11-2021

Reflective practices as the cornerstone for teacher development in the 21st century: Lessons from educators' action research projects

Musa Saimon
College of Business Education, TANZANIA

Fredrick Mtenzi
Aga Khan University, fredrick.mtenzi@aku.edu

Recommended Citation

Saimon, M., & Mtenzi, F. (2021). Reflective practices as the cornerstone for teacher development in the 21st century: Lessons from educators' action research projects. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, *11*(2), 88-100.

Journal of Research, Policy & Practice of Teachers &
Teacher Education (ISSN 2232-0458/ e-ISSN 2550-1771)
Vol. 11, No. 2, December 2021, 88-100

Reflective practices as the cornerstone for teacher development in the 21st century: Lessons from educators' action research projects

Musa Saimon[1] and Fredrick Mtenzi[2]
[1]*College of Business Education, Tanzania*
[2]*Aga Khan University, Tanzania*
Corresponding author: musa.saimon40@gmail.com

To cite this article (APA): Saimon, M., & Mtenzi, F. (2021). Reflective practices as the cornerstone for teacher development in the 21st century: Lessons from educators' action research projects. *Journal of Research, Policy & Practice of Teachers and Teacher Education, 11*(2), 88-100. https://doi.org/10.37134/jrpptte.vol11.2.7.2021

To link to this article: https://doi.org/10.37134/jrpptte.vol11.2.7.2021

Received: 04 September 2021; **Accepted**: 09 November 2021; **Published**: 11 November 2021

Abstract

Research has shown that reflective practices improve teaching practices, which makes them valuable in the 21st century where the teaching context is complex due to increasing technological innovations and diversity among learners. However, it is hardly practiced among teachers. As a result, the present study aims at highlighting how reflective practices could improve teaching practices in a challenging context. The study adopted a Self-Study qualitative research approach. The data were collected through reflection, observation, and interviews from two collaborating researchers, primary school teachers, and students. Data were analyzed thematically. Findings show that reflective practices improve four main aspects of teaching practices namely assessment, teacher-student role in the classroom, teacher pedagogical competence, and teacher awareness on integrating ICT in the classroom and teacher proficiency in technology. It was revealed that RPs were effective in meeting TPD qualities. The study calls for teacher-educating institutions to ensure that teachers are provided with skills for developing reflective practices.

Keywords: Action research, cornerstone, educator, reflective practices, teaching practices, the 21st century

Introduction

Teaching context in the 21st century is increasingly challenging. This is attributed to the diversity of learners' needs, pedagogical innovations, and the need for developing 21st-century skills such as problem solving and creativity among others (Darling-Hammond, Hyler, and Gardner 2017a; Farrell 2013; Zwozdiak-Myers 2012). Consequently, Teacher Professional Development (TPD) has become inevitable in the effort to empower them to cope with new teaching demands. Such a significance of TPD is summed up by Farrell (2013, p.19) when reflects on English language teachers, "So there are growing calls within the ELT profession

for language teachers to regularly revisit what they know and what they think they know about teaching and learning and thus pursue various forms of professional development throughout their careers." Therefore, it can be argued that effective teaching in the 21st century is determined by the quality of TPD that a particular teacher undergoes.

Traditionally, TPD has been run in the form of teachers' training through qualification courses and workshops (Farrell 2013). However, it has received criticism because of being more theoretical, time-consuming, and less engaging for teachers (Farrell 2013; Loughran 2005) [1], [4]. As Farrell (2013 p.19] argues, "…teacher development initiatives introduced before the 1990s were very linear in nature suggesting that teachers 'develop' in clearly defined, and fixed steps." This shows how traditional TPD could fail to effectively equip teachers to cope with actual classroom challenges. Therefore, this attracted the search for an alternative form of TPD that could meet the teaching demands of the 21st century.

In response, scholars have proposed the use of Reflective Practices (RPs) as the best alternative to TPD (Farrell 2013; Loughran 2005; Zwozdiak-Myers 2012). This is because RPs enable teachers to practically learn and develop skills that are relevant to their actual classroom contexts (Farrell 2013; Loughran 2005; Zwozdiak-Myers 2012). Farrell (2013, p.8) describes, *"...*is more focused towards classroom realities, based on knowledge that is co-constructed through engagement with experience, and systematic reflections, and is grounded in real teaching situations." Therefore, continuity, engagement, contextual relevance, and convenience of RPs are among the characteristics that make it suitable for the dynamic needs of teaching in the 21st century.

