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## Teacher-Related Factors Influencing the Sustainability of Continuous Professional Development in Ubungo District Public Primary Schools, Tanzania

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### *Abstract*

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*This study examines teacher-based factors influencing the sustainability of Teachers' Continuous Professional Development (TCPD) in public primary schools in Ubungo District, Tanzania. Specifically, it assesses how teachers' motivation, professional competencies, and collaboration practices affect the long-term sustainability of TCPD initiatives. The study was conducted in an urban primary school context in Ubungo District using a mixed-methods cross-sectional design. Quantitative data were collected from 384 teachers through structured questionnaires, while qualitative data were obtained through interviews with four head teachers and one district education official. The quantitative data were analysed using descriptive statistics, while the qualitative data were analysed thematically. The findings indicate that teachers' motivation, perceived relevance of TCPD, and collaborative practices significantly contribute to sustainability. However, limited reflective practice and variations in professional competence constrain sustained engagement in TCPD. Theoretically, the study contributes by integrating learning and motivational perspectives to explain TCPD sustainability, positioning teachers as central agents in*

*sustaining professional development programmes. Practically, the study highlights the need to strengthen teacher motivation, institutionalise collaborative learning, and enhance professional competencies. The study recommends embedding teacher-driven and reflective practices within school systems to support long-term improvements in teaching quality and student learning outcomes.*

**Keywords:** *Teachers' Continuous Professional Development (TCPD), Teacher Motivation, Professional Competency, Reflective Practice, Collegial Collaboration.*

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## Introduction

Teachers' Continuous Professional Development (TCPD) is globally recognised as a key driver in strengthening teachers' professional skills, improving instructional practices, and boosting student learning outcomes. Traditionally, teacher development relied on sporadic, centrally organised training programmes. However, these programmes often lacked relevance to the everyday realities of the classroom (Avalos, 2011). As a result, they have faced criticism for their limited and short-lived impact on both teaching quality and student performance (Darling-Hammond et al., 2020; OECD, 2020).

In recent years, there has been a global shift from one-off, centrally managed in-service training towards continuous, school-based, and collaborative teacher development programmes (Darling-Hammond et al., 2020; OECD, 2020; UNESCO, 2021). Such programmes are effective when embedded within teachers' daily routines, as they encourage peer learning and reflective practice. Research evidence shows that teacher development programmes are more effective in influencing teacher practice and student outcomes when they are ongoing, context-specific, and teacher-driven, rather than imposed externally (Linda Darling-Hammond et al., 2020). The development and introduction of the TCPD Framework aimed to ensure that teachers in Tanzania engage in regular, systematic, and collaborative professional learning at the

school level (MoEST; UNESCO, 2021). The TCPD initiative has been introduced as a school-based continuous professional development model that emphasises peer collaboration, reflective practice, and the development of professional competencies (MoEST, 2020; EdTech Hub, 2023). TCPD is expected to function as a continuous process rather than a time-bound activity, thereby requiring sustained teacher engagement, ownership, and commitment for its long-term effectiveness (MoEST, 2020; Darling-Hammond et al., 2020).

Even though the policy guarantees nationwide rollout of TCPD, emerging evidence suggests that the sustainability of such initiatives cannot be assumed. Studies in Sub-Saharan Africa show that professional development programmes often have strong initial uptake but decline once external support is reduced (Amponsah et al., 2021; Abakah et al., 2022). In urban districts, such as Ubungu, where schools differ significantly in terms of leadership practices, teacher profiles, and working conditions, sustaining TCPD initiatives is particularly challenging.

A growing body of literature highlights that teacher-based factors play a significant role in determining whether professional development initiatives are sustained over time (Abakah et al., 2022; Darling-Hammond et al., 2020; Ventista & Brown, 2023). Teachers' motivation and perceptions of relevance influence their sustained participation in professional learning (Deci & Ryan, 2020; Abakah et al., 2022; MoEVT, 2020; Kimaro, 2026). When teachers perceive TCPD as beneficial to their classroom practice and professional growth, they are more likely to internalise it as part of their professional identity. Conversely, when TCPD activities are viewed as administratively driven or disconnected from classroom realities, participation often becomes superficial and unsustainable.

In addition to motivation, teachers' professional competencies are critical to the persistence and success of TCPD initiatives. Professional competence includes teachers' pedagogical knowledge, subject mastery, ability to reflect on practice, and capacity to apply

newly acquired skills in real classroom contexts. Research indicates that teachers with strong professional competencies are more likely to engage actively in TCPD, apply new teaching strategies, and sustain ongoing professional learning (Avalos, 2011; Darling-Hammond et al., 2020; Vescio et al., 2008). However, where teachers lack confidence or adequate foundational competencies, TCPD activities may fail to translate into meaningful practice, thereby undermining their perceived value and sustainability.

