

Influences and Outcomes of Social Constructivist Curriculum  
Implementation on Tutors' Beliefs and Practices  
in Teacher Education Colleges in Tanzania

By

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## **Abstract**

Professional learning and development (PLD) has been one of the strategies for improving the quality of teachers and education by shifting the teaching focus from knowledge acquisition to knowledge construction/meaning-making. This research investigated the influences and outcomes of implementing a social constructivist curriculum on tutor's beliefs and practices as a result of their PLD experiences in Tanzania's teacher education colleges. Specifically, the research investigated tutors in social science subjects (geography, history and civics) who responded to four questions: What are tutors' understandings of a social constructivist approach to teaching? What are tutors' beliefs about the role of social constructivist approaches (SCA) in teaching? Do tutors integrate social constructivist approaches in teaching, and if so, how this is achieved? What are tutors' suggestions for future teaching of social science?

The research employed a qualitative case study approach and nine social science tutors were purposely selected from three colleges of teacher education. Information was gathered through open semi-structured interviews, classroom observations, documents analysis, and reflective journals. Data were thematically analysed and presented in themes, tables, figures, photos, and graphs. Transfer of training, critical pedagogy and social constructivist theoretical lenses informed and maintained the researcher's direction of research undertakings from proposal development to the final thesis report.

Results indicated that a variety of PLD experiences shaped tutors' understandings of SCA, which influenced their practices in transferring the knowledge constructed to the job. Tutors employed SCA in teaching by embracing socio-cultural and economic situations. The research indicated that contextual influences such as centralised education policies and curricular activities, PLD experiences, and contingent teaching challenges influenced tutors' teaching beliefs in the implementation of SCA. Tutors' practices and beliefs were constrained by the reform process in socio-cultural and economic situations in which tutors demonstrated limited pedagogical approaches.

Moreover, the study suggested significant needs to improve the teaching of social science by changing classroom situations, class sizes, and leadership practices in policy development and implementation, all of which has implications for the education system to ensure sustainability of the transfer of training on job setting.

The researcher recommended a continuum of PLD experiences on the job, increasing the relevance to the job setting for tutors' training, considering the use of native languages for teaching, ensuring effective supervision and implementation of educational policies, and rethinking the system of education to address SCA grounded in indigenous values and norms. It was concluded that tutors, student teachers, and community ideologies should primarily inform policy development and implementation, not the Government alone. Similarly, it was recommended that international policy transfers to a country such as Tanzania should be critically examined before adoption (to a recipient country) so that it can be implemented effectively. This study contributed to existing literature, at national and global policy levels, for the adoption of SCA in non-Western settings, and demonstrated the use of different worldviews to understand the case.

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## **Dedication**

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## List of abbreviations/acronyms

AIDS	Acquired immune deficiency syndrome
CDs	Compact discs
CoBET	Complementary basic education in Tanzania
DVDs	Digital versatile discs
DUCE	Dar es Salaam University College of Education
ESDP	Education sector development programme
ESR	Education for Self-Reliance
GER	Gross enrolment rate
GESCI	Global e-Schools and communities initiative
HIV	Human immunodeficiency virus
ICT	Information Communication Technology
ITT-PST	In-service teacher training for primary education
JMT	Jamhuri ya Muungano wa Tanzania (The United Republic of Tanzania)
MDGs	Millennium Development Goals
MoEC	Ministry of Education and Culture
MoEVT	Ministry of Education and Vocational Training
MRALG	Ministry of Regional Administration and Local Government
NECTA	National Examination Council of Tanzania
NER	Net enrolment rate
OUT	Open University of Tanzania
PEDP	Primary Education Development Plan
PLD	Professional learning and development
PhD	Doctor of Philosophy
SAP	Structural adjustment programme
SCA	Social constructivist approaches
SCC	Social constructivist curriculum
SEDP	Secondary Education Development Programme
Sida	Swedish International Development Agency
STHEP	Science and Technology Higher Education Project
TBA	Teachers' Beliefs in Action
TEMP	Teacher Education Master Plan
TIE	Tanzania Institute of Education
TSC	Teachers' Service Commission
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UPE	Universal Primary Education
URT	United Republic of Tanzania
VUW	Victoria University of Wellington

# **Chapter One**

## **Introduction**

### **1.1 Background to the study**

Education reforms are currently in progress in many countries worldwide, including Tanzania. Changes to the development agenda in the Western countries (regarding socio-political, economic, and cultural interests) have influenced people to demand for modification to the ways of providing education (Dale, 1999; Robertson, 2005; Verger, Novelli, & Altinyelken, 2012). Developing country contexts have been influenced by these education reforms and innovations, often in ways that reveal a lack of preparedness and choice (Hardman, Abd-kadir, & Tibuhinda, 2012; Vavrus, Thomas, & Bartlett, 2011; Wedgwood, 2005). Consequently, educational reforms have had impact upon the overall implementation of teacher education programmes and the education sector in the country. There have been a number of such education innovations in Tanzania, which can be traced from the 19<sup>th</sup> century.