However, in Tanzania RPs are hardly practiced by teachers despite the high need for TPD. Instead, teachers rely on qualification courses for TPD, which risks their teaching efficiency in the increasingly challenging environment. This could be caused by a lack of evidence on how RP transforms teaching practices. Marcos, Sanchez, and Tillema (2011) argued that the majority of proponents of RPs lack empirical evidence on how RPs can be practiced and what role they can play to improve teaching practices, which limits teachers from being well informed with RPs. Consequently, the present study investigates the role of RP in TPD.

Research objectives

General objectives

To investigate the role of RP in TPD

Specific objectives

a. To determine teaching areas of improvement that RPs influence
b. To assess the effectiveness of RPs for TPD.

Teacher professional development framework

TPD involves teachers' engagement in either formal or informal activities that improves their knowledge, attitude, belief, and skills about teaching (Farrell 2013; Loughran 2005; Richards and Farrell 2005; Zwozdiak-Myers 2012). According to Farrell (2013), the main areas of focus include self-awareness, subject-knowledge, pedagogical expertise, curriculum and materials, understanding of learners, and career advancement.

The introduction of TPD is attributed to various factors such as impartiality of pre-service teacher education, change in teaching approaches, and increasing diversity of learners (Farrell 2013; Zwozdiak-Myers 2012). As Zwozdiak-Myers (2012, p.21] posits,

> Schools are expected to: effectively accommodate pupils from diverse backgrounds and with different languages; be sensitive to gender and cultural issues; promote social cohesion and tolerance; respond to disadvantaged pupils and those with learning and behavioural difficulties; use new technologies; and keep pace with rapidly developing fields of knowledge and approaches to pupil assessment.

This shows how the complexities of teaching context dictate teachers to undergo professional development.

Given the potential significance of TPD to improve teaching practices, scholars highlighted qualities of effective TPD namely: engaging for teachers, being continuous, and addressing all teaching aspects (teaching approach, students, curriculum, and content) (Bayar 2014; Darling-Hammond, Hyler, and Gardner 2017b). Based on these qualities it became clear that the traditional approach of TPD seemed deficit. This is because this mode of TPD focuses on general context of teaching and makes teaching less active in constructing knowledge about teaching (Loughran 2005). Reflecting on the changing classroom context, Majid, Ean, and Leng (2016, p.34) posit, "An effective teacher in the 21st century needs to be able to empathize with students, motivating them and bringing the best out of them." This shows how demanding the teaching profession grows time after time. Consequently, reflective practices came in place as an alternative to meet the qualities of TPD. As Loughran (2005, p. 3] argues, "…one aspect of teacher education that continually receive attention in both curriculum and research is the way teacher think about their practices." Therefore, RPs were introduced to improve TPD.

The evolution of reflective practices

RPs involve critical analysis of the challenging solution in search of the better solution. As Loughran (2005, p.13) put it, "The purpose of reflecting is to untangle a problem or to make more sense of a puzzling situation; reflection involves working toward a better understanding of the problem and ways of solving it." RPs' evolution is associated with Dewey (1933)'s idea of how "We Think" in the context of education (Loughran 2005). In Dewey's view, education is to interact with the environment from which an individual collects experiences that dialectically affect both the individual and environment (Loughran 2005; Rodgers 2002). As Rodger (2002, p.846) reflects,

Dewey goes on to point out that because experience means interaction between oneself and the world, there is a change not only in the self but also in the environment as a result. The effect is dialectical with implications not only just for the learner but others and the world. Through interaction with the world we both change it and are changed by it.

However, for this experience to be fruitful, one must continually interact with the environment continually, and be able to make meaning by linking all the experiences (Rodgers 2002). As Rogers [8, p.848] clarifies, "...an experience is not the same as thought. Rather, it is the meaning that one perceives in and then constructs from experience that experience value. An experience exists in time and is therefore linked to the past and the future." Therefore, this shows that the attention that a person gives to the experience is what matters to enable one to be transformed and for the environment to be transformed.

