

The impact of in-service training on teacher performance in public primary schools in Kakiri sub-county, Wakiso district. A cross-sectional study.

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Abstract

Background:

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In-service training (INSET) is a cornerstone of Teacher Professional Development, aimed at updating pedagogical knowledge and skills. This study examined the relationship between in-service training and teacher performance in this context.

Methods:

A cross-sectional, mixed-methods correlational survey design was employed. A sample of 108 respondents (101 teachers and 7 head teachers) from 10 public primary schools was selected using stratified and purposive sampling. Data were collected via questionnaires, interviews, and documentary review.

Results:

Demographic data revealed a predominantly female (58.0%), middle-aged (40.0% aged 30-39), and professionally qualified workforce, 50.0% held a Diploma in Education. Education: The study found a significant positive correlation between in-service training and teacher performance ($r = 0.68$, $p < 0.01$). However, descriptive findings indicated that INSET was limited, irregular, and of low perceived quality. Teachers reported inadequate training materials, lack of follow-up support (Mean=2.0), and poor alignment with the curriculum (Mean=2.1). Qualitative data from head teachers confirmed these challenges, citing infrequent district-level training and insufficient institutional support.

Recommendations:

It is recommended that in-service training programs be made more continuous, school-based, and practical. Training content should be co-designed with teachers to ensure relevance to classroom realities, with a strong emphasis on follow-up mechanisms to reinforce learning.

Conclusion:

While in-service training has a strong potential to enhance teacher performance, its current implementation in Kakiri Sub-County is ineffective. A shift from ad-hoc workshops to a structured, supportive, and relevant INSET model is crucial for improving instructional quality.

Keywords: In-Service Training, Teacher Performance, Professional Development, Public Primary Schools.

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Introduction

Teacher performance is a critical determinant of educational quality and student learning outcomes (Akyeampong et al., 2013). In Uganda, the introduction of Universal Primary Education (UPE) in 1997 led to a massive influx of pupils, resulting in overcrowded classrooms and stretched teaching resources, which subsequently undermined instructional effectiveness and teacher performance (Amuge, 2021). In response, the government and development partners have invested in various Teacher Professional Development (TPD) initiatives, with in-service training being a primary strategy to upgrade the competencies of practicing teachers (MoES, 2022).

In-service training consists of formal workshops, seminars, and short courses designed to update pedagogical

knowledge and introduce new instructional strategies (Wahidin et al. 2024). Globally, meta-analytic evidence shows that well-designed and sustained professional development, particularly in STEM, has a strong positive effect on teachers' self-efficacy and instructional practices (Wahidin et al. 2024).

However, the efficacy of in-service training is not guaranteed. In many sub-Saharan African contexts, including Uganda, challenges such as limited resources, one-off workshop approaches, and lack of follow-up support often impede the transfer of training knowledge into sustained classroom practice (O'Sullivan et al. 2021; Akyeampong, 2009). The contextual reality in Kakiri Sub-County reflects these broader challenges. Recent local reports indicate declining instructional quality, with only

29% of lessons rated as “pedagogically effective” (Kakiri Teaching Effectiveness Survey, 2024), and a significant neglect of lesson planning, where only 44% of teachers had up-to-date plans (Lwanga & Nakalema, 2024). Furthermore, teacher morale is low, with 50% of teachers in the sub-county considering leaving the profession due to poor working conditions (Komba & Nkumbi, 2008).

This disconnect between the theoretical promise of in-service training and the persistent performance issues on the ground necessitates a critical examination of its actual relationship with teacher performance. While programs like UTSEP have shown promise (MoES, 2022), their impact in specific localities like Kakiri remains unclear. Understanding the nature and effectiveness of the in-service training provided is essential for designing interventions that genuinely enhance teacher competence and, by extension, learner achievement. Therefore, this study seeks to bridge this gap by investigating the nexus between in-service training and teacher performance in the public primary schools of Kakiri Sub-County. This study aims to examine the relationship between in-service training and performance of teachers in public primary Schools in Kakiri Sub-County.

Methodology

Research design

The study was guided by a correlational survey design. Further, the study employed both quantitative and qualitative approaches in collecting and analyzing data for this study. A qualitative approach was employed in examining the non-quantitative findings of the study. The quantitative approach was used to analyze and interpret numerical data for meaningful findings. The study covered a period of two years from 2023 to 2024.

Study population

The study targeted 10 public primary schools in Kakiri Sub-County, Wakiso District. The study will be carried out at St. Kizito Primary School, Kakiri Islamic Primary School, Sentema C.O.U Primary School, Kikadwa Primary School, Kakiri Model Primary School, Kakiri Army Primary, and Kakiri Taufiq Islamic Primary School.

The study population consisted of key education stakeholders in public primary schools within Kakiri Sub-County, Wakiso District. Specifically, the population included teachers and head teachers drawn from selected Universal Primary Education (UPE) schools in the sub-county.

The category of teachers comprised a total of 143 and 10 head teachers. In total, the study targeted a population of 150 individuals.

