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Disassociation between Empowerment Hypotheses and Structural Realities: An Accreditation-Aligned Investigation into Mid-Level Executive Readiness for Competency-Based Curricular Reforms in Public Junior Secondary Schools in Kenya

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Abstract: *The global transition towards Competency-Based Education (CBE) demands deep organizational reconfiguration and localized administrative stewardship to resolve systemic implementation bottlenecks. This study investigated the institutional readiness and pedagogical execution fidelity of junior secondary school mid-level executives navigating the rollout of the Basic Education Curriculum Framework (BECF) within Nandi North Sub-County, Kenya. Using Weiss's Theory of Change and descriptive correlational research design, the study sampled 305 institutional administrators. Data were collected via role-customized closed-ended questionnaires. Analysis utilized descriptive metrics, Pearson's product-moment correlation, and One-way Analysis of Variance (ANOVA) revealed that while conceptual awareness of CBE tenets is widely distributed (M = 3.41), practical readiness for execution remains deficient across both senior managers (M = 2.46) and departmental heads (M = 2.67). ANOVA models demonstrated absolute uniformity in structural preparedness across the administrative hierarchy, failing to establish role-based variance, F(1.430) < F(3.084), p = 0.2439. Pearson models confirmed a statistically significant, moderately strong positive correlation among Heads of Departments (r = 0.557, p = 0.035), supporting a systemic "learning by doing" phenomenon, whereas senior managers displayed a statistically non-significant linkage (r = 0.448, p = 0.167). The inquiry reveals a sharp dissociation between national curriculum directives and school-level operational capacity, characterized by chronic shortages of standardized assessment matrices and broken intra-institutional communication pathways. The study recommends system-wide continuous in-service retooling, the rapid deployment of standardized assessment templates by the Kenya Institute of Curriculum Development (KICD.*

Keywords: *Competency-Based Education, Institutional Readiness, Educational Administration, Policy Execution Fidelity, Structural Realities, Theory of Change*.

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1. Introduction

The alignment of national education structures with contemporary economic demands requires comprehensive curricular adjustments that move past the traditional preservation of unapplied factual knowledge. Globally, the shift toward Competency-Based Education (CBE) represents a major shift designed to build actionable knowledge, real-world skills, and ethical behavior (UNESCO, 2017). Educational systems within nations such as Canada, Australia, New Zealand, Finland, Singapore, the United States, and the United Kingdom have successfully institutionalized these skill-centered learning models by emphasizing measurable learning outcomes and performance-driven assessment frameworks (Darling-Hammond et al., 2020; Sahlberg, 2015). These international transitions demonstrate that the successful implementation of systemic educational reform depends on the operational readiness and instructional leadership capacity of school managers, who must translate policy goals into daily classroom practices (Fullan, 2011).

In Kenya, the launch of the Basic Education Curriculum Framework (BECF) in 2016 marked a historical turn, moving away from the 8-4-4 system that had shaped the country's education since 1985 (Kenya Institute of Curriculum Development [KICD], 2019). While the 8-4-4 system originally sought to foster self-reliance, it faced heavy criticism from academic and industrial panels for its high-stakes national examinations, rigid content focus, and limited cultivation of critical thinking and creative problem-solving (Cheptoo & Ramdas, 2018; Oduor & Omulando, 2020). The contemporary CBE framework intends to reorient the learning environment by addressing the provisions of the Kenya Constitution of 2010, the East African Community harmonization protocols, and the socioeconomic goals of Kenya Vision 2030 (Mugambi & Chepkonga, 2022). This structural re-engineering emphasizes seven core national competencies: communication and collaboration, critical thinking and problem-solving, creativity and imagination, citizenship, digital literacy, learning to learn, and self-efficacy (KICD, 2020).

The sudden introduction of these changes has placed significant pressure on public junior secondary school administrators, including Headteachers, Deputy Headteachers, and Heads of Departments (HoDs). These leaders serve as the front-line implementers of this educational policy change (Ministry of Education, 2023). Within the school, the Headteacher serves as the chief accounting officer and instructional leader, responsible for providing resources, coordinating professional development, and establishing strategic community partnerships (Sifuna & Obonyo, 2019). The Deputy Headteacher manages student behavior, implements class schedules, and oversees daily instructions (Kamunde, 2020). Meanwhile, Heads of Departments provide subject-specific guidance and foster collaborative teaching strategies across the disciplines (Ngyen et al., 2020). Because these administrators were themselves educated and trained under the traditional 8-4-4 framework, they face the dual challenge of unlearning old exam-driven practices while building the capacity to guide staff through localized learning outcomes and specialized assessment strategies (Koskei & Chepchumba, 2020).

This educational transition met a significant operational crisis between 2020 and 2022 when severe infrastructure gaps and uncertain logistical planning forced the national government to alter its original rollout plan. The state decided to domicile the initial junior secondary school cohorts within existing primary school facilities rather than moving them to traditional high schools (Akala, 2021; Wambugu & Muthoni, 2022). This adjustment exposed deep shortages in classroom space, specialized labor, and technical materials, raising concerns about the system's actual readiness for this curriculum rollout (Ndung'u, 2023). While public debates have focused heavily on general physical resources, teaching materials, and student adaptation, the readiness of mid-level administrative teams has remained largely unexamined (Mokoro, 2020). This gap threatens the sustainability of the policy, as standard literature confirms that even well-funded reforms fail if school leadership cannot effectively manage the change process (Bush, 2019). Consequently, there is an urgent need to examine the relationship between administrative readiness and the fidelity of curriculum execution within public junior secondary schools, focusing on the specific region of Nandi North Sub-County, Kenya.

