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PRE-SERVICE TEACHERS' TEACHING COMPETENCIES: THE EXPERIENCE OF PRACTISING TEACHING IN SECONDARY SCHOOLS AND TEACHER COLLEGES

Josta L. Nzilano

Dar es Salaam University, Tanzania

Abstract

The purpose of this study was to explore the competences of pre-service teachers from Tanzania's University of Dar es Salaam during practice teaching in secondary schools and teacher education colleges. The following were the objectives of the study: first to examine the ways pre-service teachers prepared for classroom teaching, and second to assess the effectiveness of pre-service teachers in managing classroom teaching and learning activities. The study involved 30 pre-service teachers and 8 educational officers from secondary schools and teacher colleges. The instruments for data collection were a questionnaire, semi-structured interviews, portfolio reviews, and classroom observations. Results revealed the limited competencies among pre-service teachers in classroom teaching. The study recommended reforms of the pre-service teachers' professional development program, the improvement of the educational policies, and the cooperation between educational managers from schools, colleges, and the Ministry of Education for quality education.

Keywords: pre-service teachers, practice teaching, university teacher education, teacher education, secondary education, teacher profession development, preparation for teaching, classroom management.

Introduction

The preparation of pre-service teachers (PRESETs) academically and professionally is a vital responsibility of the state and its people through the respective teachers training institutions. It is on the expectations of the educational institutions to “prepare teachers in different three-tiered process of; normative, speculative and analytical functions” (Ishumi, 2009, p. 10). The three-tiered concepts are reflected within the perspectives and purpose of teacher training as follows: first, PRESETs learning should be designed to develop creative and innovative thinking to speculate about overall existence of a phenomenon (for example the nature of education) and how that phenomenon relates with other phenomena in the context over time. Second, the PRESETs should develop knowledge and skills to critically analyse and understand the existing educational problems pertaining to a particular context of learning and teaching as well as the finding the opportunities to solve them. Third, to develop an understanding of the actions to adopt to deal with the existing educational issues, to maintain education professional norms and standards required in the context of learning and teaching for individual and community development. The mastery of three-tiered process helps PRESETs to grow as professionals through an intensive professional learning theory and to transfer it to the field-based practices, both intensively and extensively. That means teaching practice provides the PRESETs with the opportunities of learning to teach through studying observation, analysing and interpreting the learner and the learning contexts (Feiman-Nemser, 2001).

In the presence of motivation, competence and confidence of PRESETs can improve the teaching practices (Lim-Teo, Low, Wong, & Chong, 2008). Heinich, Molenda, Russell, and Sandino's (2002) ASSURE framework on effective teaching processes summarised six steps, these are to: (i) analyse learners (ii) state objectives (iii) select methods and teaching materials (iv) utilize teaching materials (v) require learner participation (vi) evaluate and revise the whole steps in the process (p. 23). This framework is ideal for PRESETs because it equips them with the knowledge and skills in their preparations for classroom teaching. PRESETs' performances in the pedagogical, subject matter and technological knowledge in the teaching practice are needed to reflect the efficacy of pre-service training programmes (Feiman-Nemser, 2001).

Literature

Studies on teaching pedagogy, technology, and classroom context knowledge of PRESETs to manage the classroom activities are discussed. In exploring the knowledge of twelve secondary school teachers in the practice of multicultural classroom context studies by Wubbels, Veldaman, Brok, and Tartwijk (2008) found that PRESETs were aware of the rules of correcting students' behaviour during classroom learning activities, however, the teachers were reluctant to understand the influence of students' cultural and ethnic background in teaching. The habit of negligence to matters that do not have direct impact to personal interests is a common problem among PRESETs. Mtika's (2008) studies on the misconduct relationship between the mentors and PRESETs revealed that host teachers (mentors) had a tendency to leave PRESETs to enter the classrooms alone to teach students. In the perspective of limited pedagogical skills by PRESETs, their authority in teaching is challenged by students, and therefore, fail to achieve the mission of student learning and learning to teach (Mtika, 2008). Thus, PRESETs need to learn about education professional code of conduct and ethics to teach effectively, and have active support of the mentors to grow in their teaching career.

Studies on teacher-learner reciprocity, school culture, and social relations (Lim-Teo, et al, 2008; Mtika, 2008; Nguyen 2009) revealed that teachers are challenged to develop

effective learning environment, organizing the subject matter, designing learning experiences, engaging all students in learning activities, and assessing students' learning outcomes. These challenges can be associated with teachers' continuous professional learning habits. Because findings showed that teachers have a limited habit to learn and participate in the open dialogues (Lim-Toe, et al, 2008; Mtika, 2008; Nguyen 2009) which could help them to transform their existing rigid beliefs about student learning. Consequently, with the participation in critical open dialogue, PRESETs grow in their professional identity to become experienced teachers (Lim-Toe, et al., 2008).

In exploring the perceptions of schools and students in matters of teaching practice, Sieborger and Quick (2005) found that PRESETs needed to spend six months in schools because they did not have practical orientations at the university. In addition, more training for PRESETs to understand the structural forms and contents of the lesson plans and classroom interaction models before practicum teaching in schools are of great importance. Further, studies reflected that induction programs at the initial years of employment are of great value to beginning teachers to gain the understanding of the work practices (Lim-Toe, et al., 2008; Sieborger & Quick, 2005).

Nonetheless, with the application of computer software in teaching and learning, David and Neal (2008) did an experimental study on how PRESETs integrate computer resources in teaching the subject in schools. In addition, teachers were challenged to balance the use of diverse teaching methods in the contexts of the learning. Adeyanju's (2003) study on the perceptions of PRESETs (in arts discipline) about the impact of using teaching aids in classroom teaching, revealed that they used teaching methods such as dramatization, role play, and demonstration that were supported by real objects. Further, the PRESETs used teaching aids for scoring marks during supervision period only and thereafter their interest in using teaching aids in teaching diminished. However, the implementation of merit systems set by employment agencies influences the professional development programs and PRESETs learning habits. This is a factor that the lecturers should address when preparing PRESETs in teacher education colleges.

The current practices in teacher education colleges include the handling of the complex aspects of teaching technology, pedagogy, and subject matter as a unified knowledge base (So, 2009). To motivate PRESET's attitude for integrating technology, pedagogy, and content knowledge during teaching and learning activities, is to continue training them in constructive teaching approaches with technology (So, 2009). However, why do PRESETs have difficulties in designing a technology-integrated lesson? The difficulties are due to lack of a link between beliefs, knowledge, and actions, as well as the limited exposure to literature on teaching in open dialogue classroom learning contexts supported by rich-technological resources (So, 2010).