### **1.2 Overview of education trends and reforms in Tanzania**

The trends of education in Tanzania passed through three important phases of reform based on pre-colonial, colonial, and post-colonial education systems. The three phases provide the rationale for understanding the current educational reforms in progress.

#### **1.2.1 Pre-colonial education**

The pre-colonial education system (indigenous education) was developed by the local African societies before the intrusion of missionaries (1860s – 1880s) in Africa. According to Owour (2007), African indigenous education had fundamental worldviews and was a value-laden system in which the spiritual ethos defined people's ways of living – reflecting a holistic view that “education is ideological and teaching requires humility and critical reflection” (Freire, 1998, p. xiii). According to Fafunwa (1974, as cited in Adeyemi & Adeyinka, 2003), there were formal and informal types of education offered at family, clan or community levels to perpetuate the goals to:

- Discover and develop the physical skills of the child.
- Promote the development of the child's good character.
- Teach respect and care for elders and authorities.
- Develop the child intellectually.
- Train specific functional skills and the attitude of the child to value products of their own efforts.
- Develop the attitude of togetherness and actively cooperate in issues around the family and the society to which they belong.
- Understand, appreciate, and promote the cultural heritage of the community at large.

The existence of these goals in the context was proposing the implementation of five philosophical principles of indigenous education: holism, perennialism, preparationism, communalism, and functionalism principles (Adeyemi & Adeyinka, 2003). Indigenous education during the preparation stage was based on age and gender and was intended to nurture skills, develop good character, and promote the attitudes necessary to taking a distinctive responsibility in the community. For instance, boys were developed to become warriors, farmers, blacksmiths, rulers, house and bridge builders, and girls were engaged in education related to family (to become good wives and mothers), health care, cookery, and nursing (Adeyemi & Adeyinka, 2003; Owour, 2007). Based on gender roles, children developed a sense of serving the community as they grew to learn its history. The functionalism principle emphasised the utility of knowledge and skills. Adeyemi and Adeyinka argued that a child was engaged in learning activities through observations, initiations, work, oral literature and play, with an expert demonstrating functional skills. A third principle of the indigenous education was to achieve communalism in which the means of production and their products belonged to the members of the community. Anything owned by individuals was considered a property for the benefit of the community. For example, a child belonged to the community, hence every member of the community had the responsibility to take care of children in that community and someone who failed to assume such a role was considered inimical – and in some communities was nicknamed as a witch (Adeyemi &



Adeyinka, 2003). In this regard, teaching and caring of children were considered social tasks. A fourth principle based on perennialism, focused on keeping the affairs (*status quo*) of the community. One of the most used approaches in maintaining cultural heritage was through education. In this context, oral literature employed proverbs and so transmitted cultural affairs from generation to generation. Hence, several taboos were used to restrict the children from practicing some of the social and cultural affairs, much as in Tanzania's modern education system where the school regulations and by-laws are used to control the behaviour of schoolchildren. For example, Adeyemi and Adeyinka (2003) noted that the sex education issues were age and gender sensitive to avoid early marriages, pregnancies, and rape crimes.

Finally, the holistic principle emphasised a multidisciplinary education, implying that "all teaching was ideological" by which a better society was developed with respect to ethical codes, religious doctrines, political and social ideas (Pratt & Associates, 1998, p. 50). A child was exposed to a variety of learning opportunities for socio-economic, political and cultural developments. For instance, someone who was engaged in the fishing industry had to learn how to build canoes and fishing nets; someone learned to build houses, learned the type of soil, the geographical landscapes and locations as well as the accessibility to the nearby community (village). In addition, children had the opportunity to learn about medicine, hunting, diseases, minerals and names of living and non-living things within their surroundings (Adeyemi & Adeyinka, 2003). In this situation, the children developed a holistic understanding of phenomena without boundaries between the subject matter of social science and natural science, and without learning directed towards certification and grading (Adeyemi & Adeyinka, 2003). This holistic approach significantly embraces the social constructivist beliefs to teaching.

According to Adeyemi and Adeyinka (2003), a qualified and experienced teacher with expertise in a particular area was used to train the children to understand a range of knowledge and skills. Therefore, to become a teacher, one had to demonstrate an outstanding experience, which the community acknowledged and approved for teaching of children. The community

guaranteed the employment because the whole process of child learning focused on the lived experience in the society. Further, there were hardly any problems of unemployment, shortage of teachers, and scarcity of teaching resources or financing for learning. One major problem of indigenous education was that there were limited ways of keeping the wisdom accumulated by teachers in the community.

