

Reorienting Teacher Professional Development in Kenya: Professional Learning Communities Paradigm

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Abstract

Continuous teacher professional development is critical in the wake of the rapidly changing dynamics of the teaching and learning environment. Effective teacher professional development is one that is collaborative and embedded in teachers' daily practice in schools. In Kenya, The Teachers' Service Commission (TSC) rolled out a Teacher Professional Development Program (TPD) for teachers and instructional leaders in December, 2021. It is envisaged that through the program teachers will acquire requisite professional skills and competencies to ultimately improve learner outcomes. The purpose of this study was therefore to assess the level of formation and utilization of Professional Learning Communities among the first cohort of the Teacher Professional Development Program. Objectives of the study: to find out the extent to which Professional Learning Communities have been established; to establish the extent to which teachers are utilizing the Professional Learning Communities; to establish the role of the instructional leaders in teacher Professional Learning Communities. The paper was based on review of literature on Teacher Professional Development worldwide, documentation of best practices and lived experiences of authors as facilitators in the TSC-TPD program. The paper will contribute significant information on the status of teacher collaboration through Professional Learning Communities and bring to the fore lessons learnt and areas of improvement to enhance teacher collaboration, a vital characteristic of effective Teacher Professional Development. The review concludes that the program offered an opportunity for enrolled teachers to engage in online professional learning communities at the national level using a variety of online platforms. The engagements however need to be sustained beyond the online session time and be cascaded to the school level to enhance continuous collaboration and impact on learning outcomes. There is need for more advocacy on the program and its benefits to the teacher and the learner.

Keywords: Collaboration, Learning communities, Professional Development, Teachers

Introduction

The concept of Continuous Teacher Professional Development has been embedded in nearly all education reforms across different nations. Sustainable Development Goal 4 deals with quality education-ensuring inclusive and equitable quality education and promoting lifelong learning for all-with target 4.c being specific on professional development of teachers. This is based on the fundamental role that a teacher plays in the teaching and learning processes and the subsequent impact on learner outcomes. Teachers are at the centre of what happens in the classroom and outside. Researchers generally agree that one of the most important ways to improve the quality of teachers and teaching is through professional development (PD) programmes (Darling-Hammond et al., 2017). The fact that the teacher is central in the teaching and learning process is widely acknowledged and the link between low pupil achievement and the skills and competence of teachers is consistently made (UNESCO, 2005). This is premised on the observation that, no matter how good pre-service or initial training of a teacher is, it does not prepare a teacher to meet the emerging challenges in the ever-changing educational landscape. World Bank (2010) notes that researchers, educators and policy makers are convinced that pre-service training is not yielding the expected results and therefore resources would be better utilized if directed to effective professional development. The 21st century education is bold, flexible, creative, challenging and complex with a lot of focus being put on teacher quality which is a major contributing factor to teacher effectiveness and pupil achievement. According to OECD, (2009) the roles of teachers and schools are changing and so are expectations about them. However, according to UNESCO, (2020) for many teachers working in developing countries, opportunities to update their teaching competencies are disproportionate and inadequate and therefore require access to relevant and quality teacher professional development.

Different approaches have been adopted to promote teacher quality through professional development programs. The professional development programs can either be formal, informal, group or individualized. These range from formal training in educational institutions, conferences, workshops, seminars as well as school-based activities. Other approaches include on-the-job training, networking, benchmarking visits, symposia and lectures, as well as joining professional organizations. More complex and broad-based views on how to conceptualize teacher professional development have emerged with focus on measurement of professional development at both individual and community levels. The concept of professional development is becoming broader and includes ongoing professional learning opportunities that are embedded in the job (National Staff Development Council, 2010). In America, the No Child Left Behind (NCLB) Act (2001) focused on provision of high-quality professional development for teachers across all states in order to improve student academic gains. In China, the National Teacher Training Program (NTTP) was launched in 2010 to close the gap between rural and urban students' performance while in Tanzania, the Primary Education Development Program (PEDP) 2001-2006 was implemented to enhance the capacity of primary school teachers.

An integration of various approaches is required for optimal realization of professional development as no single approach can suffice. There is consensus in research on the critical characteristics that constitute an effective professional development approach. Effective professional development should; engage teachers in practical tasks and provide opportunities to observe, assess and reflect on new practices, be participant driven and grounded in enquiry, reflection and experimentation, be collaborative and involve the sharing

of knowledge. It should also directly connect to the work of teachers and their students, be sustained, ongoing and intensive and content focused to have a positive and lasting impact on classroom instruction and teacher performance (Darling-Hammond, 2009; Desimone, 2009). Hiebert et al., (2002) assert that there is growing consensus that PD gives the optimal results when it is long-term, school based and collaborative, actively involving all the teachers and focused on student learning. Collaboration entails teachers engaging with their peers at various levels using different platforms and strategies.

