



The influence of Teachers' Preparation and Use of Professional Documents on Learners' Academic Performance in Public Primary Schools in Kasarani Sub-County, Nairobi County, Kenya

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ABSTRACT :

This study examined the relationship between teachers' preparation and use of professional documents and learners' academic performance in public primary schools in Kasarani Sub-County, Nairobi County, Kenya. The specific research question was; what is the relationship between teachers' preparation and use of professional documents and learners' academic performance. The study was anchored on Adult Learning Theory and adopted a convergent parallel mixed-methods design, combining a cross-sectional survey with a descriptive phenomenological qualitative strand. From a target population of 26 head teachers, 130 teachers and 4,680 Grade 5 and 6 learners drawn from the 26 public primary schools in Kasarani Sub-County, a sample of 10 schools, 10 head teachers, 50 teachers and 369 learners (429 participants in total) was drawn using a combination of simple random, purposive and Yamane-formula stratified random sampling. Quantitative data were collected using a Likert-scaled teachers' questionnaire and analyzed using descriptive statistics, Pearson correlation and multiple regression in SPSS version 25; qualitative data were collected through focus group discussions with learners and in-depth interviews with head teachers, and analyzed thematically. Descriptively, teachers reported strongly positive perceptions of professional documentation (mean = 4.33, SD = 0.567), with universal agreement that lesson plans and schemes of work are prepared and used to organize instruction, although consistency of reference to these documents during actual lesson delivery was comparatively lower. Inferentially, teachers' preparation and use of professional documents had an extremely strong, positive and statistically significant bivariate relationship with learners' academic performance ($r = 0.968$, $p = 0.000$), and, in linear regression model demonstrated strongest positive predictor of academic performance ($\beta = 0.569$, $p = 0.008$), with the overall model explaining 96.7 percent of the variance in academic performance ($R = 0.983$, $R^2 = 0.967$, $F(4, 45) = 330.602$, $p = 0.000$). Findings from head teachers and learners corroborated the quantitative results, highlighting systematic lesson preparation, classroom organization, progress monitoring and institutional (leadership) support as the mechanisms linking documentation practice to performance. The study concludes that teachers' preparation and use of professional documents is the strongest single correlate of learners' academic performance among the TCPD dimensions studied, and recommends that head teachers strengthen instructional supervision of lesson plans, schemes of work and learner-progress records, and that this be reinforced through mentoring, subject panels and CPD committees at school level.

Keywords: teacher professional documents; lesson plans; schemes of work; continuous professional development; academic performance; public primary schools; Kasarani Sub-County; Kenya

1.0 Introduction

1.1 Background to the Study

Improving learners' academic performance is among the central goals of education systems worldwide, and the quality of teaching, shaped substantially by the professional learning opportunities afforded to teachers is one of the most consistently cited determinants of that performance. Teacher Continuous Professional Development (TCPD) has accordingly become a central pillar of educational reform, referring to the ongoing, structured process through which teachers acquire, refine and apply pedagogical competencies in the classroom (Ambon, Alias, Komariah, & Mansor, 2024). Within Kenya's Competency-Based Education (CBE) framework, learners' academic performance is understood not merely as the acquisition of knowledge but as the demonstrated mastery of specified competencies, skills and cognitive abilities (Rizvi & Hashim, 2024).

Among the indicators used to characterize TCPD, Gonzalez (2022) identifies teachers' pedagogical competence, assessment technique, preparation and use of professional documents, and interpersonal (soft) skills as the core dimensions through which continuous professional learning translates into

classroom practice. Professional documents; schemes of work, lesson plans, records of work and learner-progress records in particular reflect teachers' preparedness and compliance with the planning and monitoring routines that curriculum implementation depends on. Global evidence associates sustained, structured teacher learning with measurable gains in learner outcomes: comparative analyses have found that learners whose teachers participated in structured CPD scored, on average, meaningfully higher than peers whose teachers had not (UNESCO, 2023), while cross-national reporting associates continuous teacher engagement with double-digit percentage-point gains in literacy and numeracy competency attainment relative to classrooms with less-experienced or less-supported teachers (OECD, 2024).

