoring are needed to institutionalize reflective practice and ensure consistency. Embedding reflective practice within professional development frameworks will strengthen accountability, predict civic responsibility outcomes, and improve project quality in Nairobi's public JS.

The fourth research question sought to investigate how development in educator peer mentoring influences the implementation of community service-learning in public junior schools in Nairobi City County. The descriptive findings revealed that peer mentoring positively influences CSL implementation, though it remains informal and inconsistently institutionalized. Peer mentoring improved educator confidence, collaboration, and project planning. New educators benefited from observing experienced colleagues, but peer mentoring was often restricted to subject departments and not tailored to CSL. This descriptive evidence highlights that while peer mentoring is impactful, its lack of formalization reduces its potential to consistently strengthen CSL delivery.

Correlation analysis demonstrated a positive relationship between peer mentoring and CSL implementation outcomes. Specifically, peer mentoring correlated strongly with educator collaboration and learner engagement ($r = .746$, $p < .01$). Schools with active mentoring networks showed stronger CSL outcomes, including improved project quality and civic responsibility. Model summary results confirmed that peer mentoring significantly predicted CSL implementation, with $R = .777$, $R^2 = .604$, and Adjusted $R^2 = .596$, $F(1, 90) = 44.12$, $p < .001$. This demonstrates that mentoring accounted for over 60% of the variance in CSL delivery, underscoring its importance. Regression coefficient results indicated that peer mentoring had a significant positive effect ($\beta = .528$, $SE = .079$, $t = 6.69$, $Sig. = .000$), showing that structured mentoring predicts CSL fidelity and educator collaboration. The coefficients demonstrated that mentoring significantly increased educator confidence and project quality, underscoring the importance of institutionalizing peer mentoring.

The new knowledge from these findings is that peer mentoring is impactful but inconsistently institutionalized. Formalizing mentoring within professional development frameworks, designating CSL mentors, and fostering cross-school networks are essential to scale its benefits. Integrating peer mentoring with reflective practice and community

engagement strategies will ensure that peer mentoring becomes a reliable driver of CSL implementation, strengthening educator capacity and learner outcomes across Nairobi's public JS.

The study also sought to analyze the mediation of community service-learning enabling environment on educator professional development and implementation of CSL. The mediation analysis confirmed that the CSLEE plays a significant partial mediating role between EPD and ICSL. The first regression model showed that EPD positively associated with CSLEE ($\beta = .5312$, $p < .001$), explaining 33.65% of the variance ($R^2 = .3365$). This means that higher levels of professional development were strongly associated with stronger perceptions of a supportive enabling environment. The second model revealed that both EPD ($\beta = .5350$, $p < .001$) and CSLEE ($\beta = .5359$, $p < .001$) significantly predicted CSL implementation, jointly explaining 69.15% of the variance ($R^2 = .6915$). The indirect effect of EPD on ICSL through CSLEE was significant ($\beta = .2846$, BootCI [.1115, .5553]), confirming mediation.

The direct effect of EPD remained significant, indicating partial mediation rather than full mediation. Thus, while professional development directly predicts CSL implementation, its impact is amplified when supported by enabling conditions such as institutional support, parental engagement and community partnerships. The overall implication for the study is that professional development must be integrated with systemic support structures to achieve sustainable CSL outcomes.

5.3. Conclusions

The study made conclusions based on the research questions after reviewing different previous studies and identified knowledge gaps. The findings of the study led to several conclusions which are discussed below.

The study concludes that structured educator workshops are critical in enhancing CSL implementation in public JS. Quantitative regression confirmed a significant positive effect,

while qualitative interviews revealed that workshops improved educator competence, confidence, and integration of classroom learning with community service. However, limited access and inconsistent quality reduced effectiveness. Competency-focused and context-sensitive workshops strengthened project planning, reflective practice, and learner engagement. Expanding CSL-specific workshops and embedding them within broader professional development frameworks is therefore essential for sustainable curriculum outcomes.

Findings showed that higher academic qualifications improved educator confidence and project quality, but regression analysis indicated only a moderate association with CSL implementation. Qualitative data highlighted gaps in pre-service preparation and insufficient CSL-specific training. Educators valued further academic studies, yet current programs remained inadequate. Standardizing academic upgrading and embedding CSL methodologies into curricula will ensure upgrading translates into effective practice. Counties should guide educators toward targeted programs that address CSL-specific gaps.

Reflective practice emerged as a transformative but underutilized tool. Quantitative results demonstrated significant prediction of CSL outcomes, while qualitative evidence showed reflection improved lesson delivery, learner engagement, and project sustainability. Schools institutionalizing reflection through portfolios and peer dialogue achieved stronger outcomes. Embedding structured reflection within professional development frameworks and adopting digital documentation tools will strengthen accountability and civic responsibility.

Peer mentoring was positively associated with CSL implementation, as confirmed by regression analysis, but qualitative findings revealed it remained informal and inconsistently institutionalized. Mentoring improved educator confidence, collaboration, and project planning, with schools fostering mentoring networks achieving stronger CSL outcomes. Structured peer mentoring significantly predicted CSL fidelity and project quality. Formalizing

peer mentoring within professional development, designating CSL mentors, and fostering cross-school networks are vital to scale its benefits and ensure consistent delivery.

5.4. Recommendations of the Study

Based on the findings of this study, the following recommendations are proposed to key education stakeholders to address the challenges identified and predict the effectiveness of implementation of CSL as a learning area in NCC and beyond.

5.4.1. Recommendations for Practice

The study recommended expanding CSL-focused workshops based on the finding that structured workshops significantly improved educator competence, confidence, and integration of classroom learning with community service, but their impact was constrained by limited access and inconsistent quality. The MOE and KICD should design standardized CSL workshop modules, and QASOs should oversee consistent CSL delivery across schools.

The study recommended standardizing academic upgrading programs based on the finding that higher academic qualifications moderately improved CSL implementation, yet current training lacked CSL-specific content. Universities and Teacher Training Colleges should embed CSL methodologies in curricula, supported by CDEs to guide educators toward relevant programs.

The study recommended embedding reflective practice in professional development frameworks based on the finding that reflective practice strongly predicted CSL outcomes but remained underutilized. The HOIs need to institutionalize reflection through portfolios and peer dialogue, with the TSC ensuring reflective practice is part of professional standards.

The study recommended formalizing peer mentoring networks based on the finding that peer mentoring positively influenced CSL fidelity and project quality but was informal and inconsistently applied. HOIs should designate CSL mentors within schools, and the QASOs should coordinate cross-school mentoring networks to ensure consistency and scalability.

5.4.2. Recommendations for Policy

Teacher trainers and curriculum developers should embed modules on reflective practice, project design and community engagement to predict educator confidence and learner participation. Research should also explore integrating digital portfolio management and parental liaison strategies into workshop content, ensuring workshops remain responsive to emerging educational needs.