1.1 Statement of the Problem

The global pivot toward Competency-Based Education (CBE) demands a radical departure from the traditional preservation of unapplied facts, favoring instead the development of practical, real-world proficiencies and moral agency (UNESCO, 2017; Darling-Hammond et al., 2020; Sahlberg, 2015; Koster et al., 2017). For Kenyan schools, the Basic Education Curriculum Framework (BECF) serves as a bold ambition, yet its viability rests almost entirely upon the shoulders of school leaders tasked with turning these state-level blueprints into everyday reality (KICD, 2019; Fullan, 2011; Sifuna & Obonyo, 2019; Mugambi & Chepkonga, 2022). In an ideal environment, administrators from Head teachers managing resources to departmental leads guiding curriculum would act as architects of this change, equipped with clear assessment metrics and seamless internal communication channels to support their staff (Bush, 2019; Kamunde,

2020; Ngyen et al., 2020; KICD, 2020). However, the reality for many is a state of professional dissonance; these leaders, shaped by the legacy of the 8-4-4 system, find themselves caught in a painful transition where they must dismantle their own deep-seated pedagogical foundations while simultaneously mentoring teachers through a shift toward specialized, formative evaluation (Cheptoo & Ramdas, 2018; Oduor & Omulando, 2020; Koskei & Chepchumba, 2020; Akala, 2021).

The current administrative experience in the field is marked by an unsettling divide between what the government expects and what schools are physically able to deliver. Even where administrators speak the language of competency-based learning with ease, their day-to-day work is plagued by a lack of the practical tools such as standardized templates and clear procedural manuals required to move beyond theory (Mokoro, 2020; Nkya, Fang, & Mwakabungu, 2021; Ngeno, 2023; Chemagosi, 2021). The strain is compounded by chronic fiscal delays and the physical absence of resources, which often leaves educators feeling abandoned in the face of daunting, newly-assigned responsibilities (Wambugu & Muthoni, 2022; Ndung'u, 2023; Nyamweya, 2023; Wanjiku, 2022). This struggle is not uniform; it is stratified, with different leaders within the same school hierarchy navigating the change with varying, and often inequitable, levels of preparation and support (Hunter, 2023; Nsengimana et al., 2020; Mtsi & Mabel-wendy, 2021; Chepkemei, Bomett, & Chumba, 2022). Left without a synchronized roadmap, these administrators are forced to lean on trial-and-error a "learning-by-doing" approach that leaves the success of a national reform resting on the precariousness of local improvisation rather than coherent policy execution (Silas, 2020; Ondimu, 2018; Abdullahi, 2019; Kuria, 2022).

1.2 Research Objectives

The study was conducted under the following objecitves:

1. Assess the extent of administrative readiness among senior managers and Heads of Departments regarding the requirements of the Basic Education Curriculum Framework (BECF).
2. Evaluate the level of curriculum execution fidelity currently practiced within public junior secondary schools in Nandi North Sub-County.
3. Analyze the statistical variance in structural preparedness across the different hierarchical levels of school administration (Headteachers, Deputy Headteachers, and Heads of Departments).
4. Determine the nature and strength of the relationship between administrative readiness and the efficacy of curriculum implementation in the selected institutions.

2. Literature Review

2.1 Theoretical Framework: Weiss's Theory of Change

This study is anchored on the Theory of Change (ToC), an evaluation and planning model originally formulated by Carol Weiss, Michael Quinn Patton, Huey Chen, and Peter Rossi during the 1990s to map out the complex pathways through which social and institutional reforms occur (Blamey & Mackenzie, 2007). In educational settings, the Theory of Change provides a clear roadmap for examining how targeted inputs and intermediate activities link to long-term goals, while explicitly identifying the underlying assumptions that must hold true for a policy to succeed (Fullan, 2007). When applied to Kenya's Ministry of Education, the long-term goal is to replace the exam-oriented 8-4-4 system with a sustainable CBE structure that produces holistic, skilled individuals capable of addressing modern socioeconomic challenges (KICD, 2019).

To bridge the gap between national goals and school-level execution, the model requires specific intermediate activities. For CBE to succeed, institutional administrators must complete specialized, practical training that aligns their leadership methods with performance-based instruction (Bush, 2019). Tangible inputs, such as state financial support, standardized assessment templates, and technology tools, are necessary to drive these activities (Muchira et al., 2023). However, the model reveals that severe implementation cracks appear when basic operational assumptions do not match real-world conditions. For example, the policy assumes that school administrators are uniformly prepared to guide teachers through formative assessments, and that local communities actively support student-centered learning tasks (Amunga et al., 2020). By using the Theory of Change as an analytical tool, this study examines whether the inputs provided by the Ministry of Education align with the actual capacity of administrators, helping to pinpoint exactly where structural breakdowns occur.