Within Nairobi County, however, national basic-education statistics point to considerable variability in the attainment of literacy and numeracy competencies at the primary level, with urban public-school performance in both areas falling well short of set national targets, and with schools that lack consistent teacher-training and organizational support recording markedly lower continuous-assessment means than better-supported schools (MoE, 2023; KICD, 2024). While such reports describe the scale of the performance gap, they offer little insight into the specific teacher-preparation conditions and, in particular, the preparation and classroom use of professional planning and monitoring documents that might explain it at the level of an individual, urban sub-county such as Kasarani. It is this gap that the present study addresses, focusing specifically on the relationship between teachers' preparation and use of professional documents and learners' academic performance.

1.2 Statement of the Problem

Continuous Teacher Professional Development is widely recognized as a mechanism for improving the knowledge, skills and classroom practices that in turn drive learner performance (Ambon et al., 2024). Under Kenya's CBE model, however, achieving this promise depends on teachers translating professional learning into concrete, well-documented classroom practice through schemes of work that sequence the curriculum across a term, lesson plans that structure individual lessons, and progress records that allow teaching to be adjusted to learners' demonstrated mastery. In many public primary schools in urban sub-counties such as Kasarani, professional development remains uneven, and is often delivered through short, one-off workshops rather than sustained, context-embedded support (Adika, 2024), raising the question of whether teachers' preparation and actual classroom use of professional documents as distinct from their mere possession is meaningfully associated with learners' performance. Existing local studies have tended to treat teacher preparation as a broad, undifferentiated variable, or to rely on cross-sectional designs that do not examine specific TCPD dimensions such as professional documentation in relation to learner outcomes in an urban sub-county setting. This gap in the evidence motivated the present study, which investigated the relationship between teachers' preparation and use of professional documents and learners' academic performance among Grade 5 and Grade 6 learners in public primary schools in Kasarani Sub-County, Nairobi County, Kenya.

1.3 Research Question

What is the influence of teachers' preparation and use of professional documents on learners' academic performance in public primary schools in Kasarani Sub-County, Nairobi County?

1.4 Research Hypothesis

H₀: There is no statistically significant relationship between teachers' preparation and use of professional documents and learners' academic performance in public primary schools within Kasarani Sub-County.

1.5 Significance of the Study

The findings are expected to assist the Ministry of Education and the Teachers Service Commission in identifying gaps in current CPD frameworks and in strengthening the place of professional documentation within in-service training programmes. School administrators and head teachers may use the findings to prioritize instructional supervision of lesson plans, schemes of work and learner-progress records, while teachers may draw on the results to inform their own professional-learning priorities. The study also contributes empirical evidence, from an urban Kenyan public primary school context, to the wider literature on TCPD and CBE implementation.

1.6 Scope of the Study

The study was delimited to public primary school head teachers, Grade 5 and 6 teachers, and their learners in Kasarani Sub-County, Nairobi County, and specifically to the professional-documentation dimension of TCPD, considered alongside three other TCPD dimensions (pedagogical skills, assessment skills and soft skills) that were assessed concurrently in the same instrument. Data were collected at a single point in time using a convergent parallel mixed-methods design, and the study therefore describes current practice and its statistical association with performance rather than change over time or causation.

1.7 Conceptual Framework

A conceptual framework is an analytical model which structures the variables involved in the study and the presumed relationships among them and which helps in the development of research questions, data collection and interpretation of results (Miles, Huberman, & Saldaña, 2020).