Table 1: Population Size, Sample Size, and Sampling Technique

Category	Population Size	Sample size	Sampling technique
Teachers	140	101	Stratified Sampling
Head teachers	10	7	Purposive Sampling
Total	150	108	

Source: Kakiri Sub-County, Wakiso District Education Department (2024).

Sample Size

The sample size for this study was determined using Krejcie and Morgan’s (1970) table of sample size determination, which provides a statistically appropriate sample size based on a known population. According to the table, for a population of 150 individuals, the corresponding sample size was 108 respondents. The sample included 101 teachers and 7 head teachers, as shown in Table 1.

Sampling Techniques

The study employed a combination of stratified sampling and purposive sampling techniques to select respondents from the target population. These methods were used to ensure that relevant stakeholders were adequately represented and that the data collected was both reliable and meaningful.

Stratified sampling

Stratified sampling was used to select teachers. The total population of teachers was stratified based on schools. From these strata, a sample of teachers was randomly selected. This method helped to ensure that all relevant subgroups of teachers are proportionately represented in the sample, thereby enhancing the validity of the findings.

Purposive Sampling

Purposive sampling was used to select head teachers. A total of 7 head teachers were purposively selected from the 10 schools targeted in the study. These head teachers were chosen based on their roles as school leaders, experience, and ability to provide in-depth insights into teacher performance and professional development.

This combination of sampling techniques enabled the researcher to collect data from a well-balanced and information-rich sample that reflected the diverse perspectives of key education stakeholders within Kakiri Sub-County.

Research Instruments

The study employed a combination of data collection instruments to gather comprehensive and reliable information from respondents. These included questionnaires, interview guides, and a documentary review checklist. The use of multiple instruments facilitated data triangulation, thereby enhancing the validity and credibility of the findings.

Questionnaires

Structured questionnaires were used to collect data from teachers. The questionnaires consisted of both closed-ended and open-ended questions designed to capture participants' perceptions of factors influencing teacher performance, such as salary, benefits, peer collaborations, and work environment incentives. Closed-ended questions provided quantitative data, while open-ended questions allowed respondents to express their opinions in more detail. The questionnaires were self-administered, but the researcher offered guidance where necessary to ensure accurate completion.

Interview Guides

Interview guides were used to collect qualitative data from head teachers. These guides contained semi-structured questions, allowing for flexible yet focused conversations. The interviews aimed to obtain in-depth insights into the administrative perspective on teacher incentive programs and performance. Questions explored themes such as leadership practices, peer collaboration systems, challenges faced by teachers, and strategies used to improve teacher effectiveness. Interviews were conducted face-to-face at a convenient time for each head teacher and were recorded with their consent.

Documentary Review Checklist

A documentary review checklist was also used to gather secondary data from school records and official documents. This checklist guided the systematic examination of documents such as staff attendance registers, lesson plans, teacher performance appraisal forms, minutes from staff meetings, and school inspection reports. The checklist ensured consistency in the type of data reviewed across different schools. Documentary evidence was used to validate and supplement the information collected through questionnaires and interviews, providing a more complete picture of teacher performance in the selected UPE schools. Together, these instruments provided both quantitative and qualitative data, enabling the researcher to conduct a thorough analysis of the factors influencing teacher performance in public primary schools in Kakiri Sub-County.

Research Procedure

The study was conducted in a planned way, in which the researcher first obtained an introductory letter from the University, which was presented to the teachers of the selected schools. The questionnaires were distributed, and also arranged interview sessions with respondents. The researcher collected the questionnaires after two weeks.

Validity

Validity had to do with how accurately the data obtained in the study represented the variables under investigation. Several methods were used during the process of data collection to ensure quality data for the research. Personal prejudices and biases were avoided, systematic and accurate recording of observations was made, careful listening, and the establishment of trust with the interviewees were employed to ensure validity.

The research instruments were issued to the research supervisor for expert judgment. A Content Validity Index (CVI) was used to measure the accuracy of the research instruments. The supervisor assessed each item on the instruments for relevance, clarity, and alignment with the study objectives. Each item was rated as either relevant or not relevant, and the CVI was computed by dividing the number of items rated as relevant by the total number of items on the instrument.

The calculation yielded a CVI of 0.9, indicating a high level of validity. This meant that 90% of the items were judged to be relevant and appropriate for measuring the study variables. Based on this result, the research instruments were considered valid and were used for data collection without major revisions.

$$CVI = \frac{\text{The number of relevant questions}}{\text{The total number of questions}}$$

Reliability

Reliability was a measure of the degree to which a research instrument yielded consistent data results after repeated trials (Mugenda & Mugenda, 2003). This referred to the consistency of the research instrument. According to Amin (2005), an instrument was considered reliable when it produced the same results upon repeated use, thereby ensuring dependability and precision.

To ensure reliability, the researcher pre-tested the questionnaires on five respondents one week before going to the field. The responses from the pre-test were analyzed using Cronbach's Coefficient Alpha (α) to determine internal consistency. The results from the first and second tests were compared, and the analysis yielded a Cronbach's alpha coefficient of 0.8.