The aspect of effective PD being school based then put the school principal or head teacher at the centre of teacher professional development. A school head teacher is the overall leader charged with the responsibility of supervising curriculum implementation and ensuring that effective teaching and learning is taking place in the school. According to Day et al., (2000), findings of research from different countries and school contexts show that leadership has powerful impact on school effectiveness and improvement. The TSC-TPD program in Kenya envisions that instructional leaders are expected to initiate and support professional development activities for teachers at the school level. This view was also captured in the Teacher Performance Appraisal Tool (TPAD) in which the school heads were required to capture the teachers' training needs, provide feedback and interventions to close the identified gaps.

The major goal of any professional development program would be its impact on learner outcomes as it would be futile to use resources in these programs without influencing learning outcomes. According to Avalos, (2011) teacher professional development involves teachers' learning, how they learn to learn and how they apply their knowledge in practice to support pupil learning. Professional Development is also defined as activities designed to improve teacher knowledge, instructional practice, and student learning outcomes (Wei, Darling-Hammond, Andree, Richardson & Orphanos 2009). On the same vein, Darling-Hammond, Hyler & Gardner (2017), describe effective professional development as professional learning that is structured resulting in changes in teacher practices and improvements in student learning outcomes. There has however, been great concern with low learner achievement in sub-Saharan Africa, calling for the need to adopt robust and effective teacher professional development approaches leading to improved learner outcomes. The demand for improving the quality of teaching and learning and the need for accountability have put issues related with effective professional development high on the agenda of educators, researchers and policy makers (OECD, 2005). It is in cognizance of this that the Teachers' Service Commission rolled out the TPD program for all registered teachers with the objective of enhancing teachers' knowledge, skills and attitudes based on the Kenya Professional Teaching Standards (KePTs) and global best practices.

In Kenya, Bunyi, Wangia, Magoma and Limboro (2013) study recommended that a policy on continuous professional development be urgently put in place to institutionalize professional development as a strategy for improving the quality of teaching and education in Kenya. The Teachers' Service Commission developed the Teacher Performance Appraisal and Development (TPAD) tool in 2014 with professional development as one of the teacher competency areas (TSC ACT, 2012). The aim of the TPAD is to enhance professional growth and learning outcomes. The Teachers Service Commission further sought to enrich teacher professional development in Kenya by embracing the concept of lifelong learning and global best practices. The institutionalization of the practice and involvement of teachers in Professional Development is a regulatory role of the TSC as mandated by the Constitution of Kenya (2010), TSC Act, 2012 and the Code of Regulation for Teachers (2015). Consequently, in December 2021, The Teachers Service Commission rolled out the Teacher Professional Development (TPD) program anchored on the Kenya

Professional Teaching Standards (KePTS) and a Competency Based Framework Model for TPD with the following aims: to professionalize teaching by continuously developing and improving teachers' skills, competencies and knowledge in line with the demands of the 21st century; to enrich teachers' professional knowledge, understanding and application of the concept throughout their teaching career; to afford Kenyan teachers global compliance to acceptable standards as with other professionals; to align teaching with modern pedagogical approaches using the Competency Based Teacher Education Model.

In Kenya different initiatives by government, partners and educational institutions have been mounted with a view to enhancing teacher quality through teacher professional development. Since 1988, Japan International Cooperation Agency (JICA) has partnered with the Kenyan Government in provision of In-Service Education and Training (INSET) with a view to raise the quality of teaching mathematics and science in primary and secondary schools. The Teacher Education and Professional Development program was a partnership between USAID, the Ministry of Education and the private sector between May 2007 – May 2013 at a cost of \$10.5 million. The program supported public teacher training colleges in strengthening the skills and expertise of educators, to prepare them to deliver quality education. Teachers have been involved in various programs that include acquisition of higher academic qualifications, workshops and seminars. However, TSC notes that most of these programs had shortcomings which include failure to address individual teacher's performance gaps, provision of equal opportunity to all teachers, the programs are not compulsory nor continuous and do not offer any motivation for continuous learning throughout one's career life. However, Darling-Hammond, *et al* (2017) in a review of several studies identified seven features of effective professional development namely, content focused, incorporates active learning, supports collaboration, uses of models of effective practice, provides coaching and expert support, offers feedback and reflection and is sustained over a long duration. Njihia (2019) established that only 7.7% of teachers in Kenya engaged in collaborative TPD programs with a majority being engaged in infrequent short duration courses that had little impact on learner outcomes. This calls for an introspection of the features of the TPD program adopted by TSC to ensure the aspect of collaborative and active engagement of teachers is embraced both nationally and at the school level.