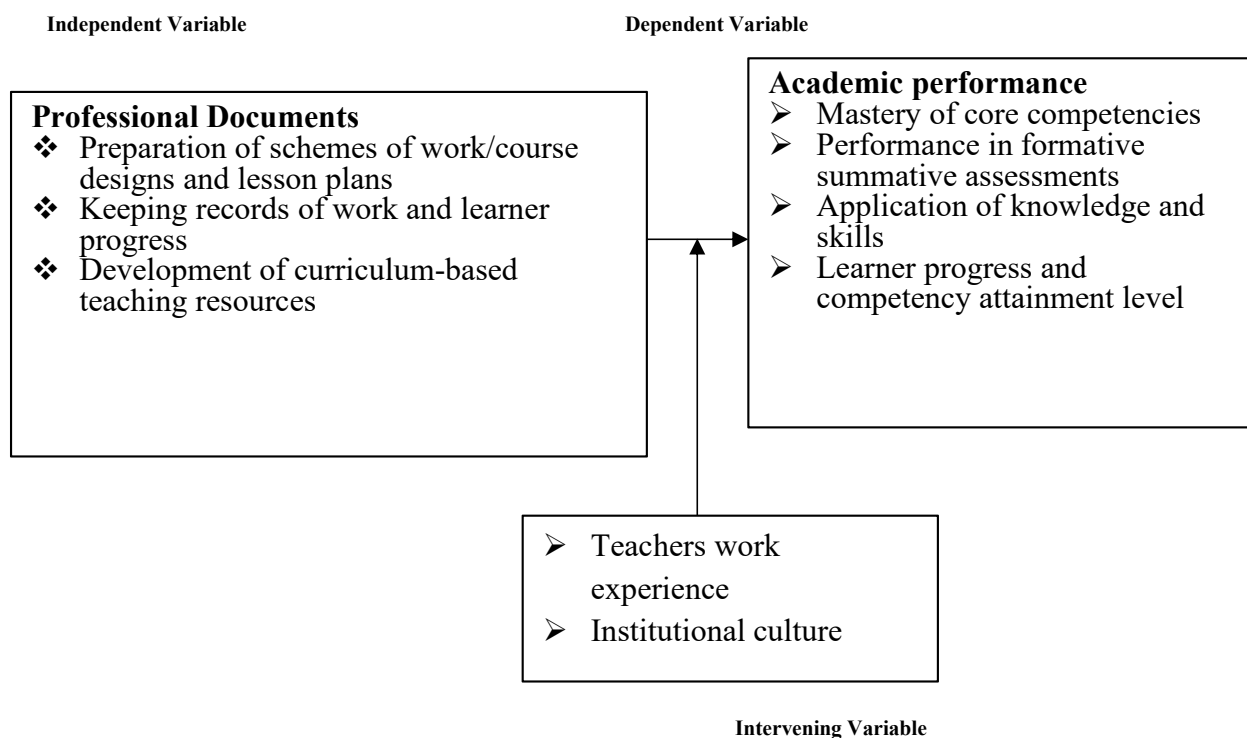


Figure 1

Conceptual Framework

Source: Researcher (2026)

Professional documents like schemes of work, lesson plans, records of work, learner progress records and curriculum-based teaching resources are expected to improve teaching and learning organization. The relationship between professional documents and learner academic performance could also be mediated by intervening variables, namely: teachers' work experience and institutional culture. This intervening variable may act as a buffer that enhances or inhibit the relationship between professional documents and learners' academic performance.

2.0 Literature Review

2.1 Theoretical Framework

The study was anchored on Adult Learning Theory (Andragogy), formalized by Knowles (1984) and building on earlier work by Lindeman (1926). The theory holds that adult learners are self-directed, bring substantial prior experience to new learning, and are motivated to learn when the content is problem-centered and has immediate application to their roles (Merriam & Bierema, 2021; Knowles et al., 2020). Applied to teacher professional development, Andragogy suggests that teachers are most likely to internalize and apply new practice including the systematic preparation and use of schemes of work, lesson plans and progress records, when such practice is experiential, reflective and directly tied to classroom problem-solving (Taylor & Hamdy, 2022; Kyndt, Gijbels, Grosemans, & Donche, 2020). The theory has been criticized for overestimating teachers' uniform capacity for self-directed learning and for paying limited attention to organizational factors such as leadership support, time and resources (Merriam & Bierema, 2021; Taylor & Hamdy, 2022); this study accordingly examined professional documentation not only as an individual teacher practice but also in relation to institutional support mechanisms such as supervision, mentoring and departmental review.