Furthermore, collaboration and peer support are widely regarded as central pillars of sustainable TCPD. School-based professional learning communities, peer mentoring, and collaborative lesson planning have been shown to enhance shared responsibility, collective efficacy, and mutual accountability among teachers (OECD, 2020). Through collaboration, teachers are able to exchange experiences, jointly solve instructional challenges, and reinforce professional norms that support continuous learning. Nonetheless, empirical evidence from developing contexts indicates that collaborative practices are often weakly institutionalised, unevenly implemented, or dependent on individual enthusiasm rather than systemic support (Avalos, 2021).

In the Tanzanian context, existing studies for example, by Kimaro (2026), Swai et al. (2024), Chachage and Thakrar (2023), Koomar et al. (2023), and Magesa and Mwantimwa (2021) have only highlighted the TCPD implementation, policy alignment, and institutional arrangements, such as leadership support and resource availability. While these dimensions are equally important, they provide only a partial understanding of its sustainability. There remains limited empirical evidence that examines how teachers' motivation, professional competencies, and collaborative practices interact to influence the sustained functioning of TCPD initiatives at the school level. In particular, teacher-related factors are often treated as secondary variables rather than central drivers of sustainability.

Within public primary schools in Ubungo District, anecdotal evidence and preliminary reports suggest variability in how TCPD is implemented across schools. In some schools, TCPD activities are embedded in

routine professional practice, supported by strong collegial relationships and active teacher participation, whereas in others, TCPD meetings are irregular, participation is inconsistent, and collaborative learning is limited. These variations raise critical questions about the underlying teacher-related factors that enable or constrain the sustainability of TCPD initiatives within the same policy and institutional framework.

Despite the importance of these issues, there is a clear gap in context-specific empirical research that explicitly focuses on teacher-based factors influencing the sustainability of TCPD in urban primary schools, such as those in Ubungo District. Most available studies either aggregate national-level findings or emphasise institutional and policy factors. Consequently, there remains insufficient understanding of how teachers' motivation, professional competencies, and collaboration shape long-term implementation outcomes at the school level.

This gap in the literature limits education stakeholders, school leaders, and policymakers in designing targeted interventions within TCPD frameworks. It also constrains efforts to strengthen teacher ownership, sustained engagement, and effective peer learning. Without strong evidence on teacher-based determinants of sustainability, TCPD risks remaining a policy ideal rather than a consistently enacted professional practice.

This study is particularly important at this time, as education systems are increasingly shifting from short-term, externally driven training models to sustainable, school-based professional development approaches. Despite widespread implementation of TCPD frameworks, many initiatives continue to face challenges in maintaining continuity and long-term impact once external support is withdrawn (Amponsah et al., 2021; Abakah et al., 2022). As a result, there is an urgent need to understand the factors that sustain professional development within schools. This study examines teacher-related factors in response to the growing demand for sustainable, teacher-driven professional learning models that can improve instructional quality and student outcomes in a lasting manner.

Therefore, this study is situated within this gap and seeks to generate empirical evidence on teacher-based factors influencing the sustainability of TCPD in public primary schools in Ubungo District. Specifically, it examines how teachers' motivation affects the sustainability of the TCPD programme, how their professional competencies contribute to the continuation and effectiveness of TCPD activities, and how teacher collaboration and peer support influence the ongoing implementation of TCPD initiatives.

In practice, TCPD is implemented through structured school-based activities such as peer learning and collaborative lesson planning, aimed at improving instruction. However, its effectiveness depends on teachers' active participation and commitment. In many cases, teachers engage in these activities after working hours without incentives, which may reduce motivation and threaten the sustainability of TCPD (Abakah et al., 2022; Ventista & Brown, 2023). By positioning teachers as central agents of sustainability, this study contributes to both scholarly discourse and practical decision-making. The findings are expected to inform policy and practice by identifying strategies that enhance teacher engagement, strengthen programme implementation, and ensure the long-term sustainability of TCPD initiatives in Tanzania (Villegas-Reimers, 2003; Darling-Hammond et al., 2017).

This study was, therefore, guided by the following specific objectives:

- 1) To examine how teachers' motivation influences the sustainability of TCPD in public primary schools in Ubungo District
- 2) To assess how teachers' professional competence gains, influence the sustainability of TCPD in public primary schools in Ubungo District
- 3) To analyse how teacher collaboration and peer support influence the sustainability of TCPD in public primary schools in Ubungo District

This study is theoretically grounded in Adult Learning Theory, originally advanced by Malcolm Knowles, and Self-Determination Theory, developed by Edward Deci and Richard Ryan. These two

theories are particularly relevant for examining the long-term sustainability of TCPD. They jointly explain how teachers learn and why they remain motivated to engage over time. The integration of these perspectives provides a robust framework for understanding teacher-related factors influencing the sustained implementation of TCPD in urban primary school contexts, such as Ubungo District.