2.2 Extent of Administrator Readiness for Competency-Based Educational Reforms

Across developing educational systems, the practical readiness of institutional administrators remains a critical bottleneck during major curriculum changes. Mokoro (2020) conducted a descriptive study in Arumeru District, Tanzania, focusing on teacher and manager readiness for a competency-based curriculum. The data revealed that 64%

of front-line educators had received no formal retooling on competency concepts, which led to a highly fragmented, ineffective implementation process. This challenge was mirrored by Nkya, Fang, and Mwakabungu (2021), who documented an increase in untrained personnel managing competency cohorts in Tanzania, concluding that hasty implementation without deep capacity building forces educators to fall back on familiar, outdated teaching habits. Within Kenya, studies show mixed results regarding administrative preparation across different counties. Silas (2020) reported high optimism in Vihiga County, where over 80% of teachers and administrators felt capable of managing CBE learners. However, when probed on details, this confidence was linked strictly to basic computer literacy, while their actual access to digital tools remained critically low. In contrast, Ondimu (2018) discovered that even in urban Nairobi County, where awareness of curriculum guidelines was widespread, administrators faced major challenges due to a lack of formal training on digital literacy platforms. Furthermore, Abdullahi (2019) reported that 68% of institutional managers in Garissa County lacked basic curriculum materials and guidance, which severely limited their capacity to lead staff. Chemagosi (2021) confirmed these patterns in public primary schools across Kilifi and Nandi counties, demonstrating that administrative readiness directly predicts how accurately a curriculum is executed in the classroom. This body of research indicates that while initial policy announcements create high conceptual awareness, they rarely provide the practical, deep retooling needed for daily operations (Ngeno, 2023).

2.3 Curriculum Requirements and Implementation Contexts

The transition to CBE introduces strict structural demands that differ fundamentally from traditional, teacher-centered teaching models. The curriculum requires clearly defined learning outcomes, student-centered learning tasks, ongoing formative assessment, and the integration of technology into the instructional environment (Koster et al., 2017). This requires a major shift from high-stakes terminal grading to performance-driven reporting, where student progress is tracked using continuous portfolios, practical exhibits, and peer evaluations (Ruth & Ramadas, 2019). In well-resourced nations, these tracking demands are managed through advanced data portals, but across African educational landscapes, limited resources present continuous hurdles (Byusa et al., 2020).

In Kenyan public junior secondary schools, large classes and limited learning materials make it difficult to implement these requirements. Sitienei (2020) revealed that in Nairobi's public schools, the student-to-teacher ratio often reaches 1:80, making it nearly impossible for educators to provide the individualized feedback that CBE mandates. Furthermore, state delays in sending funds prevent administrators from purchasing basic supplies for practical lessons in subjects like agriculture and home science (Nyamweya, 2023). Consequently, many schools rely on a blended, hybrid approach, teaching new curriculum content using old, teacher-centered lecture styles (Tarmo & Kimaro, 2021). Wanjiku (2022) also noted that while textbooks are generally available in Western Kenya, the complete lack of internet connection and electricity prevents schools from meeting digital learning goals, creating a significant gap between policy ideals and real-world execution.

2.4 Variation in Readiness Across Administrative Cohorts

An overview of international literature reveals that readiness levels often vary widely depending on an administrator's specific position within the school hierarchy. Hunter (2023) examined the rollout of new observation methods in Tennessee, USA, finding that while Headteachers received comprehensive training from state officials, Deputy Headteachers and Guidance Counselors were largely excluded, leading to uneven institutional leadership. Similarly, Manning (2018) discovered that software adoption during curriculum changes in New York varied significantly by age and administrative role, as older senior managers struggled with data tools that younger departmental heads mastered quickly. In East Africa, unequal access to training materials worsens these role-based disparities. Nsengimana et al. (2020) tracked curriculum execution in Rwanda, noting that while senior school heads regularly attended state briefings, the departmental heads responsible for subject delivery were left without training, causing science subjects to be taught using traditional lecture methods. In South Africa, Mtsi and Mabel-wendy (2021) found that science heads of departments were unequipped to lead curriculum changes because their professional workshops focused on theoretical goals rather than practical laboratory management. Within Kenya, Chepkemei, Bomett, and Chumba (2022) revealed that the Ministry of Education prioritized training for senior primary heads when planning the junior secondary transition, leaving lower-level administrative cohorts with very little support. This uneven focus makes it essential to study whether role-based differences in readiness exist within the administrative hierarchy of Nandi North Sub-County.

2.5 Empirical Connections: Implementation Fidelity and Executive Preparedness

Empirical research consistently shows a strong link between an educator's preparation and the accuracy of curriculum delivery. Isaboke, Mweru, and Wambiri (2021) demonstrated a statistically significant relationship between formal training duration and teaching competency in Nairobi County, while noting that an educator's positive attitude alone cannot offset a lack of practical skills. McCabe (2022) supported this in American training schools, showing that early, hands-on professional retooling directly boosts an administrator's confidence and performance during institutional changes. Conversely, a lack of institutional preparation can lead to a complete breakdown in policy delivery. Kuria (2022) found a negative correlation between human resource shortages and curriculum implementation scores in public secondary institutions, concluding that when staff are overwhelmed by administrative tasks, they fall back on old, familiar habits. Mohammed et al. (2020) noted that in rural Ghanaian junior high schools, teachers frequently used local languages and traditional lecturing to cope with unclear curriculum mandates. While the broader literature provides extensive data on classroom teachers, very few studies explore how the readiness of the administrative team impacts curriculum delivery (Asio et al., 2021). This missing empirical link forms the core focus of this study, exploring how administrative readiness shapes curriculum execution in a newly established educational framework.

