



Development and Assessment of Reflective Skills among Teacher Trainees in Tanzania

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Abstract

Reflective skills are a required ability that needs to be developed and assessed in any teacher training institution for quality practice and overall professional effectiveness. This study employed a case study design in exploring how teacher educators viewed the development and assessment of the reflective skills to the pre-service student teachers and the challenges educators faced among two selected teacher training colleges in Kilimanjaro and Ruvuma Regions. Data was collected through structured interviews to a sample of 10 teacher educators from two teacher colleges. The study concludes that there are different approaches used by educators in as far as developing reflective skills is concerned. These include participatory methods, inquiry learning, research strategy, group discussion, question-answer strategy and portfolios. Participatory strategy was more often used as compared to the other strategies because it is very easy and simple to administer. Each strategy had some peculiar advantages. Teacher educators used various approaches in assessing reflective skills among pre-service student teachers. The strategies used include portfolios, single lesson practice, block teaching practices, problem-solving ability and projects. Each strategy used had some specific advantages as compared to the others. The challenges teacher educators faced in developing and assessing the reflective skills of the pre-service student teachers included personal, professional, psychological and institutional. The study recommends that teacher educators should make effective use of cognitive strategies while teaching. They should also furnish their knowledge and understanding of the subject matter for them to be acquainted with current innovations in order to minimize the notable challenges.

Keywords: Reflective practices, reflective skills, teacher education, pre-service teachers

Introduction

While the emphasis on reflective practice in teaching increased at the close of the 20th century (Reynolds & Beitter, 2007), Fund, Court and Kramarski (2002) and Humaira and Jane (2008) argue that the ability to think deeply is an important competency that teachers must possess in the current times. This emphasis makes it imperative that teachers should make thoughtful and relevant changes in engaging with intellectual practices that develop a deep understanding of teaching and learning in different ways which are stimulating and challenging (Kabilan, 2007; Reynolds & Beitter, 2007). Reflection is a key skill that helps to strengthen professions. It is a required ability

that needs to be taught for effective practice (Di Gursansky, Diana, & Eddie, 2010; Hartog, 2002; Kalliath & Coghlan, 2001). Development of reflective practice is important for promoting creativity and preventing teachers' professional stagnation (Thompson & Pascal, 2012). Therefore, teacher training institutions need to facilitate and assess student teachers' development of reflective abilities.

Reflective teachers acknowledge the problems they encounter in teaching, view learning as a recurring process that starts from challenging experiences and actions and propose a plan for curbing the challenges that face the teaching and learning process. Furthermore, reflective teachers analyze and evaluate the problems

experienced in the teaching and learning process in order to enhance effective learning through the organization of knowledge and skills from real-life experiences (Hwang et al., 2018; Fullan, 2016; Alicja, Barbara & Gina, 2013; Thornton, 2005). Being a reflective teacher is not a natural talent but a character that has to be developed through learning and experience as it is connected to the idea of teaching as a lifelong learning process (Korkko, Ammala & Turunen, 2016). Therefore, strategies for developing reflective skills are an important step towards producing teachers who are reflective and critical thinkers.

The problem of quality of teachers in Tanzania is evidenced by Paulo (2014) who explains that many teachers opt to rely on repeat and memorize methods of teaching rather than the problem-solving approach, which is partly due to teachers not having mastered the subject matter. Paulo further argues that the knowledge and skills among teachers about the use of recommended methods are superficial and theoretical. While most teachers fail to teach appropriately by using recommended approaches like case study, demonstration, group work and questions-answers (Magidanga, 2017), this study sought to establish how teacher educators developed and assessed reflective skills to the pre-service student teachers and the challenges they faced. The study was guided by three research questions:

1. How do teacher educators develop reflective skills of the pre-service student teachers?
2. How do teacher educators assess the reflective skills of the pre-service student teachers?
3. What challenges do teacher educators face in developing and assessing the reflective skills of the pre-service student teachers?

