**Reforming Teacher Education in Tanzania**

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**Abstract**

*It is widely acknowledged that in order to improve the quality of education in primary schools in developing countries there is a need to place pedagogy and its training implications at the centre of teacher education reform. Like many countries in Eastern and Southern Africa, Tanzania has introduced various initiatives and reforms to improve the quality of teacher education at the pre and in-service stages. Drawing on evidence from a baseline study of primary teacher interactional and discourse practices, and a review of teacher training colleges, this paper explores the training needs of teacher educators in Tanzania who, in the light of recent reforms to teacher education, will be responsible for education and training at the pre and in-service levels.*

**Keywords**: pre-service and in-service education and training; teacher education reform; Tanzania; basic education; quality education

1. **Introduction**

In common with other countries in sub-Saharan Africa, Tanzania has expanded its primary education provision in order to achieve universal primary education by 2015. In a new drive to address problems of access and quality, 2001 saw the abolition of school fees, and in 2002 the heavily donor supported Primary Education Development Programme was launched. This was followed by the Secondary Education Development Programme in 2004, designed to expand secondary education access by up to 50% by 2010 (Wedgwood, 2007; Hardman et al. in press).

Given the need to address the quality of a rapidly expanding teaching force, the Tanzania Ministry of Education and Vocational Training (MoEVT) set about developing its national in-service and teacher education provision as part of the Teacher Development and Management Strategy (TDMS, 2008 – 2013) (MoEVT, 2008). To inform the design of the TDMS, a mapping of existing teacher education related policies, structures, plans and activities was conducted (UNICEF, 2009a), together with a baseline study of classroom interactional and discourse patterns (UNICEF, 2009b) and review of pre-service education and training (UNICEF, 2009c). From these studies, guidelines for the development of an In-service Training and Education (INSET) and Continuing Professional Development (CPD) strategy linked to the TDMS were developed (MoEVT, 2009). The CPD programme was officially launched in February 2011 (The Citizen, 25/02/2011).

Drawing on the findings of the baseline study and review of Teacher Colleges (TCs), this paper explores the training needs of teacher educators who, under the new INSET/CPD strategy, will need to be equipped to play a central role in the provision of teacher education and training at the pre and in-services stages (MoEVT, 2009). The first part of this article provides the background to the reforms to teacher education in Tanzania. The second part reviews underlying pedagogical practices currently used in Tanzanian primary schools, followed by a review of instructional practices used by teacher educators to prepare student teachers for the classroom. The concluding section highlights the main lessons to emerge from the two studies for those charged with improving the quality of teacher education in Tanzania and beyond.

1. **Background**

By international standards average academic qualifications for those entering primary teacher training in Tanzania are low, having normally completed 4 years of lower secondary school and graduating with ordinary level secondary education certificate (Towse et al. 2002). Southern African Consortium for Measuring Educational Quality (SACMEQ) data collected in 2007 shows that around 80 percent of primary school pupils are being taught by teachers with a junior secondary school qualification (known as Grade A teachers) and 16 percent with no more than a primary leaving certificate (known as Grade B teachers) (SACMEQ, 2010). Most teachers trained in TCs follow a full-time, residential course of a year or more and currently there are 34 public and 14 private colleges offering such provision.

The curriculum for teacher education in Tanzania is centrally determined by the Tanzanian Institute of Education and examined by the National Examination Council of Tanzania. The teacher education curriculum covers general studies; studies related to students’ intended field of teaching and teaching practice. These essentially conform to what obtains in other eastern and southern African countries where the content of teacher education incorporates: subject content (adequate knowledge and understanding of the subject to be taught in school); pedagogic content knowledge (knowledge of how to teach the subject); education and professional studies; a practicum; and in some cases, general education (Lewin and Stuart, 2003; O’Sullivan, 2010).

In the sub-Saharan African region generally, pre-service education and training (PRESET) is judged to be of poor quality It is found to be largely lecture-based (usually from trainers who lack experience and expertise in primary education) with little in the way of supervised practical teaching, thereby creating a large gap between theory and actual classroom practice, and a repetition of secondary education at several times the cost (Lewin and Stuart, 2003; Mattson, 2006; O’Sullivan, 2010). Similarly, the provision of in-service education and training (INSET) is also judged to be of poor quality with little transferability to the classroom, and where it does exist, it is often found to be ad hoc and mainly concentrated in urban areas (Duthilleul and Allen, 2005; Penny et al. 2008; Mulkeen, 2010). In the face of these challenges, there is a growing recognition that a focus on pedagogy and its training implications needs to be at the heart of the commitment to improving the quality of education and learning achievement in the region (Schwille et al. 2007; Stuart et al. 2009; Mulkeen, 2010).