### **Adult Learning Theory and TCPD Sustainability**

Adult Learning Theory, also known as andragogy, was systematically articulated by Knowles (1980, 1984). It posits that adult learners are self-directed, bring rich prior experiences to learning situations, and are motivated to learn when learning is relevant, problem-centred, and immediately applicable to their work. The theory views teachers as reflective practitioners who actively construct professional knowledge through experience, collaboration, and critical reflection rather than passively receiving externally designed training (Avalos, 2011; Ventista & Brown, 2023).

Adult Learning Theory aligns closely with the Tanzanian Education Policy intentions that promote school-based professional learning communities, peer mentoring, lesson study, and reflective practice (MoEST, 2020). It suggests that teachers are more likely to sustain engagement in TCPD when professional learning activities are grounded in real classroom challenges, acknowledge teachers' prior teaching experience, and provide opportunities for collaborative problem-solving (Lieberman & Pointer Mace, 2010; Darling-Hammond et al., 2020). From this perspective, teachers' professional competencies, teaching experience, and active participation in TCPD activities are central mechanisms through which sustainable instructional improvement is achieved.

Although Adult Learning Theory explains how teachers acquire and refine professional knowledge, it does not sufficiently account for the motivational forces that determine whether teachers continue to engage in professional development over time, particularly in contexts characterised by heavy workloads and limited institutional support.

## **Self-Determination Theory and Teacher Motivation**

To address the limitation pointed out in the Adult Learning Theory, this study draws on Self-Determination Theory (SDT), developed by Deci and Ryan (1985, 2000). SDT posits that sustained engagement in any activity is largely determined by the extent to which three basic psychological needs are satisfied: autonomy, competence, and relatedness. When these needs are fulfilled, individuals are more likely to develop intrinsic motivation and maintain long-term commitment (Ryan & Deci, 2020).

SDT suggests that teachers are more likely to sustain participation when they perceive professional development activities as self-directed rather than imposed, experience continuous growth in professional competence, and feel supported through collegial relationships within their schools (Abakah et al., 2022; Ventista & Brown, 2023). In the Tanzanian urban primary school context, where teachers often face time constraints, administrative pressures, and diverse learner needs, motivation becomes a critical determinant of whether TCPD is sustained or reduced to a compliance-driven routine.

Within this framework, teachers' attitudes toward TCPD, levels of intrinsic and extrinsic motivation, and willingness to participate consistently are key predictors of sustainability. TCPD initiatives that foster collaboration, recognise teachers' professional contributions, and align learning activities with teachers' perceived needs are more likely to promote positive attitudes and sustained engagement (Amponsah et al., 2021; UNESCO, 2021). Conversely, when TCPD is perceived as irrelevant, externally controlled, or disconnected from classroom realities, teacher motivation diminishes, undermining long-term sustainability.

## **Integrating Adult Learning Theory and Self-Determination Theory**

The two theories complement each other in explaining TCPD sustainability as the product of integrating learning and motivational processes. While Adult Learning Theory explains how teachers

develop professional competencies through experience-based, collaborative, and reflective learning, Self-Determination Theory explains why teachers choose to sustain engagement through positive attitudes, motivation, and a sense of professional belonging.

Within this integrated framework, teachers' participation, professional competencies, and teaching experience interact dynamically with their attitudes, motivation, and sense of ownership of TCPD initiatives. Enhancing one dimension without adequate support for the others is unlikely to result in sustainable professional development. Sustainable TCPD, therefore, requires learning environments that are both pedagogically meaningful and psychologically supportive, enabling TCPD practices to become embedded within school culture rather than dependent on external enforcement.

In this study, Adult Learning Theory and Self-Determination Theory serve as complementary conceptual lenses for analysing how teacher-based factors influence the long-term sustainability of TCPD in selected primary schools in Ubungo District. By grounding the analysis in these theories, the study positions teachers as reflective, motivated professionals whose learning processes and motivational conditions are central to sustaining continuous professional development over time.

## **Methodology**

This study adopted a descriptive cross-sectional research design. This design facilitates the collection of data at a single point in time to examine how teachers' motivation, professional competencies, and collaboration and peer support influence the sustainability of TCPD in public primary schools in Ubungo District. A cross-sectional design was deemed appropriate as it allows for the exploration of associations among variables without manipulating the study environment (Mensah, 2022). In line with current educational research practices, a mixed-methods approach was employed, combining both quantitative and qualitative methods to gain a comprehensive understanding of TCPD

sustainability. This approach strengthens the validity of findings by enabling methodological triangulation and offering multiple perspectives on the phenomenon being studied (Adom, Yeboah, & Ankrah, 2021). The integration of quantitative and qualitative findings was conducted during the interpretation stage. Quantitative results provided general patterns and relationships among variables, while qualitative findings offered deeper explanations and contextual understanding of those patterns. This triangulation approach enhanced the validity of the findings and provided a more comprehensive understanding of the factors influencing TCPD sustainability (Creswell & Plano Clark, 2018; Fetters et al., 2013).