Dewey proposed five phases of reflection namely suggestion, intellectualization, the hypothesis, Reasoning, and Testing (Loughran 2005; Rodgers 2002). The suggestion

involves consideration of various possibilities of acting. On the other hand, intellectualization is all about defining causes and ways to solve existing problems. Besides, the hypothesis involves the development of a possible course of action. Reasoning, unlike hypothesis, is an application of the opted course of an action whereas Testing deals with an observation of the implemented course through which the solution is proved effective or a new problem is noticed. However, Dewey argued that these phases are not linear and not necessarily all of them be involved, instead, the sequence and the number of phases may vary based on the priority of an individual (Loughran 2005; Rodgers 2002). Therefore, as time went on, scholars such as Schön (1987), who proposed theories/models of RPs as part of Professional development including TPD, made RPs popular in TPD.

Research experience on reflective practices for teacher professional development from the globe

Studies related to RPs for TPD show mixed findings as presented in Table 1.

Table 1. Summary of Research Findings on RPs for TPD in the world

Study and Context	Study Focus	Findings
(Marcos et al. 2011) systematic Literature Review	Exploration of the discrepancy between research and practices of RPs	Research hardly offered empirical-based knowledge about RPs
(Lane et al. 2014) Australia	Examination of the reflective practices of the pre-service teacher at the University of Sydney	Their reflection model involved noticing/describing, analyzing/evaluating, and imagining differently
(Motallebzadeh, Ahmadi, and Hosseinnia 2018) Iran	Investigation of the relationship between English Foreign Language teachers' reflective practices and their teaching effectiveness	RPs was an attribute to the effective teaching
(Lee and Mori 2021) Japan	Identification of reflective strategy that mostly influences Self Directed Learning (SDL)	Out of collaboration, self-reflection, and peer feedback, collaboration was the most significant predictor of SDL competencies.
(Min, Mansor, and Samsudin 2016) Malaysia	Investigation of student teachers' level of reflection during clinical experience	Before exposed to reflective practices student teachers hardly demonstrated reflection.
(Ann, Swanto, and AlSaqqaf 2018) Malaysia	Observation of perceived challenge among pre-service teachers of ESL in their reflection	They have little knowledge about reflection and strategies for effective reflection

(Hennessy, Haßler, and Hofmann 2015) Zambia	Investigation of constraints in TPD for interactive instruction use of technology	Lack of reflection led to teachers' misconceptions about students, pedagogy, and the use of technology.
(Haßler et al. 2015) Zambia	Evaluation of the use of RPs in school-based TPD	Dialogical reflection enabled teachers to modify their teaching strategies

Based on the research findings as shown in Table 1, it is clear that empirical evidence is needed to enable teachers to practice RPs. This is revealed by Marcos et al. (2011) who observed that lack of empirical evidence limits teachers from adopting RPs in their teaching. This makes the present study significant towards facilitating teachers to adopt RPs.

Besides, Table 1 indicates that RPs modify teaching practices (Haßler et al. 2015; Hennessy et al. 2015; Motallebzadeh et al. 2018). This shows how RPs are relevant to TPD. However, the majority of these studies (Hennessy et al. 2015; Marcos et al. 2011; Motallebzadeh et al. 2018) offer little or no information at all on the model of RPs adopted and the teaching aspects that were improved. Only the minority (Haßler et al. 2015) has explicitly the model of RPs adopted by teachers in Zambia and the teaching areas that were improved. This implies the need for a more detailed model that can guide teachers' adoption of RPs.

In response to the need for a clear model for RPs for TPD, Lane et al. (2014) observed if students undergo RPs through sequential activities of noticing/describing, analyzing/evaluating, and imagining differently are likely to improve their teaching aspects. Likewise Ann et al. (2018) and Min et al. (2016) revealed how lack of guidance on how to reflect limited student teachers from engaging in reflective practices in Malaysia. However, the reflective strategies indicated in these studies do not clearly show teaching areas that could be improved. Despite its contribution to the useful model for RPs for TPD, it does not guarantee teachers to adopt it because they cannot know specific teaching areas that the model could modify. Consequently, the present study intends to fill the gap by investigating areas that could be improved through the use of such a model.