The universities prepare teachers for secondary schools and teacher education colleges. The preparations of PRESETs operate in a context of large class sizes, and limited demonstration schools for immediate experimentation of teaching. In this context, PRESET's practicum teaching showed that they have limited teaching competencies to teach large classes because of insufficient professional training. The situation caused several challenges among PRESETs for their students and host teachers in schools and teachers colleges (Feiman-Nemser, 2001). The situation implied that PRESETs and students in teacher colleges and schools respectively are faced by difficult learning environments and they are at risk of not achieving the mission of their education training (Feiman-Nemser, 2001). Thus, this study intended to investigate how PRESETs are prepared to teach and assess their ability in classroom teaching.

The study intended to explore the ways PRESETs prepare to teach and manage classroom-teaching activities in secondary schools and teacher education colleges respectively in the teaching practice. The study sought to answer the following questions:

1. How do PRESETs prepare to teach in the teaching practice?
2. How effective are the PRESETs in classroom teaching and learning activities?

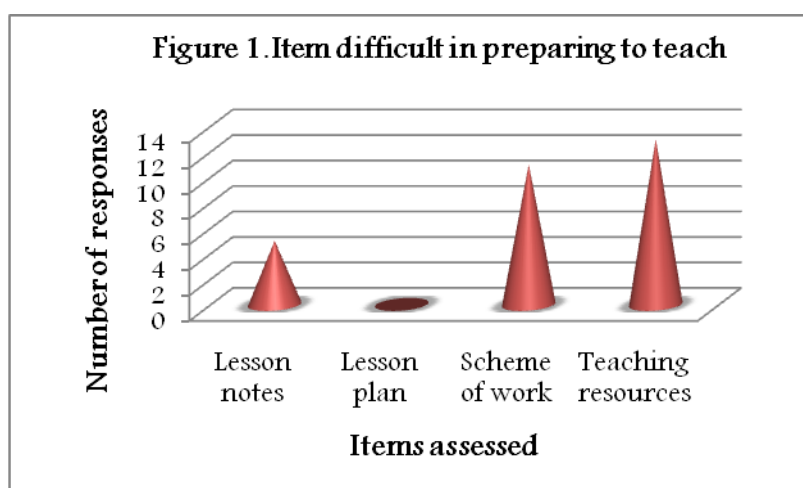
Methods

The study employed a qualitative approach with some quantitative information. This is because mixed methods design has the opportunity to embrace a variety of research perspectives, principles, and the techniques to answer the research question (Johnson & Onwuegbuzie, 2004). It assumes an “abductive – inter-subjective – transferable” viewpoint of thinking about the research process (Morgan, 2007, p. 73).

Sample size included 30 PRESETs of the University of Dar es Salaam, and the heads of 6 secondary schools and 2 teacher education colleges in Rukwa region (Tanzania). While PRESETs were selected on a random basis, the heads of schools and teacher colleges were selected purposively. Hence, the instruments for data collection included the following: questionnaires, semi-structured interviews, classroom observations checklist, and documentary reviews. The qualitative and quantitative data analyses techniques were used concurrently.

Findings and Discussions

PRESETs preparation for classroom teaching. Findings from the questionnaires and documents on the PRESETs preparations for classroom teaching and activities in five areas showed the following: lesson plan (LPs), scheme of work (SoW), teaching aids (TAs) or resources, lesson notes, and evaluation tools. In responding to the question about the most difficult task during preparation of such areas, the findings showed the TAs as the most difficult tasks followed by SoW. The findings indicated that PRESETs had an easy task to prepare the lesson notes and lesson plan as indicated by low identification response rate as shown in Figure 1.



The major causes of the problems in developing teaching and learning resources presented in Figure 1, included: (a) a great shortage of teaching and learning resources (7), (b) shortage of time to cover themes and preparation for teaching (7), and (c) expensive and

inadequate teaching resources (4). Other causes identified, included (d) frequent changes in the time tables interfered with teachers' preparations (2), and (e) academic subject teaching methods course being taught in the second year of their studies. Hence, there is a mismatch of theoretical and practice organisation in the professional training program. The mismatch implied that in the first year of undergraduate studies, PRESETs practice teaching with insufficient knowledge and skills on the pedagogy and use of diverse teaching resources. Data from PRESET's documents are discussed in themes as follows: improvisation and quality of teaching aids, scheme of work, lesson plan, student assessment tools, and lesson notes.

Improvisation and quality of teaching aids. Based on the observation data, the PRESETs improvised low quality teaching aids. The low quality of teaching aids were in terms of their size being small, improper choice of the colour of the paper and prints, short lived, mismatched learning outcomes, as well as weak visibility due to detailed information on presentations. Further, teaching aids appeared to be prepared in a hurried situation because some of them did not have important information, such as the stated purpose of the materials, or some omitted important equipment to facilitate their function in teaching. Adeyanju (2003) argued that PRESETs use teaching aids when they need to acquire marks from the supervisor and thereafter they continue to teach without using teaching aids. Adeyanju's argument clearly shows that PRESETs have limited practice regarding the knowledge and skills of improvising and using teaching aids during teaching practice. However, it is a reflection about the efficacy of implementation of the professional training programs for PRESETs. In addition, it is an indication of superficial training of PRESETs that calls for a review or overhaul of the existing professional training program from the teacher education programs' offering universities.

Scheme of work (SoW). PRESETs were taught how to make a scheme of work matrix that consists eleven columns. In series from right to left the columns include the competence, the month, the week that the competencies are covered, the subject topic and subtopics, number of periods, and the learning objectives. The next columns are the teacher's activities, the students' activities, the teaching aids, the references, and the remarks. In reviewing the SoW, the researcher was interested in collecting information related to the skills of PRESETs in writing the SoW correctly (as reflected from syllabi) with coherence in the organisation of the topics. The focus was to assess the extent to which the preparations for teaching reflected learner-centred teaching.

The researcher found that the majority of PRESETs prepared the SoW, which constituted activities of the whole period of teaching practice. The comments given by the supervisors were not considered by some PRESETs to correct their SoW, hence they continued to use the incorrect ones, until they completed the teaching practice activities. Findings showed the challenges faced by PRESETs was to logically organise the information in the SoW matrix and three observed irregularities are discussed as follows:

First, there was a lack of consistency about the specific column to place the competencies of the topic in the scheme of work matrix among PRESETs. For instance, the competence column appears before the month's column, but some of PRESETs placed it in the column after the "month." As a result it distorted the meaning of information in each section of the column.