The study was conducted in Ubungo District Council, an urban district in Tanzania. Ubungo has a relatively high concentration of teachers, diversity in school contexts, and active engagement with TCPD initiatives (Ministry of Education, Science and Technology [MoEST], 2021). This makes it a relevant and strategic area for studying sustainability-related factors. The target population consisted of 464 teachers from ten public primary schools within the district. These schools were selected to represent various geographical and operational contexts within the district, thereby allowing for a more contextualised analysis of TCPD implementation.

For the quantitative component, stratified sampling was used. Stratified sampling was employed to ensure proportional representation of teachers across the selected public primary schools. Each school was treated as a stratum, and participants were selected proportionally (Creswell & Creswell, 2018). This approach was appropriate because the teacher population was heterogeneous in terms of experience, teaching environments, and exposure to TCPD practices. Therefore, stratification improved representativeness and reduced sampling bias. The sample size for the quantitative survey was 384 teachers, determined using Cochran's formula for sample size calculation, adapted for social science research:

$$n_0 = \frac{Z^2 pq}{e^2} \dots\dots\dots (1)$$

$$n_0 = \frac{(1.96)^2 \times 0.5 \times (1-0.5)}{(0.05)^2}$$

$$= 384$$

Where:

$n_0$  = sample size of teachers

$Z^2$  = is the abscissa of the normal curve that cuts off an area  $\alpha$  at the tails

$p$  = is the estimated proportion of an attribute that is present in the population, and  $q$  is  $1-p$ .

$e$  = is the desired level of precision

$Z$  = the value found in statistical tables containing the area under the normal curve. e.g.,  $Z = 1.96$  for a 95 % level of confidence

$(1 - \alpha)$  = the desired confidence level, e.g., 95%

**Table 3.1. Target Population and Sample Size per Primary School**

| S/N | Primary School | Population | Sample     |
|-----|----------------|------------|------------|
| 1   | School A       | 54         | 44         |
| 2   | School B       | 50         | 41         |
| 3   | School C       | 64         | 53         |
| 4   | School D       | 57         | 46         |
| 5   | School F       | 50         | 41         |
| 6   | School G       | 46         | 38         |
| 7   | School H       | 43         | 35         |
| 8   | School I       | 35         | 28         |
| 9   | School J       | 24         | 25         |
| 10  | School K       | 41         | 33         |
|     | <b>Total</b>   | <b>464</b> | <b>384</b> |

For the qualitative component, purposive sampling was employed to select key informants who hold strategic roles in the implementation and supervision of TCPD. These included four head teachers, one District Education Officer (DEO), selected based on their experience, involvement, and institutional responsibility (Boateng, 2021).

Quantitative data were gathered using a structured questionnaire, administered face-to-face to reduce non-response and improve clarity. The questionnaire included closed-ended and Likert-scale items designed to measure: teachers' motivation toward TCPD; levels of participation; professional competencies; institutional support; perceptions of TCPD sustainability. This approach is recommended in contemporary education research to ensure data quality and response accuracy (Mensah, 2022).

For the qualitative component, semi-structured interviews were conducted with purposively selected key informants. An interview guide was used to explore perceptions and experiences related to: teachers' motivation towards TCPD sessions; teachers' competence developed through TCPD sessions and teachers' collaboration in TCPD sessions for sustaining TCPD. Semi-structured interviews are widely used in education research for their flexibility and depth of insight (Adom et al., 2021)

Quantitative data were coded and analysed using statistical software. Descriptive statistics, including frequencies, percentages, and means, were used to summarise the data and assess patterns related to TCPD sustainability (Abonyi & Umeh, 2022). Qualitative data were analysed through content analysis, involving transcription, coding, categorisation, and theme development. Recurring themes and patterns were identified and interpreted to capture contextual and teacher-based factors influencing TCPD sustainability (Magesa & Mwantimwa, 2021). The integration of quantitative and qualitative findings ensured methodological triangulation and enhanced the validity of study conclusions (Ventista & Brown, 2023).

To ensure validity, the research instruments were subjected to expert review by specialists in educational research. The feedback was used to refine the clarity, relevance, and alignment of the items with the study objectives. In addition, a pilot study was conducted in a context similar to the study area to test the suitability of the instruments, and necessary adjustments were made. Internal consistency of the questionnaire was assessed using Cronbach's alpha coefficient to ensure validity and reliability. A reliability coefficient of 0.70 or higher was considered acceptable, indicating that the instrument was consistent and reliable (Taber, 2018).