Research experience in Tanzania on the use of reflective practices for teacher professional development

Teachers in Tanzania, like in any other country in the globe, need effective TPD to cope with the challenges of teaching contexts. This has attracted research attention, especially on RPs as it is regarded to be the most effective mode of TPD. Table 2 summarizes research findings on RPs for TPD from Tanzania

Table 2: The Summary of Research Findings on RPs for TPD from Tanzania

Study	Study Focus	Findings
(Dachi 2016)	Identification of missing dimension of TPD in primary and secondary schools since Arusha declaration	Teacher Competencies on ICT and school-based TPD designing are the missing dimensions
(Mwakabenga, Kavenuke, and Kinyota 2019)	Highlighting Lessons that Tanzania TPD	Formalization of school-based TPD and encouragement of individual initiatives are the main lessons highlighted

	should learn from China	
(Losioki 2020)	Exploration empowerment and TPD among secondary school teachers in Mkuranga district	TPD is dominated by qualification causes. Student handling and self-efficacy are among the area that needs improvement

Table 2 indicates the need for the shift from qualification course as a mode of TPD to RPs. This is because qualification course fails to improve teaching practices (Dachi 2016; Losioki 2020; Mwakabenga et al. 2019). For instance, Losioki et al. (2020) and Dachi (2016) observed that despite the training teachers receive through qualification courses, they still struggle in handling students and employing ICT in the classroom. Furthermore, these studies suggest the use of a school-based approach, which is the characteristic feature of RPs. Therefore, this shows the extent RPs are relevant in Tanzanian contexts.

However, none of these studies provide empirical evidence on the implementation of RPs for TPD in Tanzania. This means they are less informative to teachers who could wish to adopt RPs in their classrooms. To fill such a gap, the present study has focused on providing empirical evidence on how RPs can be implemented and their effectiveness for TPD in Tanzanian contexts.

Conceptual framework

Conceptual Framework is the researchers' understanding of the interrelatedness of various concepts related to the study at hand as presented in the reviewed literature (Adom, Hussein, and Joe 2018; Leshem and Trafford 2007). Based on the reviewed literature, we argue that teaching practices once subjected to RPs lead to effective TPD. Figure 1 represents the diagrammatic representation of the Conceptual Framework.

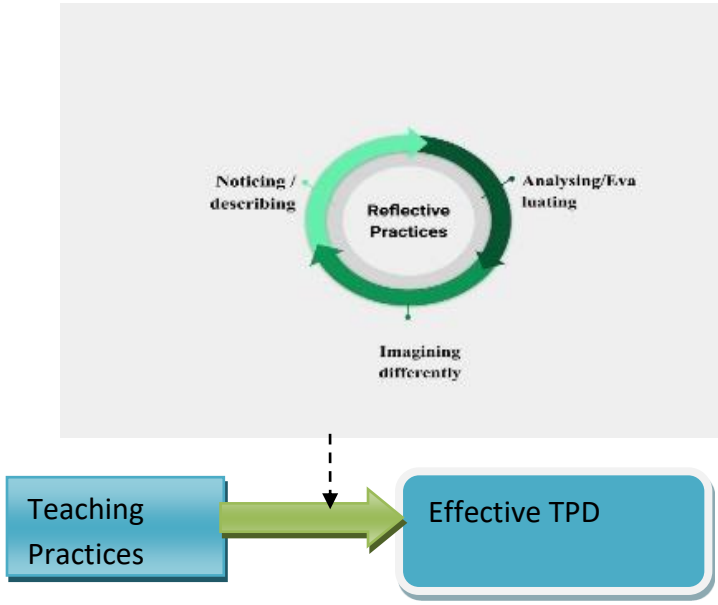

Figure 1: Conceptual Framework for Implementing RPs for effective TPD

Methodology

Research design

The present study adopted a Self-Study Qualitative Research Approach. The qualitative research approach focuses on the exploration of individuals' experiences in their action settings (Creswell and Creswell 2018; Pinnegar and Hamilton 2009). In a Self-study research context, though the focus is on the experience of the individuals, the researcher is interested in his or her own experience (Crowe 2010; Hamilton 1998; Pinnegar and Hamilton 2009). Crowe (2010) argues that in Self-Study for Teaching and Teacher Education Practices (S-STTEP), educators investigate how their improvements have resulted from their experiences. As Pinnegar and Hamilton (2009) underscores, "The self seeks to explore the gap between who I am and who I would like to be in my practice and studies that self and the others involved as the self takes action to reduce or alter that gap." (p 12) Since the present study focused on the researchers' improvements through our reflective practices, it aligned with the Self-Study Qualitative Approach.