In common with other sub-Saharan African countries, the comparatively few studies that have been carried out into classroom pedagogy in Tanzanian primary schools show a teacher-dominated discourse promoting rote learning and recitation. Such interaction often takes the form of lengthy recitations made up of teacher explanation and questions, and brief answers by individual pupils or the whole class (Arthur, 2001; O-saki and Agu, 2002; Abd-Kadir and Hardman, 2007; Barrett, 2007; Wedin, 2010). Helping teachers to transform classroom talk into a purposeful and productive dialogue, through a pedagogy and curriculum which is relevant to the lives and linguistic profile of the communities from which the pupils come, is therefore seen as being fundamental to improving the quality of primary education, particularly in contexts like Tanzania where learning resources and teacher training are limited (Tharp and Dalton, 2007).

Changing such a narrow repertoire of pedagogic practices suggests the need for powerful school-based professional programmes as ultimately educational quality is obtained through pedagogical processes in the classroom (O’Sullivan, 2006; Alexander, 2008; Hardman et al. 2009). Such identified weaknesses at the PRESET and INSET in the eastern and southern African region have led to calls for a radical overhaul of teacher education that moves away from a largely college-based provision to a more long-term sustainable vision of CPD that would systemically update the key competences that teachers require in the classroom (Schwille et al. 2007; Timperley, 2008; Mulkeen, 2010).

In response to this need, development partners in the region have been assisting governments to develop national professional systems for teachers. The emphasis has been to bring together PRESET and INSET to ensure coherence, consistency and quality so that all children have access to teachers with minimal competences. The use of school-based INSET supported by distance learning materials, school clusters and local support agents to work with head teachers and teachers in the schools has been strongly advocated as a way of closing the gap between theory and practice, and raising the quality of teaching and learning in the region’s primary schools (O’Sullivan, 2006; Mattson, 2006; Hardman et al. in press).

However, there are dangers if the adoption of such ‘best practices’, driven by the agendas of international donors and often adapted from high income countries, ignore the everyday realities of the classroom, and the motivations and capacity of the teachers charged with delivering such reforms. Comparative research shows that teacher reform needs to combine the culturally or nationally unique with what is universal in classroom pedagogy if internationally driven reforms to teacher education are to be embedded in the classroom reforms (Crossley, 2009; Heynemann, 2009; Avalos, 2011). The studies reported on in the current paper were therefore designed to inform the development of the national INSET/CPD strategy and ensure it reflected the realities of the Tanzanian primary classroom and current capacities of teacher educators.

1. **Baseline study of classroom interaction and discourse**

*3.1 Design of the baseline*

A sample of 32 primary schools serving urban and rural contexts from 8 of the 36 regions in mainland Tanzania (Bagamoyo, Hai, Magu, Makete, Mtwara, Shinyang, Siha, Temeke) were selected. To study the quality of teacher-pupil classroom interaction and discourse in the schools, systematic observation, computerised interaction analysis of digitally recorded lessons and discourse analysis of transcripts were used. Trained observers, working in pairs to ensure inter-rater reliability, completed a systematic observation schedule on 236 live lessons covering the teaching of English, Kiswahili, mathematics and science at standards 3 and 6. The schedule used time-line analysis and recorded the proportion of time that was spent on a range of whole class, group and individual tasks/activities. In addition, 40 lessons covering the teaching of English at standards 3 and 6 were digitally recorded and intensively analysed using a computerised systematic observation system developed for use in earlier studies of sub-Saharan African classrooms (Ackers and Hardman, 2001; Hardman et al. 2008). The coding analysed teacher-pupil interaction by recording the different types, frequency and length of discourse moves made by teachers and pupils. Sections from the lessons were also transcribed and coded using a system of discourse analysis based on the work of Sinclair and Coulthard (1992) for triangulation with the computerised analysis of the digitally recorded lessons.

As part of the baseline, data were also collected on teacher participation in INSET from teachers in the 32 schools sampled. Of the 323 teachers who completed the questionnaire, 36% had undertaken INSET with a focus on pedagogy, and 16% had undertaken subject knowledge upgrading courses in the previous 5 years. Most of the recorded provision was of a short duration, lasting no more than a week. However, across the districts there was a large degree of variation: 86 percent of teachers in Siha and 84 percent in Shinyanga reported that they had taken part in INSET or upgrading programmes compared to 9 and 5 percent in Bagamoyo and Temeke respectively.

*3.2 Findings*

* 1. *1 Timeline analysis*

A breakdown of the 236 live lessons analysed using a time-line analysis framework is given in Table 1.

**Table 1: Breakdown of observed lessons by subject and year group**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **English** | **Kiswahili** | **Mathematics** | **Science** |
| **Standard 3** | 32 | 24 | 32 | 31 |
| **Standard 6** | 31 | 22 | 32 | 32 |

The framework systematically coded in minutes the time that was spent on a range of ten teaching and learning constructs[[1]](#footnote-1). Across all of the 32 schools, lessons were timetabled to last 40 minutes. However, the average lesson of the recorded lessons in the sample was 38 minutes in length. The total number of boys in the 236 lessons analysed was 5647 compared to 6254 girls giving a mean of 24 boys and 27 girls per class (ranging from 15 to 112).