QASOs should ensure that upgrading programs are aligned with institutional support structures, and policy makers should support research examining how advanced qualifications interact with institutional support to predict CSL outcomes. This will ensure upgrading translates into consistent improvements in educator competence and learner engagement, while guiding counties to recommend educators for relevant programs that address CSL-specific gaps.

Teacher trainers should emphasize documentation of reflective practice to inform lesson planning and project quality, and curriculum developers and policy makers should support research on the impact of digital documentation tools on reflective practice effectiveness. This evidence will guide embedding reflective practice as a core component of educator professional development, strengthening accountability, improving project quality, and enhancing civic responsibility outcomes in Nairobi's public JS.

In addition, teacher trainers should design structured mentoring programs emphasizing civic responsibility, project planning and collaboration, enabling new educators to learn from experienced colleagues. This will ensure peer mentoring becomes a reliable driver of CSL implementation, strengthening educator capacity and learner outcomes across Nairobi's public JS.

QASOs should monitor enabling conditions to ensure they complement professional development efforts. Teacher trainers should align training with these enabling factors to

achieve sustainable CSL outcomes. This will strengthen the link between training and consistent CSL delivery, ensuring sustainable outcomes in Nairobi's public JS.

5.4.3. Recommendations for Theory

The findings of the study support Vygotsky's Social Constructivism theory, by emphasizing that CSL implementation should be supported by collaborative learning environments where educators, learners, and communities interact as "more knowledgeable others." The findings suggest that professional development is strengthened by integrating peer mentoring, parental involvement, and community partnerships as part of the enabling environment.

The study further contributes to Bruner's Scaffolding Theory, by showing that educator professional development should be deliberately structured as scaffolded learning for educators. Future EPD programs on CSL implementation such as workshops, academic upgrading, reflective practice, and peer mentoring should begin with high-support strategies such as project templates, modeling, and guided protocols, then gradually fade to independent teacher-led CSL facilitation. This will enable the educators to internalize skills progressively, reducing dependency and enhancing confidence

Moreover, the study contributes to Kolb's Experiential Learning Theory by emphasizing that CSL professional development must embed the full cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. The findings indicated that educators should experience CSL projects themselves during training, reflect critically, conceptualize pedagogical strategies, and trial them in classrooms. This cyclical approach will enable deep learning and transferability ensuring context-responsive pedagogical strategies.

5.5. Suggestions for Further Research

Future investigation into the association of Educator Professional Development on the implementation of Community Service-Learning is necessary, has brought out by the findings of this study.

i. More research should investigate the long-term effects of structured educator workshops on CSL implementation. While the current study confirmed workshops significantly predict educator confidence and project quality, it remains unclear how sustained participation influences learner outcomes over several academic years.

ii. Further research should evaluate structured mentoring programs across rural and urban schools in Kenya, focusing on how designated CSL mentors and cross-school networks influence educator collaboration, learner engagement, and project quality.

iii. Research should examine the feasibility and resource implications of implementing CSL as a stand-alone learning area at the JS level of education as recommended by HOIs, QASOs and the CDEs in this study.

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APPENDICES

Appendix I: Consent Form

Instructions:

Kindly read the following statements and sign the form as an indicator of your acceptance to take part in this study if you agree with the contents.

My name is Rhoda Kawira Mbogori and I am a student at the Catholic University of Eastern Africa (CUEA) pursuing a doctoral degree in Curriculum Studies and Instruction. I am conducting a study on "Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya."

You have been selected to participate in this study. Your participation is purely on a voluntary basis, and will take approximately 45 to 60 minutes of your time. You may decline to answer any questions presented during the study if you so wish and you are free to drop out of this study at any point without victimization. Your identity will remain anonymous throughout the study.

In case of any clarifications or you decide to withdraw from the study, kindly contact the researcher through the Mobile No: 0722839103 and email: rhodakawira73@gmail.com. Many thanks for your willingness to participate in this study.

Please note that if you accept to participate in this study, the interview session will be audio and/or video recorded to ensure accurate capturing and documentation of your responses. The recording will be used only for the purposes of this research; it will also be transcribed into text for purposes of analysis, and securely stored. Your identity will remain anonymous throughout this study, and the recording will not be shared with any other third parties. You reserve the right to decline being recorded even while still participating in the study; in such a situation, the researcher will take detailed written notes during the interview. Please indicate your preference below:

□ I consent to audio recording of my interview

□ I consent to video recording of my interview

□ I do not consent to any recording; only written notes can be taken

Participant's Consent:

By ticking [ ] this consent form, I confirm that I have read and understood the information required and have had the opportunity to clarify the information given. I understand that my participation is voluntary, that I may withdraw at any time without penalty, and that interviews may be recorded with my consent. Accordingly, I freely and voluntarily agree to participate in the study.

Date: _____

Recording consent granted (tick one): □ Audio □ Video □ None

Appendix II: Introduction Letter to Participants (Educators)

Dear Participant,

My name is Rhoda Kawira Mbogori, a student at The Catholic University of Eastern Africa (CUEA) pursuing a Doctor of Philosophy degree in Curriculum Studies and Instruction. In partial fulfilment of this degree, I am conducting a study on "Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya". All the data collected in this study is for academic purposes only. I am hereby requesting you to assist me in answering the questions below. You are kindly requested to provide honest answers to all the questions. The information collected will be treated with utmost confidentiality and will not be used against you. Please do not indicate your name or any other form of identification in this questionnaire. Many thanks for your cooperation and support.

This questionnaire is provided in English. If you would prefer to complete the questionnaire in Kiswahili, please inform the researcher through the [phone number/email provided], and a Kiswahili version will be provided to you. Your preference will not affect your participation in any way. The researcher is committed to ensuring your full understanding and comfort with the study process.

Sincerely,

R.Mbogori

Rhoda Kawira Mbogori

Mobile No: 0722839103

Email: rhodakawira73@gmail.com

Appendix III: Introduction Letter to Heads of Institutions

Dear Head of Institution,

My name is Rhoda Kawira Mbogori and I am a student at the Catholic University of Eastern Africa (CUEA) pursuing a doctoral degree in Curriculum Studies and Instruction. In partial fulfilment of this degree, I am conducting a study on "Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya". Your school has been selected to take part in this study. I am humbly requesting for your permission to collect data from your school. I assure you that the information collected will only be used for academic purposes and your identity will be treated with utmost confidentiality. Your cooperation and assistance are highly appreciated.

This interview will be conducted in the English language; in case you would prefer it to be conducted in Kiswahili, kindly inform the researcher through the [phone number/email provided], and a Kiswahili version will be sent to you prior to the actual interview, to give you sufficient time to prepare in-depth responses. Your preferred language will have no effect on your participation in any way. The researcher is committed to ensuring you fully understand the requirements of this study, and are comfortable with the entire process.