### **Ethical declaration**

AI-assisted tools (SciSpace and ChatGPT-5.2) were used to support record management and workflow efficiency, particularly for relevance ranking and screening prioritisation; however, all eligibility decisions, evidence extraction, interpretation, and synthesis were conducted by the researcher, and the use of AI tools did not replace human judgement or alter the predefined inclusion criteria.

### **AI use statement**

AI-assisted tools such as ChatGPT was used to support writing clarity, organization and workflow efficiency. However, all data analysis, interpretation and conclusion were conducted by the researcher. The use of AI tools did not influence the research findings or replace human judgement.

### **Results and Discussion**

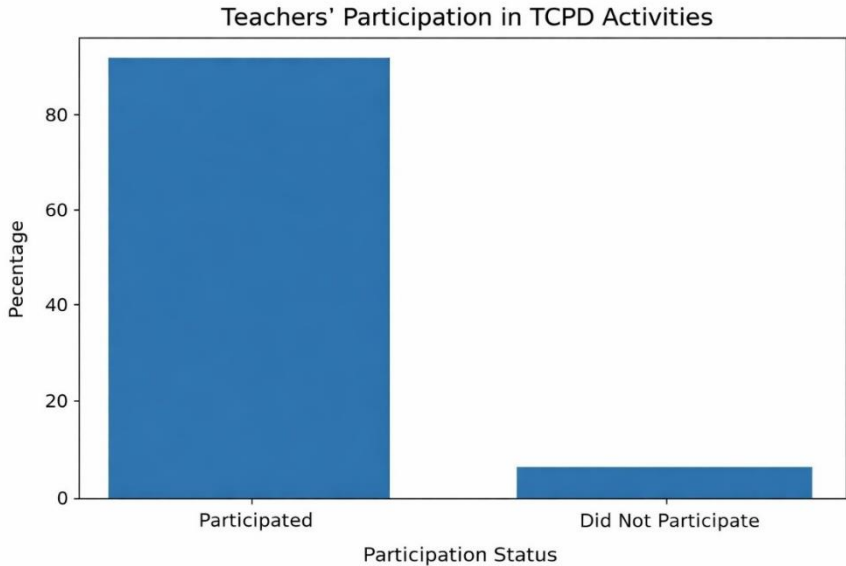
This section presents and discusses findings on teacher-based factors influencing the sustainability of the 'Teachers' Continuous Professional Development (TCPD) initiative in selected primary schools in Ubungo District. Sustainability is examined through teachers' participation, perceived professional value, relevance, motivation, collegial collaboration, reflective practice, and professional competence development.

Overall, the findings demonstrate that TCPD sustainability in Ubungo District is strongly shaped by regular participation, perceived professional value, intrinsic motivation, competence development, and collaborative learning practices. The consistently high levels of engagement indicate that TCPD has moved beyond a pilot phase toward routine school practice, which is widely recognised as a prerequisite for long-term professional development and instructional improvement (Darling-Hammond et al., 2020; OECD, 2020; UNESCO, 2021).

### **Teachers' Participation in TCPD Activities**

The findings indicate a high level of sustained participation among teachers. 92.71% indicated that they participate in TCPD activities at least once per week, including collaborative lesson planning, subject-based discussions, classroom reflection meetings, mentoring, and sharing of teaching experiences. The results suggest that the TCPD programme is widely accepted and an integral part of teachers' daily practices. The less frequent or no participation (7.29%) suggests that there are few hindrances to acceptance of the activities. These hindrances include factors, such as timing, scheduling, and resource constraints (Figure 1).

**Figure 1: Teachers' Participation in TCPD Activities**



The findings suggest that TCPD has moved beyond the pilot or compliance stage and is increasingly becoming embedded into the routine professional culture of schools in Ubungo District. This means: teachers are not only aware of TCPD but also actively involved. Further, TCPD appears to be increasingly becoming part of school routines, not an external or one-time event. This suggests a growing sense of ownership and accountability among teachers.

The high participation rate suggests that TCPD is well established, accessible, and perceived as relevant among teachers. This level of engagement implies that TCPD sessions have been largely institutionalised into regular school routines, which is a key indicator of sustainability (Ono & Ferreira, 2010; Ventista & Brown, 2023).

However, a small proportion of teachers (3.65%) reported to have never participated, signalling a potential sustainability risk if non-participation persists. From a theoretical perspective, Communities of Practice theory suggests that sustained learning depends on

continuous mutual engagement. Thus, exclusion of some members may weaken collective learning over time (Wenger, 1998).