Traditionally, teachers in Tanzania are trained to follow a three-part structure: the first stage being made up of teacher explanation, question and answer, followed by individual seat work with the pupils completing exercises from the chalk board or text books while the teacher marks pupil work, and a brief ‘plenary’ to review the work covered in the lesson. Only 32% of the lessons recorded, however, used all three stages with the majority of lessons missing out a review session to draw together, consolidate and direct pupils to the next stage of learning.

Overall, the aggregated data for all four subjects show that teacher directed activities (explaining, question and answer, writing on the chalk board, reading to the class, asking pupils to read, lesson summary) took up over half (55%) of the lesson time. Individual seat work, where pupils worked on exercises from the chalk board or textbooks and teachers marked the exercises, accounted for 25% of the lesson time. More ‘pupil-centred’ forms of learning (i.e. paired or group work, pupil demonstration) accounted for just 14% of the lesson time. Non-curricular activities (i.e. administration, interruptions) took up a further 6% of the time. There also appeared to be little variation in teaching approaches across all four subjects at both stages of the primary curriculum.

In order to investigate if there were any differences between urban and rural schools, an independent-samples t-test was used to analyse each of the teaching and learning activities to compare the mean scores for each group of teachers. No significant differences were found between the two groups of teachers with the exception of ‘pupils working from textbooks’ (p= 0.0333). Pupils in urban schools were more likely to work from a textbook reflecting the higher number of textbooks available in urban settings (an urban/rural textbook ratio of 2:1). In contrast, although not quite statistically significant (p=0.0851), pupils in rural schools were more likely to work on exercises from the chalkboard compared to urban pupils.

Observers also recorded the number of textbooks available in the 236 classrooms visited. We found a textbook-pupil ratio of 1:10 at Standard 3 and 1:6 at Standard 6; 94 (40%) of the lessons had no textbooks for pupil. Similarly, the use of visual aids, such as charts, models and scientific equipment were only recorded in 46 (19%) of the lessons observed. The findings therefore show the scarcity of teaching and learning resources reinforcing the practice where teachers spent an excessive amount of time writing up notes on the chalkboard with pupils copying from it. Where textbooks were present, the observations suggested that their use was often limited to the teacher reading to the class, interspersed with question and answer, individual exercises and pupils reading to the class. Overall, it was found that reading (from both textbooks and the chalk board) accounted for nearly 9% of the lesson time.

While there were no significant differences in the overall teaching activities between urban and rural schools, further analysis of the data at district level revealed that there was a great deal of variation in the way teachers were using participatory methods such as paired and group work. Overall, 6% of lesson time was spent in paired/group work. However, in Hai, Magu and Makete, the percentage of the lesson time spent on paired/group work was 14% and 10% respectively, compared to 3% and 4% in Temeke and Mtwara where the lowest rates of INSET were reported. Although not significant, paired and group work was also more likely to occur in standard 6 classes.

*3.2.2 Interaction analysis of digitally recorded lessons*

In analysing the 40 digitally recorded English lessons, the coding system primarily focused on the types of teacher questions (i.e. open or closed), whether questions were answered (and by whom), and types of follow-up given in response to answers. It also recorded the number of pupil initiations in the form of questions. Responses were coded according to whether a boy or girl answered, or whether there was a choral reply. Teacher follow-up to a pupil response was coded according to whether it was affirmed, praised or elaborated upon. Overall, 5321 discourse moves at the initiation-response-feedback stages were coded and analysed.

*3.2.3 Lesson structure*

Across all 32 schools, the average length of the 40 English lessons was 38 minutes. Only 11 (28%) of the lessons recorded used a 3-part structure with most missing out a review stage of the lesson. The interaction analysis showed that the average length of time spent on whole class interaction, where the teacher mainly used explanation, question and answer and the chalk board to engage the whole class, was 18 minutes. Of the 18 minutes spent interacting with the whole class, teacher explanation took up 47% of the time, question and answer sequences took up 27% of the time, and the rest was made up of writing on the chalk board, reading from the chalk board or textbook, pupil demonstration, silences and interruptions.

*3.2.4 Initiation moves*

The study counted all requests for information as questioning sequences. In addition to teacher questions designed to elicit an answer from the pupils, one prominent ‘questioning’ move was the use of a mid-sentence rise in voice intonation that acted as a teacher elicit, designed to get a response from the pupils during, or at the end of, an explanation or following a pupil response (Pontefract and Hardman, 2005; Wedin, 2010). Usually, the elicitation was in the form of a repetition or completion of a phrase or word. It was often direct and pupils often knew from the intonation whether it required an individual answer or a choral response. This was categorised as a *cued elicitation.* Teachers would also use a tag question to check on understanding. Rather than being a genuine check, often the only possible response was an affirmative answer from the pupils. This was categorised as a *teacher check*.