Framework for inquiry

The study adopted the framework for inquiry that was proposed by Pinnegar and Hamilton (2009) as shown in figure 2. The framework was adopted for its clarity of the procedures involved in the research design.

What am I interested in exploring? What do I identify as problems in my practice, where my actions do not seem to match my values (living contradictions)? What issues do I want to further understand? What do I want to learn about these interests, issues, and concerns?
How could I explore these concerns and issues? What contexts might be most fitting? Who are the most appropriate participants – me? My students?
What methods might I use? What would count as evidence?
What work in teacher education research (or other research fields) will guide my inquiry? What beliefs are embedded in my questions? What values do I embody in my practice and research? How will I hold myself accountable? What do I expect to contribute to the knowledge base?

**Adopted from Pinnegar and Hamilton (2009)*

Figure 2: The Framework for Inquiry Planner

Implementation of framework for inquiry planner

The implementation of the framework for inquiry planner was done in two action research projects conducted in 2020 and 2021 as presented below.

Action research projects of September 2020 and March 2021

In both projects, the aim was to identify how reflective practices would enhance TPD in integrating mobile applications in the classroom. However, the September 2020 project was focused on the use of mobile applications in assessing language literacies in the summative

assessment of primary education in Tanzania. In contrast, the March 2021 project was focused on using the mobile application in teaching business communication in colleges. As a teacher and teacher educator, I felt obliged to seek for the way potential effective way to develop teacher literacies in using technology in the class because of their potential to improve classroom practices.

Context for exploration

The context for exploration was the primary school classroom where we interacted with standard seven students and the teacher who was the English language teacher. The choice for the classroom was motivated by the need to test my improvements against the actual contexts where technology has to be applied. Also, the English teacher and standard seven students were suitable for the study because they were the target consumer of the technology in the class. Consequently, we used one of the public primary schools in Ilala municipal in Dar es Salaam.

On the other hand, the college contexts involved our interaction with diploma II students in the classroom. The choice for the business communication course was based on the alignment of the researchers with the area of specialization.

Furthermore, in the primary school context, we implemented the assessment of language literacies using the Profuturo App. This was an app that was installed on the laptops and tablets that the school was sponsored by an international agency known as Profuturo. In the college classroom context, we implemented teaching of business communication using Google Classroom. This is a free app that can be downloaded from the play store or signed up to be used as a web service. We used Kami extension and Google slides to make it more functional for our classroom interaction purpose.

However, in the present study, we will not focus much on the role of RPs to students and the collaborating teacher, rather on ourselves as researchers. This is because the focus of the study is on the self about others. Pinnegar and Hamilton (2009) warn that being focused on the self, S-STTEP does not mean to isolate others, rather it acknowledges the role of interaction in generating knowledge, only that the generated knowledge is checked against the development of the self.

Data collection methods

Identification of data collection is another important aspect of the framework of inquiry for a planner because it serves as evidence for the presented findings (Pinnegar and Hamilton 2009). During the 2020 project in the primary school classroom, we collected data through the reflective journal, observation, and interviews. Apart from journaling our experience, we also collected data from students' reflective journals. Further, we observed students when taking the test using the mobile apps and conducted interviews with the collaborating teacher. Unlike in primary school classroom context, in the college classroom contexts, we collected data through journaling and observing students engaging in using the mobile application in their classroom activities.

Proponents of S-STTEP have lauded journaling, observation, and interviews as among the best qualitative methods for data collection in self-study research. For instance, on the usefulness of journals, Pinnegar and Hamilton (2009) underscore, "It includes the details of the day and the events of teaching, along with the reflection upon and the interpretations of practice." (p124). They also argued that interviews help in checking observed information. Therefore, it is clear that the methods for data collection in this study were effective for collecting needed information.