Central to this study was the idea embodied in the indigenous education – the learner was to become a change agent of community life experiences. Indigenous education in Africa, especially Tanganyika and Zanzibar (now called The United Republic of Tanzania, when Tanganyika and Zanzibar formed a union Government after independence) was organised around a practice-based learning and focused on social transformation. The introduction of missionary and colonial education invariably influenced the education system in the context.

### **1.2.2 Missionary and colonial education**

Missionaries from different religious backgrounds (Christians and Moslems) introduced formal education systems and disregarded indigenous education (Mushi, 2009). For instance, around the 1860s and 1870s Christian and Moslem missionaries introduced formal education in order to obtain followers that could read and understand religious scripts. In the 1880s, missionary activities in Tanganyika and other parts of Africa facilitated the intrusion of colonialism. The German Government colluded with the missionaries to open more schools that could provide education to Africans so as to obtain some skilled workers as junior administrators, teachers and technicians, and to maximise communication and productivity of their economic activities (Moyd, 1996). Moyd added that apart from the established schools, in 1899 a high school (*oberschule*) was opened in Tanga to train clerical workers, providing them with industrial and academic courses and teachers (Meena, 2009; Moyd, 1996). Hence, the first teacher-training centre was initiated in Tanganyika. Overtime, there was a gradual increase of pupils in the formal system of education, especially the missionary schools.

Following the impact of World War I, the country became a British colony (under the mandate of trusteeship of the League of Nations) and the British inherited the German formal education system but also promoted greater reforms to achieve their economic interests in Tanganyika. Owuor (2007) argued that, “the purpose of education during the colonial period was mainly for religious conversion, economic exploitation, and the assimilation of Africans into the Western cultures, values and practices” (p. 25).

Two reports in 1927 informed the decision of the British Government to continue with the provision of education in Tanganyika. First, a report supported by the Phelps Stokes Fund investigated education issues in West and South Africa, and then a White Paper report from the British Colonial Advisory committee considered education policy for British Colonies in Africa (Mushi, 2009). The recommendations of these reports prompted the British Government to approve its first teacher education college established in 1926 at Mpwapwa. The Education Ordinance Act (1927) was introduced to legalise the activities of the college, including the training of more primary and secondary school teachers. This Act guided education policy matters during the colonial era and the first decade after the Tanzania’s independence (Mushi, 2009; URT, 1995). A secular education system that reflected the British education system was introduced and a majority of non-native teachers taught in this system. The main goal of education was to produce a few individuals for administrative needs, specifically to serve in the lower and middle class administrative posts (Kitta, 2004; Mushi, 2009).

British colonial education was founded on religious and racial grounds — Europeans, Asians, and Africans — each had their own schools and curricula focus (Mushi, 2009). While in the European schools the pupils were taught grammar, arithmetic, and discipline-based subjects, Asian people were taught commercial subjects, and the Africans were taught subjects such as agriculture, general studies, rural studies, carpentry, brick making, and masonry (Kitta, 2004). One of the advantages of the colonial education system was that it produced soldiers for World Wars 1 and 2, but also developed a few others who led the nationalism movements against the colonial administration in

Tanganyika, Zanzibar and Africa in general. However, of central importance to this study, is the notion that the impact of colonial education system has made it difficult for many Africa countries to implement educational reforms that support their socio-cultural, economic and political environments. Thus, in many situations they continue to provide education that has little connection to real life experiences.

### **1.2.3 Post-colonial education**

Soon after Tanganyika's independence, the 1962 Education Act replaced the 1927 Education Ordinance Act of the colonial government. The new Act aimed to abolish school fees and religious and racial discrimination in education, review curricula objectives (specifically to shift from teaching Western values to teaching Tanzania values), and to review administrative functions. Swahili language was made the medium of instruction in all schools except in secondary and University education where English language was maintained (Nyerere, 1967; United Republic of Tanzania – URT, 1995). Still these changes could not solve all educational problems because other development sectors needed changes too. During the implementation of new curricula, several problems related to the high demand for education resulting from expansion of schools were identified. Moreover, education remained elitist in nature; it was designed to meet the needs of only those who entered the school system. A number of children did not have access to the school education system. Hence, it divorced schoolchildren from the society they were intended to serve. Nyerere (1967, p. 10) argued that “we have tried to relate these skills [basic academic skills], at least in theory, to the life which the children see around. However, the school is always separate. It is not part of the society”. What this meant was that the curricula were irrelevant to the social needs. Furthermore, as Nyerere argued, the education system was bookish and despised other sources of wisdom, for instance the wisdom of local elders or parents.