3. Methodology

3.1 Research Design

This study utilized a quantitative framework combining descriptive survey and descriptive correlational research designs to systematically examine institutional conditions without manipulating the participants (Aquino et al., 2018). The descriptive survey approach allowed the researcher to gather quantifiable data regarding administrative readiness and implementation levels across a large sample of public junior secondary schools (Olamoyegun et al., 2022). Simultaneously, the descriptive correlational design was used to analyze the statistical relationships between the independent variable (administrator readiness) and the dependent variable (the extent of curriculum implementation), while testing for variance across distinct administrative roles.

3.2 Population and Sampling Matrix

The target population comprised all institutional administrators across the 169 public junior secondary schools domiciled within Nandi North Sub-County, Kenya (Ministry of Education, 2023). This administrative body included Headteachers, Deputy Headteachers, and Heads of Departments (HoDs). To determine the exact population size, the total number of individuals across these categories was calculated: 159 Headteachers (with 10 positions vacant or shared), 169 Deputy Headteachers, and 1,014 Heads of Departments (based on an allocation of 6 specialized departmental heads per school), yielding a total population of 1,342 administrators. To find the required sample size, Yamane's structural formula was applied:

$$n = N / [1 + N(e)^2]$$

Where n is the target sample size, N represents the total population size (1,342), and e signifies the margin of error, set at a strict 0.05 threshold. The calculation:

$$n = 1342 / [1 + 1342(0.05)^2] = 1342 / [1 + 1342(0.0025)] = 1342 / 4.355 = 308.15$$

Thus, the minimum required sample size was determined to be 308 administrators. To ensure a balanced representation across schools, a systematic stratified sampling technique was used. The 169 schools were arranged alphabetically and assigned identification numbers from 1 to 169. Sampling was executed in two structural rounds to select the participating institutions. In the first round, the researcher selected all even-numbered schools within every block of ten, which yielded 47 institutions. In the second round, to reach the institutional target, odd-numbered schools were selected starting from number 1, continuing until 27 additional schools were obtained. This systematic process selected 74 public junior secondary schools, providing a total sample of 305 responding administrators who returned fully completed questionnaires.

Table 1: Systematic Institutional Sampling Frame Matrix

Institutional Blocks	First Round Selection (Even Nodes)	Second Round Selection (Odd Nodes)	Total Selected Units
Nodes 1-10	2, 4, 6, 8, 10	1, 3, 7, 9	9
Nodes 11-20	12, 14, 16, 18, 20	11, 13, 17, 19	9
Nodes 21-30	22, 24, 26, 28, 30	21, 23, 27, 29	9
Nodes 31-40	32, 34, 36, 38, 40	31, 33, 37, 39	9
Nodes 41-50	42, 44, 46, 48, 50	41, 43, 47, 49	9
Nodes 51-60	52, 54, 56, 58, 60	51, 53, 57, 59	9
Nodes 61-70	62, 64, 66, 68, 70	61, 63, 67, 69	9
Nodes 71-80	72, 74, 76, 78, 80	71	6
Nodes 81-90	82, 84, 86, 88, 90		5
Nodes 91-169	92, 94, 96, 100, 102, 104, 106, 108, 110, 112, 114, 116, 118		13
Aggregate	**47 Institutions**	**27 Institutions**	**74 Institutions**

3.3 Research Instruments

Data collection relied on role-customized, closed-ended questionnaires developed through an extensive literature review and aligned with the curriculum goals of the Basic Education Curriculum Framework (BECF). The scaling method used a modified 4-point Likert scale to eliminate neutral responses and ensure clear commitments from respondents (Jebb & Tay, 2021). The categories were structured as: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree. Distinct questionnaires were created for senior managers (Headteachers and Deputy Headteachers) and subject specialists (Heads of Departments), tracking core metrics such as lesson planning, integrated teaching, formative assessments, and parent engagement.

3.4 Validity and Reliability Protocols

Content and external validity were established through expert panel evaluations. The initial instruments were reviewed by curriculum specialists and senior professors within the Department of Education at the University of Eastern Africa, Baraton. Their feedback helped align the wording of questions with the operational realities of public junior secondary schools (Flake et al., 2022). Reliability was tested through a pilot study conducted in 20 public junior secondary schools within neighboring Chesumei Sub-County, an area chosen because it features similar demographic and structural conditions but sits safely outside the main study zone (Teresi et al., 2022). The pilot sample included 20 Headteachers, 20 Deputy Headteachers, and 60 teachers, providing 100 total participants. Data from this pilot were analyzed using Cronbach's alpha coefficient, applying a strict minimum reliability threshold of 0.69 (Mugenda & Mugenda, 2003). All sections exceeded this benchmark, confirming strong internal consistency:

Table 2: Instrument Reliability and Internal Consistency Metrics

Target Administrative Cohort	Scale Functional Domain	Item Count	Cronbach's Alpha (α)
Headteachers & Deputies	Extent of Readiness for Curricular Reforms	12	0.896
Headteachers & Deputies	Extent of Curriculum Implementation	11	0.810
Heads of Departments	Extent of Departmental Readiness	10	0.876
Heads of Departments	Extent of Departmental Implementation	10	0.848

3.5 Data Collection Procedures

Data collection began after securing institutional clearance from the Ethics Review Committee at the University of Eastern Africa, Baraton (Ref: UEAB/ISERC/137/02/2025). The researcher then obtained a formal research license from the National Commission for Science, Technology and Innovation (License No: NACOSTI/P/25/4176421), followed by approval from the Nandi County Director of Education and the Deputy County Commissioner. The researcher visited each of the 74 selected schools to explain the study's purpose and distribute the questionnaires to the administrative teams. Participants completed the forms independently, and the data were collected on the same day, ensuring confidentiality and a high return rate.

3.6 Statistical Treatment of Data

The completed questionnaires were cleaned, coded in Microsoft Excel, and moved to SPSS Version 23 for analysis. Descriptive statistics, including means and standard deviations, summarized the core readiness and implementation scores. To interpret the mean scores, the following scale was used: 1.00-1.49 (Strongly Disagree), 1.50-2.49 (Disagree), 2.50-3.49 (Agree), and 3.50-4.00 (Strongly Agree). A One-way Analysis of Variance (ANOVA) tested for differences in readiness scores across the administrative roles, applying an alpha level of 0.05. Finally, Pearson product-moment correlation coefficients evaluated the strength and direction of the relationship between administrative readiness and curriculum implementation scores.

3.7 Ethical considerations

From the onset of the research process to its conclusion, the researcher took cognizance of the recommended professional ethical considerations influencing research as outlined in the University research policy. Each respondent was apprised of the purpose, implications, and applications of the research study, and upon their willingness to participate, they were requested to sign a consent form. No coercion was applied, and respondents were accorded due respect. The researcher ensured the confidentiality of all information. Respondents were advised not to divulge their identity. Respondents were informed that they had the liberty to withdraw. Finally, findings were not used to incriminate the respective institutions or individuals.

4. Results and Discussion

4.1 Demographic Characteristics of the Respondents

The demographic profile of the 305 responding administrators reveals a deeply experienced, highly educated group, dominated by mid-level and senior positions. Gender distribution shows that male leaders hold 56.4% (n = 172) of the administrative roles, while female leaders comprise 41.3% (n = 126), with 2.3% of respondents leaving this section blank. Academic qualifications are strong across the sample: 43.9% hold a Bachelor's degree, 34.4% possess a Diploma in Education, 20.0% have earned a Master of Education degree, and 1.6% hold a Doctor of Philosophy (PhD).

Professional experience is exceptionally high within the cohort. A substantial majority (49.2%) have served in the education sector for over ten years, while 43.3% have five to ten years of experience. Only 5.6% have served for less than five years, with 2.0% of the data missing. In terms of institutional roles, Deputy Headteachers form the largest segment at 44.3%, followed by Heads of Departments at 22.3%, Headteachers at 22.0%, and Career Counselors at 11.5%. These demographics confirm that the participants possess the professional background and education needed to understand and manage curriculum changes.

4.2 Readiness for Curricular Reforms: Headteachers and Deputy Headteachers

The descriptive analysis for senior managers reveals a sharp split between their general conceptual understanding of the curriculum and their practical capacity to implement it. While both Headteachers and Deputy Headteachers understand the core goals of the policy, they lack the specific skills and materials needed for daily operations.

Table 3: Perceived Readiness Matrix for Headteachers and Deputy Headteachers

Evaluated Operational Metric	N	Mean	SD	Interpretation
Possession of official KICD syllabus guidelines.	305	3.41	0.67	Agree
Understanding that CBE focuses on competencies over content.	305	3.41	0.66	Agree
Integration of hands-on experiential learning methods.	305	2.75	0.75	Agree
Incorporation of teaching strategies for critical thinking.	305	2.78	0.74	Agree
Preparedness to implement specific skill pathways.	305	2.48	0.66	Disagree
Commitment to designing student-centered problem tasks.	305	2.42	0.70	Disagree
Possession of formative assessment tools for student tracking.	305	2.27	0.64	Disagree
Possession of reporting tools to communicate student mastery.	305	2.26	0.82	Disagree
Active involvement of teachers and parents in preparations.	305	2.26	0.77	Disagree
Preparedness to coordinate integrated, cross-disciplinary lessons.	305	2.25	0.52	Disagree
Understanding of specific learning outcomes across all subject areas.	305	1.67	0.91	Disagree
Perception that all teachers are fully trained for CBE.	107	1.55	0.78	Disagree
Composite Institutional Readiness Score	**305**	**2.46**	**0.72**	**Disagree**