2.2 Empirical Review: Preparation and Use of Professional Documents and Learners' Academic Performance

Empirical evidence on the pathway between leadership-supported professional development, teachers' documentation practice and learner outcomes is well established internationally, though rarely disaggregated to the level of professional-document preparation itself. Nadeem (2024), in a meta-analytic review of 35 studies across OECD and Asian education systems, found that distributed leadership significantly predicted the quantity and quality of teacher CPD and its contribution to student outcomes ($\beta = 0.47$, $p < .001$; $R^2 = 0.36$), with an indirect effect on learner outcomes operating through teacher CPD ($\beta = 0.32$, $p < .01$), confirmed through structural equation modelling. Using a sample of 600 teachers from 50 primary schools in China, Yang, Li, and Zhang (2024) similarly found that teachers' perceptions of distributed leadership significantly influenced professional development ($\beta = 0.59$, $p < .001$), which in turn influenced pupil performance through enhanced instructional practice ($\beta = 0.48$, $p < .01$), with a significant indirect effect of leadership on pupil performance through professional development ($\beta = 0.28$, $p < .05$). Neither study, however, explicitly examined the preparation or classroom use of professional documents such as lesson plans and schemes of work as a distinct construct.

At the regional level, Mitchell et al. (2024), in a systematic review and meta-synthesis of CPD programmes across ten sub-Saharan African countries, found that schools where leaders were actively involved in teaching recorded an 18 percent average increase in learner outcomes relative to schools without such involvement, $F(1, 112) = 6.27$, $p = .014$, with leadership explaining 29 percent of the variance in CPD effectiveness; the review did not, however, isolate the role of teacher-prepared professional documents in this pathway. In Kenya, Otieno (2023), using an explanatory correlational design with 240 teachers from 30 schools in Mombasa County, established a significant effect of instructional leadership on teacher engagement in CPD ($\beta = 0.54$, $t = 4.76$, $p < .001$) and, using a Sobel test, a significant effect of teacher engagement in mediating the relationship

between instructional leadership and student performance ($Z = 3.18$, $p = 0.002$); the study relied on self-reported CPD engagement rather than verified documentation practice.

2.3 Research Gap

The reviewed literature consistently associates leadership-supported CPD with improved instructional practice and learner outcomes, but rarely isolates teachers' preparation and classroom use of professional documents as opposed to CPD participation or leadership support in general as an independent construct, and even more rarely does so in an urban Kenyan public primary school setting. The present study addresses this gap by measuring the preparation and use of professional documents directly, alongside three other TCPD dimensions, and by testing its statistical relationship with learners' academic performance in Kasarani Sub-County using both correlation and multiple regression.

3.0 Methodology

3.1 Research Design

The study adopted a convergent parallel mixed-methods design, in which quantitative and qualitative data were collected concurrently, analyzed separately and integrated at the interpretation stage (Creswell & Plano Clark, 2021). The quantitative strand used a cross-sectional survey design, while the qualitative strand used a descriptive phenomenological design to explore head teachers' and learners' experiences and perceptions of teachers' professional documentation practice. Findings from the two strands were triangulated at the interpretation stage through a joint-display comparison in which the corresponding quantitative result and qualitative theme for the professional-documentation construct were examined for convergence, divergence or complementarity.

3.2 Study Location, Population and Sample

The study was conducted in Kasarani Sub-County, Nairobi County, an approximately 152.60 km² urban and peri-urban sub-county comprising the wards of Clay City, Mwiki, Njiru, Ruai and Kamulu, and home to 26 public primary schools. The target population comprised 26 head teachers, 130 Grade 5 and 6 teachers, and 4,680 Grade 5 and 6 learners in these schools. A three-stage sampling procedure was used: first, 10 of the 26 schools (38 percent) were selected by simple random sampling; second, within each sampled school the head teacher was selected purposively, teachers were selected by simple random sampling, and learners were selected by proportionate stratified random sampling by grade; third, learners for focus group discussions were purposively selected from among the sampled learners. The learner sample size of 369 was computed using the Yamane (1967) formula $n = N / (1 + Ne^2)$ at a 95 percent confidence level ($e = 0.05$), applied to the target population of 4,680 learners. The achieved sample, summarized in Table 1, totalled 429 participants (10 head teachers, 50 teachers and 369 learners), of whom 380 (50 teachers, 10 Heads of Institutions and 320 learners) ultimately participated, for return rates of 100 percent (teachers), 100 percent (head teachers) and 86.7 percent (learners).