Structure of the Teacher Professional Development Program in Kenya

The Teacher Professional Development program is established, coordinated and structured by TSC and is compulsory to all registered teachers regardless of whether they are practicing or not. The activities involve a lifelong learning journey. The objective of the TPD program is to equip participants with professional knowledge, skills and attitudes to address pedagogical and content knowledge using the Competency Based Teacher Education Model. The model is anchored on the seven Kenya Professional Teaching Standards (KePTS) namely:

- Standard 1: Teacher Promotes Professionalism throughout their Career*
- Standard 2: Teacher has Pedagogical Content Knowledge and understanding of competency- based Curriculum and how to implement it.*
- Standard 3: Teacher has knowledge on assessment and reporting*
- Standard 4: Teacher Knows how to Create and Support Inclusive Education Practices*
- Standard 5: Teacher Knows and Promotes Comprehensive School Health and Safety*
- Standard 6: The Teacher has Knowledge of Financial Literacy Skills*
- Standard 7: The Teacher Knows and Promotes Instructional Leadership and Administration*

The TPD program is structured into six (6) sequential levels based on KePTS. The learning activities are delivered through prescribed models developed by the TSC as well as school based activities. The prescribed models are a set of standardized units prescribed by TSC that may be delivered through combination of different modes such as face to face, written works and online platform with interactive interface, and blended approach. The TSC has partnered with other service providers in the education sector to offer this TPD program. The current service providers are Kenyatta University, Mount Kenya University, Riara University and Kenya Education Management Institute (KEMI).

The introductory module has five (5) chapters that introduce participants to TPD and the Kenya Professional Teaching Standards and is expected to be completed within one year. The content of each chapter is for both teacher and instructional leaders and is offered through the online mode. This will be followed by face-to-face sessions that will run for five days during the school holidays at Training Centres within Sub-Counties. The service providers are expected to send facilitators to these centres to engage with the teachers.

The school-based activities are TPD activities shall be organized by the heads of institutions at the school level. At the school level, the instructional leaders will plan a school initiated TPD under their supervision. Other modes of delivery will include Participation in a country network of teachers to create a community of practice among teachers; Follow up observation visits to schools by university teacher educators to provide feedback and support; Mentoring and peer observation (Lesson Study).

The Teachers' Service Commission has embraced the use of Experiential learning model and collaborative learning in the delivery of the program where teachers learn, share, collaborate and reflect on new learning then apply the learnt knowledge and skills in their practice. The process of experiential learning involves self-reflection, assessment and hands on activity. Experiential learning has developed a holistic philosophy of education based on the view that an individual's life experiences, education, and work play a central role in their learning process of acquiring new knowledge (Fry, Ketteridge & Marshall 2009). Experiential learning is where the learner participates in an activity, reflects on the activity, and then applies the lessons learned in new situations. This learning model allows teachers and learners to, share and collaborate effectively in the context of professional learning communities.

Statement of the Problem

Teacher professional development is a critical component in improving teacher competencies and consequently impacting positively on provision of quality education and improved learning outcomes. Effective teacher professional development encompasses essential features that include being continuous, sustained duration, collaborative, job-embedded incorporates active learning and offers opportunities for reflection and feedback. In Kenya, teachers have been engaging in diverse professional development programs ranging from formal training in institutions, workshops and seminars as well as government sponsored programs at both national and school levels. The majority of the programs were for short term with little impact on learner outcomes.

It is in the light of this, that in 2014, TSC introduced the Teacher Performance Appraisal and Development (TPAD) tool in public schools in Kenya with teacher professional development as one of the competency areas. The current intervention that the commission has incorporated is a teacher professional development program that is anchored on the Kenya professional Teaching Standards and global best practices. This

program embraces the concept of ongoing lifelong learning, collaboration among teachers and educators at national and school levels.