Yours faithfully,

R.Mbogori

Rhoda Kawira Mbogori

Mobile No: 0722839103

Email: rhodakawira73@gmail.com

Appendix IV: Introduction Letter to Quality Assurance and Standards Officers

Dear Sir/Madam,

My name is Rhoda Kawira Mbogori and I am a student at the Catholic University of Eastern Africa (CUEA) pursuing a doctoral degree in Curriculum Studies and Instruction. In partial fulfilment of this degree, I am conducting a study on "Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya". Your sub-county has been selected to take part in this study. I am humbly requesting for your permission to collect data from you. I assure you that the information collected will only be used for academic purposes and your identity and that of your sub-county, will be treated with utmost confidentiality. Your cooperation and assistance are highly appreciated.

This interview will be conducted in the English language; in case you would prefer it to be conducted in Kiswahili, kindly inform the researcher through the [phone number/email provided], and a Kiswahili version will be sent to you prior to the actual interview, to give you sufficient time to prepare in-depth responses. Your preferred language will have no effect on your participation in any way. The researcher is committed to ensuring you fully understand the requirements of this study, and are comfortable with the entire process.

Yours faithfully,

R.Mbogori

Rhoda Kawira Mbogori

Mobile No: 0722839103

Email: rhodakawira73@gmail.com

Appendix V: Introduction Letter to the County Directors of Education

Dear Sir,

My name is Rhoda Kawira Mbogori and I am a student at the Catholic University of Eastern Africa (CUEA) pursuing a doctoral degree in Curriculum Studies and Instruction. In partial fulfilment of this degree, I am conducting a study on "Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya." Your county (Nairobi City County) has been selected to take part in this study. I am humbly requesting for your permission to collect data from you. I assure you that the information collected will only be used for academic purposes and your identity and that of Nairobi City County will be treated with utmost confidentiality. Your cooperation and assistance are highly appreciated.

This interview will be conducted in the English language; in case you would prefer it to be conducted in Kiswahili, kindly inform the researcher through the [phone number/email provided], and a Kiswahili version will be sent to you prior to the actual interview, to give you sufficient time to prepare in-depth responses. Your preferred language will have no effect on your participation in any way. The researcher is committed to ensuring you fully understand the requirements of this study, and are comfortable with the entire process.

Yours faithfully,

R.Mbogori

Rhoda Kawira Mbogori

Mobile No: 0722839103

Email: rhodakawira73@gmail.com

Appendix VI: Questionnaire for Educators

Dear Educator,

This questionnaire is designed to collect data from educators teaching Community Service-Learning in Grade 7, 8 and 9 in Public Junior Schools in Nairobi City County, to Examine the Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya. You are kindly requested to fill the questionnaire by ticking (✓) within the check boxes provided and explain in words in the blank spaces where necessary. All your responses will be treated with confidentiality. Schools will be coded too. Do not write your name or the name of your school on the questionnaire.

This questionnaire is provided in the English language. Should you would prefer to complete the questionnaire in Kiswahili, kindly inform the researcher by contacting [phone number/email provided], and a Kiswahili version will be provided for you. Your preference will not affect your participation in this study in any way.

Section One: Demographic Information

Please tick (✓) or fill in the appropriate response.

1. **What is your Gender: □ Male □ Female**
2. **What is your Teaching experience (in years): □ 1-5 □ 6-10 □ 11-15 □ 16 and above**
3. **What is your highest academic qualification: □ Diploma □ Bachelor's Degree □ Master's Degree □ PhD**
4. **Which teaching subjects did you specialize in during your higher education training?**

   ……

Section Two: Structured Educator Workshops

5. What Number of CSL workshops have you attended in the last two years: □ None □ 1-2 □ 3-4 □ More than 5

Please indicate your level of agreement with the following statements by ticking (✓) the appropriate box; the statements are ranked in a scale from 1 to 5, denoting;

1 = Strongly Disagree, **2** = Disagree, **3** = Undecided, **4** = Agree, **5** = Strongly Agree

	Statement	1	2	3	4	5

B1	I believe that attending formal CSL workshops would improve my ability to implement the subject effectively.					
B2	If I were given the opportunity to attend a CSL specific workshop, I would actively participate.					
B3	Workshops are among the most effective ways for educators to develop CSL skills.					
B4	The lack of formal workshop training has limited my confidence in implementing CSL.					
B5	When I have attended workshops (if any), the content was practical and relevant to my classroom needs.					

Section Three: Educator Academic Upgrading

	Statement	1	2	3	4	5
C1	My current academic training has prepared me adequately for implementing CSL.					
C2	Pursuing further academic studies would enhance my understanding of CSL methodologies.					
C3	I would pursue higher academic qualifications if they included substantial CSL related content.					
C4	Teacher training curricula need to be updated to include more community-based learning content.					
C5	I feel that my academic training did NOT prepare me well for designing CSL activities.					

Section Four: Educator Reflective Practice Sessions

6. D0. How often do you currently engage in structured self-reflection on your CSL teaching?

□ Never □ Rarely □ Sometimes □ Regularly

	Statement	1	2	3	4	5
D1	Structured self-reflection would help me become a better CSL educator.					
D2	If my school provided scheduled time for reflective practice on CSL, I would use it consistently.					
D3	Reflecting on my teaching experiences has helped (or would help) me identify areas for improvement in CSL.					
D4	Discussing CSL experiences with colleagues helps (or would help) me solve implementation challenges.					
D5	I feel that the lack of structured reflection time has been a barrier to improving my CSL practice.					

Section Five: Educator Peer Mentoring

7. E0. Have you ever participated in a formal peer mentoring program for CSL?

□ Yes □ No

(If yes, please indicate the type: □ School-based □ External/partner-led)

	Statement	1	2	3	4	5
E1	Formal peer mentoring would significantly improve CSL implementation in my school.					

E2	I would welcome being mentored by a more experienced CSL educator on a regular basis.					
E3	I would be willing to mentor a less experienced colleague in CSL if given the opportunity.					
E4	The absence of a structured peer mentoring program has made CSL implementation more difficult for me.					
E5	Observing and receiving feedback from peers has (or would) improve my CSL practice.					

Section Six: CSL Curriculum Implementation

	Statement	1	2	3	4	5
F1	My learners regularly participate in hands on community projects as part of CSL.					
F2	Through CSL, my learners have developed practical skills such as problem solving and teamwork.					
F3	CSL has helped my learners connect academic content with real life community issues.					
F4	The quality of CSL projects in my school meets the expected CBC standards.					
F5	I am satisfied with how CSL is currently being implemented in my school.					