Cued elicitations and teacher checks therefore largely functioned as ritualised participation strategies designed to keep the pupils involved rather than requiring an answer to a question. Only teacher elicitations that went beyond a strategy to get the pupils to participate, were classified as *teacher questions*. The interaction analysis system recorded whether teacher questions were *open* (i.e. defined in terms of the teacher’s reaction to the pupil’s answer: only if the teacher accepted more than one answer would it be judged as open) or *closed* (i.e. calling for a single response or offering facts). The system also recorded *teacher directs* where the teacher directed the class to do something that did not require a verbal response. Pupil questions, and teacher responses to such questions, were also recorded. Altogether the study coded and analysed 1741 questioning sequences within the 40 lessons using the above categories.

A percentage breakdown for each of the initiation moves is given in Figure 1 below.

The graph shows that teacher questions were the most frequent teacher elicitation move, followed by cued elicitations and teacher explanations. Further analysis revealed that 97 per cent of all such questions were closed requiring recall of information. More thought provoking, open-ended questions, eliciting a range of responses, were therefore rare. The comparatively low use of teacher directs suggests classroom routines were clearly established and understood by the pupils, reducing the need for frequent reminders. The lack of managerial talk may also reflect the lack of learning resources available in the classroom. Pupil questions were extremely rare: in all 40 lessons only 9 pupils asked questions making up less than 1 per cent of the total initiation moves.

*3.2.5 Response moves*

The following moves were coded in response to questioning moves: boy answer, girl answer, choral response, pupil demonstration and teacher answer. A pupil demonstration was coded when a pupil was called to the chalk board to demonstrate an answer to a question or to recite. In total, 1646 response moves were coded. The percentage distribution for each of the response moves is given in Figure 2 below.

Choral responses were therefore the dominant method of responding to a teacher initiation, making up 62% of the response moves compared to 35% individual responses. It was also found that boys were twice more likely to be asked to answer a question than girls.

*3.2.6 Follow-up moves*

The following discourse moves were coded in follow-up to a response: whether there was a response; whether it was affirmed (i.e. acknowledging that the teacher accepts or rejects the answer); whether it was praised; whether it was probed; whether the answer was commented upon; whether the teacher asked another pupil to answer). In total, 1934 follow-up moves were coded. Figure 3 shows the percentage score for each of the follow-up moves.

The findings show it was common for an answer to receive no follow-up, particularly when a teacher elicitation called for a choral response. When it did occur, teachers usually affirmed an answer or praised it (often by asking the class to clap). Teacher comments on pupil

answers, whereby they would rephrase, build or elaborate upon an answer, were rare, as were teacher probes (i.e. teacher would stay with a pupil and ask for further elaboration upon

their answer). When the data were further analysed to compare teachers working in urban and rural schools no significant differences were found in their interactive practices.

*3.2.6 Transcript analysis*

The following transcript (Table 2), taken from a year 6 English lesson in a rural school in Hai, is representative of the patterns of interaction we found in all 40 English lessons. The class was made up of 32 pupils (18 boys and 14 girls). The lesson, taught by a female teacher, focused on the use of the verbs *will* and *shall*[[2]](#footnote-2). Half of the 40 minute of the lesson was spent on whole class teaching, followed by individual seat work where the pupils copied down the teacher’s notes from the chalk board (the *moves*, Initiation, Response, Feedback, make up the three-part teaching exchange which in turn are made up of *acts*: acc = accept; ch = teacher check; com = teacher comment; d = teacher direct; e = teacher evaluation; el = teacher question; i = teacher inform; n = nomination; p = prompt; rep = reply; s = starter. Re-initiations (R/I) moves are embedded within a teaching exchange and together with the act of cued elicitation (ce) are often designed to elicit a repetition or completion of a phrase or word. Boundaries indicated by a marker (m) and/or meta-statement (ms) show a change in lesson topic; ^ indicates rising intonation; T = teacher; B = boy; G = girl; C = choral response):