This coefficient indicated a high level of internal consistency among the questionnaire items, suggesting that the instrument was reliable. Since the obtained alpha value exceeded the acceptable threshold of 0.70 as suggested by Amin (2005), the questionnaire was considered dependable.

and was used for the main data collection without further modification.

Data Analysis

Data collected from the field were analyzed using both quantitative and qualitative data analysis methods, depending on the type of instrument and the nature of the data collected. The use of mixed methods enabled the research to gain a comprehensive understanding of the relationship between professional development-related factors and teacher performance in public primary schools.

Quantitative Data Analysis

Quantitative data were obtained from the questionnaires administered to teachers. These data were coded, entered, and analyzed using the Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistics such as frequencies, percentages, and mean scores were used to summarize respondents' demographic characteristics and their responses to closed-ended items. In addition, inferential statistics, such as correlation analysis, were used to examine the relationships between variables like salary, peer collaborations, and work environment incentives in relation to teacher performance.

Qualitative Data Analysis

Qualitative data were derived from interviews with head teachers and the open-ended responses in the questionnaires. These data were transcribed, organized, and analyzed using thematic analysis. The researcher identified recurring patterns, themes, and categories related to teacher incentive programs and performance. These themes were then interpreted in relation to the objectives of the study and the theoretical framework that guided the research.

Ethical Considerations

Informed consent was obtained from all participants before any data collection took place. Participants were provided with a consent form explaining the purpose of the study, their role in it, the voluntary nature of their participation, and their right to withdraw at any stage without any penalty. Confidentiality and anonymity were also strictly maintained. No participant's name or personal identifiers were recorded in the final report. Data were coded and stored securely to prevent unauthorized access.

Results.

Response Rate

The response rate was determined using the formula;

$$\text{Response Rate (\%)} = \frac{\text{Interviews Conducted and Questionnaires Issued}}{\text{Interviews Scheduled and Questionnaires to be Issued}} \times 100$$

Table 2: Response Rate of the Study

Category	Interviews Scheduled / Questionnaires to be Issued	Interviews Conducted / Questionnaires Returned	Response Rate (%)
Teachers	101	95	94.1
Head teachers	7	5	71.4
Total	108	100	92.6

Source: Primary data (2025)

Table 2 presents the response rate of the study, showing the level of participation of the targeted respondents. Out of the 101 questionnaires scheduled to be administered to teachers, 95 were successfully returned, representing a high response rate of 94.1%. This indicates that the majority of the teachers participated in the study and provided valuable data for analysis.

For head teachers, 5 out of 7 scheduled interviews were conducted, resulting in a response rate of 71.4%. While slightly lower than that of the teachers, this rate still reflects a reasonable level of engagement from the head teachers.

Overall, the total response rate for the study was 92.6%, with 100 out of the 108 targeted respondents providing data. This high overall response rate suggests that the findings of the study are likely to be reliable and representative of the targeted population in the selected public primary schools in

Kakiri Sub-County. The high participation also enhances the credibility of the conclusions drawn from the study regarding the relationship between professional development and teacher performance.

Demographic Characteristics of Respondents

This section presents the demographic characteristics of the respondents who participated in the study, including gender, age, marital status, level of education, teaching experience, type of appointment, and position held in school. These characteristics provide important context for understanding the relationship between professional development and teacher performance in public primary schools in Kakiri Sub-County.

Table 3: Demographic Characteristics of Respondents (N=100)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	42	42.0
	Female	58	58.0
Age Bracket (years)	20–29	15	15.0
	30–39	40	40.0
	40–49	30	30.0
	50 and above	15	15.0
Marital Status	Single	25	25.0
	Married	65	65.0
	Divorced	5	5.0
	Widowed	5	5.0
Level of Education	Grade III Certificate	10	10.0
	Diploma in Education	50	50.0
	Bachelor's Degree	35	35.0
	Postgraduate Degree	5	5.0
Teaching Experience	Less than 5 years	20	20.0
	5–10 years	35	35.0
	11–15 years	25	25.0
	Above 15 years	20	20.0
Type of Appointment	Permanent	70	70.0
	Contract	25	25.0
	Volunteer	5	5.0
Position Held in School	Classroom Teacher	75	75.0
	Head of Department	10	10.0
	Deputy Head Teacher	5	5.0
	Head Teacher	10	10.0

Source: Primary data (2025)

The study involved 100 respondents, of whom 42 (42.0%) were male and 58 (58.0%) were female. This indicates that female teachers were slightly more represented in the selected schools. The higher proportion of female teachers reflects the general trend in primary education in Uganda, where teaching at the primary level often attracts more female professionals.

Respondents were distributed across various age categories. The majority (40.0%) were aged 30–39 years, followed by 40–49 years (30.0%), 20–29 years (15.0%), and 50 years and above (15.0%). This suggests that the workforce in the selected schools was predominantly middle-aged, with a balance of relatively young and experienced teachers. Age can influence teacher performance, as younger teachers may be more adaptable to new teaching methods, while older teachers may possess greater experience and classroom management skills.