Second, there was a lack of clarity in explaining the teacher and students activities in order to prepare for the classroom learning. For instance, the majority of PRESETs indicated the classroom preparation activities for

students and for teachers in the SoW. Ideally, that information was supposed to appear in the lesson plan. This indicated that PRESETs have poor pedagogical content knowledge of teaching (So, 2010).

Third, a few PRESETs who received assistance from host school teachers and host college mentors prepared the scheme of work using the teacher-centred approach rather than the learner-centred approach of teaching. There was evidence that school teachers were reluctant to accompany and support beginning teachers in classroom teaching. This was reflected their fear to express the limited pedagogical and technological knowledge of teaching (Mtika, 2008; So, 2010).

Lesson plan (LP). The findings from the documents indicated that PRESETs were able to prepare the lesson plans because they presented the necessary parts of the lesson plan as they were taught in the college. These parts include the preliminaries, the competence, the topic, the learning objectives, the teaching resources, lesson presentation, and evaluation. In this review, the following were revealed. First, PRESETs prepared weak statements of learning outcomes, as they did not embrace the required statement of explicit objective features as stipulated, such as the:

- a) *Audience* that is the learners who is expected to benefit from the learning,
- b) *Behaviour* (subject matter) which is presented in observable measurable action verbs e.g. define, write, state, label, describe and so forth.
- c) *Condition*; this is the situation which make a learner to abide with in order to achieve the objective. For example the use of phrases such as ‘with the use of text books, given ten articles to read, with the help of an atlas, and so forth
- d) *Degree of performance* where the demonstrated behaviour of the learner in terms of quality is determined, e.g. 99% correct, 95% accurately, appropriately,
- e) *Standard of performance* is the estimated amount of experiences for the learner to perform, i.e. the level attained by the learner in order to make the decision, for example, at least ten sentences, four traits of living things, three East Africa countries, and so forth.
- f) *Full time coverage*; this is the time required to change the learner: e.g. by the end of 60 minutes, by the end of 40 minutes, by the period of two hours, (and so forth to) observe the following examples of specific behavioural objectives (Gronlund, & Linn, 1990).

Based on omission of these features, most of the PRESETs did not indicate examples of the conditions in which the learners were engaged to learn or to change the behavior. Moreover, few PRESETs managed to develop statements of learning outcomes that indicated the degree of performance. However, some of the lesson plans contained learning outcomes that mismatched the amount of time for learning activities. For instance, they either prepared too many learning outcomes to accomplish within a short period or prepared too few learning outcomes for the prescribed period.

Second, the majority of PRESETs wrote general statements of learning activities, which were difficult to distinguish between the tasks that are specific for students and for the teachers. For instance, one student teacher wrote, “...the student will understand the meaning of weather station.” In this case, the use of the term “understand” is ambiguous and a general verb that does not tell clear the action for the student to demonstrate during the learning activities. It is not easy to determine what the student performs and therefore it is difficult to identify the level of performance to be attained by the student.

Third, the majority of PRESETs demonstrated a low ability to write a self-evaluation statement in LPs. The self-evaluation statement was written in a broad manner as follows:

“...the students have understood the lesson, I will continue with the next lesson;”

“90% of students have understood the lesson very well;”

“ $\frac{3}{4}$ of the students did well and $\frac{1}{4}$ did not do well I will give them more exercise” or

“the lesson was clear and the students understood it.” (reviewed documents)

The statement phrases seemed to evaluate the students based on a general or a passive action “understand”, and the numerical and fractional values did not state the exact total number of students attempting the assignment or a task. These numerical values are meaningless in the evaluation statement because they do not tell the exact total number of students attempting the task. As such, they might reveal high performance results in the context of a small number of students in the classroom who attempted to do the task. However, the intention of the self-evaluation section in the LP is to help the individual PRESET to reflect on his/her performance regarding the efficacy of preparations for and actual classroom teaching activities. The actual practice was to evaluate the students’ performances instead of the PRESET’s practices. The implication here is that the PRESET’s view of the self-evaluation is not understood and therefore they do not know exactly what to evaluate, who to evaluate, when to evaluate, and for what purpose. Generally, the implication is that PRESETs do not evaluate their teaching and therefore, the classroom teaching and learning challenges are not worked out for improvement purposes.

Student assessment tools. The assessment tools refer to the exercises, tests, quizzes, and homework assignments for students. The researcher reviewed PRESETs papers consisting of prepared exercises and assignments for students. Findings showed that PRESETs prepared assessment tools based on the predetermined student learning outcomes and a few of them were not able to set assessment tools that reflected the student learning outcomes. In this case, about 50% of the PRESETs prepared the assignments and exercises for students and the remaining 50% did not prepare them.

Conversely, some PRESETs were found to create the assignments and exercise questions by writing them on the chalkboard for the students during classroom teaching. Because they were composed in the classroom, there was an indication that PRESETs did not have enough time to construct high quality assessment tools. Hence, they composed questions that had some errors: misspelled, ambiguous, and incomplete contestation of the student-learning outcomes. In this regard, PRESETs lack skills and knowledge of designing high quality student assessments. Some PRESETs who prepared the evaluation questions used their common sense and the experiences copied from their school-teachers during the time when they were schooling. Therefore, these situations influenced the student assessment and behaviour in the classroom. Certainly this outcome ties to studies by Mtika (2008) that showed that the essence of indiscipline in the classroom is due to teachers who tend to deviate from the school practices and norms that govern professional teachers.

Lesson notes. The PRESETs prepared lesson notes, which were brief and addressed the purpose of the topic clearly. The PRESETs varied in formulating the lesson notes as some wrote them as narrations in paragraphs and others prepared in point forms. None of the

PRESETs prepared students to develop lesson notes or demanded students either to fill some sections or direct them to the guide questions that eventually address the prescribed student learning outcome in that particular lesson. In doing so, students were largely depending on PRESET's prepared lesson notes; this practice cultivated the traditional teacher-centred teaching approach.

However, the lesson notes were in a correct format and written appropriately this was due to the availability of reference books and teaching manuals obtained from the different sources including the Tanzania Ministry of Education. A number of PRESETs owned copies of books bought in the local bookshops and some of these books were borrowed by these PRESETs from the school/college libraries (subjects included Kiswahili language, History, Geography, English Language, Mathematics, Biology, Chemistry, and civics). Thus, the books were in simple language and clear presentation of content for PRESETs to understand and prepare the lesson notes by merely copying from the books with little modification. Hence, PRESETs followed the teacher-centred approach of teaching because they read books and teaching manuals and transferred the information to the students who then copied the information so that they reproduced the tests and assignments as reflected in literature (Lim-Toe et al., 2008; Mtika, 2008; Nguyen, 2009). Therefore, these practices indicated that PRESETs had little understanding and ability to implement the competence based approach of teaching.