To address these challenges in the education system, the Arusha Declaration was developed along with the 1967 Education for Self-reliance policy (under Education Act No.25) that resolved the problem regarding the missed education policy in post-independence education (URT, 2011). The Arusha Declaration

outlined the country's philosophy of *socialism and self-reliance* and the main beliefs included respect for human dignity, the equality of humans, inculcating the sense of co-operation and working together, and sharing necessities and produce (Msonde, 2011). Drawing from these beliefs, the Education for Self-reliance Policy (ESR) emphasised the integration of education and work. To achieve that, Nyerere (1967) argued that "the school work-terms, times and so on, must be so arranged that the children participate as members of family" for cultivation or in any community activities as new generation members (p. 22). ESR necessitated the operationalisation of curricular reforms in the education system. The curricula were designed to develop creative thinking skills, practical learning, and place-based learning experiences. Thus, these curricula were intended to revamp the indigenous education that was relevant to the context.

In line with this ESR, Universal Primary Education (UPE) was introduced in 1974 operationalised by the Musoma Resolution. This stated that all children aged 7 to 13 years must attain primary education, and augmented the implementation of ESR Policy mission. Thus, the ESR Policy implementation was able to:

- Attain a gross enrolment ratio of 98% and net enrolment ratio of 70% in 1981 (URT, 2001a).
- Make education free for all people and improve the literacy rate in an unprecedented manner (both among women and men) from 33.3% in 1970 to 90% in 1984 (Brock-Utne, 1996).
- Introduce communal labour sharing and child-care facilities.
- Introduce self-help projects based on participatory approaches from the household to the community levels.

However, the implementation of ESR Policy and UPE were constrained by high pupil/teacher ratio, low transition rates of school graduates to secondary education, underfunding of the educational programmes (Wedgwood, 2007) and deterioration of buildings because of poor construction. This situation led to "reduced capacity to expand and sustain enrolment" for basic education programmes (URT, 2001a, p. 28). Moreover, the Education and Self-reliance Policy gave minimal priority to teachers and teacher professional development

(Mushi, 2009). These challenges marked the beginning of a concern about the future and quality education in the country.

It became clear that more improvements with regard to the implementation of Education for Self-reliance Policy were needed and this pressured the Government in 1981 to form the Makweta Commission to make recommendations for improvements. This commission submitted the report to the Government in 1982 and among other ideas, it recommended (1) the establishment of the Teachers' Service Commission (TSC); (2) the establishment of Tanzania Teachers' Association; (3) the introduction of new curricular package for schools and teacher education and the establishment of the faculty of teacher education at the University of Dar es Salaam; and (4) the introduction of teacher education programmes for pre-primary (childhood) education teachers (Msonde, 2011; URT, 2008, 1995). Tanzania's Government adopted the commission's recommendations and modified teacher education programmes that could work towards solving the challenges within the socio-economic, cultural and political milieu by the year 2000.

Tanzania's agreement with the World Bank and International Monetary Fund organisation on the adoption of Structural Adjustment Policy (SAP) in 1986 influenced the implementation of the Makweta Commission's missions in its early stages. Accordingly, SAP Policy dictated the removal of Government spending on social and communal services, hence the reintroduction of school fees, removal of price controls and a free market economy led to the commoditisation of education services and increased burden for the majority of the people to incur the cost of education and living in general. The SAP was responsible for an increased illiteracy rate although it was suggesting the initiation of liberalisation and democratisation of socio-economic and political institutions. According to Brock-Unte (1996), the illiteracy rate rose from 10% to 20% between 1984 and 1992 respectively. With this external pressure, the Government sought to redesign the education system along with developing the teacher education programmes suit the 21<sup>st</sup> century that is competitive for a social, economic, political and cultural environment.