Research works to guide our inquiry

The study was guided by the research works such as Farrell (2013), Loughran (2005), and Darling-Hammond et al (2017b) among others, who view reflective practices as the best approach to effective TPD.

Data analysis

We analyzed data through thematic analysis. The thematic analysis involves coding data categorizing and identifying emerging themes. We adopted the framework of Miles and Huberman (1994). This framework involves three main activities: data reduction, this is data management activities such as coding and sorting; data display is compression of related data using a matrix, charts, or graphs to simplify data comprehension; drawing conclusion and verification involve coming up with a general statement about participants' view and theories. However, such activities are not linear rather they are interactive and iterative (Miles and Huberman 1994). Consequently, it allows the researcher to easily cross-check and verify all steps of analysis. Therefore, the need to effectively analysed data led us to adopt this framework.

Findings and discussion

The present study was guided by two specific objectives: to determine the teaching areas that RPs improve and; to assess the effectiveness of RPs for TPD. In this section, we present and discuss the findings from data analysis.

Presentation of findings

The findings presented in this subsection are organized based on the themes and subthemes drawn from specific objectives.

Teaching areas improved through reflective practices

Data indicate that teaching areas that RPs improve include assessment, teacher-student role, teacher-pedagogical competence, and classroom awareness on integrating technology in the classroom.

Data from students during September 2020 action research project indicate that students prefer authentic assessment because it makes them the confidence to use literacy in a real context. In addition, the data reveal that students value immediate feedback to avoid debating about what was the right answer. For instance, one of the students' reflective journals reads, "when you go out of the examination room without knowing the right answers, you keep on debating with friends." This shows that students view assessment feedback as a solution to unnecessary debate among themselves.

On the question of teacher-students role, data from March 2021 project show that taking the collaborating role between teacher and students improves teaching and learning. For example, during the installation of the Google classroom app, students who were helping others grew confidence and those who were being helped seemed to be more comfortable than before. Also, it was observed that students prepared PowerPoint presentations using features such as customizing the background, which we did not teach them. This shows that when

teachers and students take the collaborating role rather than that of a leader and a follower, it facilitates both teaching and learning.

Moreover, data indicate that teacher-pedagogical competence is another teaching area of improvement that results from RPs. During both September 2020 and March 2021 projects, we improved our knowledge on employing technology in the classroom and using a student-centered approach. This is because the need to improve our actions during these projects forced us to search for more knowledge and skills on using mobile applications to facilitate language literacies. Some of these skills include using Kami extension with Google classroom to maximize the accessibility of learning materials. In addition, we gained skills on how to motivate students to engage in learning tasks collaboratively. For instance, to ensure that all students attend group discussion hours, we asked them to take a photo and attach it with the PowerPoint as they submit it. This motivated them to actively participate in the group assignment.

Above all, it was clear that RPs raised our awareness on integrating technology in the classroom. Some of the insights we gained include students being more digital skilled, dealing with limited resources such as lack of internet access, the role of teacher-technological skills, and technical support to students. During our September 2020 project, interviews with the teacher showed that students were able to share information through their tablet via Bluetooth despite not being taught. Similarly in March 2021, project students customized the background of PowerPoint presentation without being taught. This shows that students are more digital skills than teacher thinks.

Data from our observation and reflection showed that integration of technology is possible when the teacher is technologically skilled and can reliably support learners. Initially, there are some features of the applications that we did not master well to the extent that we could not deal effectively with the challenges that students faced. Also, we did not give students mobile phones to reach us at any time. As time went on, we learned more about the applications and provided a mobile phone for learners to reach us anytime for help, this made even those who were hiding their smartphones ask for the installation of the applications. This made us learn that reliable presence and teacher competence in technology are vital aspects for the successful integration of technology in the classroom.

Another insight from the data is that integration of technology cannot be implemented overnight. Initially, the majority of students were facing difficulties submitting their assessment in Google classroom, and some of them had no smartphones. However, in a short course, all students were able to submit the work and the majority of them had had smartphones. This shows that successful integration of technology in the classroom needs time.