Review of Related Literature

Teachers' reflective practice can take place in different yet combined ways. It can be done individually or in groups as it can be advantageous and beneficial when a teacher works independently or with others (Farrell, 2018; Reynolds & Beitter, 2007). The self or individual reflection can help to discover the external and internal distressing events through

self-assessment which will help the teacher and students to understand more and beyond content due to enhanced self and group dialogue (Eisenbach, 2016). Cunningham (2001) argues that reflective practices lead to self-understanding and improvement, causing someone to be a better teacher who can facilitate necessary changes. The process of reflective practices is stimulated through critical questioning and dialogue which in turn enhances learning and contributes to everlasting learning outcomes and students' ability to take autonomy of their learning through self-inquiry (Hawley & Jordany, 2014; Ryan & Mary, 2013). It promotes students' higher-order thinking skills which lead to new perspectives (Glazer, Abbott, & Harris, 2004; Coulson & Harvey, 2013).

Reflective practices and abilities influence both teachers and learners to acquire knowledge, skills and attitudes that originate and are constructed in their thoughtful teaching and learning process (Kabilan, 2007). Teachers should therefore review the ways of managing their classrooms from different perspectives basing on assessment data like examination results. This is because reflective thinking involves attentive consideration of one's own experiences in knowledge application, contemplating what happens in classroom and finding out the alternative means of achieving goals and aims (Wongwanich & Soisangwarn, 2014). Reflective practices can enable teachers to accept and deal with complexities and understand reflection activities as a necessary condition to be developed in this competitive world which helps them to approach and tackle the problems they encounter in the teaching and learning process. This approach can also help teachers to gain a stance upon their practice and see the necessity of continuing looking for relevant strategies to develop confidence and effectiveness (Thornton, 2005).

As the development of expertise is dependent upon and predicted by a person's beliefs and experiences, teachers who comfortably participate in reflective practices can develop the ability to examine their teaching and facilitate the development of their expertise in teaching, which in turn, influences a deeper understanding of themselves, their teaching practices, the assessment procedures, and therefore develop informed decision making abilities during the teaching process (Farrell, 2018). The reflective

practice is also about knowing by doing which is a very important ingredient for effective learning to take place (Hartog, 2002).

Practitioners and student teachers are required to learn and demonstrate reflective skills because this helps in better understanding of themselves, their actions and their enthusiasm to teach (Watts, 2015; Fullan, 2016). It involves seeing things that are happening every day from a more distinct perspective than the normal outlook as reflective learning emphasizes learners to be provided with real situations faced in daily life (Hwang et al., 2018). Reflective approach views learning as a recurring process that begins with a problematic action or experience. It is further argued that in reflective learning, there is a need of understanding the general underlying principles which caused the situation, seeking options and proposing a plan to follow in taking action. It helps to examine what is already known, what exists and relate the learning to real-life experience (Fullan, 2016).

Hwang, Chen, Chen, Lin & Chen (2018) believe that reflective study can influence professional abilities through the gaining of knowledge and skills from real-life experiences. Beatty (2000) argues that reflective thinking influences learners to be accountable during the learning process. It is bound to help student teachers to become scholars who can expand their intellectual world through developing their knowledge, competencies and resources. Reflective learning involves an examination of all important sources of knowledge that can assist to comprehend the learning situation. Greiff, Halt and Funke (2013) argue that reflective learning can train students to generate and gather information from their everyday lives and apply it to solve existing problems.

According to Alicja, Barbara and Gina (2013), there is a need for the pre-service teachers to engage in activities that promote reflective thinking early in their initial teacher education preparation. One of the best ways to promote reflective thinking is through the employment of the out-of-class experiences (Lawson & Watts, 2009).

Characteristics of Reflective Teachers

There are different characteristics that reflective teachers need to possess. These include

professional creativity, ability to implement strategies and reflection upon practices as explained below:

Professional Creativity: A reflective practitioner develops original ideas, innovates new knowledge and turns new and imaginative ideas into reality (Biktagirova, 2016).