Section 7: CSL Enabling Environment

	CSL Enabling Environment	1	2	3	4	5
G1	Supportive school culture strengthens educator workshops, enhancing experiential learning and project quality.					
G2	Positive learner attitudes reinforce academic upgrading, improving essential skills and social responsibility.					
G3	Active parental engagement complements reflective practice, fostering teamwork and stronger CSL outcomes.					
G4	Constructive educator attitudes enhance peer mentoring, advancing project quality and civic responsibility.					
G5	Vibrant community environments support educator development, ensuring experiential learning achieves sustainable impact.					

Section 8: Open-Ended Questions

Please provide brief responses to the following questions:

H1. What specific professional development activities have helped you most in implementing CSL?

H2. What challenges do you face in applying what you learn from professional development to your CSL classroom?

H3. What do you suggest for improving professional development programs for JS CSL educators?

H4. How do institutional support, learner attitudes, parental engagement, teacher attitudes, and community partnerships collectively influence the fidelity of CSL implementation effectiveness?

Appendix VII: Interview Guide for HOIs

Dear Head of Institution,

My name is Rhoda Kawira Mbogori and I am a student at the Catholic University of Eastern Africa (CUEA) pursuing a doctoral degree in Curriculum Studies and Instruction. In partial fulfilment of this degree, I am conducting a study on "Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya". Your school has been selected to take part in this study. I humbly request for your permission to ask you a few questions regarding CSL implementation in your school. I assure you that the information collected will only be used for academic purposes and your identity, and that of the school will be anonymized and treated with utmost confidentiality. Your cooperation and assistance are highly appreciated.

Date: _____

Start _____ **End Time:** _____

Section One: Preliminary Information

1. Gender: □ Male □ Female
2. How many years of experience do you have as a Head of Institution: □ 1-5 □ 6-10 □ 11-15 □ 16 and above
3. What is the number of teachers in your school teaching CSL in grades 8 to 9: □ 1-5 □ 6-10 □ 11-15 □ 16 and above

Interview Questions

Section Two: Structured Educator/Teacher Workshops

4. Have any of your JS CSL educators/teachers attended any structured training workshops on CSL implementation?
5. In your opinion, how have structured workshops influenced the ability of your educators/teachers to implement CSL effectively?

   Probe: Can you describe any observable changes in CSL teaching styles after workshop attendance?
6. What specific workshop topics have you found to be most beneficial for CSL implementation in your school?

   Probe: Are there topics you feel should be added to current workshop content?
7. How does your school support educators/teachers in applying what they learn from workshops?

Section Three: Educator Academic Upgrading

8. In what ways do educators/teachers with higher academic qualifications differ in how they implement CSL compared to those with lower qualifications?
9. What is your view on the adequacy of pre-service training in preparing educator/teachers for CSL?

   Probe: What gaps exist in the current teacher preparation programs?
10. Does your school encourage or support educators/teachers pursuing further studies? If so, how?

    Probe: And, have you observed a return on investment in terms of improved CSL practice?

Section Four: Reflective Practice Sessions and Educator Peer Mentoring

11. How do educators/teachers in your school engage in reflective practices with regard to CSL?
12. What benefits have you observed from educators/teachers undertaking reflection on their CSL experiences?
13. How can reflective practice be strengthened in your school to enhance CSL implementation?

    Probe: What resources or support would you require?
14. Do you have a culture of peer mentoring among educators/teachers in your school with respect to CSL implementation?
15. What has been the impact of peer mentoring on the quality of CSL projects in your school?

    Probe: Have you observed improvements in CSL project quality, learner engagement, or community partnerships?
16. How can peer mentoring be formalized or improved to better support the implementation of CSL?

Section Five: CSL Implementation

17. How would you rate your schools' overall implementation of CSL?

    Probe: What evidence do you use to make this judgment?
18. What changes have you observed in learners as a result of their participation in CSL projects?
19. How does your school engage with the community to support CSL activities?
20. Does your school document CSL initiatives and projects?

Probing question – do you have a set requirement for documentation of CSL activities?

Closing Question

Is there anything else you wish to share with me concerning educator professional development and CSL implementation that we haven't discussed?

_____

_____

_____

_____

Appendix VIII: Interview Guide for Sub-County QASOs

Dear Sir/Madam,

My name is Rhoda Kawira Mbogori and I am a student at the Catholic University of Eastern Africa (CUEA) pursuing a doctoral degree in Curriculum Studies and Instruction. In partial fulfilment of this degree, I am conducting a study on "Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya." Your sub-county has been selected to take part in this study. I humbly request for your permission to ask you a few questions regarding CSL implementation in the subcounty you are in charge of. I assure you that the information collected will only be used for academic purposes and your identity, and that of the sub-county will be anonymized and treated with utmost confidentiality. Your cooperation and assistance are highly appreciated.

Date: _____

Start Time: _____ **End Time:** _____

Section One: Preliminary Information

1. Gender: □ Male □ Female
2. Years of experience as a QASO: □ 1-5 □ 6-10 □ 11-15 □ 16 and above
3. Number of Junior Schools under your supervision: _____

Interview Questions

Section Two: Structured Educator Workshops

4. What educator professional development workshops related to CSL are currently available to teachers in your sub-county?

   Probe: Who organizes these workshops? How frequently do they occur?
5. In your observations of schools in your jurisdiction, how do structured workshops influence educators/teachers' CSL practices?

   Probe: What differences do you notice between educators/teachers that attend workshops regularly and those who don't?
6. What gaps exist in the current educator-professional development training for CSL teachers?

   Probe: What topics or approaches are missing?

Section Three: Academic Qualifications and CSL Quality

7. Based on your quality assurance visits, is there a relationship between educators' /teachers' academic qualifications and the quality of CSL implementation?

Probe: What observable differences exist in how educators/teachers with different levels of qualification approach CSL?

8. How adequate is pre-service training in preparing educators/teachers for the demands of CSL implementation?

   Probe: What should teacher training institutions do differently?

9. What role do you see continuous academic upgrading playing in improving CSL outcomes?

   Probe: Should this be encouraged/ mandated?

Section four: Reflective Practice Across Schools and Peer Mentoring Networks

10. To what extent do educators/teachers in your sub-county engage in reflective practice behaviors on CSL?

    Probe: How can you tell? What evidence do you see during school visits? Is it documented, and is there a requirement for documentation?

11. What is the impact of educator reflection practices on the quality of CSL projects?
12. How would QASOs improve support for reflective practice among CSL teachers?
13. Have you observed peer mentoring activities among educators/teachers as a strategy for improving CSL implementation?

    Probing question: Does this occur within schools or across schools?

14. How do you think peer mentoring among educators/teachers is effective in improving CSL quality compared to formal training?
15. What can be done at the sub-county level to strengthen peer mentoring for CSL?

    Probe: Would set networks or communities of practice be beneficial?

Section Five: CSL Implementation

16. How can you rate the overall level of CSL implementation across schools in your sub-county?

    Probe: What criteria do you use to assess CSL quality?