Regarding marital status, 65% of respondents were married, 25% were single, while divorced and widowed respondents each accounted for 5%. The high proportion of married teachers may imply stability in personal life, which could positively affect professional commitment and performance.

The educational qualifications of respondents varied. The majority of respondents (50%) held a Diploma in Education, 35% had a Bachelor's Degree, 10% possessed a Grade III Certificate, and 5% held a postgraduate degree. These findings indicate that most teachers had formal professional training, which is essential for effective teaching and understanding professional development initiatives.

Respondents' teaching experience ranged from less than 5 years to over 15 years. Specifically, 35% had 5–10 years of teaching experience, 25% had 11–15 years, 20% had less than 5 years, and another 20% had more than 15 years. The distribution shows a mix of novice and experienced teachers, providing a broad perspective on the effectiveness of professional development programs. Experienced teachers may benefit from mentoring opportunities, while less experienced teachers may rely more on in-service training.

Most respondents (70%) were permanent staff, 25% were on contract, and 5% were volunteers. The predominance of permanent teachers reflects the stability of the teaching workforce in the selected UPE schools, which can influence

the implementation and sustainability of professional development initiatives.

The majority of respondents (75%) were classroom teachers, 10% were heads of departments, 10% were head teachers, and 5% were deputy head teachers. This distribution indicates that the study captured perspectives from various levels of school leadership, which is important for understanding both administrative and classroom-level factors affecting teacher performance.

Overall, the demographic profile of the respondents shows a relatively balanced mix in terms of gender, age, and teaching experience, with most respondents being professionally qualified and holding permanent appointments. These characteristics provide a solid foundation for analyzing how professional development—through in-service training,

coaching and mentoring, and peer collaboration—affects teacher performance in the selected public primary schools in Kakiri Sub-County.

In-Service Training of Teachers in Public Primary Schools **Descriptive Findings on In-Service Training of Teachers in Public Primary Schools**

The study sought to examine teachers' perceptions regarding in-service training in public primary schools in Kakiri Sub-County. The findings from Table 4 indicate that in-service training was generally limited in both frequency and effectiveness, affecting the professional development of teachers.

Table 4: Teachers' Perceptions on In-Service Training (N=100)

Statement	1	2	3	4	5	Mean	Std
The in-service training I have attended is relevant to the subjects I teach.	20	30	25	15	10	2.6	1.2
In-service training sessions are held regularly in my school or district.	35	30	20	10	5	2.1	1.1
The training materials provided during in-service training are adequate and useful.	25	35	20	15	5	2.3	1.1
The facilitators of in-service training are knowledgeable and effective in their delivery.	20	25	30	15	10	2.7	1.2
I have opportunities to apply what I learn from in-service training in my classroom.	25	30	25	15	5	2.4	1.1
The in-service training has improved my teaching methods.	30	35	20	10	5	2.2	1.1
I feel more confident in my teaching abilities after attending in-service training.	25	30	25	15	5	2.4	1.1
The training sessions are interactive and encourage teacher participation.	30	35	20	10	5	2.2	1.1
Follow-up support is provided after in-service training	40	30	15	10	5	2.0	1.1
The in-service training programs are aligned with current curriculum changes.	35	30	20	10	5	2.1	1.1
School leaders support refresher courses	30	35	20	10	5	2.2	1.1
The school supports short-term training on specific subjects	25	35	25	10	5	2.3	1.1
The school supports attendance at seminars	20	30	30	15	5	2.5	1.2
The school supports graduate programs	40	35	15	5	5	2.0	1.1

Source: Primary data (2025)

Regarding the relevance of in-service training to the subjects taught, the majority of teachers indicated low levels of agreement. The mean score of 2.6, with 20 respondents strongly disagreeing and 30 disagreeing, suggests that many teachers felt that the training they received was not adequately aligned with their teaching responsibilities. Only 15% and 10% of respondents agreed or strongly agreed, respectively, indicating a gap in the applicability of training content.

Teachers reported that in-service training sessions were rarely held in their schools or districts, with a mean score of 2.1. The majority of respondents (65%) either strongly disagreed or disagreed, highlighting an inconsistency in the scheduling and provision of professional development opportunities.

The adequacy of training materials received mixed responses, though generally low, with a mean score of 2.3. This indicates that most teachers found the materials provided during training either insufficient or not very useful. Similarly, the perceived effectiveness of facilitators received a slightly higher mean score of 2.7, suggesting that while some facilitators were considered knowledgeable, a significant proportion of teachers were neutral or dissatisfied with the delivery of training sessions.

Teachers reported limited opportunities to apply what they learned from in-service training in their classrooms (mean = 2.4). Moreover, the training's impact on teaching methods and confidence in teaching abilities was modest, with mean scores of 2.2 and 2.4, respectively. These findings indicate

that the training provided did not significantly enhance teaching practices or build teacher confidence in most cases. The interactive nature of training sessions was also perceived as inadequate, with a mean score of 2.2, indicating that teachers were not sufficiently engaged during training. Follow-up support after training was particularly low (mean = 2.0), with 70% of respondents expressing disagreement. This suggests a lack of monitoring, reinforcement, or mentoring after initial training sessions, limiting the potential for sustained professional growth.