**Table 2: Extract from Standard 6 English lesson**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Exchanges** |  |  | **Moves** | **Acts** |
| 1 | T | today we’re going to study about auxiliary verbs how | I | ms |
| 2 | T | say auxiliary verbs | I | ce |
| 3 | C | auxiliary verbs | R | rep |
| 4 | T | we will deal with the two verbs will and er shall also we use will when we are talking about happen or the thing which we can do in future  also we use will when we are talking about happen future example I shall (writes on chalk board) I will go to the to the market this afternoon it means now you’re in class but in during the afternoon you will go to the market  also you can say I will (writes on chalk board) go to the break next time | I | i  i  i |
| 5 | T | Now I want to who can make can make sentence by using the word will you know that it will show us after this this time what you will think you will do  who can try to make the sentence who can try I will go home in the evening who can try to make a sentence  Navora try | I | s  el  n |
| 6 | G | I will go to the market afternoon | R | rep |
| 7 | T | good | F | e |
| 8 | T | another one another one  Benson | I | s/el  n |
| 9 | B | I will go to the home this evening | R | rep |
| 10 | T | there is a mistake | F | e |
| 11 | T | another one who can try another one who can try  yes | I | el  n |
| 12 | G | I will go to the shop afternoon | R | rep |
| 13 | T | good | F | e |
| 14 | T | I will go (writes on chalk board) I will go to the shop afternoon I will go to the shop afternoon  class read this sentence  I will go to the shop this^ | I | s  ce |
| 15 | C | I will go to the shop afternoon | R | rep |
| 16 | T | again | R/I | ce |
| 17 | C | I will go to the shop afternoon | R | rep |
| 18 | T | yes Azoro | I | el |
| 19 | B | I will go to the shop in the morning | R | rep |
| 20 | T | no that is the past tense  we’re going to study about the future future action or the thing which you are thinking you will do in the morning | F | e  com |
| 21 | T | another one future things not the pasted things  another one who can try use ( )  yes | I | s  n |
| 22 | B | I will go to the church afternoon | R | rep |
| 23 | T | I will go to the church afternoon (writes on chalk board) | F | acc |
| 24 | T | now we can also use will we will go to the church afternoon because I say you can use I and we will in will we will go the market afternoon we will go to the ( ) next time I will go we will go to the shop afternoon we will eat afternoon we will eat afternoon | I | i |
| 25 | T | who can try make sentence using we | I | s/el  n |
| 26 | B | we will go to the home afternoon | R | rep |
| 27 | T | again | R/I | ce |
| 28 | B | we will go to the home afternoon | R | Rep |
| 29 | T | we will go to the home afternoon  we will go to the home afternoon (writes on chalk board) | F | acc |

The extract shows the teacher’s pervasive use of teacher explanation (Turns 4, 5, 24) punctuated by a question and answer approach. Cued elicitations were often accompanied by a mid-sentence rise in voice intonation designed to get a response from the pupils, often as a choral response, during, or at the end of, an explanation or following a pupil response (Turns 2, 14, 16 & 27). The use of this ‘participation’ strategy, through the completion of phrases, the repetition of words and choral affirmation of ‘understanding’, often prevented pupils from engaging in more creative and higher levels of thinking. It therefore led to the perpetuation of a restrictive, often monotonous, model of teaching and learning similar to the patterns of teacher-pupil interaction found in Wedin’s (2010) study of primary school teaching taught through the medium of Kiswahili. Overall, interactional practices in the English lessons were found to be highly ritualised creating a semblance of curriculum coverage, knowledge and understanding. Hornberger and Chick (2001) describe such discourse patterns as safe talk as it is predictable and pupils know from the intonation when to answer and the type of answer expected of them. The extract also reveals gaps in the teacher’s own subject knowledge as she fails to differentiate between will and shall, mistakenly corrects a pupil’s answer (Turns 19 & 20) and fails to correct other language errors in her own use of English and that of the pupils.

1. **Review of Teacher Colleges**

*4.1 Design of review*

For the review of PRESET in Tanzania, three TCs covering a wide geographical spread (Morogoro, Ilonga, Tandala) were visited. Each of the colleges offered a 2-year, full-time certificate course in primary school teaching. All of the TCs were preparing the trainees to teach across the primary curriculum (i.e. to be able to teach 11 subject areas) and to play a full role in pastoral development. They also provided for a degree of specialisation, especially for upper primary teachers mostly related to core subjects in English, Kiswahili, mathematics and science. A content analysis of all the course materials made available to us was carried out focusing on those aspects of the curriculum which directly addressed knowledge of how to teach a subject.Semi-structured interviews were also conducted with the 3 college principals and focus group discussions were carried out with college tutors (n = 18) and student teachers (n = 18). The interviews explored their perceptions of the effectiveness of PRESET and the role TCs could play in delivering INSET.

Alongside the interviews, observations were carried out covering the teaching of English, mathematics and science (N=12). As in the primary school study, lessons were digitally recorded and analysed using a computerised systematic observation schedule focusing on patterns of teacher-student interaction by logging the number and duration of different types of discourse moves made by college tutors and students, supplemented by discourse analysis of selected transcripts.

*4.2 Findings*

Data provided by the colleges and interviews with principals, staff and students showed that the majority of students on the 2-year training course had entered the colleges straight from school. The majority of entrants came from households with low levels of parental education and non-professional livelihoods. The academic level of many of the entrants was also low as many had the minimal qualifications necessary for entrance. Tutors also reported that their competence in Kiswahili[[3]](#footnote-3), the medium of instruction, and English was weak. Despite the academic limitations of the students, college principals and tutors were of the view that simply raising minimum entry qualifications for Kiswahili, English and other core subjects would reduce the numbers of qualified entrants and exacerbate teacher supply problems. It was suggested that bridging programmes to raise the academic achievement of students prior to entry were needed to address the language needs of students and upgrade their subject knowledge.

*4.2.1 Tutor interactional practices*

Our computerised systematic analysis of the 12 observed college lessons (i.e. 4 English, mathematics and science lessons) supplemented by discourse analysis of transcripts revealed a lecture-dominated format. College sessions were timetabled to last an hour. Tutor-fronted interaction made up of explanation, question and answer, and use of the chalk board, took up nearly 80 percent of the time; the rest was made up of individualised work, group work, administration and interruptions. Only two of the tutors observed reviewed what had been covered in the session.