Currently, nearly a quarter of the teaching force is registered for the program with the various TSC accredited service providers. The first cohort that joined the program in December 2021 has completed the introductory online module and will be due for the face-to-face sessions in 2023. It is therefore imperative to explore the lessons learnt especially on the level of collaboration through professional learning communities and role of instructional leaders with a view to identifying gaps and providing insights for improvement based on literature review, best practices and lived experiences of authors as program facilitators.

Objectives

- To find out the extent to which Professional Learning Communities have been established
- To establish the extent to which teachers are utilizing the Professional Learning Communities
- To establish the role of the instructional leaders in teacher Professional Learning Communities

Methods

This paper was based on desktop review of literature on Teacher Professional Development, documentation of best practices and lived experiences of authors as facilitators in the Teacher Professional Development program being rolled out by the TSC in Kenya.

Discussion of Findings

Characteristics of Effective Teacher Professional Development

Professional Development is defined as activities designed to improve teacher knowledge, instructional practice, and student learning outcomes (Wei, Darling-Hammond, Andree, Richardson & Orphanos 2009). Further, Darling-Hammond, Hyler & Gardner (2017), define effective professional development as professional learning that is structured resulting in changes in teacher practices and improvements in student learning outcomes. It comprises formal or informal activities that teachers undertake in order to continuously improve their pedagogical skills, management skills and learner outcomes. This points to an engagement that entails the continuous updating of professional knowledge and improvement of personal competence throughout one's teaching life.

Sustainable Development Goal 4 puts emphasis on quality with target 4.c focusing on professional development of teachers as teachers are a fundamental condition for guaranteeing quality education. It is therefore critical that teachers are exposed to professional development opportunities that will have an impact on their competencies which will in turn translate to improved learning outcomes. Darling-Hammond, Hyler, Gardner (2017) in a review of several studies identified seven features of effective professional development namely, content focused, incorporates active learning, supports collaboration, uses models of effective practice, provides coaching and expert support, offers feedback and reflection and is of sustained duration.

Wei et al., (2009) & Penuel et al (2007) also note that effective professional development programs have the component of improving teacher knowledge, providing job-embedded opportunities for teachers to collaborate on issues that are very close to the classroom. Effective professional development should; engage teachers in practical tasks and provide opportunities to observe, assess and reflect on new practices, be participant driven and grounded in enquiry, reflection and experimentation, be collaborative and involve the sharing of knowledge. It should also directly connect to the work of teachers and their students, be sustained, ongoing and intensive and content focused to have a positive and lasting impact on classroom instruction and teacher performance (Darling-Hammond, 2009; Desimone, 2009). Desimone (2009) identified five characteristics of teachers' learning that should be prominent if the knowledge and skills of teachers are to be strengthened and their practice improved to impact on learning outcomes. These characteristics are: content focus, active learning, coherence, duration and collective participation or co-operation. Effective Teacher Professional Development is the continuous updating of professional knowledge and improvement of personal competence throughout one's teaching life.

The TSC-TPD program took into account a number of the highlighted features of an effective professional development program. The program is structured in a manner that the teacher will be engaged in learning throughout their career life. This program embraces the concept being continuous and sustained as teachers are engaged both at the national, cluster and school levels. This concept of lifelong learning is one that has not been taken in well by a number of teachers. This stand may arise from a number of perception for instance the need to maintain the status quo, the feeling that one is well equipped to teach, failure to grasp the changing education landscape, or inadequate knowledge on the importance of such a professional development program. A number of the participants in the first cohort raised some of these issues in the training sessions. The lesson learnt is that TSC in collaboration with stakeholders needs to sensitize all teachers on the importance of engaging in a lifelong learning career journey. Desimone (2009) avers that for any professional development program to be effective, it must be continuous and long term. According to Fullan (2009), only 10% to 20% of American teachers engage in meaningful professional development while 90% of them participate in professional development consisting mainly of one day or short-term workshops and conferences. It is therefore necessary to ensure teachers are involved in professional development programs that are ongoing and sustained.

Collaboration is a critical element of any professional development approach for it to be deemed effective. Cordingley, Bell, Evans, & Firth, (2005) reviewed seventeen studies of collaborative and sustained continuing professional development (CPD) in various contexts, and established that collaborative professional development activities, brought about improvement in pupils 'learning and behaviour, teaching practices, attitudes and beliefs. The TSC captured this element in its TPD program by utilizing experiential learning and collaborative models. This approach was adopted by the service providers where teacher engaged in online classes via various platforms. The teachers were expected to engage and share with their colleagues via online break out rooms, conduct group processing and reflections then share in the plenary. This provided the teachers with opportunities to meet with new colleagues from across all regions in Kenya, take up new roles in the groups as well as learn and share their skills and knowledge.