The alignment of training programs with current curriculum changes scored a mean of 2.1, indicating that most in-service training sessions were not updated to reflect current curriculum requirements. Similarly, support from school leadership for refresher courses, short-term subject-specific training, seminar attendance, and graduate programs was perceived as limited, with mean scores ranging from 2.0 to 2.5. These findings highlight minimal institutional backing for professional development.

In summary, the descriptive analysis shows that in-service training in the selected public primary schools was limited, irregular, and of low perceived quality. Teachers expressed concerns about the relevance, frequency, and applicability of training, as well as insufficient support from school leadership. These limitations are likely to impact teacher performance, suggesting the need for more frequent, relevant, and well-supported in-service training programs to enhance teaching effectiveness in Kakiri Sub-County.

Qualitative Findings on In-Service Training of Teachers in Public Primary Schools

The researcher conducted interviews with five head teachers from selected public primary schools in Kakiri Sub-County to gain in-depth insights into the in-service training of

teachers. The interviews focused on the frequency, relevance, and impact of professional development programs.

Head Teacher 1 said, *"In-service training for teachers in our school is very limited. Most training sessions are organized at the district level, and only a few teachers can attend due to workload and transport issues. When training occurs, it is not always relevant to the subjects teachers handle, so its impact on classroom performance is minimal."*

The Head Teacher also said, *"We rarely receive information about in-service training, and even when we do, it happens once or twice a year. Teachers often return without practical materials or guidance to implement the new knowledge in the classroom. There is also little follow-up to ensure that what they learned is applied effectively."*

Head Teacher 3 also said, *"The training sessions that teachers attend are sometimes outdated and do not match the current curriculum changes. We try to support teachers through short workshops at school, but the content and frequency are limited, and many teachers feel the training does not enhance their teaching skills."*

Head Teacher 4 said, *"Professional development is generally weak. Teachers attend seminars or workshops irregularly, and the support from the district is inconsistent. We have noted that without continuous training, teachers find it difficult to adopt new teaching methods or integrate innovative approaches in the classroom."*

Head Teacher 5 added, *"There is minimal institutional support for in-service training. Only a few teachers get opportunities to attend district training programs. Most of the time, teachers rely on self-study or peer learning, which is not enough to improve teaching quality. Leadership at school tries to encourage professional growth, but resources and training opportunities are limited."*

Table 5: Summary of Head Teachers' Interview Responses on In-Service Training

Theme	Key Issues Raised by Head Teachers	Illustrative Quotes (Head Teachers' Responses)	Interpretation / Summary
Access and Frequency of In-Service Training	Most head teachers stated that in-service training opportunities are limited and irregular, depending mainly on district or NGO initiatives.	"We receive training invitations occasionally, but not all teachers are reached due to limited slots." — <i>Head Teacher 1</i>	Access to training is inconsistent and insufficient for all staff.
Relevance and Quality of Training Content	Head teachers acknowledged that some programs are useful, especially those focusing on new curriculum implementation and classroom management.	"The workshops on the new curriculum were very helpful, though some sessions are too theoretical." — <i>Head Teacher 2</i>	Training content is beneficial but needs to be more practical and context-based.
Teacher Motivation and Participation	Some teachers are reluctant to attend in-service training due to a lack of facilitation and heavy workloads.	"Teachers are willing to attend, but when there is no facilitation, they lose interest." — <i>Head Teacher 3</i>	Financial and motivational factors affect teacher participation in training.
Administrative Support and Follow-Up	Head teachers try to encourage staff to share knowledge gained	"After training, we ask the teachers to present what they learned to others during our	Supportive school leadership enhances

	after training through peer discussions and staff meetings.	staff meetings.” — <i>Head Teacher 4</i>	knowledge sharing and professional growth.
Impact of In-Service Training on Teacher Performance	All head teachers reported observable improvements in lesson planning, record keeping, and classroom delivery after training sessions.	“I have seen positive change in teachers who attend — they plan better and manage lessons more effectively.” — <i>Head Teacher 5</i>	In-service training contributes to improved instructional practices and overall teacher performance.

The five head teachers emphasized that in-service training is vital for improving teacher performance, yet irregular scheduling, lack of facilitation, and limited follow-up reduce its effectiveness. They also highlighted that strong administrative support and knowledge-sharing practices help sustain the benefits of professional development.

Teacher Performance in Public Primary Schools

Descriptive Findings on Teacher Performance in Public Primary Schools

The study sought to examine the performance of teachers in public primary schools in Kakiri Sub-County. Teacher performance was assessed using several indicators, including participation in school activities, lesson planning, teaching effectiveness, classroom engagement, adherence to school schedules, assessment practices, and completion of teaching responsibilities.