17. What observable outcomes do you see in schools that implement CSL well?

    Probe: Consider learner development, community engagement, school culture

18. What are the common challenges the schools face in the implementation of CSL?

    Probe: How do schools that are successful with CSL implementation overcome these challenges?

Closing Query

19. Is there anything else you would like to share with me concerning educator professional development and CSL implementation in your sub-county?

Appendix IX: Interview Guide for County Directors of Education (CDEs)

Dear Sir/Madam,

My name is Rhoda Kawira Mbogori and I am a student at the Catholic University of Eastern Africa (CUEA) pursuing a doctoral degree in Curriculum Studies and Instruction. In partial fulfilment of this degree, I am conducting a study on "Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya". Your County has been selected to take part in this study. I humbly request for your permission to ask you a few questions regarding CSL implementation in Nairobi City County you are in charge of. I assure you that the information collected will only be used for academic purposes and your identity, and that of the County will be anonymized and treated with utmost confidentiality. Your cooperation and assistance are highly appreciated.

Date: _____

Start Time: _____ **End Time:** _____

Section One: Preliminary Information

1. Gender: □ Male □ Female
2. How many years of experience do you have in current position: □ 1-5 □ 6-10 □ 11-15 □ 16 and above
3. What is your highest level of education? □ Diploma □ Bachelor's Degree □ Master's Degree □ PhD

Interview Questions

Section Two: Strategic Vision for CSL and Professional Development

4. From a county perspective, what vision do you have for the effective implementation of CSL in JS?
   Probe: What would success look like?
5. How does professional CSL educator development align with the broader education goals of the county?
6. What are the professional development initiatives related to CSL that the county office has organized or supported?
7. What are the most significant challenges to effective CSL implementation at the county level?
   Probe: Which challenges are most urgent to address?

Section Three: Structured Workshops and Training

8. How effective have structured workshops been in enhancing educator capacity for CSL instruction across the county?
9. What criteria guides the design and delivery of CSL professional development initiatives at the county level?
10. What challenges does the county face in providing adequate CSL professional development opportunities?
    1. Hint - Consider the availability of resources, expertise, coordination

Section Four: Academic Qualifications and CSL Quality

11. From your perspective, how important are educator'/teachers' academic qualifications to the successful implementation of CSL?
12. Are there observable differences in CSL implementation across schools that may be attributed to the educator's/teacher's level of qualification?
13. What should the county's role be in encouraging or facilitating educator/teacher academic upgrading?

Section Five: Reflective Practice and Peer Mentoring

14. To what extent are reflective practice and peer mentoring emphasized in the county's approach to educator/teacher development for CSL?
    1. Probe: Are these seen as formal strategies or informal activities?
15. What examples of effective peer mentoring or collaborative practice regarding CSL have you observed across the county?
16. How can the county better support reflective practice and peer mentoring practices among CSL educators?

Closing questions

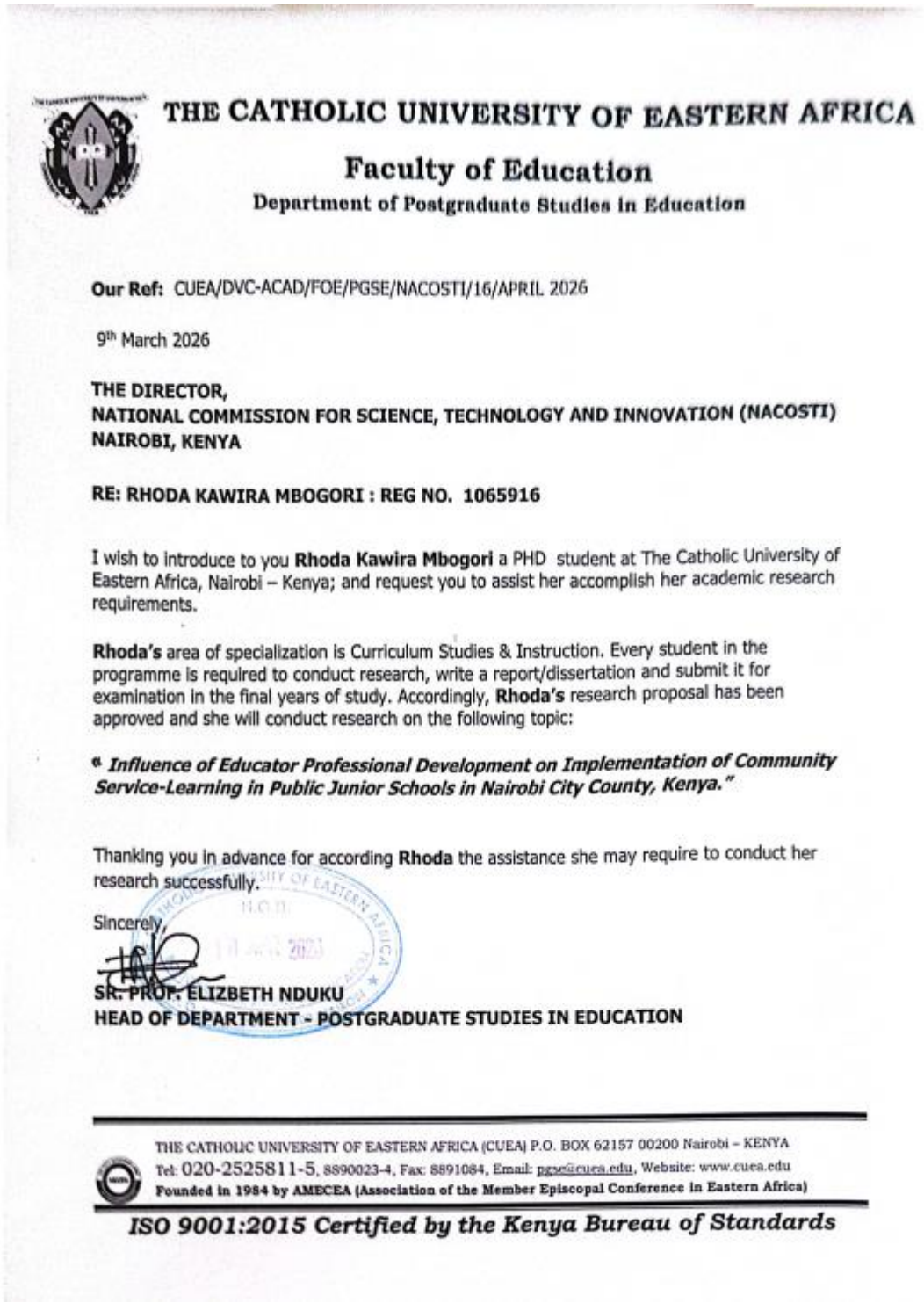
17. Based on reports and your observations, how would you characterize CSL implementation across Nairobi City County?
18. Is there anything else you would like to share about educator professional development and CSL implementation in Nairobi City County?