The effectiveness of reflective practices for teacher professional development

Data suggest that RPs were effective for TPD because they were engaging for teachers, continuous, and contextually specific. During both projects, we were actively engaging in determining potential solutions to classroom challenges. For instance, during the September 2020 project when the application (Profuturo) had no space for responses to the listening question, we went through the app tutorial until we customized the space for the responses. This shows that that dealing with such a challenge we had to actively engage in finding the solution. In addition, in the March 2021 project, we were forced to continuously engage in looking for a solution for improving learning, minimizing internet access among others. All these show that our improvement of knowledge and skills through RPs was active, engaging, continuous, and specific to our classroom context.

Discussion

Data suggest that RPs improve various teaching areas such as teaching approaches, assessment, and integration of technology in the classroom to mention a few. This implies that RPs enable teachers to improve holistically in the most focal areas needed for TPD. As we were gaining new insights on various areas of teaching at once, we could analyse how to incorporate such insights in specific teaching aspects such as student-teacher interaction without affecting negatively other teaching areas. As a result, our growth in teaching was holistic. Farrell (2013) outlined pedagogical advancement, teacher self-awareness, understanding learners, and subject-knowledge as key areas that any TPD has to address. Based on this, the quality of TPD in terms of the areas of teaching that need to be addressed is reflected in RPs. Therefore, it is high time for teachers and teacher educators to consider the potential of RPs towards meeting the needs of TPD.

Moreover, RPs being active, continuous, and contextually specific as shown from the data, means RPs are effective to TPD. Such features are tipped to be the qualities of any effective mode of TPD (Darling-Hammond et al. 2017b). Our freedom to choose what to focus on for improvement and the need to continuously search for the best solution, facilitated to focus, reinforce, and internalize new knowledge and skills. Farrell (2013) and Loughran (2005) have noted that one of the deficits of the qualification approach to TPD is the assumption that there is a general solution to all classroom contexts and that teachers are knowledge consumers. This shows how features of RPs such as being contextually specific and engaging for teachers, make it the most effective mode of TPD. Therefore, teachers and teacher educators should adopt RPs to improve teaching and learning.

These findings are relatively similar to those from Haßler et al. (2015) and Hennessy and colleagues (2015) in Zambia, Motallebzadeh (2018) in Iran, and Lee and Mori (2021) in Japan who observed the role of RPs in improving teaching and learning. Such similarities could be influenced by the fact that when carefully observed, RPs improve teaching and learning in any context. However, they differ from Losioki (2020) and Dachi (2016) in Tanzania who noted a lack of RPs in Tanzania and thus low improvement in teaching and learning. This could be because the current study focused on what RPs bring to TPD in the Tanzanian context. While other studies (Dachi, 2016; Losioki, 2020) focused on examining the existing mode of TPD in the Tanzanian context. Additionally, these findings differ from Marcos and colleagues (2011) who noted a lack of empirical evidence on the role of RPs. This could be attributed to the different approaches that the two studies adopted. The present study adopted a self-study approach while Marcos and colleagues [5] conducted a systematic literature review.

Conclusions and recommendations

The present study aimed at investigating the role of RPs in TPD. The study adopted a self-study qualitative approach using the framework for inquiry planner proposed by Pinnegar and Hamilton (2009). Findings show that RPs improve various teaching areas such as assessment, teacher-pedagogical competence, teacher-student role, and teacher awareness on integrating technology. It is also revealed that RPs enable teachers to engage in improving their knowledge and skills actively, continuously, and contextually specific.

Therefore, it is recommended that teachers and teacher educators should consider the potential of RPs towards effecting TPD. Moreover, teachers and teacher educators should adopt RPs as a mode of TPD because of their effectiveness in improving teaching and learning.

References

Adom, D., Hussein, E., & Joe, A.-A. (2018). *Theoretical and conceptual framework: Mandatory ingredients of a quality research*. *7*(1), 438–441.

Ann, O. W., Swanto, S., & AlSaqqaf, A. (2018). Pre-service ESL teachers engaging in reflective practice: Current observations and perceived challenges. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, *8*(2), 5–18.