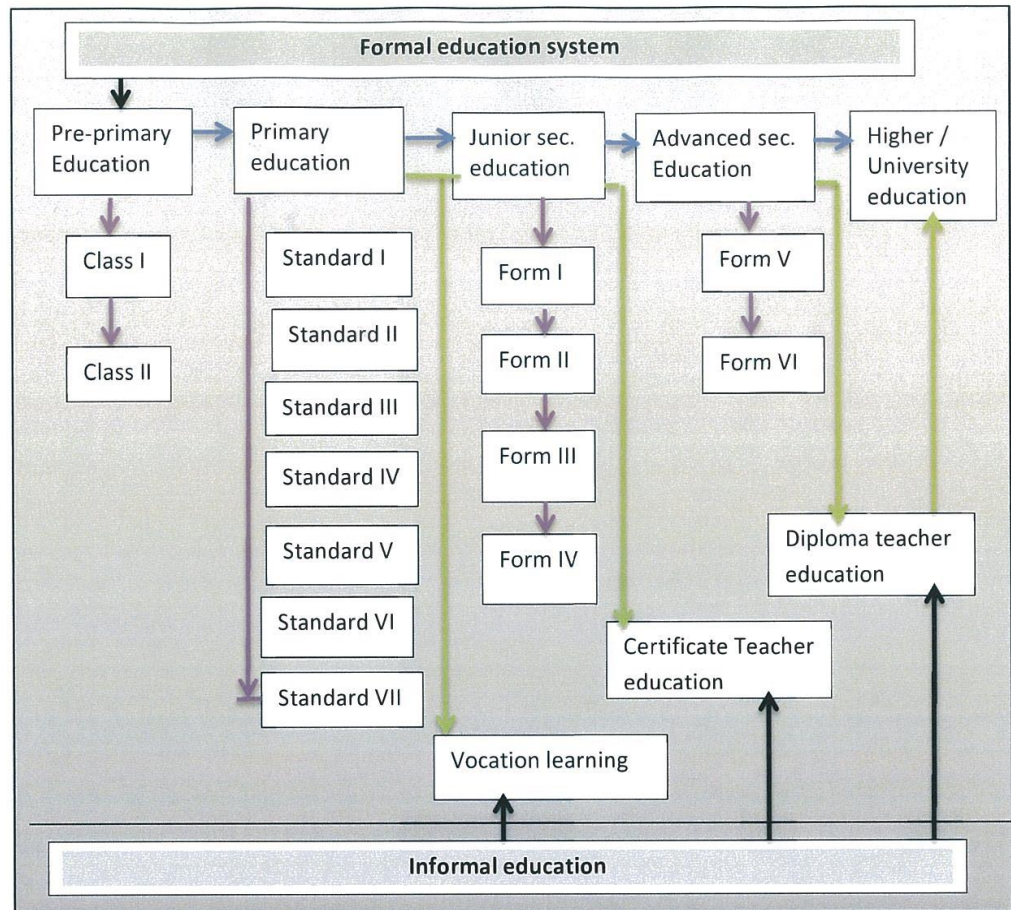
In 1990, the Government created a Presidential National Task Force to review the existing system of education in the country and its final report, *The Tanzania Education System for the 21<sup>st</sup> Century*, was submitted to the Government in 1992 (URT, 2011, 1995). One of the achievements of this report was the establishment of the Tanzania Education and Training Policy in 1995. To implement the new policy, in 1996 the Government introduced the Education Sector Development Programme (ESDP) that catered for all formal and non-formal education subsectors in basic education, secondary education, tertiary education, and universities (URT, 2001a). ESDP focused on addressing the quality of education, and the increasing human resources commensurate with socio-economic reforms to ensure a sustainable connection between education sectors and development. In the meantime, the ESDP implemented several educational development plans including training for tutors to teach student teachers in different levels of teacher education programmes (Mushi, 2009; URT, 2008).

### **1.3 The education system in Tanzania**

Tanzania adopted a formal and non-formal education system soon after her independence in 1961. Currently, two ministries manage the education system: the Ministry of Education and Vocational Training (MoEVT), and the Ministry of Regional Administration and Local Government (MRALG). The formal education system comprised 2 years of pre-primary education, 7 years of primary education, 4 years of junior secondary education, 2 years of advanced secondary education, and the 3 or more years of tertiary and higher education (URT, 2013, 2001a). In addition, there are adult education programmes based on an informal education system. In the informal education sector, literacy programmes related to continuing education, post-literacy, life and applied skills are taught to adults (URT, 2001a). Hence, there are opportunities for some individuals successful in the informal education to enter the formal tertiary education system. Figure 1.1 illustrates the learning paths of the education system in Tanzania.

## 1.4 Categorising teacher education in Tanzania

Teacher education is one of the tertiary education fields specifically for the training of teachers, tutors, and student teachers. Generally, there are two categories of teacher education: the on-the-job and initial teacher training in different professional courses.



**Figure 1.1:** Education system in Tanzania

### 1.4.1 On-job teacher education programmes

According to Kitta (2004), the on-the-job teacher education programmes are specific for professional growth of tutors. Whenever tutors' training needs arise, the education professional experts from the Ministry of Education and universities conduct training for tutors in the colleges. The Ministry officials and University lecturers select the convenient training centres; often they are located in one of the teacher education colleges in the zones, regions, and



districts areas. These areas are conveniently reachable and have necessary services for the participants. In some cases, trainings are conducted and organised by the officials or tutors from respective colleges to deal with the emerging teaching challenges.

#### **1.4.2 Initial teacher education programmes**

Initial teacher training programmes in Tanzania range from certificates to degree levels (URT, 2001b). These levels are: Level I, Certificate in teacher education [which is the focus of this study]; Level II, Diploma in teacher education; and Level III, Degree in teacher education (URT, 2013, 2001b). The certificate teacher education for primary schools enrolls graduates from the ordinary (junior) secondary schools, while diploma in teacher education programmes enrol graduates from the advanced secondary schools, and the degree level recruits graduates from advanced secondary education schools.