These findings are further supported by qualitative responses obtained from open-ended items and follow-up discussions with selected participants. Teachers emphasised that they are motivated to participate in TCPD Sessions, as one participant said: “TCPD has made me more confident in my teaching, which motivates me to continue participating even when there are challenges.”

Furthermore, the head teacher of School B said:

Teachers have a positive attitude toward TCPD because it has been helpful in some topics that teachers find challenging in the classroom. They are motivated to participate in TCPD because it serves as a platform for sharing academic knowledge and skills. Furthermore, many teachers are eager to learn more. Likewise, the collaboration of teachers greatly contributes to TCPD being a good platform for learning and exchanging knowledge, thus ensuring its sustainability. (Interview, School B head teacher, 2026)

The fact that teachers have a positive view of TCPD suggests a high level of intrinsic motivation, which is central to sustaining teacher engagement in professional development over time (Ryan & Deci, 2020). When teachers value a programme and see its relevance, they are more likely to participate voluntarily and consistently (Abakah et al., 2022). The head teacher notes that TCPD offers a space for teachers to exchange academic knowledge. Collaborative environments where teachers learn from one another are known to foster professional learning and encourage continuous improvement of instructional practice (Darling-Hammond et al., 2020). This aligns with the idea that collegiality and shared expertise strengthen professional communities. By helping teachers address difficult content, TCPD directly contributes to building their sense of competence, a psychological need that supports long-term motivation and engagement (Ryan & Deci, 2020). This practical benefit reinforces the value of TCPD in the day-to-day teaching context, increasing the likelihood of long-term institutionalisation.

## Teachers' Perceived Professional Learning and Competence Gains

The results in Table 1 suggest that teachers evidently hold a positive view of their professional growth under TCPD operations. High levels of agreement and mean scores indicate teachers' confidence in using their experience (95.57%, M = 4.37) and the usefulness of TCPD in addressing diverse learner needs (88.54%, M = 4.34%). This suggests that TCPD enhances instructional self-efficacy and adaptability. Meanwhile, the high endorsement of the ease of undertaking new methods (85.68%, M = 4.30) and the sense of achievement following TCPD (85.94%, M = 4.17) also supports the perceived meaningful value and motivational impact. A lower level of agreement on regular reflection (69.27%, M = 3.65) suggests limited metacognitive engagement. Although teachers report competence gains and knowledge expansion (82.03%, M = 4.20), there is a need for more systematic reflection and improvement.

**Table 1: Professional Learning and Competence Gains Factors (N=384)**

| Teacher-based factor                                | Mean | Agree (%) |
|---|------|-----------|
| TCPD helps me address diverse learner needs         | 4.34 | 88.54     |
| I regularly reflect on how TCPD affects my teaching | 3.65 | 69.27     |
| I can easily apply the new methods learned          | 4.3  | 85.68     |
| I feel a sense of achievement after TCPD            | 4.17 | 85.94     |
| I feel confident applying what I learn              | 4.37 | 95.57     |
| knowledge expansion                                 | 4.2  | 82.03     |

Note: Agree (%) combines "Agree" and "Strongly Agree" responses

Findings show that teachers agreed that TCPD contributes positively to their professional growth. High mean scores indicate that teachers perceive TCPD as relevant, applicable, and useful for classroom practice. It supports improved teaching methods, responsiveness to diverse learner needs, and confidence in applying new instructional strategies.

These findings were further supported by qualitative responses obtained from open-ended items and follow-up discussions with selected participants. Teachers emphasised that TCPD has improved their teaching. One of the participants from school A highlighted that: “TCPD supports professional growth, especially in English and Mathematics. It helps me work better, increases my confidence, and expands my knowledge.”

The teacher from school B elaborates more:

TCPD sessions have helped me a lot in understanding conditional sentences that previously troubled me in grasping them, but now I am doing well. There was also a common belief that Mathematics teachers are only men. The TCPD programme has helped many people realise that even women can teach Mathematics. As a result, that belief no longer exists. In addition, TCPD has increased my confidence, skills, and knowledge. (Interview with head teacher, 2026)

The head teacher from school A insisted that: “When teachers gain new knowledge and skills that they previously lacked, it is a credit to the school and more beneficial than simply overloading learners with content. For example, in Mathematics, learners were previously taught addition before understanding the value of numbers. After teachers improved their professional competency, learners began to be taught correctly and more systematically.”

The head teacher from school B added that, “Teachers have been able to improve their skills in certain topics after receiving lessons from expert teachers who facilitated sessions through TCPD.” Furthermore, the DEO of primary school emphasised: “Teachers enjoy the TCPD sessions because they gain knowledge on difficult topics or those they previously viewed negatively. For example, a facilitation on pronunciation of the letters, delivered by the experts from the Room to Read organisation empowered the teachers to the extent that they became proficient in that area.”