Appendix X: Number of Public JS in NCC by Sub-County

Subcounty	Number of Schools	Percentage by Proportion	JS	Teachers	HOIs
Westlands	14	7%	1	4	1
Dagoretti North	20	9%	2	6	2
Dagoretti South	13	6%	1	4	1
Lang'ata	16	8%	2	5	2
Kibra	11	5%	1	3	1
Roysambu	4	2%	0	1	0
Kasarani	13	6%	1	4	1
Ruaraka	9	4%	1	3	1
Embakasi South	10	5%	1	3	1
Embakasi North	13	6%	1	4	1
Embakasi Central	10	5%	1	3	1
Embakasi East	24	11%	2	7	2
Embakasi West	11	5%	1	3	1
Makadara	9	4%	1	3	1
Kamukunji	14	7%	1	4	1
Starehe	16	8%	2	5	2
Mathare	6	3%	1	2	1
Total	**213**	**100%**	**22**	**64**	**22**

Source: ***Researcher (2026)***

Appendix XI: University Introduction Letter



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

Faculty of Education

Department of Postgraduate Studies in Education

Our Ref: CUEA/DVC-ACAD/FOE/PGSE/NACOSTI/16/APRIL 2026

9th March 2026

THE DIRECTOR,
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION (NACOSTI)
NAIROBI, KENYA

RE: RHODA KAWIRA MBOGORI : REG NO. 1065916

I wish to introduce to you **Rhoda Kawira Mbogori** a PHD student at The Catholic University of Eastern Africa, Nairobi – Kenya; and request you to assist her accomplish her academic research requirements.

Rhoda's area of specialization is Curriculum Studies & Instruction. Every student in the programme is required to conduct research, write a report/dissertation and submit it for examination in the final years of study. Accordingly, **Rhoda's** research proposal has been approved and she will conduct research on the following topic:

" ***Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya.***"

Thanking you in advance for according **Rhoda** the assistance she may require to conduct her research successfully.

Sincerely,

SR. PROF. ELIZBETH NDUKU
HEAD OF DEPARTMENT - POSTGRADUATE STUDIES IN EDUCATION

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA (CUEA) P.O. BOX 62157 00200 Nairobi – KENYA
Tel: 020-2525811-5, 8890023-4, Fax: 8891084, Email: pgse@cuea.edu, Website: www.cuea.edu
Founded in 1984 by AMECEA (Association of the Member Episcopal Conference in Eastern Africa)

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Appendix XII: Research Antiplagiarism Checker Certificate

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I HEREBY CONFIRM THAT **RHODA KAWIRA MBOGORI** REG NO: **1065916**, SUBMITTED A CHECK OF ANTIPLAGIARISM ON EVALUATION OF **INFLUENCE OF EDUCATOR PROFESSIONAL DEVELOPMENT ON IMPLEMENTATION OF COMMUNITY SERVICE-LEARNING IN PUBLIC JUNIOR SCHOOLS IN NAIROBI CITY COUNTY, KENYA. A DISSERTATION SUBMITTED TO THE FACULTY OF EDUCATION, DEPARTMENT OF POST GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY DEGREE IN CURRICULUM STUDIES AND INSTRUCTION AT THE CATHOLIC UNIVERSITY OF EASTERN AFRICA.**

Verification by Systems Librarian:

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Appendix XIII: Ethical Letter

TANGAZA UNIVERSITY

Teaching Minds / Touching Hearts / Transforming Lives

OFFICE OF THE CHAIRMAN
TANGAZA UNIVERSITY
INSTITUTIONAL SCIENTIFIC AND ETHICS REVIEW COMMITTEE

E-mail: iserc@tangaza.ac.ke **Website:** www.tangaza.ac.ke

OUR Ref: TU/ISERC2026/04/00157 **Date:** 16th April 2026

The Commission Secretary,
National Commission for Science, Technology and Innovation
P.O. Box 30623,
Nairobi, Kenya.

Dear Sir/Madam,

Re: Recommendation for Research Permit – RHODA KAWIRA MBOGORI

This is to confirm that **RHODA KAWIRA MBOGORI** is the PI of a research protocol submitted to TU-ISERC for review. The protocol was reviewed and approved for a research permit.

Rhoda wishes to conduct research titled *"INFLUENCE OF EDUCATOR PROFESSIONAL DEVELOPMENT ON IMPLEMENTATION OF COMMUNITY SERVICE-LEARNING IN PUBLIC JUNIOR SCHOOLS IN NAIROBI CITY COUNTY, KENYA".*

I strongly recommend **RHODA KAWIRA MBOGORI** to the Kenya National Commission for Science, Technology, and Innovation (NACOSTI) for the issuance of a research permit. The permit will enable her to proceed with data collection for her study. Thanking you in advance for your cooperation.

Yours sincerely,

Prof Daniel M. Kitonga (Ph.D., MBA)
Chairperson, TU-ISERC

TANGAZA UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICAL REVIEW COMMITTEE (TU-ISERC)
16 APR 2026
P. O. Box 15055 - 00509
NAIROBI - KENYA

P.O. Box 15055 - 00509 Langata, Nairobi - Kenya
Tel: +254 20 8067667 / 732 897 000 / 733 685 059 / 722 204 724 / 714 610 777
Email: inquiries@tangaza.ac.ke
Website: www.tangaza.ac.ke

TANGAZA UNIVERSITY

Teaching Minds / Touching Hearts / Transforming Lives

REF: TU/ISERC2026/04/00157 16th April 2026

To: RHODA KAWIRA MBOGORI Reg. No: 1065916
C/O Catholic University of Eastern Africa

Dear Rhoda,

Re: *"INFLUENCE OF EDUCATOR PROFESSIONAL DEVELOPMENT ON IMPLEMENTATION OF COMMUNITY SERVICE-LEARNING IN PUBLIC JUNIOR SCHOOLS IN NAIROBI CITY COUNTY, KENYA".*

This is to inform you that TU-ISERC has reviewed and approved your above research proposal. Your application approval number is *TU/ISERC2026/04/00157*. The approval period is **16th April 2026 – 17th April 2027**. This approval is subject to compliance with the following requirements;

1. Only approved documents, including informed consents, study instruments, and MTA, will be used
2. All changes, including amendments, deviations, and violations, are submitted for review and approval by TU-ISERC.
3. Death and life-threatening problems and serious adverse events or unexpected adverse events, whether related or unrelated to the study, must be reported to TU-ISERC within 72 hours of notification.
4. Any changes, anticipated or otherwise, that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research, must be reported to TU-ISERC within 72 hours
5. Clearance for export of biological specimens must be obtained from relevant institutions.
6. Submission of a request for renewal of approval at least 60 days before expiry of the approval period. Attach a comprehensive progress report to support the renewal.
7. Submission of an executive summary report within 90 days upon completion of the study to TU-ISERC.