Ability to Implement Strategies: A reflective teacher analyzes and questions things that are happening during the teaching and learning processes. Furthermore, they keep records of all important events and share successful stories in order to enhance the learning effectiveness. Furthermore, they read professional literature and explore more materials to support students' effective learning and consequently good performance (Impedovo & Mlaki, 2016).

Reflection upon Practices: Another characteristic of reflective teachers is ability to reflect on what they believe in order to improve their current and future practices. According to Lawson and Watts (2009), reflective teachers think, plan, act, assess and evaluate themselves. They examine their practices in order to find better ways of teaching (Wongwanich & Soisangwarn, 2014).

Research Methodology

The study involved two diploma teacher colleges from Kilimanjaro and Ruvuma Regions whereby 10 teacher educators, five from each college participated. Respondents were selected through snowball sampling technique whereby the few known teacher educators were used to identify others who were willing to be involved in the study. Structured interview was used to collect data. The structured interview helped the researcher to collect useful information from each interviewee and compare the response from one respondent to another. Data was recorded in a log book and organized into thematic units. Simple statistical analysis was conducted in terms of percentages, and then it was interpreted and summarized to address the problem under investigation.

Results and Discussion

This section presents and discusses findings of the study, based on the literature reviewed.

Research Question 1: How do teacher educators develop reflective skills of the pre-service student teachers?

The development of reflective skills is very important in the teaching profession. Data from the participants show that there are different approaches used by educators in as far as developing these skills is concerned. The teacher educator's responses were based on the approaches/strategies they used in teaching. These include participatory methods, inquiry learning, research strategy, group discussion, question-answer strategy and portfolios.

Participatory strategy: Educators acknowledged that this strategy is more often used as compared to the other strategies. It was often used because it is very easy and simple to administer. However, the majority felt that participatory strategy consumes a lot of time and energy. Some educators indicated were not certain whether they used participatory approach in their teaching endeavors.

Inquiry Learning: Educators indicated that this strategy was innately used in developing reflective skills of the pre-service student teachers. They indicated that they encouraged every student-teacher to use his or her effort to find answers to particular problems or come up with new concepts and solutions. It was also found that student teachers were encouraged to think and rethink about an issue, hence they built up and reinforced reflective practices effectively. They were constantly given activities that encourage and influence them to think in a wider perspective as far as the topic is concerned, leading to the development of intended reflective skills. However, some educators indicated that they rarely used this strategy because it consumes time as it requires one to develop integrated complex learning activities or problems which demand student teachers to perform some practical activities. They lamented that it is difficult to employ this strategy due to number of subjects they teach and nature of the contents of those subjects which do not encourage the use of inquiry strategy.

Research Strategy: Findings show that educators used this strategy once in a while as compared to the other strategies. The strategy helped student teachers to develop their thinking and a learning notion as research helps to identify the diverse talents and abilities. Educators argued that research skills provided to student teachers enabled them to challenge their core beliefs, values and actions as they developed new skills,

competencies and strategies that can positively influence the development of their reflective capacity. It provided student teachers with tasks to research and share their understanding. The approach in turn influenced the development of student teachers' professional roles which imparted the capacity of creating theories and philosophy of teaching and learning.

Question-answer: Educators acknowledged that they used question and answers during classroom and out of class activities to develop reflective skills of the pre-service student teachers. They appeared to employ this strategy in a wider range of activities. The reason for this was due to its simplicity and ease to handle. Educators indicated that they made sure that they ask student teachers some questions about different concepts related to the topic in order to seek their prior knowledge. Teacher educators concluded that through question and answers strategy, student teachers were forced to reflect back and explain what they knew about the concepts which build up their thinking and ability to examine or reflect issues.

Group Discussion: Teacher educators indicated that they preferred to use discussion because in the course of discussion is where student teachers developed their ability to reflect which, in turn, enable them to expand their thinking capacity and the ability to reason. They argued that the use of group discussion influences the development of reflective skills whereby they give their student teachers tasks to discuss in their groups, share ideas and experiences concerning a given task and then student teachers are required to come up with their own ideas. They further argued that the group discussion approach influenced the exchange of ideas among students; hence it helped them to identify their own understanding of their practices. Most importantly, it was noted that discussion helps student teachers to engage in reflection as they work in close collaboration with partners.