The data indicate that senior managers have successfully secured core curriculum documents, with high agreement scores for possessing KICD guidelines (M = 3.41, SD = 0.67) and understanding that CBE prioritizes skill acquisition over memorization (M = 3.41, SD = 0.66). They also express confidence in their theoretical ability to support critical thinking (M = 2.78) and experiential learning (M = 2.75). However, this conceptual confidence disappears when looking at the practical requirements of the curriculum. Senior administrators report a critical lack of understanding regarding specific learning outcomes across subject areas (M = 1.67, SD = 0.91) and feel unequipped to handle cross-disciplinary lessons (M = 2.25, SD = 0.52). A major operational breakdown appears in the area of student evaluation, where leaders state they lack the basic tools needed for continuous formative tracking (M = 2.27) and performance-based reporting (M = 2.26). Crucially, managers note that teacher preparation is dangerously low (M = 1.55, SD = 0.78), and that parent engagement remains weak (M = 2.26). With an overall composite score of 2.46 (SD = 0.72), senior administrators in Nandi North Sub-County do not yet feel fully prepared to implement the core requirements of the curriculum.

4.3 Extent of Curriculum Implementation: Headteachers and Deputy Headteachers

The data tracking actual curriculum delivery shows an early, cautious transition. While schools have adopted basic lesson structures and planning templates, deeper changes in teaching and assessment methods remain limited.

Table 4: Perceived Implementation Matrix for Headteachers and Deputy Headteachers

Evaluated Implementation Metric	N	Mean	SD	Interpretation
Shifting instructional focus from content to competencies.	305	3.30	0.86	Agree
Piloting new learning outcomes frameworks.	305	3.24	0.64	Agree
Piloting and using new schemes of work templates.	305	3.14	0.69	Agree
Executing specific skill pathways specified by state guidelines.	305	2.71	0.91	Agree
Integrating cross-disciplinary approaches across departments.	305	2.49	0.72	Disagree
Ensuring teachers attend formal state retooling sessions.	305	2.48	0.72	Disagree
Using active, hands-on learning strategies in class.	305	2.38	0.65	Disagree
Using performance-based reporting tools over traditional grades.	305	2.22	0.79	Disagree
Possessing formal tools to track ongoing student progress.	305	2.14	0.68	Disagree
Fully executing all specialized subject learning outcomes.	305	1.82	1.02	Disagree
Disseminating curriculum updates to parents and community networks.	305	1.57	0.74	Disagree
Composite Institutional Implementation Score	**305**	**2.50**	**0.77**	**Agree**

Schools have successfully integrated new curriculum templates, with administrators agreeing that they are actively piloting new schemes of work (M = 3.14, SD = 0.69) and core learning outcomes (M = 3.24, SD = 0.64). They also report a positive shift toward teaching competencies over rote memorization (M = 3.30, SD = 0.86). However, deeper instructional changes have stalled. Real-world execution of all specialized subject outcomes scores low (M = 1.82, SD = 1.02), showing a major gap between administrative planning and actual classroom practice. Cross-disciplinary lessons remain underdeveloped (M = 2.49), and the use of active, hands-on learning tasks is low (M = 2.38). Evaluation methods also show severe gaps: schools lack tools for tracking continuous student progress (M = 2.14) and struggle to use competency reporting over traditional grades (M = 2.22). Finally, community communication remains broken, with a critical lack of information sharing with local parents (M = 1.57, SD = 0.74). The composite implementation score sits at a marginal 2.50 (SD = 0.77), indicating an early but inconsistent and fragile execution of the curriculum across institutions.

4.4 Readiness and Implementation Metrics: Heads of Departments

Data from Heads of Departments (HoDs) show a slightly higher level of operational readiness, but confirm identical structural barriers regarding resource shortages, assessment tools, and internal communication.

Table 5: Departmental Readiness and Implementation Metrics for HoDs

Evaluated Departmental Metric (HoD Perspective)	N	Mean	SD	Interpretation
Possession of official departmental KICD syllabus guidelines.	305	3.36	0.68	Agree
Possession and piloting of updated schemes of work.	305	3.08	0.84	Agree
Understanding that CBE focuses on competencies over content.	305	3.25	0.65	Agree
Shifting departmental focus to student competencies over content.	305	2.97	0.94	Agree
Understanding specific specialized departmental learning outcomes.	305	2.94	0.74	Agree
Ensuring departmental teachers attend formal training sessions.	305	2.56	0.73	Agree
Active training of teachers within the department.	305	2.43	0.76	Disagree
Executing specific skill pathways within the department.	305	2.54	0.85	Agree
Preparedness to implement specialized subject skill sets.	305	2.41	0.60	Disagree
Using continuous tools to track student progress in class.	305	2.31	0.73	Disagree
Possession of performance reporting tools to track mastery.	305	2.40	0.74	Disagree
Using competency metrics over traditional percentage grades.	305	2.36	0.77	Disagree
Preparedness to execute integrated, cross-disciplinary lessons.	305	2.30	0.55	Disagree
Implementing cross disciplinary assignments across fields.	305	2.33	0.66	Disagree
Possession of formative tools to evaluate daily student progress.	305	2.25	0.66	Disagree
Fully implementing all specialized subject learning outcomes.	305	2.35	1.06	Disagree
Involving departmental teachers in early preparation steps.	305	2.65	0.75	Agree
Possessing specialized materials for critical thinking tasks.	305	2.07	0.65	Disagree
Understanding critical thinking and experiential learning paradigms.	305	2.65	0.63	Agree
Disseminating curriculum updates to the school Headteacher.	305	1.65	0.74	Disagree
Composite Departmental Readiness Score	**305**	**2.67**	**0.68**	**Agree**
Composite Departmental Implementation Score	**305**	**2.42**	**0.70**	**Disagree**