This testimony illustrates how perceived improvements in professional competence reinforce continued engagement. These findings align with the Adult Learning Theory, which emphasises that

adult learners sustain engagement when learning is experience-based, problem-centred, and directly relevant to their work contexts (Knowles et al., 2015; Avalos, 2011). At the policy level, this implies that TCPD frameworks should prioritise classroom-focused, teacher-led learning approaches that address real instructional challenges (MoEST, 2020; UNESCO, 2021).

By helping teachers address difficult content, TCPD directly contributes to building their sense of competence, a psychological need that supports long-term motivation and engagement (Ryan & Deci, 2020). This practical benefit reinforces the value of TCPD in the day to day teaching context, increasing the likelihood of long-term institutionalisation.

The observation that teachers are eager to learn more shows that TCPD is tapping into a desire for ongoing professional growth, which is a critical factor for sustaining teacher development efforts (OECD, 2020). This eagerness can help shift TCPD from being a short-term intervention to a routine professional practice.

### **Teacher Motivation toward TCPD**

The results reveal strong intrinsic motivation among teachers. Over 86% of respondents reported personal enthusiasm to participate in TCPD, and 85.94% indicated that they experience a sense of professional achievement after completing TCPD activities. This indicates that teachers are not simply participating out of obligation, but because they are intrinsically motivated (psychological reward) and they feel fulfilled professionally when they do.

Qualitative evidence from school leaders further explains the motivational dynamics. The head teacher of School A said: “In my school, teachers have developed interests in TCPD to an extent of attending sessions punctually, hoping to gain useful knowledge, and the timetable is stable.”

Similarly, the head teacher of school B emphasised the role of teachers’ motivation towards TPCD, he said: “Sessions take place within the

school environment, and facilitators are fellow teachers, which motivates teachers greatly.”

The head teacher of school C insisted:

Teachers have a positive attitude towards the programme because it helps them build skills. The programme focuses on identifying difficult topics. When we meet, teachers support each other subject-wise. This motivates teachers a lot. For example, when we started, we focused on lower classes, especially pronunciation, which was a major challenge for many teachers. Teachers are motivated because they gain new skills. In subjects like Mathematics and English, many teachers had given up early, but TCPD programmes have helped teachers gain the confidence and ability to teach these subjects. (Interview with a head teacher, 2026)

The evidence suggests that teachers’ participation is driven largely by intrinsic motivation. They engage because they find TCPD professionally meaningful and rewarding. Intrinsic motivation strengthens programme “firmness” by promoting voluntary, consistent, and self-sustaining engagement, which reduces reliance on external supervision and makes implementation more resilient over time (Ryan & Deci, 2020; Abakah et al., 2022). Consequently, when teachers experience competence, autonomy, and professional growth through TCPD activities, the programme is more likely to be institutionalised as routine practice and sustained in the long term (Darling-Hammond et al., 2020; OECD, 2020).

A teacher from school A elaborated,

The TCPD programme motivates me to participate because sometimes the sessions involve active and lively discussions. This motivates teachers to continue attending the sessions. (Interview with a head teacher, 2026)

Furthermore, the DEO emphasised:

Teachers enjoy the TCPD sessions because they gain knowledge on difficult topics or those they previously viewed negatively. Experts from the Room to Read Organisation empowered the teachers to the extent that they became proficient in that area, for example, letter pronunciation.

The data suggest that TCPD improves teacher competency, strengthens motivation and sustained engagement. These findings are consistent with Self-Determination Theory, which suggests that sustained engagement is more likely when individuals experience intrinsic motivation, autonomy,

and a sense of competence (Deci & Ryan, 2000; Ryan & Deci, 2020). Empirical studies in Sub-Saharan Africa similarly show that when teachers perceive professional development as meaningful and valuable for improving instruction, their commitment and continuity of participation increase (Amponsah et al., 2021; Abakah et al., 2022).

Thus, strengthening teachers' autonomy, ensuring stable scheduling and recognising professional growth are critical for sustaining TCPD over time. This is also reflected in the findings of Darling-Hammond et al. (2020) and UNESCO (2021), who emphasise the importance of teachers' self-sufficiency in their professional growth.

### **Collegial Support and Collaborative Learning**

Collegial collaboration emerged as a significant teacher-based factor influencing the sustainability of TCPD. Most teachers agreed that collaboration with colleagues increases their participation and that peer encouragement supports continued engagement (Table 2). The results suggest that participants perceive collegial support and peer collaborative learning as significantly important (87.24%,  $M = 4.23$ ). The highest mean score and level of agreement suggest that peer interaction positively enhances active engagement. Encouragement from colleagues was slightly acknowledged (83.85%,  $M = 3.95$ ). Although perceptions of support for implementing innovative methods remain favourable (72.4%,  $M = 3.98$ ), the proportion of agreement was comparatively reduced, indicating a potential area for improvement in implementation-centred collegial support. These findings highlight the importance of school-based collaborative learning environments in sustaining TCPD.