Portfolios: The use of portfolio was acknowledged by educators as one of the most efficient and effective ways to develop reflective skills of the pre-service student teachers. Teacher educators argued that they always needed pre-service teachers to have a portfolio in which they documented all the home works, project works and any other creative works they had developed

or invented, which were checked and graded. This helped to develop their ability to examine issues for future review.

Research Question 2: How do teacher educators assess the reflective skills of the pre-service student teachers?

Having established how teacher educators implemented the reflective skills to the pre-service student teachers, it was necessary to investigate on the teacher educators assessed the reflective skills of the pre-service student teachers. The assessment of reflective skills is very essential in teacher profession. Data from the participants show that there are different approaches used by educators in as far as assessing these reflective skills is concerned. The teacher educator's responses were based on the approaches/strategies they used in assessing reflective skills among pre-service student teachers. These strategies include: portfolios, single lesson practice, block teaching practices, problem-solving ability and projects.

Portfolios: Teacher educators used this strategy effectively. Majority of them indicated that portfolios strategy is among the best strategies to assess reflective skills of the pre-service student teachers. In responding to this teacher educator A, C, D, E, H, I and J revealed that: *"Each of the pre-service student teachers is required to prepare portfolio to put different assignments they do and their answers such as project works and action research reports to measure their abilities."* On the other hand, teacher educator B and F indicated that they are less effective in using portfolio to assess the reflective abilities of their student teachers because it is a very time consuming strategy.

Single Lesson Practices: The findings on the single lesson practices assessment strategy rated the lowest. Educators A, B, C, D, G, H, I and J, for instance, indicated that they are less effective in using the strategy due to the fact that student teachers seldom get time to undertake the single lesson practice. The teacher educators wondered, "If student teachers are not given enough single lessons teaching exercises, how can they perform in the higher level of block teaching practices?" This is an anomaly that needs serious attention.

Block Teaching Practices: The use of block teaching practices was acknowledged by educators as the most efficient and effective way to assess reflective skills of the pre-service student teachers, though it comes once in a while. In explaining this, teacher educator A, C, D, E, F, G, H and J lamented that, *"During teaching practice sessions, we get chances to assess our student teachers by looking on how they have prepared for the lesson."* They added that during the teaching practice sessions, student teachers get time to explain how they feel about the teaching, the content and its application. They further stressed that in most cases, the assessment of these student-teachers on the development of the reflective skills through block teaching practice makes them feel more confident.

Problem-solving Ability: Educators indicated that this strategy is effectively used in assessing reflective skills of the pre-service student teachers. They revealed that through problem-solving strategy, every student is encouraged to use his/her effort to find answers to a particular problem or come up with new thoughts and ideas. Teacher H revealed that: *"I give pre-service student teachers any of the challenging sub-topics to find answers by themselves and present the findings for grading."* Teacher educator D and J emphasized that they give pre-service student teachers some challenging activities to reflect on the past and present experiences concerned with the concept or linking the concept with what happens in real life and mark them as part of their continuous assessment. According to them, the activities given to student teachers are those that encourage and influence them to think in a wider perspective as far as the topic is concerned, hence grading those activities influence knowing their ability to examine issues.

Project Presentation: Some teacher educators indicated that they prefer to use project presentation in assessing reflective skills of their student teachers. They argued that they assign student teachers with project activities which they are required to present in class. They concluded that they used the strategy when they taught a small size classes.

Research Question 3: What are challenges that face teacher educators in developing and

assessing the reflective skills to the pre-service student teachers?

The challenges teacher educators faced in developing and assessing the reflective skills of the pre-service student teachers were classified into four categories: personal, professional, psychological and institutional.