Heads of Departments demonstrate a higher conceptual readiness (Composite M = 2.67, SD = 0.68), showing clear alignment with official KICD documents (M = 3.36) and a solid understanding of the core competency philosophy (M = 3.25). They understand their internal departmental outcomes (M = 2.94) and collaborate reasonably well with fellow teachers (M = 2.65). However, their actual implementation score falls into the Disagree category

(Composite M = 2.42, SD = 0.70). This shortfall stems from intense resource constraints and broken communication channels within the institutions. HoDs report a severe lack of supplies and equipment needed to teach critical thinking and experiential lessons (M = 2.07, SD = 0.65). They are unequipped to run cross-disciplinary assignments (M = 2.33), lack localized tracking tools (M = 2.31), and face major difficulties replacing old grading formats with competency reporting (M = 2.36). Alarmingly, internal communication between department heads and senior school management is non-functional, with a critical low score for sharing basic information with the Headteacher (M = 1.65, SD = 0.74). This breakdown isolates departments and prevents a coordinated rollout across the institution.

4.5 Inferential Structural Variance Across Administrative Hierarchies

To evaluate whether readiness for curriculum change varies by institutional role, a One-way Analysis of Variance (ANOVA) model examined scores across the three major administrative positions: Head Teachers, Deputy Head Teachers, and Heads of Departments. The null hypothesis postulated absolute uniformity in readiness across the administrative hierarchy.

Table 6: One-Way ANOVA Parameter Estimates for Hierarchy-Wide Curricular Readiness

Variance Origin Component	Sum of Squares(SS)	df	Mean Square(MS)	Calculated F	Critical F	p value
Between Institutional Cohorts	0.116	2	0.058	1.430	3.084	0.2439
Within Institutional Cohorts (Error)	4.224	104	0.041	—	—	—
Total Combined Variance	4.340	106	—	—	—	—

The inferential model yielded a calculated F-statistic of 1.430, which sits substantially below the critical F value threshold of 3.084 at a 95% confidence level. The resulting p-value of 0.2439 is significantly greater than the standard alpha level of 0.05. This demonstrates that there is no statistically significant difference in curriculum readiness scores across the administrative roles, confirming absolute uniformity across the institutional hierarchy.

Table 7: Bonferroni Post-Hoc Pairwise Hierarchical Contrast Matrices

Reference Cohort (A)	Contrast Cohort (B)	Mean Difference (A−B)	Standard Error	Statistical Significance
Head Teacher	Deputy Head Teacher	-0.044	0.045	p > 0.05 (Non-Sig)
Head Teacher	Head of Department	-0.091	0.054	p > 0.05 (Non-Sig)
Deputy Head Teacher	Head of Department	-0.047	0.051	p > 0.05 (Non-Sig)

The Bonferroni post-hoc comparisons confirm the core ANOVA results, with all pairwise contrasts showing p-values well above the 0.05 significance threshold. This statistical uniformity reveals that the challenges and readiness deficiencies are systemic rather than role-specific, affecting all levels of school leadership equally. Consequently, any interventions or professional retooling programs must be broad and system-wide, rather than targeting specific administrative tiers in isolation.

4.6 Correlational Analysis: Curriculum Implementation vs. Administrative Readiness

The final empirical analysis examined the correlation between curriculum implementation scores and administrative readiness across senior managers and department heads, revealing two distinct institutional dynamics.

For Headteachers and Deputy Headteachers, the Pearson correlation coefficient model showed a moderate positive trend ($r = 0.448$). However, the 2-tailed significance test yielded a p-value of 0.167, which sits well above the critical alpha threshold of 0.05. This indicates that for senior managers, the link between reported readiness and actual curriculum implementation is not statistically significant. This finding aligns with the criticisms of Mule (2025), who argues that senior school heads in Kenya are often treated as mere executors of rigid state directives rather than active leaders of change. Because their actions are constrained by top-down administrative demands, their personal readiness metrics fail to translate into localized curriculum delivery.

In contrast, data from Heads of Departments show a moderately strong, positive correlation ($r = 0.557$) that is statistically significant ($p = 0.035 < 0.05$). This significant link demonstrates a powerful, practical relationship: as department heads engage directly with the daily implementation of the curriculum, their operational readiness increases. This confirms a clear "learning by doing" phenomenon, where the hands-on management of subject content, continuous assessments, and departmental planning directly builds practical capability and confidence (Usawa Agenda & Zizi Afrique Foundation, 2024). This structural dynamic indicates that active involvement in the daily requirements of curriculum change serves as a potent form of professional development for mid-level specialists.