PRESET's Classroom Teaching and Learning Management

PRESETs were expected to practice teaching when they have acquired the necessary competencies of effective teaching. The PRESETs were expected to demonstrate mastery in the use of time, subject matter, teaching strategies, discipline control and caring, personal qualities, and the use of audio-visual materials during classroom interactions activities. Data gathered by classroom observations, semi-structured interviews and questionnaires are discussed in the following paragraphs.

Ways used by PRESETs for time management and teaching aids. The PRESETs responded to the classroom observations to give their opinion about the use of time and teaching aids with regard to classroom motivation of learning activities. This was intended to determine how these teachers spent those resources to manage the classroom activities and student behaviours to attain the student learning. The classroom observations covered the introductory, presentation, and closure parts of classroom interaction activities as Table 1 presents.

Table 1: PRESET's ways used for time management and teaching aids in the classroom (N=30)

Determinant aspects	Responses (%)
I. When introducing the lesson	
<ul style="list-style-type: none"> To arrange the students and the teaching aids in good manner 	1(3.3)
<ul style="list-style-type: none"> To introduce the lesson and ask students about the topic in general 	16(53.3)
<ul style="list-style-type: none"> Revising the previous lesson 	13(43.0)
<ul style="list-style-type: none"> Motivating students about the lesson 	1(3.3)
II. When presenting the lesson	

• Interacting with students through guided discussions	17(56.7)
• Demonstrating the lesson contents	7(23.3)
• Illustrating the teaching aids to learn the lesson	1(3.3)
• Managing time	3(10.0)
• Evaluating students about the lesson	1(3.3)
III. When closing the lesson	
• Summarization of the lesson	12 (40.0)
• Assign tasks to students regarding the learning outcome	11(36.7)
• To prepare students for next period in the subject by assigning them with tasks.	2 (6.7)

Table 1 shows the results about the ways PRESETs used time and teaching aids to manage classroom activities. In the *introduction of the lesson*, the observations indicated that PRESETs spent time and teaching aids as follows: (a) about 53.3% of PRESETs spent the time and teaching aids to introduce the student learning outcomes and to ask questions to students about the lesson to be learned, (b) 43.0% of PRESETs used them to revise the previous lessons, and (c) 3.3% used them to arrange the lesson and students in good manner and motivated students about the lesson respectively.

With regard to the *presentation of the lesson*, the findings showed that 56.7% of teachers spent their time and teaching aids to enhance classroom interaction activities with students through guided discussions, 23.3% used them for the demonstration of the lesson contents and about 10.3% use TAs to illustrate the lesson's concepts and hence maximized time usage. Moreover, 3.3% of PRESETs spent time effectively by using teaching aids correctly to evaluate students learning and illustrating the teaching aids for students learning of the lesson (see Table 1).

Likewise, *during the closure* of the classroom teaching activities, about 40% of PRESETs spent the time effectively using teaching aids in summarising the lesson and 36.7% used time for assigning activities to students regarding the prescribed learning outcomes. In addition, 6.7% of PRESETs used time and teaching aids for assigning tasks to students to prepare them for the next period (see Table 1).

Classroom interactions with teaching aids. In discussing the classroom interactions with teaching resources to motivate student learning, three themes were established: the dominant teaching aids in the classroom, the effectiveness of teaching aids, and the motivation of student learning.

Dominant teaching aids in classroom. The researcher investigated the utility of teaching aids in motivating classroom management activities with regard to the type of sensory organ they stimulate in students.

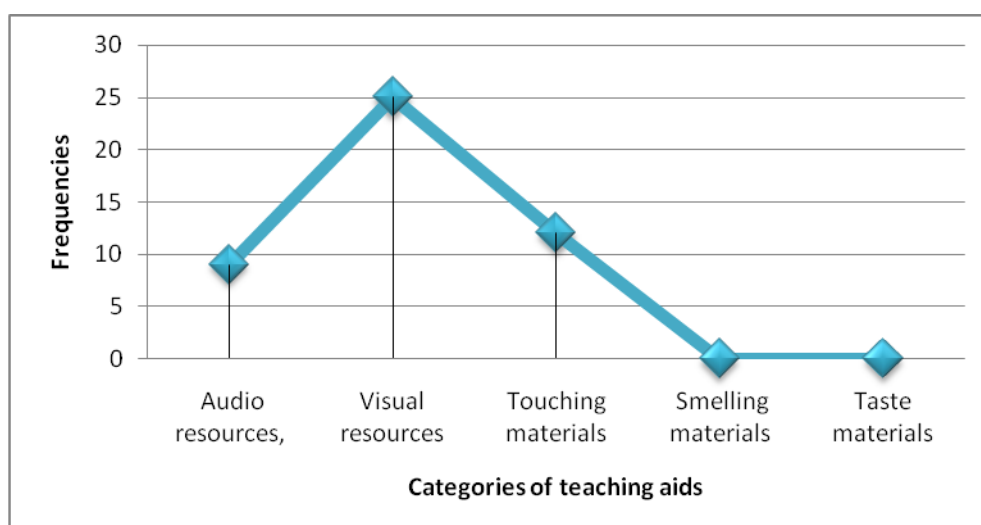


Figure 2: Dominant type of teaching resources in the classroom

In Figure 2 it was found that 25% of PRESETs used teaching resources that stimulate watching by eyesight, 11% of PRESETs used materials that involved touching, 9% of PRESETs preferred to use audio resources, and none of PRESETs were found teaching with resources that involved smelling and tasting respectively. In this case, the eyesight or visual resources were the dominant teaching aids used by PRESETs in classroom teaching and learning. Therefore, PRESET's emphasis of visual teaching materials in teaching was a challenge particularly when they dealt with visually impaired students because for them those resources were considered inappropriate.

Assessing the effectiveness of teaching aids during classroom interaction. In responding to the questionnaire, which requested PRESETs to explain the ways they assessed the effectiveness and quality of teaching aids when teaching students in the classroom, as

Table 2: PRESETs' teaching aids and students' interactions in classroom

The means used to determine the quality of teaching aids during the class interaction (N = 30)	Percept (%)
• The way students accept and receive teaching aids or by seeing their responses	11(36.7)
• The way it facilitates and saves time to learn a task	3 (10)
• The way students achieve learning outcome	4 (13.3)
• When students respond correctly to the questions by using teaching aid	5 (16.7)

Table 2 shows that about 36.7% of PRESETs argued that they observed how students perceived and were motivated to interact with the teaching aids, and 16.7% argued that they observed when students used the teaching aids to respond correctly to the questions. Moreover, while 13.3% of PRESETs indicated that they observed the way students achieved the learning outcomes, 10% observed the way teaching aids facilitated and saved time to learn a task in the class. The findings show that PRESETs were informed about the influence of teaching aids in classroom learning processes.