Personal Challenges: The findings indicated that teacher educators faced personal challenges which included lack of confidence. Respondents pointed out that there is a lack of some sense of responsibility or commitment among them which was influenced by the belief that doing reflection in the classroom consumes time. They further argued that some teacher educators preferred to use the lecture method for they are busy with no time to think and employ techniques that encourage inquiry in the classrooms. On the other hand, the low confidence among student teachers was revealed to be associated with little experience in teaching and dependence on cramming which affected their ability to link what they learned.

Professional Challenges: Teacher educators reported that professional challenges somehow affected negatively the development and assessment of reflective skills of the student teachers. Professional challenges were associated with some sort of weaknesses which caused difficulties for some teacher educators to employ reflective skills. According to Biktagirova (2016), lack of professional skills leads to premature learning output. Respondents further pointed out those professional challenges *include the teaching strategies used and time limitation. This is because time allocated for teacher educators does not allow them to reflect or encourage them to examine what has been taught.* Furthermore, it was revealed that *the number of students in the classroom forced the teacher educators not to allow any kind of conversation, discussion, or dialogue among students and between students and their teacher educators.* Al-Issa and Al- Bulushi, (2010) posit that little or lack of analytical thinking skills among teacher educators compromises the teaching and learning qualities. With that regard, some teacher educators commented that there is a problem associated with lack of analytical thinking skills among teacher educators and pre-service student teachers as well. They revealed

that some teacher educators had very little skills of critically looking or analyzing the role they played in the classroom. They had limited ability to think about alternative ways of handling critical situations in the classroom.

Psychological Challenges: Teacher educators faced some psychological challenges in developing and assessing reflective skills of student teachers. The psychological challenges they faced includes conservative behavior of some pre-service teacher. It was reported that some teacher educators had conservative behavior which limited the development of reflective skills. Some teacher educators believed that reflective practices disturb their work schedules by being forced to use more time or extend their working hours in classrooms. To overcome this, teacher educators need to develop self-regulation skills including self-control, coping with stressful situations and increasing self-confidence (Moskvicheva & Kostromina, 2015).

Institutional Challenges: Institutional challenges were related to shortage of resources and directives on what should be taught on reflection. There were no reference books about reflective skills and practices in the teacher training institutions. Furthermore, it was pointed that the available syllabus had no topic about reflection.

Conclusions and Recommendations

This section presents the conclusions of the study based on the findings from the previous section. It is followed by recommendations of the study.

Conclusions

The study concludes that there are different approaches used by educators in as far as developing these skills are concerned. These include participatory methods, inquiry learning, research strategy, group discussion, question-answer strategy and portfolios. *Participatory strategy* was more often used as compared to the other strategies because it is very easy and simple to administer. Each strategy had some peculiar advantages. Through question and answers strategy, for instance, student teachers reflected back and explained what they knew about the concepts, which build up their thinking and ability to examine or reflect issues. The use of group discussion, on the other hand, influenced the development of reflective skills

whereby teachers gave the student teachers tasks to discuss in their groups, share ideas and experiences concerning a given task and then student teachers were required to come up with their own ideas.

Teacher educators used various approaches in assessing reflective skills among pre-service student teachers. The strategies used include portfolios, single lesson practice, block teaching practices, problem-solving ability and projects. Each strategy used had some specific advantages as compared to the others. The use of block teaching practices, for instance, was acknowledged by educators as the most efficient and effective way to assess reflective skills of the pre-service student teachers, though it came once in a while. Through problem-solving strategy, every student was encouraged to use his/her effort to find answers to a particular problem or come up with new thoughts and ideas.

The challenges teacher educators faced in developing and assessing the reflective skills of the pre-service student teachers included personal, professional, psychological and institutional. The personal challenges included lack of confidence. The institutional challenges were related to shortage of resources. There were no reference books about reflective skills and practices in the teacher training institutions.

Recommendations

The study recommends that teacher educators should make effective use of cognitive strategies while teaching. They should also furnish their knowledge and understanding of the subject matter for them to be acquainted with current innovations in order to minimize the notable challenges. There should be a prompt review of the teaching and learning situations on what is known, what is not yet known and what has been mastered in order for teacher educators to address the identified gaps related to reflective thinking.

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