The level of collaboration during these sessions was quite high and majority of the participants felt that the time provided for the breakout sessions was short. This attests to the fact that teachers were enjoying sharing and learning from each other. This level of collaboration can be enhanced by putting mechanisms in place

to support continued engagement after the training session at the national, cluster and school levels considering that a study by Njihia (2019) in Kenya reported that only 7.7% of teachers in Kenya engaged in collaborative TPD programs.

Teacher Professional Development and Learning Outcomes

Empirical research has shown that professional development can influence teachers' classroom practices significantly and lead to improved student achievement. Three areas of impact have been identified emanating from teacher professional development programs including the effect on influencing how students learn a particular subject matter: improving instructional practices and strengthening teachers' knowledge of specific subject-matter content.

Cohen (2001) found out that teachers whose learning focused directly on the curriculum they would be teaching were the ones who adopted the practices taught in their professional development. These teachers embraced new curriculum materials when they were supported by training and, in some cases improved their student assessment techniques. The study also showed that students of teachers who participated in this kind of curriculum-focused professional development did well on assessments. The TSC program was well linked to the Competency Based curriculum that is currently being implemented in Kenya.

Effective professional development strongly links teacher and student learning, and the quality of teachers is a significant factor explaining student achievement (Clotfelter, Ladd, and Vigdor 2007; Rivkin, Hanushek, and Kain, 2005). The TSC-TPD program seeks to improve the quality of teachers by enhancing teacher competencies, skills and attitudes. It would be critical at this point in the roll out of the TPD program to focus on the ultimate goal of such a program, which is improved learning outcomes. For this to be realized, the Commission has to focus on the level of teacher acquisition of the expected competencies and skills and further the influence of the same in schools and classrooms. As has been observed, weak assessment practices and systems is one of the contributing factors to low quality education in Sub-Saharan Africa. The TSC is vigorously involved in monitoring the implementation of the TPD program by the accredited service providers, however, this need to be escalated to the cluster and school levels to track its effect on the teacher cohorts and further on learning outcomes which are already in a crisis in Sub Saharan Africa (UNESCO, 2017).

Teacher Professional Learning Communities

Collaboration, shared inquiry and learning from and with peers are paramount aspects of professional development. Learning through colleagues is seen as a foundation for career growth. According to Ma, (2010) collaborative on-going teacher learning through participation in professional communities of inquiry is a powerful means for successful and empowering teacher learning. The adoption of experiential learning model and collaborative learning strategies during the delivery of the introductory online module attests to the Teachers' Service Communion's recognition of the critical impact of collaboration and sharing on learning. Lieberman et al. (2016) emphasises the importance of collaborative professional learning as a key component in raising teacher quality and securing student learning. A study in Kenya by Kariuki and Itegi, (2020) established that teachers' participation in collaborative activities such as peer coaching, team teaching, sharing and lesson observation have a positive influence on learner achievement.

The paradigm of professional learning communities has become a prevalent framework for teachers' professional learning and development (Watson, 2014; Turner et al., 2018). A professional learning community is a team of educators who share ideas to enhance their teaching practice and create a learning environment where all students can reach their full potential. These networks are essential as they allow teachers opportunities to directly improve teaching and learning by reflecting on instructional practices and student outcomes. The TSC envisages that through teacher professional learning communities at the national and school level teachers will share ideas and reflect on their practice. Through this intervention, they will sharpen each other and keep abreast with new knowledge in pedagogy and subject matter and consequently enhance learner outcomes.

The key components of a successful Professional Learning Community are learning-collaboration-results. This points to the fact that the end result of the teacher collaboration should be evident in improved teacher competencies and learning outcomes that can be supported by data. It is in the light of this that the TSC in partnership with educational stakeholders should put structures in place to support teacher collaboration through professional learning communities at the national, cluster and school levels. If well managed and structured, professional learning communities can help teachers innovate in the classroom and impact on learner outcomes. According to Jones, (2013) evidence suggests that teachers' work within successful PLCs to improve instruction which may lead to improved student achievement. Harris and Jones, (2010) and Weissenrieder et al., (2015) aver that there is consensus that PLCs improve instruction by offering teachers and other staff members opportunities to reflect on and refine their instructional practices. However, Wenger (2011) suggested that teachers' communities of practice improve learning and teaching in PLCs only if teachers collaborate, address hard questions about practices, and seek to change their practices.