Motivating student learning with teaching aids. PRESETs were asked to respond to open-ended questionnaires in order to explain how they motivated student learning with teaching aids in teaching.

Table 3. How PRESETs use teaching aids to motivate students' learning?

How teaching aids used to motivate students' learning? (N = 30)	Frequencies (%)
• To let them introduce the lesson to be taught	1 (3.3)
• By allowing students to interact with teaching aids to arouse discussion or questions	10 (33.3)
• By emphasizing parts of the lesson / making summaries	3 (10)
• Using graphics and painting them with colours	6 (20)
• Multiple responses	10 (33.3)

Table 3 results show that (a) they used teaching aids to arouse students to participate in the discussions or respond to questions (33.3%), (b) by using graphics and painting them with colours (20%), (c) they used teaching aids to emphasize parts of the lesson or summarise the lesson (10%), (d) they used teaching aids to introduce the lesson. The other responses did not reflect any of the above uses.

Challenges faced by PRESETs using teaching aids and coping strategies. In responding to the questionnaires, PRESETs expressed their views regarding the various challenges they faced with regard to the use of teaching aids in teaching, and then suggested possible solutions.

Table 4: The Challenges faced by PRESETs to use teaching aids during classroom teaching (N = 30)

Challenges identified by PRESETs	Frequency	Percentage (%)
Some students are visually impaired, it is difficult for them to follow	6	21.4
Limited time to assess how each group used the teaching aids in the class	1	3.5
Difficult in preparing and presenting with teaching aids	2	7.1
Poor management/use of teaching aids	1	3.5
Students fails to relate teaching aids and subject matter	4	14.2
It consumes a lot of time for presentation, than estimated time	1	3.5
Students sometimes are more motivated to interact with teaching aids and pay little attention to the progress of lesson	5	17.8
The proper place to position teaching aids in the classroom and appropriate time to use it during teaching	5	17.8
Some topics are difficult to teach with teaching aids	1	3.5
Few text books	2	7.1
Total Responses	28	100

In expressing the challenges, PRESETs mentioned, as identified in Table 4 that (a) Students with visual problems had difficult to follow the lesson and PRESETs could not have means to help them (21.4%); (b) Sometimes students were motivated to interact with the teaching aids and had little attention to the progress of lesson (17.8%); (c) they do not know the proper

place to position the TA in the class and the appropriate time to use them during classroom interaction processes (17.8%); (d) They chose teaching aids appropriate to teach a particular lesson in the topic during classroom teaching (14.2%); (e) They faced shortage of teaching aids and textbooks; and (f) PRESETs mentioned little time to assess the students' use of teaching aids and that teaching aids consumes a lot of time during classroom presentations (3.5%) respectively. Certainly, the challenges identified above in (c), (d), and (f) imply that PRESETs had limited knowledge and skill in using teaching aids in teaching. To cope with these challenges PRESETs made several proposals as discussed and illustrated in Table 5.

Table 5: PRESET's Coping strategies to challenges of using teaching aids during class interactions

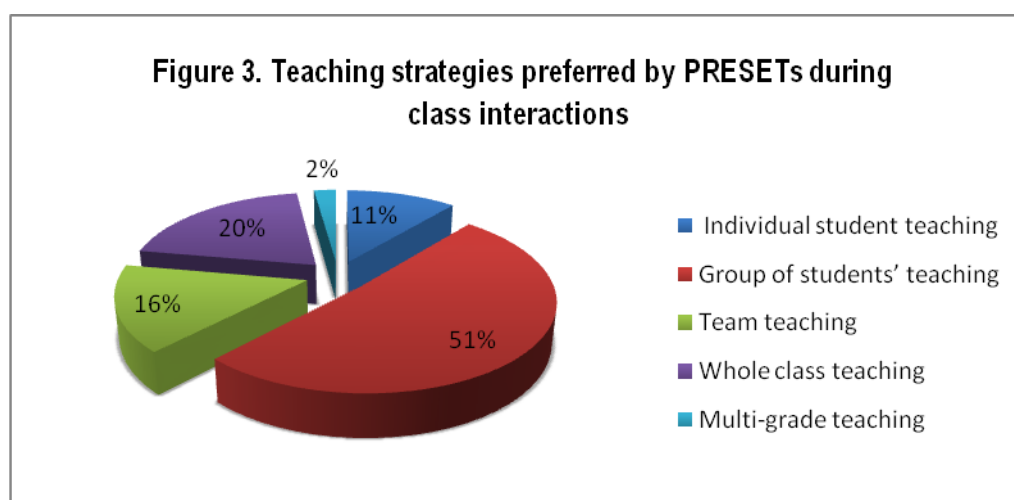
Challenges faced by teachers in using teaching aids in teaching and learning context	How do teachers cope with the challenges?
1. Some students are visually impaired, it is difficult for them to follow	Give more verbal explanation / remedial /summary of lesson notes
2. Limited time to assess how each group in the class used the teaching aids	Provide homework to students to reflect on the available teaching aids.
3. Difficult to preparing and presenting with teaching aids	Ask students to come to the classroom with own prepared teaching aids
4. Poor management/use of teaching aids	Seek support from experienced teacher in the subject
5. PRESETs fails to relate teaching aids and subject matter	Use different written text instead of teaching aids. Make more explanations for students to compare information. Use varieties of teaching techniques.
6. It consumes a lot of time for the presentation of the lesson, than estimated time.	Give brief explanations about the teaching aids
7. Students sometimes are more motivated to interact with teaching aids and pay little attention to the progress of lesson	Give students individual task to keep them busy. Remove the teaching aids when is not needed to continue with the lesson. Advice students to be attentive to lesson progress
8. The proper place to position in the classroom and appropriate time to use TA during teaching	Place the teaching aids in one side in front of the class and allow students to take notes from it. Use a variety of teaching techniques.
9. Some topics are difficult to teach with teaching aids	No responses
10. Few text books	Borrow from the nearby schools/college whenever needed.