According to URT (1995), the pre-primary and primary schools are taught by certificate teachers, the junior secondary schools taught by teachers with diploma qualifications, and the advanced secondary schools are taught by degree graduate teachers. The student teachers in the universities or teacher education colleges are taught by graduates with a minimum qualification of good degree passes (for non-degree programmes) and high performances in the undergraduate degree or above in the relevant field (for degree programmes). According to (URT, 2013, p. 5), the purpose of teacher education and training is to:

- Inculcate theories and foundations of education, guidance and counselling, and psychology.
- Inculcate in student teachers the foundations of education and pedagogical skills of creativity and innovation.
- Promote an understanding of the foundation of the school curriculum
- Sharpen student teachers' and tutors' knowledge and mastery of subjects and technologies.
- Inculcate in student teachers the competencies and approaches of assessment and evaluation in education.

- Inculcate both student teachers and tutors with leadership and management skills in education and training.

## **1.5 Towards the recent context of teacher education reforms in Tanzania**

According to URT (2011), recent education reforms in Tanzania have been influenced by global policies (for example, Millennium Development Goals, Education for All via Dakar Framework for Action; Universal Declaration of Human Rights) and national education development policies (for example the Tanzania Development Vision 2025, Education for Self-reliance, Education and Training Policy). The Government's education and training policy statements through the Education Sector Development programmes (ESDP) have guided recent reforms in the education system. The ESDP mission was translated into plans for adoption of the reforms and innovation in the education system. For instance, the implementation of the Primary Education Development Plan (PEDP) between 2002 and 2005 and the Secondary Education Development Plan (SEDP) between 2004 and 2009 aimed at improving access, equity and the quality of education as well as the school infrastructure (URT, 2008; Wedgwood, 2005). Thus, the introduction of new teaching approaches began in pre-primary and primary education followed by secondary education and eventually teacher education. ESDP implementation brought several challenges and achievements; for example, URT (2010, pp. 25-26) outlines some of the achievements for the implementation of new teaching approaches in schools, including:

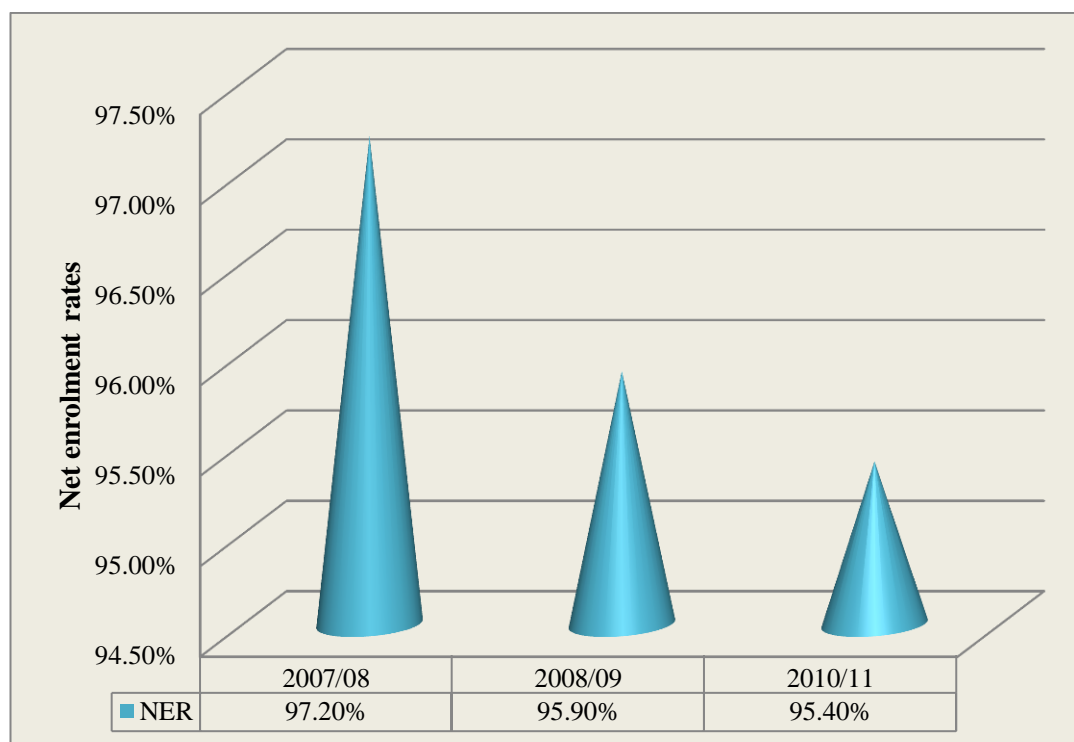
- The training of about 270 mathematics and science tutors to train fellow tutors in the colleges.
- The training of 100 tutors, 17 education inspectors, and facilitators on courses related to information technology.
- The reduction of dropout rates in primary schools from 3.7% in 2009 to 2.6% in 2010.
- The training of about 557 educational officers from the Ministry of Education, councils, and local governments.