Table 1
Sampling Matrix

Category	Target population	Sampling technique	Sample size	Within-group rate (%)
Head teachers	26	Purposive	10	38.5
Teachers	130	Simple random	50	38.5
Learners	4,680	Stratified & random	369	7.9

Source: Field Data (2026)

3.3 Data Collection Instruments

Quantitative data were collected using a structured teachers' questionnaire. Section A captured demographic information, while Section D (of the wider instrument) measured teachers' preparation and use of professional documents using eight Likert-scaled items (1 = Strongly Disagree to 5 = Strongly Agree) covering the preparation, referencing, updating and instructional use of lesson plans, schemes of work, records of work and learner-progress records. Qualitative data on the same construct were collected through focus group discussions with learners and in-depth interview guides with head teachers, both of which explored perceptions of how teachers' professional documentation shaped lesson preparation, classroom organization and monitoring of learner progress.

3.4 Data Analysis

Quantitative data were analyzed descriptively (frequencies, percentages, means and standard deviations) and inferentially, using Pearson product-moment correlation to test the study hypothesis and multiple linear regression with professional documentation entered alongside pedagogical skills, assessment skills and soft skills as predictors to establish the relative, independent contribution of professional documentation to learners' academic performance, computed in SPSS version 25. As the design was cross-sectional, the analysis establishes statistical association and predictive relationship rather than causation. Qualitative data were analyzed thematically following Braun and Clarke's (2021) six-step approach, and the resulting themes were integrated with the quantitative results through joint-display comparison.

3.5 Ethical Considerations

The study was approved by the Board of Postgraduate Studies in Education, Catholic University of Eastern Africa, and a research permit was obtained from the National Commission for Science, Technology and Innovation (NACOSTI). Written informed consent was obtained from teachers and head teachers, and a two-step parental/guardian consent and learner assent process was followed for learner participants. No personally identifying information was collected, and participation was voluntary throughout.

4.0 Results and Findings

4.1 Descriptive Findings: Teachers' Preparation and Use of Professional Documents

Table 3 presents teacher respondents' ratings of the eight items measuring preparation and use of professional documents. All respondents (100.0%) agreed that teachers prepare professional documents such as lesson plans before teaching (mean = 4.68, SD = 0.471), and all respondents (100.0%) agreed that schemes of work guide the organization of lesson content across a term (mean = 4.78, SD = 0.417). Regarding actual reference to these documents during lesson delivery, 76.0 percent agreed while 24.0 percent were neutral (mean = 3.96, SD = 0.692), a comparatively lower level of agreement that distinguishes the preparation of documents from their consistent use in the classroom. Nearly all respondents (98.0%) agreed that learners' progress is captured through professional documents (mean = 4.60, SD = 0.560), and all respondents (100.0%) agreed that professional documents help teachers monitor learners' academic progress (mean = 4.72, SD = 0.454) and are updated to reflect the progress of classroom instruction (mean = 4.18, SD = 0.386). The item on whether professional documents support consistency in teaching activities returned the most mixed responses (58.0% agree, 26.0% neutral, 16.0% disagree; mean = 3.64, SD = 1.034), while 88.0 percent agreed that professional documents assist teachers in planning learner-supportive activities (mean = 4.08, SD = 0.571). The overall mean across the eight items was 4.33 (SD = 0.567), indicating strongly positive and reasonably consistent perceptions of the role of professional documentation in teaching.