The absence of teaching and learning resources in the form of textbooks, charts, and practical equipment meant that the students had to copy notes from the chalk board. Nine of the classes observed were focused on the development of student subject knowledge, with only three covering teaching methodology so as to address the knowledge, skills and attitudes needed to teach the subject matter. Even here, a transmission model dominated so there was little blending of theory with practice. For example, in two science lessons, students were lectured about the use of practical work and in an English lesson they were lectured about the use of group work. In these sessions, college tutors appeared to be offering idealised images of schools rather than the reality of the Tanzanian primary classroom.

The following extract (Table 3) taken from a lesson focusing on the teaching of spoken English is representative of the lecturer-student interaction observed in all 12 classes. The class is made up of 52 students (32 female/20 male) (T = tutor; M = male; F = female; C = choral response; O = observer):

**Table 3: Teacher College English class**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Exchanges** |  |  | **Moves** | **Acts** |
| 1 | T | now^  I think we’re heading where I exactly forecast in particular how people pronounce | I | m  ms |
| 2 | T | in particular it is answ*or* or answ*er*  now look ok here which is which^ | I | s  ce |
| 3 | C | answer | R | rep |
| 4 | T | ok | I | el/n |
| 5 | F | answ*er* | R | rep |
| 6 | T | now I think the colleague (referring to observer) wanted answ*er* ... answ*er*. | F | e |
| 7 | T | now look here in this profession it’s a very big problem  especially in our country especially in  due to our what | I | s  el |
| 7 | M | our mother tongue | R | rep |
| 8 | T | our Kiswahili mother tongue isn’t it^ | I | ce |
| 9 | C | yes | R | rep |
| 10 |  | we have got a problem in our profession for example this (writes *this* on board)  how do we pronounce^ | I | s  ce |
| 11 | C | th*is* | R | rep |
| 12 | T | eh^ | R/I | ce |
| 13 | C | th*is* | R | rep |
| 14 | T | is it th*is* (long stress) or this (short stress)^ | I | ce |
| 15 | C | this | R | rep |
| 16 | T | so that is clear  this (short stress) not this (long stress) | F | c |
| 17 | F | (puts hand up) | I | nv |
| 18 | T | yes | I | n |
| 19 | F | So that we’re clear which is correct English language I need to know we’re using two languages that is the American English language and the British English language  so I need to know answer the best one to use so I need to know is there anything we can pronounce like answer which is correct is it British or American English | I | s  el |
| 20 | T | yeah I will need more help  but what are you ... you’re Scottish (to observer) | I | s  el |
| 21 | O | English | R | rep |
| 22 | T | American English and er British English isn’t it | I | el |
| 23 | O | yes | R | rep |
| 24 | T | so it depends on which teacher is you are unfortunately about  (laughter) | F | acc |
| 25 | T | ok | Boundary | m |
| 26 | T | yeah even in our language in Swahili there is a problem with pronunciation instead of saying karibu he say kari*bu* (long stress) (laughter) | I | i |
| 27 | T | now that is this skill this the learners the skill of expressing yourself now if as you as a teacher you must be able to express yourself so this skill enables a learner to urm yourself some of what normally they fail to express themselves so you have to learn how to express in total to people so that people can understand you | I | i |
| 28 |  | what you express to the learners  for you to express to the^ | I | s  el |
| 29 | C | pupils | R | rep |
| 30 | T | now that you’re going to teach those primary school pupils ... if you as a teacher fail ... if you fail to express the learners won’t get you you have to learn to express | I | i |

The extract reveals the extent to which the discourse is made up of tutor explanation (Turns 26, 27, 30) and question and answer sequences. As in the primary lessons, the practice of asking students to complete a sentence either through a direct repetition of the tutor’s explanation or student’s answer, or through omitting the final word, or words, or a combination of both these strategies, was very common (Turns 2,8, 10, 12). Responses to cued elicitations were often choral (Turns 3, 9, 11, 13, 15) to reinforce information given by the tutor or elicited from the students, and students often know from the intonation of the first move of an exchange whether it requires an individual answer or a choral response.

The student question (Turn 19) about American and British pronunciation and which is ‘correct’ is of interest as such initiations were rare, making up just 4 per cent of the total teaching exchanges. Such a question could have provided an opportunity for a discussion on English as a world language, thereby raising the academic content and understanding. However, the tutor’s question to the observer (Turn 20) and exposition on ‘correct’ forms of pronunciation (Turn 26) excludes the possibility of alternative frames of reference emerging from the students. Overall, the transcript shows how the tutor interspersed his lecturing with question and answer largely made up of closed questions and cued elicitations. Only rarely did he probe, comment or build on a student answer in a subsequent question to invite further elaboration and participation from the students and open up the frame of reference.