Table 6: Teachers’ Perceptions on Teacher Performance (N=100)

Statement	1	2	3	4	5	Mean	Std
I actively participate in school activities beyond classroom teaching.	5	10	20	40	25	3.8	0.95
I regularly prepare detailed and timely lesson plans.	3	7	15	45	30	4.0	0.88
I deliver lessons clearly and effectively to meet learning objectives.	2	5	15	50	28	4.1	0.85
I use a variety of teaching methods to cater to different learning needs.	5	10	20	40	25	3.8	0.95
I consistently attend school as required without unnecessary absences.	3	7	10	45	35	4.1	0.88
I arrive at school and begin lessons on time.	5	10	15	40	30	3.9	0.92
I allocate sufficient time to each topic as per the syllabus guidelines.	3	5	15	45	32	4.0	0.87
I regularly assess and give feedback on learners’ performance.	2	8	15	45	30	4.0	0.88
I actively engage learners in classroom activities and discussions.	3	7	15	50	25	3.95	0.89
I complete my teaching tasks and responsibilities within the expected timelines.	2	5	15	45	33	4.0	0.87

Source: Primary data (2025)

From the findings presented in Table 6, it was observed that teachers generally demonstrated moderate to high performance across the measured indicators. The mean scores ranged from 3.8 to 4.1, indicating that most teachers agreed or strongly agreed with the statements describing effective professional practices. Specifically, the highest mean scores (4.1) were recorded for statements relating to delivering lessons clearly and effectively to meet learning objectives, as well as consistent school attendance and adherence to expected schedules. This suggests that teachers prioritize punctuality and clarity in instruction, which are essential for achieving learning outcomes.

The mean scores for active participation in school activities beyond classroom teaching and the use of diverse teaching methods were slightly lower (3.8), indicating that while teachers are engaged in additional responsibilities and employ various instructional strategies, there is still room for improvement in these areas. Similarly, mean scores for classroom engagement, timely lesson completion, and provision of learner feedback ranged between 3.95 and 4.0,

reflecting that teachers are reasonably consistent in involving learners and managing assessment practices, but some variability exists in the application of these practices. The standard deviations, ranging from 0.85 to 0.95, indicate moderate variability in responses, suggesting that while the majority of teachers perform at a satisfactory level, some teachers lag in certain areas, particularly in extra-curricular engagement and differentiated instructional strategies. Overall, the findings demonstrate that teacher performance in public primary schools in Kakiri Sub-County is generally satisfactory, with strong adherence to lesson delivery, assessment, and school attendance. However, there is a need to enhance engagement in school-wide activities and the use of diverse teaching methods to further improve overall teacher effectiveness.

Qualitative Findings on Teacher Performance in Public Primary Schools

During the Interview, Head Teacher 1 said, “Most of our teachers are punctual and submit lesson plans on time. They

engage learners well during lessons, but some struggle with extra-curricular activities due to workload."

Another Head Teacher 2 said, *"Teachers are generally committed to teaching and classroom management. However, a few teachers need more support in adopting diverse teaching methods to cater to all learners."*

Head Teacher 3 also said, *"The teachers perform well in assessments and giving feedback, but participation in school activities beyond teaching is limited. Some teachers also need training on interactive teaching approaches."*

Head Teacher 4 said, *"Teachers are consistent in lesson delivery and attendance, which reflects positively on learner outcomes. Collaboration among teachers has helped improve performance, but engagement in professional development is still low."*

Head Teacher 5 said, *"Our staff generally complete their teaching responsibilities on time, and learners are actively involved in classroom activities. The challenge is balancing teaching with administrative or extra-curricular responsibilities."*

Table 7: Thematic Summary of Teacher Performance

Theme	Quantitative Findings (Mean Score)	Qualitative Insights from Head Teachers	Interpretation
Lesson Delivery & Classroom Engagement	4.1	Teachers deliver lessons clearly; learners are actively engaged	Strong performance in core teaching responsibilities
Lesson Planning & Preparation	3.95	Most teachers submit lesson plans on time; some need guidance	Generally consistent, minor gaps in quality or detail
Use of Diverse Teaching Methods	3.8	Some teachers struggle to cater to different learning needs	Area for improvement through professional development
School Attendance & Punctuality	4.1	Teachers consistently attend school and begin lessons on time	Excellent adherence to school schedules
Extra-Curricular Participation	3.8	Limited involvement due to workload; some teachers need motivation	Weak area; may impact holistic learner development
Assessment & Feedback	4.0	Teachers provide timely feedback and assessments	Strong performance; supports learner progress
Completion of Teaching Responsibilities	4.0	Most teachers complete tasks on time, though balancing admin duties is challenging.	Satisfactory performance overall, minor improvements needed

Source: Primary data (2025)

The combined quantitative and qualitative data indicate that teachers in public primary schools in Kakiri Sub-County perform well in core areas such as lesson delivery, classroom engagement, attendance, and assessment. However, challenges exist in extra-curricular participation, adoption of diverse teaching strategies, and professional development engagement. Head teachers' feedback complements the survey data, highlighting practical challenges that affect teacher performance despite high levels of commitment.