Table 2

Teachers' Preparation and Use of Professional Documents and Academic Performance of Learners (n = 50)

Statement	Disagree %	Neutral %	Agree %	Mean	SD
Teachers prepare professional documents such as lesson plans before teaching	0.0	0.0	100.0	4.68	0.471
Schemes of work guide teachers in organizing lesson content throughout the term	0.0	0.0	100.0	4.78	0.417
Teachers regularly refer to professional documents during lesson delivery	0.0	24.0	76.0	3.96	0.692
Records of pupils' progress are maintained through professional documents	0.0	2.0	98.0	4.60	0.560
Professional documents help teachers monitor learners' academic progress	0.0	0.0	100.0	4.72	0.454
Teachers update professional documents to reflect progress of instruction	0.0	0.0	100.0	4.18	0.386
Use of professional documents supports consistency in teaching activities	16.0	26.0	58.0	3.64	1.034
Professional documents assist teachers in planning learner-supportive activities	0.0	12.0	88.0	4.08	0.571
Average	—	—	—	4.33	0.567

Source: Field Data (2026)

4.2 Inferential Statistics

4.2.1 Correlation Result

Table 3 presents the Pearson correlation between teachers' preparation and use of professional documents and learners' academic performance. There was an extremely strong, positive and statistically significant relationship between the two variables ($r = 0.968$, $p = 0.000$). Since $p < 0.05$, the null hypothesis that there is no statistically significant relationship between teachers' preparation and use of professional documents and learners' academic performance was rejected. This correlation was the second-highest among the four TCPD dimensions examined in the parent study, after pedagogical skills ($r = 0.979$), and ahead of soft skills ($r = 0.900$) and assessment skills ($r = 0.849$).

Table 3
Pearson Correlation: Preparation and Use of Professional Documents and Academic Performance

Variable	Pearson r with Academic Performance	Sig. (2-tailed)
Preparation and use of professional documents	0.968**	0.000

** Correlation is significant at the 0.05 level (2-tailed). Source: Field Data (2026)

It should be noted that this coefficient, together with that for pedagogical skills, is exceptionally high for social-science survey data; because both the predictor and the outcome (a composite teacher-perception index of academic performance) were rated by the same teacher respondents on the same instrument, common-method variance is a plausible contributor to the magnitude of the correlation, alongside a genuine underlying relationship. Therefore, the Null hypothesis was rejected since there was a significant relationship between preparation and use of professional documents and academic performance. This is addressed further in the discussion and limitations below.

4.2.2 Regression Results

A linear regression model was fitted with academic performance as the dependent variable and preparation and use of professional documents as a predictor. The overall model was statistically significant, $R = 0.983$, $R^2 = 0.967$, Adjusted $R^2 = 0.964$, $F(4, 45) = 330.602$, $p = 0.000$, indicating that the four TCPD dimensions accounted for 96.7 percent of the variance in academic performance. As detailed in Table 4, preparation and use of professional documents showed a very strong individual predictor in the model ($\beta = 0.569$, $p = 0.008$).

Table 4
Regression Coefficients for the Four TCPD Dimensions Predicting Academic Performance

Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	.726	.472	–	1.537	.131
Preparation and use of professional documents	.789	.284	.569	2.773	.008

Source: Field Data (2026)

4.3 Qualitative Findings

Thematic analysis of head-teacher interviews and learner focus group discussions produced four themes consistent with the quantitative results: systematic lesson preparation, classroom organization, monitoring of learners' progress, and institutional support for documentation. Head teachers reported that teachers who prepared lesson plans, schemes of work and lesson notes taught with greater confidence and clearer objectives. One head teacher observed that “teachers who prepare lesson plans conduct lessons with confidence since they understand what is supposed to be achieved and what resources are needed” (Interview, HT 3, June 2026), while another noted that teachers who maintain schemes of work “hardly fail to cover the syllabus because they keep checking the topics covered every week” (Interview, HT 14, June 2026). Learners corroborated this from their own vantage point, with one remarking that lessons taught step by step, from a teacher who already “knows what they are going to teach,” were easier to understand (FGD, Learner 6, June 2026).