The lack of instructional materials and resources available to students, as in the baseline study, meant there was a heavy reliance on copying notes from the chalkboard and this reinforced the limited repertoire of instructional strategies in the teacher-fronted interaction. Often the only text-based resource was the college tutor’s notes largely derived from external sources (method books published internationally, lecture notes from overseas training courses etc), and therefore not based on grounded classroom-based research from Tanzanian classrooms. This provided a partial explanation as to why some key dimensions (teaching large classes, multi-grade strategies for small schools, language code switching, social constructivist approaches to lesson planning) were absent from the curriculum materials reviewed. Follow up interviews with tutors also revealed that just over half had experience of teaching in a primary school or secondary school and the rest had come straight from university degrees with no experience of teaching in the primary school.

Developing expertise in formative as well as summative assessment approaches also seemed to account for a small proportion of the time in the teaching and curricula we reviewed. The college assessment practices themselves also appeared to encourage rote learning as an analysis of examination papers showed questions mainly focused on subject content knowledge and testing memory skills. Thus the main methods of assessment consisted of recall tests, the grading of lecture notes written up on the chalk board, and the numerical grading of teaching practice with little emphasis on formative assessment.

*4.2.2 Teaching practicum*

Outside of the demonstration schools attached to the TCs, interviews with students suggested that much of the teaching practice took place in schools that were remote from the colleges. Though many students valued their school-based experience, many reported they had been left largely to their own devices to accumulate teaching survival skills. Because of the lack of trained, school-based mentors, supervisor visits were considered to be essential by the student. However, the college principals reported that it was expensive and time-consuming for tutors to visit because of a lack of transport, poor infrastructure and schools being widely scattered. As a result, students were crowded into atypical schools near the TCs or they selected schools that would accept them so they were scattered across a wide geographic area. According to the students, tutor visits tended to be badly timed, rushed, irregular, and mostly orientated to the assessment of teaching using a summative numerical score. Formative feedback geared to the student’s own development needs also appeared to be absent.

1. **Discussion**

The analysis of college-based learning in the current study suggested that the pedagogical knowledge, skills and attitudes needed to teach primary subjects effectively through a mixture of theory and practice was rarely being practiced. The model of teaching the students were being presented with was essentially transmission-based, stressing a hierarchical learning of knowledge and conventional teacher-fronted classroom organisation (Lewin, 2005; O’Sullivan, 2010). Not surprisingly, as the baseline study of interactional and discourse practices shows, such practices are perpetuated in schools from which the students emerge and into which they will return as teachers, thereby maintaining the status quo

As in other studies of pre-service education and training in sub-Saharan Africa, the linking of college-based learning to its application in the classroom appeared to be the exception rather than the rule in the teaching we observed (Lewin and Stuart, 2003; O’Sullivan, 2010). Thus lecturing about the potential of group work in English or practical work in science was sending out contradictory messages to the student teachers. Such poor pedagogic practice, where large groups of trainees are lectured for much of the time, suggests that advocacy of new pedagogies was more in name than in practice. Therefore key dimensions of pedagogic content knowledge (teaching large classes, multi-grade strategies for small schools, language code switching, constructivist approaches to lesson planning) were largely ignored in the teaching and curriculum materials we reviewed.

Helping teacher educators and teachers transform classroom talk from the familiar rote, recitation and exposition to include a wider repertoire of dialogue and discussion in whole class, group-based and one-to-one interactions to improve the quality of instruction will require training in alternative classroom interaction and discourse strategies[[4]](#footnote-4) (Hardman and Abd-Kadir, 2010). The development of in-service training modules with a focus on pedagogical knowledge supported by in-class coaching, observation and feedback by colleagues in schools and colleges is therefore central to the Tanzanian INSET/CPD strategy (Joyce and Showers, 2002). They have been designed so as to help teacher educators and the teachers they train explore their own beliefs and classroom practices and bridge the gap between theory and practice (MoEVT, 2009).

However, research into the training of teacher educators in sub-Saharan African countries suggests that as a group they are often overlooked (Lewin and Stuart, 2003, Mattson, 2006; O’Sullivan, 2010). In Tanzania, the Swedish International Development Agency (SIDA) sponsored an in-service training of college tutors know as the Training of Tutors’ Education Programme (TEP). The overall objective of the TEP programme, which ran from 1997 – 2002 with technical assistance from the Stockholm Institute of Education, was to provide a 3-month training course to improve the teaching and learning (pedagogy) approaches of tutors. From 2003, the course was run as a semi-distance learning course over a period of 6 months with 4 face-to-face seminars so as to increase the numbers of tutors completing the course. By 2004, however, only 286 tutors out of an estimated total of 960 had participated in the course and donor funding had ceased, severely hampering the sustainability of the programme (Lindhe et al. 2005). This was reflected in our visits to the TCs: in Morogoro, less than half of the tutors had been through TEP, and in Ilonga and Tandala less than a third.