Table 5 presents the strategies used by PRESETs to cope with the challenges of using teaching aids during classroom teaching. These strategies were, first, that the PRESETs used

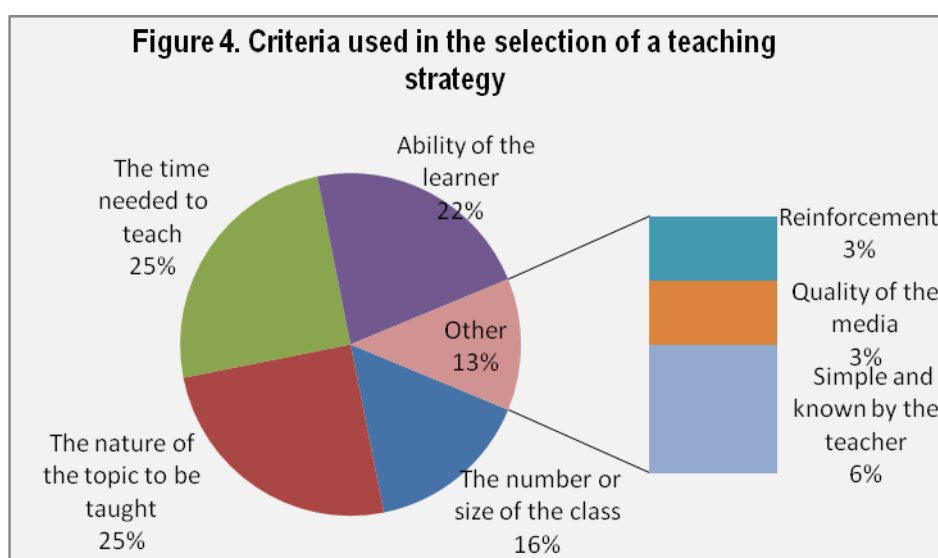
verbal explanations, summary of lesson notes, and remedial teaching for students who were visually impaired because such students had difficulty in following the lesson during classroom interaction activities. These strategies were appropriate for visually impaired students, although PRESETs did not explain how they would help students who had other disabilities, deaf, or had a mental illness. This might call for another study that will examine the challenges of students with such challenges in schools and colleges in similar research contexts. Second, when PRESETs had limited time to assess the way students used the teaching aids in-group learning activities, they assigned homework to students in order to validate the efficacy of teaching aids. Third, the students were instructed to improvise learning aids and come with them during face-to-face interactions as a strategy to deal with challenges of shortage of teaching aids. However, the quality and effectiveness of the student's improvised teaching aids were questionable. Unless the students were taught some skills to prepare effective teaching aids, otherwise, PRESETs needed to assess the quality of teaching aids before face-to-face session for revision and effective use of the teaching aids in teaching. Fourth, when PRESETs encountered some difficulties in the class interaction activities, an experienced local teacher supported them with how to use teaching aids in teaching the lesson. Fifth, when PRESETs had difficulty with selection of the relevant teaching aids for the subject topic they used a variety of text materials, a variety of teaching techniques, and provided explanations to students to help them compare the information as a remedy to the difficult situation. Sixth, the PRESETs explained briefly about the teaching aids to save time for the lesson presentation. This was used as a strategy to keep students from concentrating on a particular teaching aid and then failing to follow the lesson. In addition, once the teaching aids were used, individual tasks were given to students, and then removed from display in order to continue with the lesson to encourage the students to be attentive. Seventh, PRESETs displayed some of the teaching aids in front of the class on one side of the chalkboard/classroom to allow students to interact with them. In addition, PRESETs used a variety of teaching techniques (such as whole class dialogue, small group discussion, examples, cases, and lecture) and teaching aids (real objects, improvised materials) to enhance classroom interactions. These strategies were used to cope with the challenge of locating the appropriate place to display the teaching aids for student viewing and the appropriate time to use teaching aids during teaching. Eighth, the PRESETs borrowed teaching aids from neighbouring schools and colleges to solve the problems of textbook shortages and other referenced materials at their school or college.

Common Teaching Strategies Used by PRESETs

The teaching strategies discussed the main teaching techniques and the criteria, which were used by the PRESETs in the selection of the appropriate technique for the classroom teaching and learning.



The response by PRESETs to the strategies used in teaching included: small grouping of students strategy (51%), whole class discussion strategy (20%), team teaching strategy (16%), individual student learning strategy (11%), and multi-grade teaching (2%) as shown in Figure 3 below. The results reflected the literature, such as Mtika (2008), who showed that the use of learner-centred pedagogy in schools was not popular among some PRESETs, or it was not appropriated properly in college for use in classrooms. Further, it showed that when it was used the motive was to achieve appropriate grades during observations by supervisors, but was not necessarily a valued tool by PRESETs for promoting pupil involvement in their own learning (Mtika, 2008, p.158).



Based on the data from the questionnaire, PRESETs explained the criteria they followed in the selection of a teaching-learning strategy, they included: (a) the time needed to teach the class (25%); (b) the nature of the topic to be taught by using such technique (25%); (c) the ability of learners in the class (22%); and (d) the number or size of the class (16%). Other conditions included (e) the quality or relevance of the strategy (3%) and (f) to teach content that is simple and clearly known by the teacher (6%) as demonstrated in Figure 4. These

criteria reflected that PRESETs had prior understanding and skills about the premises of using teaching strategy with regard to the student needs and learning context.

PRESET's ability to balance student learning and teaching time. PRESETs filled out the questionnaire to describe how they involved students in the learning activities of the subject and the ways they used to balance between the ability of students and the lesson objectives as well as the time for learning. The results are presented in Table 6.

Table 6: Assessment of students' involvement in the classroom learning activities.

PRESET identified ways to assess student engagement (Multiple responses, N = 30)	Responses
By asking questions regarding the lesson to students which bring positive responses	(23) 85.0%
By observing their attention in the presentation	(1) 3.7%
By providing homework	(2) 7.4%
By observing how students ask and attempt questions about the topic	(1)3.7%

Table 6 indicates how PRESETs assessed student's involvement in learning the subject. The results show that PRESETs assessed students by (a) asking questions regarding the lesson to check if they followed the learning positively (85.0%), (b) providing homework to evaluate the involvement of students in learning activities (7.4%), (c) observing the attention of students during lesson presentation (3.7%), and (d) observing how students asked and attempted to answer the questions about the topic (3.7%). The findings reflected the PRESET's understanding of student involvement or engagement as an aspect of pedagogy of teaching.

Table 7: Means used to balance between lesson objectives, student needs, and class teaching and learning process time.