Before commencing your study, you will be expected to obtain a research license from the National Commission for Science, Technology, and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

Yours sincerely

Prof Daniel M. Kitonga (Ph.D., MBA)
Chair, TU - ISERC

TANGAZA UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICAL REVIEW COMMITTEE (TU-ISERC)
16 APR 2026
P. O. Box 15055 - 00509
NAIROBI - KENYA

P.O. Box 15055 - 00509 Langata, Nairobi - Kenya
Tel: +254 20 8067667 / 732 897 000 / 733 685 059 / 722 204 724 / 714 610 777
Email: inquiries@tangaza.ac.ke
Website: www.tangaza.ac.ke

Appendix XIV: NACOSTI Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **489600**

Date of Issue: **02/May/2026**

RESEARCH LICENSE



This is to Certify that Ms.. RHODA KAWIRA of Catholic University of Eastern Africa, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County, Kenya. for the period ending : 02/May/2027.

License No: **NACOSTI/P/26/4188219**

489600

Applicant Identification Number

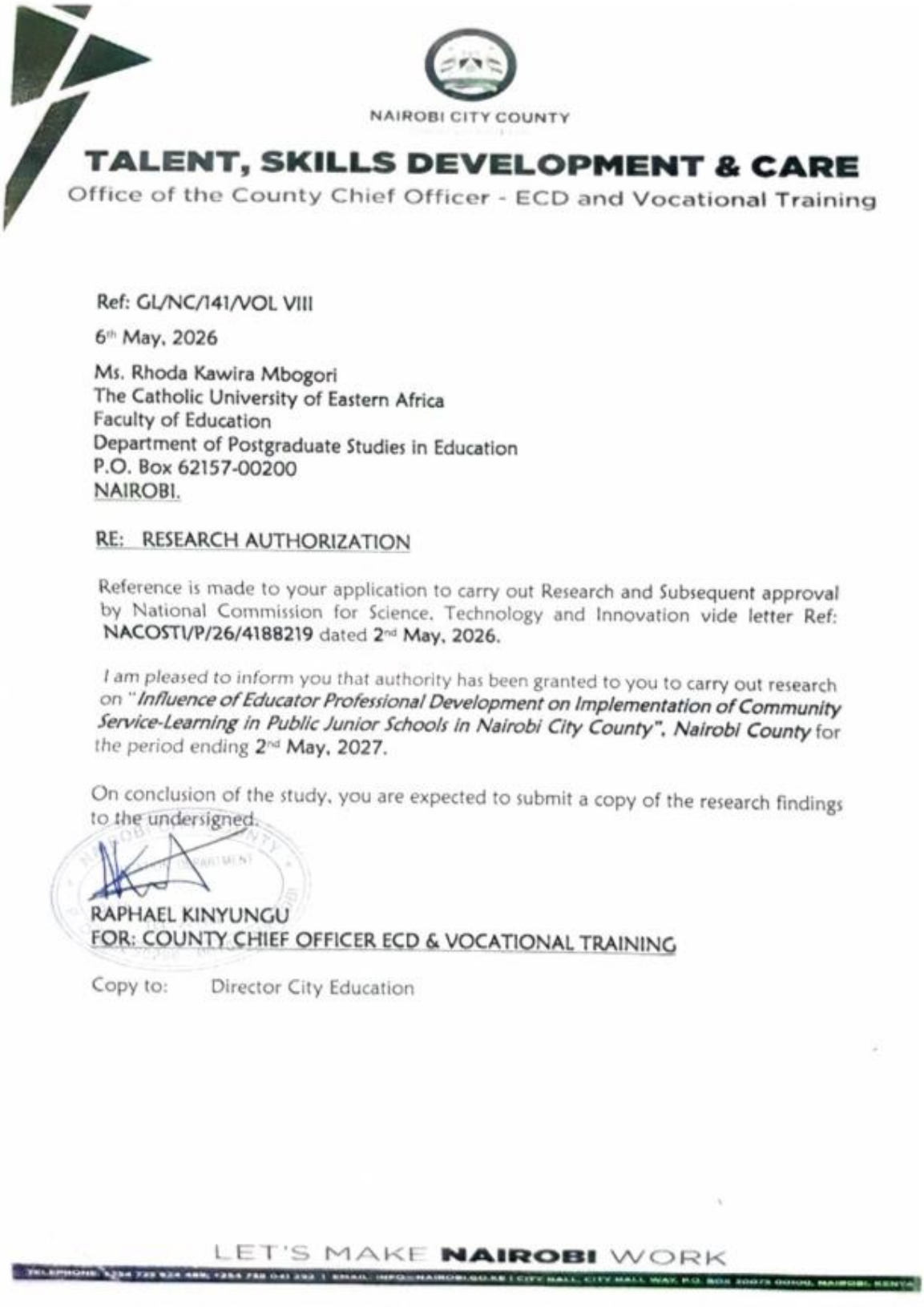
Ag. Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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See overleaf for conditions

Appendix XV: Nairobi City County Clearance



NAIROBI CITY COUNTY

TALENT, SKILLS DEVELOPMENT & CARE

Office of the County Chief Officer - ECD and Vocational Training

Ref: GL/NC/141/VOL VIII

6th May, 2026

Ms. Rhoda Kawira Mbogori
The Catholic University of Eastern Africa
Faculty of Education
Department of Postgraduate Studies in Education
P.O. Box 62157-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Reference is made to your application to carry out Research and Subsequent approval by National Commission for Science, Technology and Innovation vide letter Ref: NACOSTI/P/26/4188219 dated 2nd May, 2026.

I am pleased to inform you that authority has been granted to you to carry out research on "*Influence of Educator Professional Development on Implementation of Community Service-Learning in Public Junior Schools in Nairobi City County*", *Nairobi County* for the period ending 2nd May, 2027.

On conclusion of the study, you are expected to submit a copy of the research findings to the undersigned.

RAPHAEL KINYUNGU
FOR: COUNTY CHIEF OFFICER ECD & VOCATIONAL TRAINING

Copy to: Director City Education

LET'S MAKE **NAIROBI** WORK

Appendix XVI: Ministry of Education Research Authorization

Republic of Kenya

MINISTRY OF EDUCATION
STATE DEPARTMENT FOR BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone; Nairobi 020 2453699
Email: rcenairobi@gmail.com
cdenairobi@gmail.com

When replying please quote

REGIONAL DIRECTOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

Ref: RDE/NRB/RES/1/65 Vol.2

13TH MAY 2026

Ms. Rhoda Kawira Mbogori
CATHOLIC UNIVERSITY OF EASTERN AFRICA

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from National Commission for Science, Technology & Innovation, regarding research authorization in Nairobi County on the topic: "Influence of Educator Professional Development On Implementation of Community Service-Learning in Public Junior Schools in Nairobi County, Kenya."