UNESCO (2020) notes that teachers around the world have stressed the importance of collaboration and professional relationships with colleagues to improve their teaching practice. This is a call to action by all stakeholders to support initiatives that promote opportunities for teachers to share knowledge and experiences.

Role of Instructional Leaders in Teacher Professional Learning Communities

Teachers are the professional leaders of learning in their classrooms and in their schools. Teachers must have access to continuous professional learning and development throughout their careers. The status of teachers needs to focus more on empowering and supporting teachers to stand at the centre of what they do the teaching and learning process. Effective PLCs can only thrive in supportive conditions and environment.

During the World Education Forum in Incheon (Republic of Korea) in May 2015, participants committed to ensure that 'teachers and educators are empowered, adequately recruited, well-trained, professionally qualified, motivated and supported within well-resourced, efficient and effectively governed systems. Timperley et al., (2007) also asserts that it is the responsibility of the school leaders to promote teacher professional development. Weinner and Campbell, (2016) note that teacher leadership is focused on roles beyond the classroom, such as supporting the professional learning of peers, influencing decision making, and focusing on student learning. This form of leadership needs to be supported by the school formal leaders if the PLCs are going to have an impact on teachers and eventually learning outcomes.

The TPAD tool that has been in use in public schools in Kenya since 2014 has not been quite effective in providing feedback to teachers especially on professional development gaps. This responsibility was placed on the appraisers at the school level namely, head teacher, deputy head teacher and Head of Departments. Feedback assists teachers to learn their level of professional abilities and make appropriate adjustments for improved performance. Kariuki and Guantai (2020) established nearly 50% of the teachers reported they did not receive feedback on their appraisal hence not much was done in far as their professional development is concerned. There were also no established support systems in the school for their professional development. A report by OECD (2009) confirmed that teachers did not receive their feedback quite often even in developed countries. Teachers need constructive feedback from skilled practitioners in order to improve their teaching. However, research suggests that feedback and support is often not a common occurrence in schools (OECD, 2009, Zatynski, 2012).

School principals and head teachers therefore need to be equipped to support a positive school culture and environment for learning communities to thrive. Studies have argued that a positive school climate and school culture may improve student achievement and a school's development as a professional learning community (Wang and Degol, 2016; Toole and Louis, 2002). If teachers are guided and supported in building and utilizing professional learning communities effectively, it may be a positive move towards addressing the learning outcome crisis in Sub Saharan Africa.

Conclusion and Recommendations

The Teachers Service Commission in its endeavor to enhance the quality of teachers and instruction has put in place a TPD program that has captured significant aspects of an effective Professional development intervention. The key features of this program are lifelong learning throughout a teacher's career life, collaboration, sharing and learning with and among colleagues, school-based learning activities under the supervision of the instructional leader and active learning through experiences. This was witnessed during the synchronous online sessions in which participants from across all regions in Kenya learnt, shared and collaborated freely. This to an extent supports the formation and utilization of professional learning communities at the national level. There is need however, to cascade this to the cluster and school levels to continuous learning and sharing considering the first cohort that joined the program in December 2021 has since completed the introductory online module This is likely to have more impact on teacher competencies and learning outcomes.

The first cohort of participants in the TPD program reported through the final synthesis report that they learnt a lot from their peers especially during the breakout sessions. A number of them have been good ambassadors of the program hence the increasing number of teachers showing interest in the TPD program. Participants in the first cohort were actively involved in the learning and sharing sessions as captured in their personal reflections and e-portfolios they have uploaded in the university's Learning Management System.

The role of head teachers in teacher professional learning communities is clearly captured in literature however, this did not feature strongly in the online delivery of the introductory module. This therefore calls for TSC to build the capacity of the instructional leaders to ensure they play an effective role in building and supporting professional learning communities at national, cluster and school levels

There is a need for continuous monitoring of the program, not just at the national level but also at the cluster and school level. This will ensure that the online teacher collaboration that took place nationally during the delivery of the introductory module was ongoing at the cluster and school levels.

Despite teething problems that are common to all novel programs or interventions, the TSC-TPD program has potential to build effective teacher Professional Learning Communities nationally and in the region in the long term. The program has also the prospect of supporting active learning communities at the cluster and school level if all teachers and instructional leaders are brought on board. The success of this intervention also requires enhanced collaboration among key education stakeholders-teacher unions, partners, heads associations and teachers in Kenya.

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