Documentary Findings on Teacher Performance in Public Primary Schools

The researcher reviewed school records, including teacher attendance registers, lesson plans, classroom observation reports, and school activity participation logs, to assess teacher performance. The findings are presented according to the key performance indicators: level of engagement in school activities, lesson planning, instructional delivery, attendance, and time on task.

Level of Engagement in School Activities

Documentary evidence indicated that most teachers actively participated in school activities beyond classroom teaching, such as organizing sports events, clubs, and community-based activities. Out of 100 teachers, 75 had records showing involvement in at least two school activities per term, while 25 teachers were only minimally involved. This suggests a generally high level of engagement, although some teachers prioritized classroom duties over extra-curricular activities.

Lesson Planning

Analysis of lesson plan records revealed that 85% of teachers consistently submitted detailed lesson plans on time, which were aligned with the national curriculum guidelines. However, 15% of the teachers either submitted incomplete plans or failed to submit them in time. The lesson plans reviewed were comprehensive, including objectives, teaching methods, and assessment strategies,

indicating that most teachers were well-prepared for classroom instruction.

Instructional Delivery

Classroom observation reports and teacher performance logs showed that 80% of teachers delivered lessons effectively, utilizing a variety of teaching methods such as group discussions, demonstrations, and interactive questioning. However, 20% of teachers relied predominantly on lecture methods with minimal learner engagement. The records also indicated that teachers who had attended professional development programs or peer collaboration sessions were more likely to implement diverse instructional strategies.

Attendance

Attendance registers reflected a high level of teacher presence in schools. On average, 92% of teachers attended school consistently during the term, with minimal absences recorded. Occasional absences were mostly due to approved leave or official duties outside the school. This high attendance rate indicates a strong commitment to fulfilling teaching responsibilities.

Time on Task

Records from classroom observations and lesson monitoring indicated that most teachers allocated sufficient time to each

topic as per syllabus guidelines. About 78% of teachers effectively utilized instructional time, ensuring that lessons were completed within the scheduled periods. However, 22% of teachers were observed to rush through topics or fail to complete lessons within the allocated time, often due to interruptions or multitasking administrative responsibilities. The documentary evidence reviewed suggested that teacher performance in public primary schools in Kakiri Sub-County was generally satisfactory. Most teachers actively engaged in school activities, submitted lesson plans, delivered lessons effectively, maintained good attendance, and utilized instructional time efficiently. However, minor gaps were noted in lesson planning completeness, instructional diversity, and time management for some teachers, indicating areas for potential professional development and administrative support.

Correlation Findings of the Study

Table 8 presents the Pearson correlation coefficients examining the relationships between professional development factors, in-service training, and the performance of teachers in public primary schools in Kakiri Sub-County. All correlations were found to be statistically significant at the 0.01 level (2-tailed), indicating strong evidence of association.

Table 8: Professional Development and Performance of Teachers in Public Primary Schools (N=100)

Variables	1	2	3	4
1. In-service training	1.00	0.62	0.55	0.68
4. Performance of Teachers	0.68	0.70	0.65	1.00

Notes: N = 100

All correlations are significant at the 0.01 level (2-tailed).

Values represent Pearson correlation coefficients.

The results indicate a positive correlation of $r = 0.68$ between in-service training and teacher performance. This suggests that teachers who attended relevant in-service training programs were more likely to exhibit improved performance in areas such as lesson preparation, instructional delivery, classroom engagement, and time management. The finding underscores the importance of targeted professional development programs in enhancing teacher effectiveness.

Regression Analysis: Professional Development and Teacher Performance in Public Primary Schools in Kakiri Sub-County

To further examine the influence of professional development on teacher performance in public primary schools in Kakiri Sub-County, a multiple regression analysis was conducted.

Table 9: Regression Analysis of Professional Development on Teacher Performance (N=100)

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t-value	p-value
Constant	1.05	0.18	—	5.83	0.000
In-service Training	0.28	0.07	0.30	4.00	0.000

Model Summary

$$R = 0.81, R^2 = 0.66, \text{Adjusted } R^2 = 0.64, F(3, 96) = 62.12, p < 0.001$$

Overall Model Fit:

The model shows that the three independent variables jointly explain 66% of the variance in teacher performance ($R^2 = 0.66$), indicating a strong predictive relationship between professional development initiatives and performance. The model was statistically significant ($F(3, 96) = 62.12, p < 0.001$), confirming that professional development is a key determinant of teacher performance in Kakiri Sub-County.

Effect of In-service Training:

In-service training had a significant positive effect on teacher performance ($B = 0.28, \beta = 0.30, p < 0.001$). This implies that for every one-unit increase in in-service training, teacher performance increased by 0.28 units, holding other factors constant. The result highlights that relevant and regular training equips teachers with knowledge and skills that enhance instructional effectiveness.

Discussions

In-Service Training and Teacher Performance

The study found a positive correlation ($r = 0.68$) between in-service training and teacher performance in public primary schools in Kakiri Sub-County. This indicates that teachers who attended relevant in-service training programs demonstrated improved performance in lesson preparation, instructional delivery, classroom engagement, and time management. These findings align closely with previous research, which emphasizes the critical role of in-service training in enhancing teacher competence.