4.7 Discussion

The findings from public junior secondary schools in Nandi North Sub-County reveal a deep split between theoretical curricular policy goals and the real-world operational capacity of school leadership teams. This systemic pattern of high conceptual awareness paired with low practical execution capacity reflects identical challenges documented across several global and regional educational reforms. The high agreement scores for possessing KICD guidelines ($M = 3.41$) match the patterns observed by Ondimu (2018) in Nairobi County, confirming that state educational agencies are highly effective at distributing official policy documents and generating initial enthusiasm among institutional leaders.

However, the composite readiness score for senior managers ($M = 2.46$) and the low practical implementation scores for department heads ($M = 2.42$) reveal that introductory briefings cannot replace deep, continuous professional retooling. This capacity breakdown aligns with the findings of Abdullahi (2019) in Garissa County and Mokoro (2020) in Tanzania, which demonstrate that rushing a curriculum rollout without long-term capacity building forces educators to fall back on familiar, exam-driven habits. The critical lack of continuous evaluation tools reported by Nandi North administrators ($M = 2.14$) directly mirrors the difficulties documented by Retnawati, Hadi, and Nugraha (2016) in Indonesia, where teachers struggled to track student progress because they lacked clear matrices for measuring performance-based skills.

The absolute uniformity in readiness scores confirmed by the ANOVA model ($p = 0.2439$) highlights that these deficiencies are deeply embedded across all levels of school leadership. This contrasts with the findings of Hunter (2023) in Tennessee, who reported clear role-based disparities where senior heads were well-retooling while mid-level supervisors were left behind. In Kenya, top-down policy delivery leaves all levels of school leadership equally isolated, meaning that targeted, role-isolated training programs are unlikely to succeed (Chepkemei et al., 2022).

Furthermore, the non-significant correlation found among senior managers ($p = 0.167$) compared to the statistically significant "learning by doing" correlation observed among Heads of Departments ($r = 0.557$, $p = 0.035$) highlights a major structural challenge. Senior heads are often overwhelmed by external bureaucratic demands, preventing their personal readiness from translating into instructional support for their staff (Mule, 2025). Meanwhile, department heads build real capacity through daily interaction with curriculum tasks, even while facing severe resource shortages (Mtsi & Mabel-wendy, 2021). Finally, the complete breakdown in internal communication between department heads and senior management ($M = 1.65$) matches the communication gaps noted by Rodger (2021) in the United Kingdom, warning that isolating subject specialists from central school planning can dilute policy goals and cripple long-term implementation.

5. Conclusion and Recommendations

5.1 Conclusion

This study demonstrates that the successful transition to a Competency-Based Education model within public junior secondary schools in Nandi North Sub-County is severely hindered by a deep gap between top-down curriculum mandates and real-world administrative capacity. Although school leaders are highly experienced, hold advanced academic qualifications, and conceptually support the skill-focused focus of the framework, their practical readiness remains dangerously low. This deficiency is particularly acute in critical operational areas, including cross-disciplinary instructional tracking, the execution of continuous formative assessment matrices, and performance-based reporting methods.

The inferential models confirm that these readiness deficits are perfectly uniform across the institutional hierarchy, proving that the implementation breakdown stems from systemic issues rather than individual role failures. Furthermore, the significant correlation between implementation engagement and operational readiness found among Heads of Departments highlights a powerful "learning by doing" dynamic, confirming that hands-on administrative tasks build real-world leadership capacity. However, this capacity remains fragile due to severe shortages of physical resources and a near-complete breakdown in internal communication between department heads and senior management. Without immediate, systemic interventions to address these communication cracks and resource gaps, the implementation of the curriculum risks becoming a hollow administrative exercise that fails to deliver genuine educational change.

5.2 Policy and Administrative Recommendations

Based on empirical findings and statistical analyses, this study presents the following urgent recommendations for policy adjustments and institutional actions:

1. **Institutionalization of Continuous, Role-Specific Retooling:** The Ministry of Education, in partnership with the Teachers Service Commission (TSC), must move past brief introductory seminars and implement continuous, practical in-service training programs. These sessions must focus on the concrete requirements of the curriculum, providing administrators with the skills to guide teachers through integrated, cross-disciplinary lesson delivery and performance-driven instructions.
2. **Rapid Deployment of Standardized Assessment Frameworks:** The Kenya Institute of Curriculum Development (KICD) along with the Kenya National Examinations Council (KNEC) must immediately create and distribute standardized formative evaluation templates, digital rubrics, and performance-reporting scorecards. This will eliminate institutional confusion and prevent schools from falling back on traditional grading systems.
3. **Establishment of Mandated Internal Planning Panels:** School leadership teams must set up structured, weekly departmental collaboration meetings. These panels will allow Heads of Departments to share curriculum data with senior management, bridge the internal communication gap, and build a cohesive, institution-wide approach to delivering the curriculum.

5.3 Recommendations for Further Empirical Studies

1. **A Multi-Tiered Comparative Study on Teacher vs. Administrator Readiness:** A localized comparative study should examine the operational readiness of classroom teachers against their supervising institutional heads to identify shared capacity gaps and target resources effectively.
2. **An Evaluation of School Leadership Styles on Reform Uptake:** Further empirical research should examine how specific educational leadership models (such as transformational, instructional, or distributive leadership) influence the speed, fidelity, and long-term sustainability of curriculum implementation.

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