**Table 2: Collaboration and Support Factors (N=384)**

| Teacher-based factor                                     | Mean | Agree (%) |
|--|------|-----------|
| Collaboration with colleagues increases my participation | 4.23 | 87.24     |
| Colleagues encourage my participation                    | 3.95 | 83.85     |
| I feel supported in implementing new methods             | 3.98 | 72.4      |

**Note:** Agree (%) combines “Agree” and “Strongly Agree” responses

Similarly, the head teacher of School A emphasised the role of relevance and peer facilitation: “The foundation of TCPD is teachers’ classroom challenges. Sessions are conducted within the school environment, and facilitators are fellow teachers; this strongly attracts teachers to participate.” The head teacher of school B cemented: “Teachers’ collaboration greatly contributes to making TCPD a valuable platform for learning and sharing knowledge, thus promoting its sustainability. The head teacher of School C added, “The program is collaboratively, each teacher has something to present, they prepare a presentation, and they present as well”.

Ideally, these findings support Communities of Practice and Professional Learning Communities (PLC) models, which conceptualise teacher learning as a social process embedded in a shared practice (Wenger, 1998; DuFour & Eaker, 1998). From a practice perspective, this suggests that formalising collaborative structures, such as peer mentoring, shared lesson planning, and team teaching, can further strengthen sustainability.

However, reflective practice recorded comparatively lower mean scores ( $M = 3.65$ ), indicating that while collaboration is strong, opportunities for systematic reflection and deeper professional inquiry require strengthening. This aligns with earlier studies showing that collaborative professional development is most effective when accompanied by structured reflection on practice and learner outcomes (Vescio et al., 2008; Avalos, 2011). At the policy level, this underscores the need to support PLCs not only as meeting spaces but as sites of continuous inquiry and evidence-based reflection.

The head teacher of school C remarked that “TCPD offers a space for teachers to exchange academic knowledge.” Such collaborative environments, where teachers learn from one another, are known to foster deeper professional learning and encourage sustained participation (Darling-Hammond et al., 2020).

Generally, the data generated through this study indicates that a well-structured TCDP, particularly one that promotes collegiality and shared expertise, ensures its sustainability.

## **Conclusion**

This study concludes that the sustainability of the Teachers’ Continuous Professional Development (TCPD) initiative in selected public primary schools in Ubungo District is predominantly influenced by teacher-related factors rather than by structural or policy directives alone. In particular, sustained teacher participation, perceived professional relevance, intrinsic motivation, collegial collaboration, reflective practice, and professional competence development collectively determine whether TCPD becomes embedded in routine school practice or remains a compliance-driven activity. The perceived relevance and professional competence gains are critical drivers of sustainability. Teachers are more likely to sustain engagement in TCPD when professional learning activities address real classroom challenges and lead to observable improvements in instructional practice and learner outcomes.

Further, the study concludes that regular and consistent participation is a foundational condition for TCPD sustainability. High participation rates indicate that TCPD has been institutionalised within school routines. However, the presence of a small group of less frequently and non-participating teachers suggests the need for targeted measures to address the barriers to participation.

Intrinsic motivation toward TCPD significantly enhances sustainability. When teachers perceive TCPD as meaningful, professionally rewarding, and aligned with their growth needs, they

are more likely to maintain long-term engagement without external enforcement.

Furthermore, collegial collaboration strengthens TCPD sustainability by embedding professional learning within school culture. School-based, peer-facilitated learning promotes shared responsibility, trust, and collective ownership of professional development.

Although participation and collaboration are strong factors to ensure the sustainability of TCPD, reflective practice remains comparatively weaker, posing a risk of surface-level sustainability. Thus, without systematic reflection on classroom practice and learner outcomes, TCPD may continue in form but with limited depth and long-term instructional impact.

## **Recommendations**

Based on the study conclusions, the following recommendations are proposed:

- 1) Schools should integrate structured reflection activities such as post-lesson discussions and analysis of learner work into TCPD sessions to deepen professional learning and sustain instructional improvement.
- 2) School leaders should promote inclusive participation by supporting non-participating teachers and increasing teacher-led facilitation and mentoring to strengthen motivation and sustainability.
- 3) Education authorities should continue embedding TCPD within school timetables and redefine sustainability indicators to include professional competence growth and reflective practice, not attendance alone.

## **Conflict of Interest**

The author declares that there is no conflict of interest regarding the publication of this paper.

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