Means used to balance between lesson objectives and time in class teaching and learning process (N = 37)	Percentage (%)
By limiting the lesson plan objectives within the time set	(31) 91%
By discussing one objective in one period	(2) 5.8%
By ensuring that I do not miss a period	(1) 2.9%

Table 7 presented multiple responses about the means used by PRESETs to ensure appropriate time was allocated to learning objectives in teaching and learning. The means included: limiting the amount of lesson objectives within the timeframe as prescribed in the lesson plan 91% (31), discussing one objective in one period 5.8% (2), and PRESETs participated in all period for class teaching 2.9% (1). Therefore, the findings revealed that about 9% (3) PRESETs were not informed on how to ensure the balance between time and the learning outcome in teaching for students because they did not appropriately respond to the question.

Table 8. Means used by PRESETs to balance student needs and teaching objectives.

Ways used to balance lesson objectives and ability of students during lesson delivery	Frequencies
By observing the level of difficulty of the lesson objectives	2
By setting extra time for those who learn slowly	1

By asking individuals about tasks to assess if they understand	3
By following what is suggested in the syllabus	3
By simplifying difficult objectives	1
If the difficult level is low, I "spend up" teaching	3
By teaching from simple to complex learning objectives	1

In connection to Table 7, teachers were also asked to indicate the means used to ensure that there is a balance between learning objectives and student ability during teaching as Table 8 shows. PRESETs used strategies such as: (a) asking individuals about tasks to assess their understanding; (b) by following what is suggested in the syllabus; and (c) if the difficulty level is low they spent time in teaching or not; (d) assessing the level of difficulty of the lesson objectives. Others were: (e) setting extra time for those who learn slowly, (f) simplifying difficult learning objectives, and (g) teaching from simple to complex learning objectives. In this situation, PRESET teachers showed an understanding of the pedagogical knowledge and skills of teaching methods taught by their lecturers.

PRESET's behaviours and classroom management during teaching. PRESETs were observed in the classroom when they taught students and the data were collected by using an observation checklist. The classroom observations were intended to align the documents and the behaviours of the PRESETs in different phases of class interactions as Figure 5 illustrates.

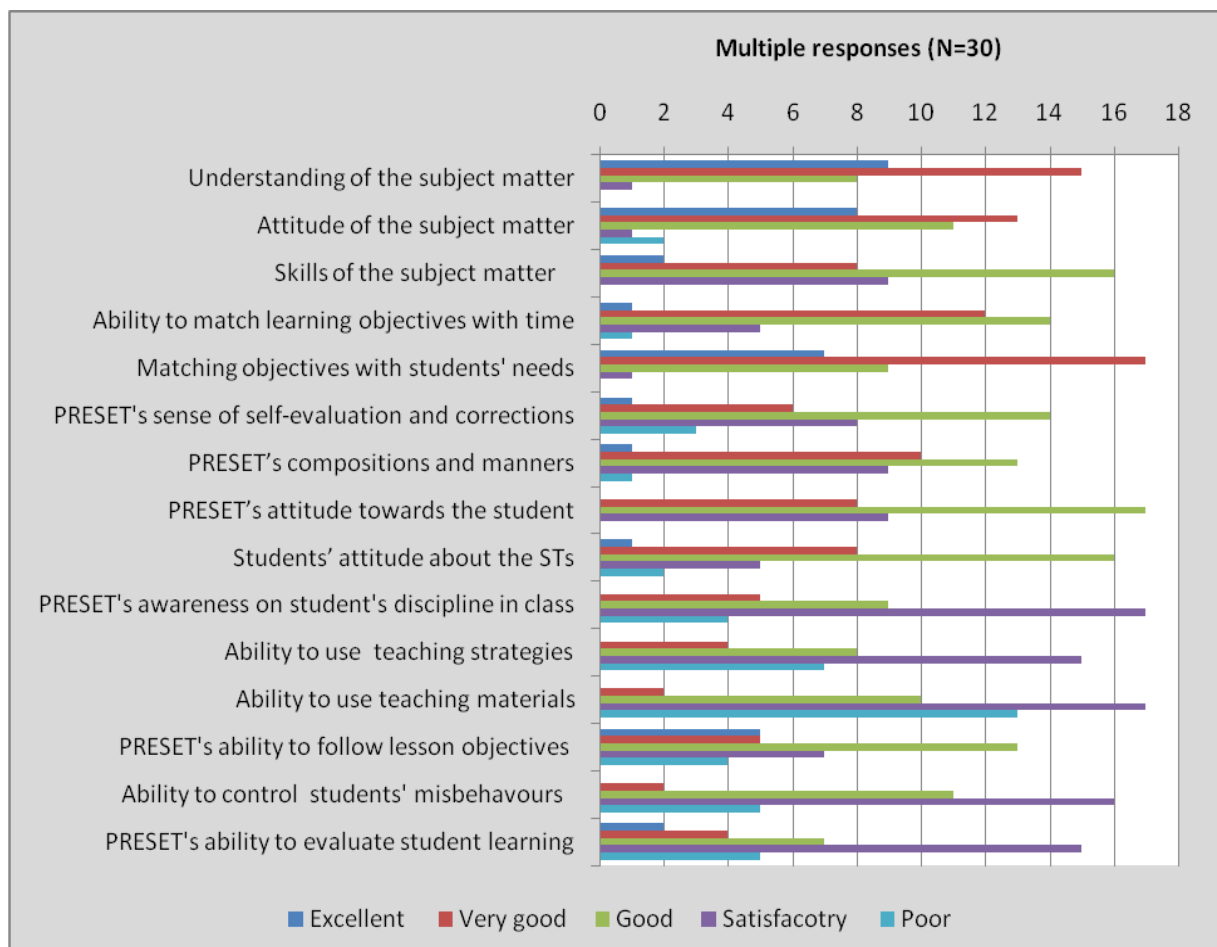


Figure 5 PRESETs behaviours to manage classroom teaching.

Figure 5 presents data observed when PRESETs were teaching in the classroom. The intention was to assess the ability of the PRESETs' behaviour to influence the control of classroom discipline. The researcher used an observation rating scales (excellent, very good, good, satisfactory, and poor). The discussed results are according to multiple rating responses. The results showed high responses in PRESET's mastery of subject matter (15) and attitude towards students (17), as well as the ability to link the learning objectives and student's needs (17); these were rated "very good" respectively. Moreover, other behaviours included: the ability to follow lesson objectives in teaching (13), the positive attitude of students about the PRESETs (16), the PRESETs mastery of subject skills (16), and the positive attitude of PRESETs about the students (13) were all assessed as "good" respectively. In addition, the good composition and manners of the student teacher (13), the student teacher's sense of self-evaluation and corrections (14), and the ability to match learning objectives with time (14) were also rated as "good".