For a period ending 2nd May 2027.

This office has no objection and authority is hereby granted on the condition that the exercise will be carried out within the ethical and professional standards as required.

A report on the exercise will be required on completion.

ANTHONY MBASI
FOR: REGIONAL DIRECTOR OF EDUCATION
NAIROBI.

REGIONAL DIRECTOR OF EDUCATION NAIROBI 13 MAY 2026 MINISTRY OF EDUCATION P. O. Box 74629, NAIROBI

SGS

Appendix XVII: Nairobi North Sub-Region Research Authorization

OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION

Telegrams.....
Telephone: Nairobi 316845, 341666
When replying please quote

COUNTY COMMISSIONER
NAIROBI NORTH SUB -REGION
P.O. Box 30124-00100
NAIROBI

REF: ED 10/6 VOL. XXX11 (126) **13th May, 2026**

MISS. RHODA KAWIRA MBOGORI
THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

RE: RESEARCH AUTHORIZATION
Reference is made to your letter dated 5th May, 2026 on the above subject matter.

This office has no objection and authority is hereby granted to conduct research on the topic **"Influence of Educator Professional Development on Implementation of Community Service-Learning In Public Junior Schools in Nairobi City County, Kenya"** within Nairobi North Sub-Region for the period ending 2nd May, 2027.

JOHN M. KANYIRA
For: COUNTY COMMISSIONER
NAIROBI NORTH SUB-REGION

Copy to: All Deputy County Commissioners
NAIROBI NORTH SUB-REGION

Appendix XVIII: Nairobi West Sub-Region Research Authorization

REPUBLIC OF KENYA

MINISTRY OF EDUCATION
STATE DEPARTMENT OF BASIC EDUCATION

Email: nrbwestsubregionedu@gmail.com
Telephone: 341666

When replying please quote

COUNTY DIRECTOR OF EDUCATION
NAIROBIWEST SUB REGION
P. O. BOX 74629 -00100
LANG'ATA
NAIROBI

REF: NRBWST/ED/RES /FOL1/L5

14th May, 2026

Rhoda Kawira Mbogori
C/o The Catholic University of Estern Africa
Po Box 62157-00200
NAIROBI

RE: RESEARCH AUTHORIZATION

Reference is made to your letter by the National Commission for Science, Technology and Innovation with regard to your research on the topic "**Influence of Educator Professional Development on Implementation of Community Service -Learning in Public Junior Schools in Nairobi City County, Kenya.** "Dated on 2nd May, 2026.

This office has no objection for the research to be done in Nairobi West Sub- Region Schools.

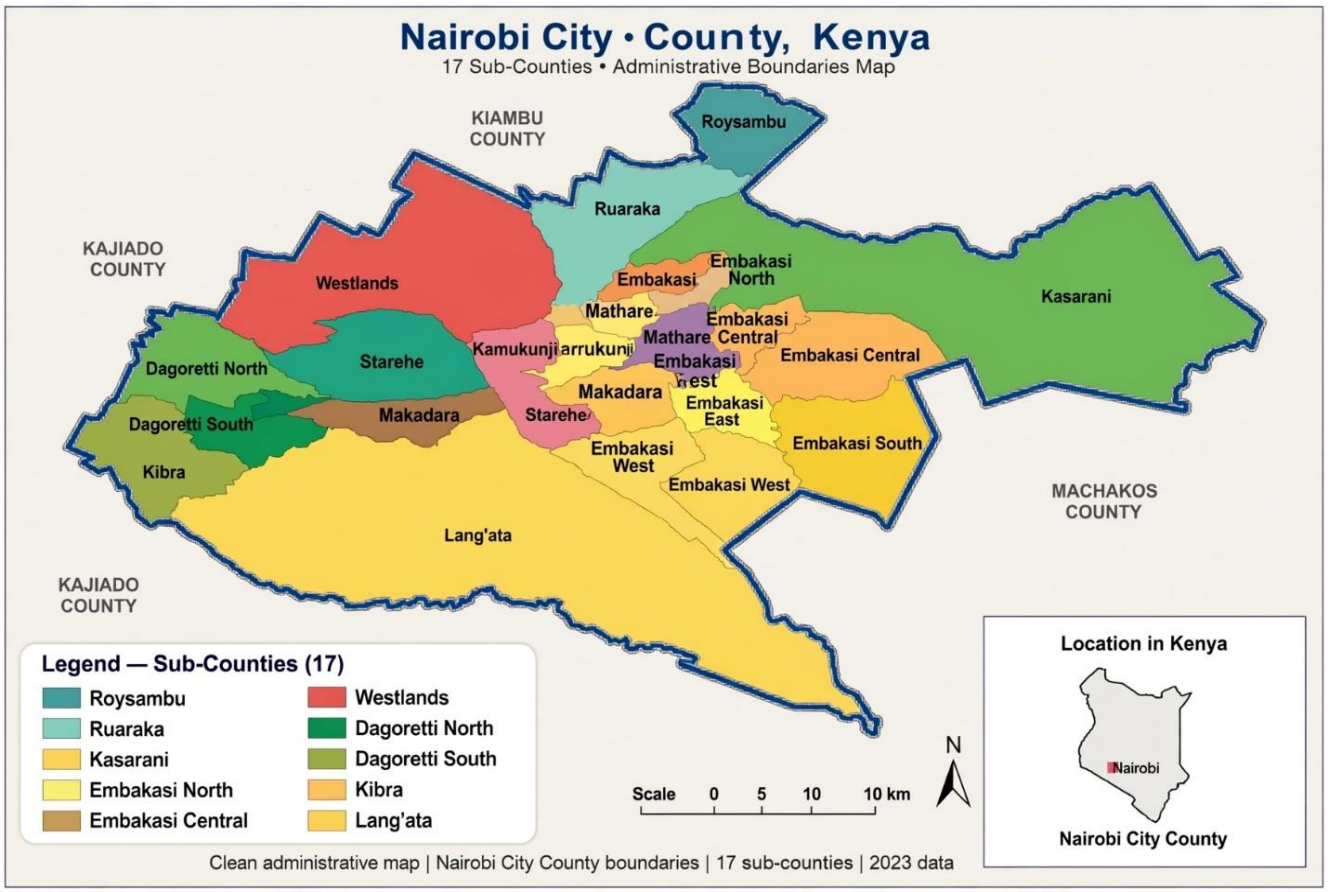
Thank you.

COUNTY DIRECTOR OF EDUCATION
NAIROBI WEST SUB REGION
P.O Box 74629-00100,
Nairobi.

FOR

Bridget Wambua (Mrs)
County Director of Education
Nairobi West Sub Region

Appendix XIX: Map of Nairobi City County



Source: *Adapted from Kenya County boundaries GeoJSON, by OpenStreetMap contributors, 2023 (github.com). Nairobi City County Code 47.*