- The increase in enrolments of pupils and student teachers in schools and tertiary teacher education institutions; while 9022 student teachers were enrolled in the teacher education certificate course, 235 on-the-job teachers enrolled for undergraduate teacher education programmes to upgrade their qualifications, and 50 were enrolled for master's programme.
- The development of new syllabi in different education levels, from pre-primary to secondary and teacher education programmes.

However, challenges to the implementation of ESDP influenced the achievement of the predetermined mission for the programme. Major challenges included the shortage of tutors and a limited number of teacher education colleges to cater for the needs of increased enrolments in the colleges. Simply put, a number of newly established schools needed more teachers and resources. Although in 2009 and 2010, the net enrolment rate (NER) and the gross enrolment rate (GER) increased in pre-primary and secondary education, the gross enrolment rate decreased in primary education with the exception of primary education for special needs education (see also Figure 1.3). According to URT (2010), the net enrolment ratio (NER) decreased from 97.2% in 2007/08 to 95.9% in 2008/09 and to 95.4% in 2010, (see Figure 1.2). This decrease in gross enrolment rates was attributed to primary schools' poor infrastructure and learning environments that influenced both teachers and pupils. In this situation, the new approach in teacher training programmes meant enrolling student teachers with poor education achievement. Another factor that has affected the training process is large class sizes (URT, 2008). Figure 1.3 illustrates the expansion of enrolment in basic education in 2009 and 2010.

Another challenge was the demand for more teachers and tutors as well as educational officers and inspectors to facilitate the implementation of social constructivist teaching. In essence, the parents' demand for quality education for their children necessitated Government initiatives to implement PEDP and SEDP, which consequently increased both enrolment rates in schools and the number of schools to enrol in, producing a high and crucial demand for

teachers. As pupil enrolment rates increased, the shortage of teachers, and inadequacy of teaching resources and facilities became increasingly apparent. For example, the MoEVT reported that 337800 teachers were needed in pre-primary, primary, and secondary schools between 2007 and 2013, and the lack of these teachers had created more burdens for those already working in the colleges. Table 1.1 shows the detail.

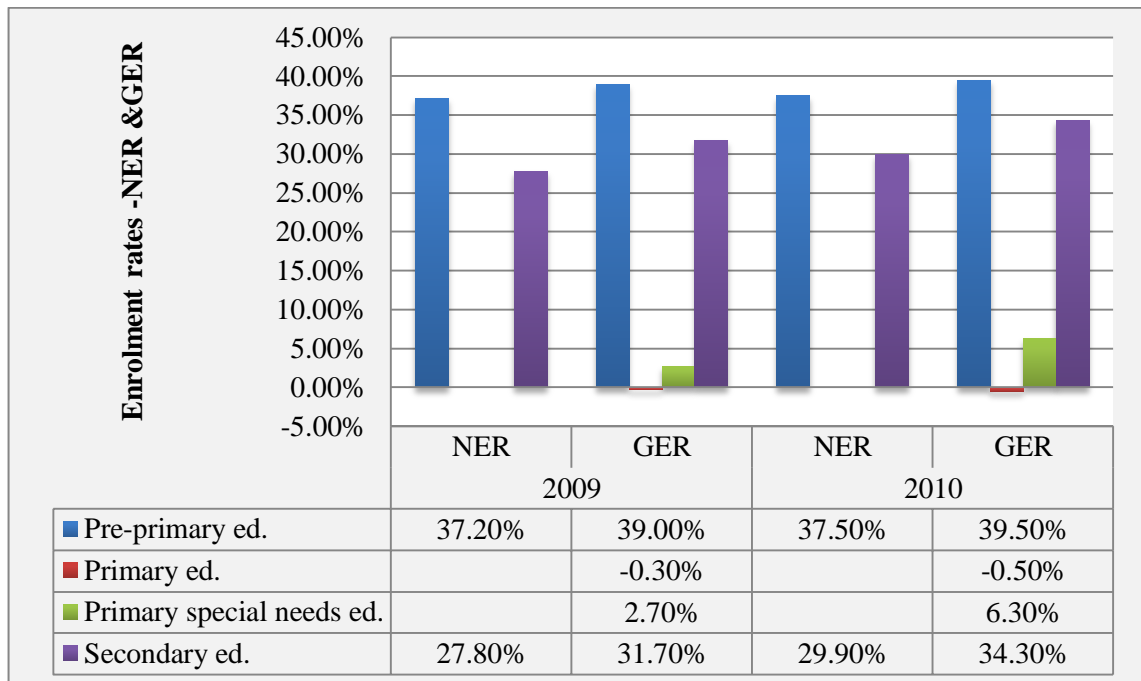


**Figure 1.2:** Net enrolment rates of primary school pupils from 2007/08 to 2010/11.

**Table 1.1:** The demand for teachers in schools 2007/2013

Level	Annual teacher requirements						Total
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	
Pre-primary	-	2617	8811	9573	12566	5996	39563
Primary	51259	48674	35255	17491	7681	-	160360
Secondary	21168	26115	28460	25183	23695	13256	137877
<b>Total</b>	<b>72427</b>	<b>77406</b>	<b>72526</b>	<b>52247</b>	<b>43942</b>	<b>19252</b>	<b>337800</b>