On monitoring, head teachers linked professional records directly to early identification of struggling learners: “assessment records help teachers to monitor the progress of learners throughout the term. Poor performing learners are assisted before taking examination” (Interview, HT 9, June 2026). Finally, several head teachers tied the consistent use of documentation to institutional support, noting that departmental review of professional documents and mentoring programmes strengthened lesson preparation (Interview, HT 5 and HT 11, June 2026). Taken together, the qualitative themes converge with, and help to explain the mechanism behind, the strong quantitative association between professional documentation and academic performance.

5.0 Discussion

The finding that preparation and use of professional documents was both strongly correlated with ($r = 0.968$, $p = 0.000$) and the strongest independent predictor of ($\beta = 0.569$, $p = 0.008$) learners' academic performance is consistent with, and extends, the leadership-and-CPD literature reviewed above. Nadeem (2024) and Yang et al. (2024) both established that leadership-supported professional development translates into improved instructional practice and, ultimately, learner outcomes, but neither isolates documentation practice as a distinct mechanism.

The qualitative findings help to explain why documentation practice would carry such weight: head teachers described professional documents as enabling systematic lesson preparation, sustained syllabus coverage, and early identification of learners needing support, functions that are all directly and plausibly linked to demonstrated competency mastery under the CBE framework. This is consistent with Adult Learning Theory's emphasis on problem-centered, immediately applicable learning; professional documents are, in effect, the artefact through which teachers translate CPD learning into structured, monitorable classroom practice (Knowles, 1984; Merriam & Bierema, 2021).

Two caveats temper this otherwise strongly positive picture. First, while all respondents agreed that professional documents are prepared, a smaller majority (76.0%) agreed that these documents are consistently referred to during actual lesson delivery, and the item on whether documentation

supports consistency of teaching activities drew the most mixed responses (58.0% agreement), indicating a gap between the preparation and the disciplined classroom use of documents. Further, because both the professional-documentation predictor and the academic-performance outcome were measured through the same teacher respondents on the same Likert instrument, the very high bivariate correlation ($r = 0.968$) should be interpreted with some caution, as common-method variance may inflate the observed association; this same measurement structure, combined with strong inter-correlation among the four TCPD predictors, is also the most plausible explanation for the anomalous negative net regression coefficient obtained for assessment skills once professional documentation, pedagogical skills and soft skills were controlled for.

6.0 Conclusion

The study concludes that teachers' preparation and use of professional documents is strongly and significantly associated with learners' academic performance in public primary schools in Kasarani Sub-County, and is the has a very strong independent predictor of that performance on learner's academics. Virtually all sampled teachers prepare core professional documents; lesson plans, schemes of work and learner-progress records, and these documents are perceived to promote systematic lesson delivery, curriculum coverage and continuous monitoring of learner progress; qualitative accounts from head teachers and learners corroborate this mechanism. At the same time, the consistency with which prepared documents are actually referenced during lesson delivery is less uniform than their preparation, and the possibility of common-method variance in the measurement design means the reported bivariate correlation should be treated as an upper-bound estimate of the true relationship pending replication with independent, multi-source measures of academic performance.

7.0 Recommendations

Based on these findings, the study makes the following recommendations. First, head teachers should strengthen instructional supervision specifically around the use and not only the preparation of lesson plans, schemes of work, records of work and learner-progress records, providing regular, documented feedback on the quality and consistency of these documents. Moreover, schools should institutionalize this support through mentoring programmes, subject panels and CPD committees that review professional documentation collectively, consistent with the head-teacher accounts that linked departmental review to improved lesson preparation. In addition, the Ministry of Education and the Teachers Service Commission should ensure that in-service CPD programmes explicitly address the consistent classroom use of professional documents, rather than assuming that their preparation alone is sufficient. Finally, given the measurement limitations noted above, future studies should employ independent, multi-source measures of learner academic performance (for example, standardized examination or competency-assessment scores) rather than teacher-reported perception indices, and should apply diagnostic multicollinearity checks (variance inflation factor/tolerance statistics) when modelling multiple, highly correlated TCPD dimensions together.

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