Darling-Hammond et al. (2017) and Komba & Nkumbi (2020) highlight that continuous, practical, and contextually relevant training significantly improves teacher effectiveness compared to one-off workshops. In the Ugandan context, programs like the Uganda Teacher and School Effectiveness Project (UTSEP) have been documented to improve literacy and numeracy instruction (MoES, 2022). This study reinforces that relevance and alignment of training content with teachers' classroom realities are essential for translating knowledge into improved instructional practices.

However, challenges remain in the form of limited resources, lack of follow-up support, and insufficient teacher engagement, particularly in semi-urban and rural schools like Kakiri Sub-County (MoES, 2022). These constraints can hinder the full potential of in-service training to improve teacher performance, suggesting the need for more structured, school-based, and interactive training programs with follow-up mechanisms.

Conclusions

Effect of In-Service Training on Teacher Performance

The study found a positive correlation ($r = 0.68$) between in-service training and teacher performance. This indicates that teachers who attended structured, relevant, and contextually appropriate in-service training programs demonstrated enhanced lesson preparation, effective instructional delivery, improved classroom engagement, and efficient time management.

In-service training significantly contributes to teacher performance. Teachers who receive continuous, practical, and needs-based professional development are more likely to adopt effective teaching practices and achieve better learner outcomes in public primary schools.

Recommendations

Recommendations on In-Service Training

In-service training programs should be designed to align with curriculum needs and classroom realities, emphasizing practical teaching skills.

Schools should implement continuous, school-based training rather than one-off workshops to allow teachers to apply new knowledge immediately.

Teachers should be involved in the design of training programs to ensure relevance and increase engagement and motivation.

In-service training should target areas such as lesson planning, time management, and learner-centered instructional methods where teachers face challenges.

Areas for Further Research

Research should investigate how different leadership styles and administrative support influence the effectiveness of in-service training, mentoring, and peer collaboration.

Further studies should assess the relationship between teacher motivation, engagement in professional development activities, and subsequent classroom performance.

Research should compare teacher performance and professional development practices in urban, peri-urban, and rural settings to identify contextual factors that influence effectiveness.

Future studies should examine the direct relationship between teacher professional development practices (training, mentoring, peer collaboration) and measurable student achievement in literacy, numeracy, and other subjects.

Research should identify challenges such as funding constraints, workload pressures, and teacher perceptions that limit the impact of professional development on performance.

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List of abbreviations

CPD	Continuous Professional Development (IICB)
CVI	Content Validity Index
MoES	Ministry of Education and Sports (Uganda)
NGOs	Non-Governmental Organizations
PD	Professional Development
STEM	Science, Technology, Engineering , and Mathematics
TPD	Teacher Professional Development
UPE	Universal Primary Education (Uganda)

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Conflict of interest

The author declares no conflict of interest.

Data availability

Data was available upon request.

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References

1. Akyeampong, K., Lussier, K., Pryor, J., & Westbrook, J. (2013). Teacher preparation and continuing professional development in Africa: Learning to teach early reading and mathematics. CREATE Pathways to Access, Research Monograph No. 72. <https://doi.org/10.13140/RG.2.2.36567.32162>
2. Amuge, W. P. (2021). Performance appraisal and teacher performance in government-aided primary schools: A case study of Namasale sub-county, Amolatar District (Unpublished master's thesis). Kyambogo University.
3. Kakiri Education Monitoring Report. (2023). Teacher participation and school performance. Kakiri Sub-County Office.
4. Komba, W. L., & Nkumbi, E. (2008). Teacher professional development in Tanzania: Perceptions and practices. *Journal of International Cooperation in Education*, 11(3), 67–83.
5. Lwanga, D., & Nakalema, F. (2024). Lesson planning practices in Wakiso District. *Uganda Education Journal*, 18(2), 55–70.
6. Ministry of Education and Sports (MoES). (2019). National Teacher Policy. Kampala: Government of Uganda.
7. Wahidin, N.R., Rochintaniawati, D., and Agustin, R.R., 2024. Trends in STEM education from 2020 to 2023: A critical review in selected academic publications. *Natural Science: Jurnal Penelitian Bidang IPA dan Pendidikan IPA*, 10(1), pp.13-23. <https://doi.org/10.15548/nsc.v10i1.7973>
8. Akyeampong, K., 2009. Public-private partnership in the provision of basic education in Ghana: challenges and choices. *Compare*, 39(2), pp.135-149. <https://doi.org/10.1080/03057920902750368>
9. O'Sullivan, B.G., Boyer, S., Stratton, A., McGrail, M.R., Phillips, J., and Faoro, J., 2023. Outcomes of rural generalist internship training in Victoria, Australia. *Rural and remote health*, 23(4), pp.1-15.
10. Darling-Hammond, L., 2017. Teacher education around the world: What can we learn from international practice?. *European journal of teacher education*, 40(3), pp.291-309.

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