Furthermore, the PRESET's awareness of class discipline (17), the ability to use teaching strategies (15), the ability to use teaching materials or resources (17), the ability to control students' misbehaviours (16), as well as the ability to evaluate students' achievements in teaching (15) were each rated as "satisfactory". Nevertheless, the PRESET's ability to use teaching materials (13), teaching strategies (7), control of students' behaviours (5), and the evaluation of student learning (5) were each rated as "poor". The highest rating of "excellent" was indicated in the assessment of the ability of the PRESETs in matching the student needs with manageable learning objectives (7), understanding the subject matter (9), and the attitude towards the subject matter.

Thus, the findings revealed PRESETs demonstrated high ability of linking the learning outcomes with the timing of learning, positive attitude towards the subject, and an understanding of the subject matter, as well as controlling students' misbehaviour. However, although the PRESET's control of students' misbehaviours was poor, overall, the findings showed high ability in pedagogical knowledge and skills contrary to some previous studies including Lim-Toe, et al. (2008), Mtika (2008), and Nguyen (2009). The semi-structured interviews were administered to eight heads of the secondary schools and teacher colleges. The question wanted the heads to explain their perceptions about the challenges faced by PRESETs in teaching and they responded as Table 9 illustrates.

Table 9. Perceptions of educational administrators: PRESET's teaching challenges.

Institution	Responses from educational administrators
I	teachers (<i>PRESETs</i>) do not have any challenge
II	teachers do not have any challenge
III	teachers have language barriers; in class, they are not free to communicate the subject matter. Sometimes they stuck to communicate the lesson properly to students
IV	Teachers have problems of class control, competence in language communication skills and behaviours.
V	The teachers have problems in the preparations for teaching, for instance, they prepare many objectives in short time, they do not plan and show clearly the teaching and learning activities before teaching.
	One of the problems of these teachers is how to communicate in English language, as some of them have shown lack of confidence and competence. I

	think these teachers would begin with diploma (<i>diploma in teacher education</i>) before joining for university education. I think it can improve their confidence and competence in their areas of specialization and professional ethics
VI	These teachers have a problem with the language of instruction <i>as</i> they are used to learn in English language when they are at the university campuses. Hence, it is difficult to teach in Kiswahili language in teacher colleges because these teachers have acquired the subject concepts and theories in English Language.
VII	The teachers are competent since I have not received any problem from my students
VIII	All universities send students for teaching practice in the same time and the students end up sharing the same subjects to teach and sometimes share to teach the same topic in the same class.

With the data in Table 9, the heads of the schools and teacher colleges reflected the major challenges faced by PRESETs in teaching, which were associated with the issues of the classroom communication language, classroom management, and preparation for teaching. The classroom management problems reflected the PRESET's limited ability in teaching preparations and mastery of both English and Kiswahili instructional languages. Based on this understanding of PRESETs, it is an indication that they have limited pedagogical content knowledge as also indicated in Mtika (2008). However, the findings from the interviews about the pedagogical content knowledge for PRESETs were contrary from the observations, which rated them "very good" in the overall PRESET's behaviours and class control in the same aspects. Hence, PRESETs seem to have limited experience on classroom management that led to a lack of confidence in teaching as the heads of institutions III, IV, V, and VI commented:

"...the systems of education have weak foundation of preparing students to learn English language properly, that is, from primary and secondary schools, students cannot even speak and write a correct sentence either in English or Kiswahili ..."

In elaborating the sources of those challenges, some heads of schools and teacher colleges raised their concerns about the present educational policies. In their views, the education system has poor strategies to prepare people to learn the English and Kiswahili languages from the elementary level. Moreover, they argued that the situation was caused by the influence of global development policies that increased the fall of moral standards and ethics among people and the government leaders. To justify this, one of the heads of those educational institutions narrated:

"... issues of globalization have greatly influenced the quality of education; the issues of globalization led to the formation of weak and corrupt government we have today. We now witness the bleaching of moral values, ethics, and patriotism spirit among public servants such as policy makers and curriculum developers in the system of education in the country in general. The government does not talk and stop such emerging habit; ordinary people who need change cannot gain support anyhow ..."

This suggests that the educational officers do not provide effective strategies as a contribution towards solving the policy problems. In this perspective, there was clear evidence of a lack of accountability and responsibility to their work and the people around them.

Conclusion and Recommendations

The PRESET's preparation for classroom teaching reflected the nature of the professional development program that prepares them. Findings have shown that there was a mismatch between theory and practice, which led to superficial teaching by PRESETs. PRESETs demonstrated weak abilities in the preparations for classroom teaching in terms of long-term (schemes of work) and short plans (classroom learning plans) for classroom teaching. PRESETs showed limited competence in designing high quality evaluation instruments, inability to facilitate the students to construct lesson notes and improvisation of teaching materials. PRESET's preparation reflected the traditional teacher centred teaching whereby the lesson notes prepared by PRESETs from textbooks and teaching manuals determined students learning.

Findings indicate that PRESETs were able to manage properly their teaching time, but they had difficulty in linking the teaching resources and pedagogical skills in different learning environments. PRESETs demonstrated low ability to use teaching resources in teaching because the majority of them were using teaching materials that stimulated the sense of sight (25%), and therefore, they faced great problems in helping students with visual problems. PRESETs employed outcome based approaches in teaching, such as a small groups (51%) and whole class strategies (20%) to recognise students' learning needs and the teaching context, however, they demonstrated poor pedagogical content knowledge and skills in the implementation of those strategies. In addition, the PRESETs had a language problem in classroom communication in both Kiswahili and English languages which influenced their confidence in teaching. Thus PRESETs needed to learn these pedagogical skills from their university courses before starting their teaching practice. Therefore, this may serve as evidence that PRESETs spent more time in learning academic content and less in the pedagogical teaching courses during their undergraduate degree program studies.

Therefore, higher education institutions that offer PRESETs degree programs should make sure there is a balanced treatment of the academic and pedagogical courses during the implementation of those programs for PRESETs. The balanced treatment should also consider the support for resources and facilities by the respective universities for effective implementation of the PRESETs professional development program. In the same way, the management of the schools, colleges, and universities should cooperate closely in the implementation of PRESETs professional development programs to produce high quality teachers who can enjoy their teaching career with students in schools and colleges. Likewise, there is a need to review the education policy document together with the curricula designs of secondary schools and teacher education to provide more opportunities for students to earn a quality education prior to entering their teacher education program. Quality education is needed for students to attain their individual and social dreams of life experience. Therefore, the implementation of the educational policy reforms should involve a bottoms up approach in which the stakeholders get the opportunities to discuss policy issues for the effective implementation of the PRESETs education programs.

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