Without the stimulus of further professional development such as the TEP initiative and an environment that encourages reflective practice and research capacity through links with universities, it will be difficult for tutors to pioneer various instructional and assessment practices and to develop the mentoring skills necessary to bring about effective teaching and learning in schools. Many of the tutors we interviewed also expressed frustration with the lack clear policies on teacher education, poor remuneration, uncertain promotion prospects, and poor working conditions.

None of the TCs we visited had strong professional links with schools and currently they play little role in curriculum development and implementation at school level. However, in the INSET/CPD strategy, it is recognised that the TCs have many advantages in terms of their location and concentration of educational professionals, and thus have the potential to offer advice and support to practising teachers in schools (MoEVT, 2009). Transforming the TCs into centres of professional learning with direct links to schools and universities will, therefore, require additional investment and the mapping out of clear roles and responsibilities for teacher education at college, district and school level.

While new information and communication technologies appear to offer many potential benefits for teacher education in Tanzania, regular face-to-face contact with peers and a college tutor are likely to remain essential components of training, supplemented by other distance learning methods as and when these become available at sustainable and attractive levels of cost. For this reason, the Tanzanian INSET/CPD training modules are designed to be relatively cheap to produce and durable. They will also be used by both student teachers and teachers working in school environments, where good practice may not be common and informed advice is difficult to come by, so as ensure greater continuity between PRESET and INSET (MoEVT, 2009).

The Tanzanian INSET/CPD strategy is set to bring about a better balance between the time and money spent on initial training and subsequent teacher professional development. In the long term it may make sense to shorten the period of PRESET in favour of more school-based training, thereby directing more training resources towards those teaching in the classroom. The INSET/CPD strategy will provide training through a mixed mode delivery: short, intensive periods of residential, vacation workshops, complementary distance learning support and local cluster groups to support teachers in the classroom. The INSET/CPD strategy will also be linked to a competency framework and promotion structure to provide incentives for teachers to stay with the programme and accumulate skills and competence.

1. **Concluding comments**

It is apparent from our visits to the TCs and primary schools across Tanzania that there is no quick fix to the reforming of teacher education in Tanzania. New ideas for methods and structures have to recognise the realities of differing needs, circumstances and resources in the regions we visited. Suggested improvements have to be formulated within the assumptions, processes and expectations of the wider national education system in Tanzania.

As discussed throughout this paper, the current teacher education curricula suffer in varying degrees from a lack of integration of theory and practice, and a failure to address the everyday realities of the Tanzanian primary classroom. Written materials for trainers and for trainees have often been in short supply and derived from a variety of sources which lack coherence or consistency in approach. The main aim of the Tanzanian INSET/CPD strategy is to revitalise the current teacher education system by introducing a competency-based framework, supported by nationally agreed training materials and the training of college tutors in the use of the materials (MoEVT, 2009).

While there are many good pedagogic and professional development reasons why teacher education and professional learning should be largely located in the school environment, the basic assumptions of school-based training at the PRESET and INSET stages – namely that there are sufficient schools able to offer an appropriate training environments and enough qualified teachers to act as professional mentors to trainees – are often difficult to meet in low income countries like Tanzania (O’Sullivan, 2006; Lewin, 2005). Mattson (2006) also questions the assumption that school-based training is a cheaper alternative to traditional college-based courses because of the need to provide in-class support from trained supervisors and mentors. As the baseline study suggests, most schools are not appropriately resourced as training sites, as they lack textbooks and expertise in observation, coaching and mentoring as tools of professional development. Research suggests, however, that with enough support, some elements of school-based training are possible even in very resource-poor circumstances so that primary teachers are better prepared to bring about effective learning in the classroom (Mattson, 2006, Hardman et al. 2009).

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1. Observers systematically coded the proportion of time spent on the following 10 teaching and learning activities: teacher explanation, question and answer; teacher writing on chalk board; teacher reading to class; pupils working from chalk board; pupils working from textbooks; pupils working in pairs or groups; pupil demonstrating to class; plenary; administration; no teaching taking place. [↑](#footnote-ref-1)
2. In British English, some people still differentiate between the two verbs arguing that will implies volition or intention, while shall can imply necessity. However, in many other varieties of English *shall* has largely disappeared from everyday use. The appropriateness of the lesson topic taken from an old English textbook is therefore questionable. [↑](#footnote-ref-2)
3. As Wedin (2010) points out in his study of Tanzanian classrooms, in a country of 120 languages, Kiswahili is for many students a second language and many primary teachers lack confidence in teaching through this medium of instruction. [↑](#footnote-ref-3)
4. For example: the use of open and closed questions and teacher statements; giving students time to answer; sharing questions at the start of a lesson; encouraging students to ask their own questions; beginning a lesson by giving pairs of students a question to answer from the last lesson; asking pairs to discuss a question for a minute before they answer; getting a pair or group of students to set questions for another pair or group; treating answers with respect and giving students credit for trying; probing answers; commenting on a response to exemplify, expand, justify or add additional information; building student responses into questionsthereby acknowledging their importance to the classroom discussion.

   [↑](#footnote-ref-4)