Bayar, A. (2014). The Components of effective professional development activities in terms of teachers' perspective. *International Online Journal of Educational Sciences*. doi: 10.15345/iojes.2014.02.006

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (Fifth edition). Los Angeles: SAGE.

Crowe, A. R. (Ed.). (2010). *Advancing social studies education through self-study methodology: The power, promise, and use of self-study in social studies education*. Dordrecht ; New York: Springer.

Dachi, H. (2016). Reflecting on five decades of teacher professional development in Tanzania: The missing dimensions. *Papers in Education and Development*, *36*.

Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, *40*(3), 291–309.

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.

Farrell, T. S. C. (2013). *Reflective Practice in ESL Teacher Development Groups*. London: Palgrave Macmillan UK. doi: 10.1057/9781137317193

Hamilton, M. L. (Ed.). (1998). *Reconceptualizing teaching practice: Self-study in teacher education*. London ; Bristol, PA: Falmer Press.

Haßler, B., Hennessy, S., Cross, A., Chileshe, E., & Machiko, B. (2015). School-based professional development in a developing context: Lessons learnt from a case study in Zambia. *Professional Development in Education*, *41*(5), 806–825. doi: 10.1080/19415257.2014.938355

Hennessy, S., Haßler, B., & Hofmann, R. (2015). Challenges and opportunities for teacher professional development in interactive use of technology in African schools. *Technology, Pedagogy and Education*, *24*(5), 1–28. doi: 10.1080/1475939X.2015.1092466

Lane, R., McMaster, H., Adnum, J., & Cavanagh, M. (2014). Quality reflective practice in teacher education: A journey towards shared understanding. *Reflective Practice*, *15*(4), 481–494. doi: 10.1080/14623943.2014.900022

Lee, B. J. (2021). Comparing factual recall of tapped vs. Handwritten text. *Acta Psychologica*, *212*, 103221. doi: 10.1016/j.actpsy.2020.103221

Leshem, S., & Trafford, V. (2007). Overlooking the conceptual framework. *Innovations in Education and Teaching International*, *44*(1), 93–105.

Losioki, B. E. (2020). *Professional development and empowerment among secondary school teachers in Mkuranga District, Tanzania*. *11*(24). doi: 10.7176/JEP/11-24-11

Loughran, J. J. (2005). *Developing Reflective Practice:Learning about Teaching and Learning through Modelling* (2nd ed.). London: Falmer Press.

Majid, H. A., Ean, C. B., & Leng, E. Y. (2016). Continuous teacher education process in school. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, *6*(2), 33–44.

Marcos, J. M., Sanchez, E., & Tillema, H. H. (2011). Promoting teacher reflection: What is said to be done. *Journal of Education for Teaching*, *37*(1), 21–36. doi: 10.1080/02607476.2011.538269

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed). Thousand Oaks: Sage Publications.

Min, W. Y., Mansor, R., & Samsudin, S. (2016). Student teachers' level of reflection during teacher clinical experience: A case study in a Malaysian university. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, *6*(2), 23–32.

Motallebzadeh, K., Ahmadi, F., & Hosseinnia, M. (2018). The relationship between EFL teachers' reflective practices and their teaching effectiveness: A structural equation modeling approach. *Cogent Psychology*, *5*(1), 1424682. doi: 10.1080/23311908.2018.1424682

Mwakabenga, R. J., Kavenuke, P. S., & Kinyota, M. (2019). *Promoting teacher professional learning in Tanzanian schools: Lessons from Chinese school-based professional learning communities*.

Pinnegar, S. E., & Hamilton, M. L. (2009). *Self-study of practice as a genre of qualitative research: Theory, methodology, and practice*. Dordrecht ; New York: Springer.

Richards, J. C., & Farrell, T. S. C. (2005). *Professional development for language teachers: Strategies for teacher learning*. New York: Cambridge University Press. Retrieved from https://doi.org/10.1017/CBO9780511667237

Rodgers, C. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *Teachers College Record*, *104*(4), 842–866.

Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions* (1st ed). San Francisco: Jossey-Bass.

Zwozdiak-Myers, P. (2012). *The teacher's reflective practice handbook: Becoming an extended professional through capturing evidence-informed practice*. Abingdon, Oxon ; New York, NY: Routledge.