**Source:** Adapted from Education Sector Performance Report, 2008/09 (URT, 2008, p. 42).

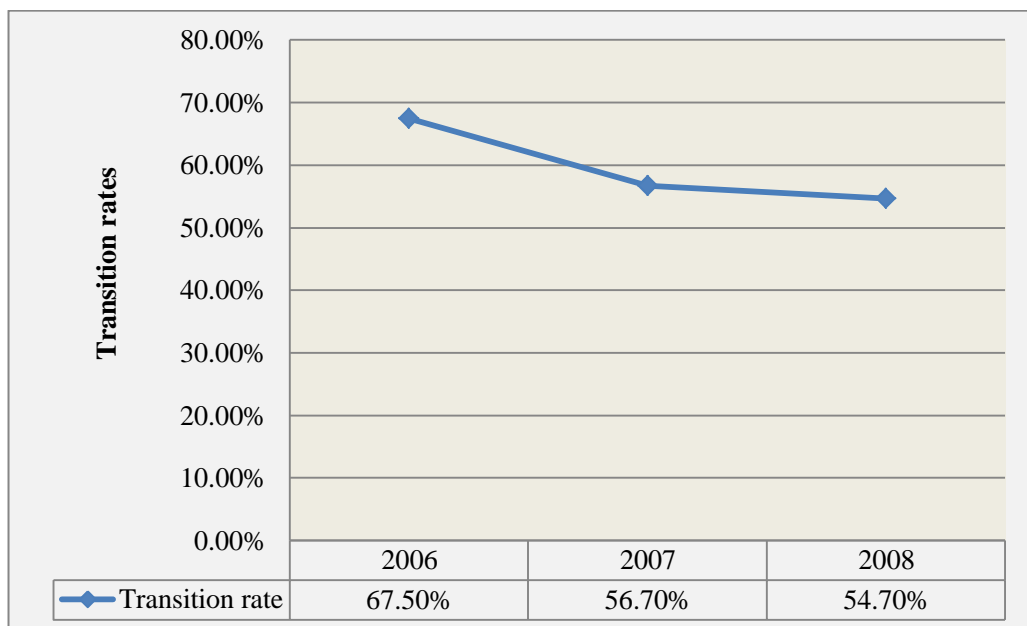


**Figure 1.3:** Pupil enrolment rates from pre-primary to secondary schools.

In this situation, there was a significant need for professional training to prepare teachers to handle large class sizes, for more tutors to train the student teachers enrolled in teaching colleges, and for improvement of the teaching and learning environment, as well as motivation for teachers. However, tutors might have employed the traditional approaches in the training of student teachers if there were not strategies to sustain their new teaching approaches. That being so, URT (2008) proposed some ways to deal with the high demand for both teachers in schools and tutors in tertiary education: “Some of the interventions ... to address these issues include the creation of an environment for the development of all-round, well-motivated and committed teaching force through the expansion of teachers’ colleges infrastructure and facilities” (p. 43).

In the same vein, the implementation of ESDP practices caused a decrease in the transition rate of primary school leavers to secondary schools. Evidence has shown (Figure 1.3) that there has been a steady decrease from 67.5 % to 56.7% and 54.7% in 2006, 2007 and 2008 respectively (URT, 2008). Arguably, the decreasing transition rate was a reflection of the decreasing pupil NER and GER in primary schools (see Table 1.1 above). In any case, these changes

have influenced the quality of teaching in tertiary education which increased number of enrolment to train more teachers for the schools and this has implications to the increase in the ratio between tutors and student teachers as well as the demand for more teaching resources. For example, recruiting more pupils without paying attention to the quality of teacher training does not eliminate the problems of inadequate and poor quality teachers in schools. However, teacher education colleges were and still are, more likely to continue recruiting student teachers from education backgrounds not commensurate with learning the college curriculum, or student teachers likely to confront their tutors' knowledge of employing the new teaching approaches in classroom context. In addition, this situation has the implication that tutors produce student teachers with superficial knowledge, who are not able to teach effectively in schools and this is likely to impact upon the performance of pupils. Figure 1.4 indicates the decreasing transition rates of primary school pupils to secondary schools.



**Figure 1.4:** The transition rate of primary school pupils into secondary education

ESDP plans followed a top-down approach to introducing educational reforms, and specifically the replacement of the traditional teacher-centred or transmission approach with a social constructivist approach (Meena, 2009; Vavrus, 2009). Accordingly, the top-down decisions about the educational

reform influenced not only the school infrastructure, the school curricula, and teaching resources but also the teachers and pupils being primed to adopt the new teaching approach. URT (2001b) reports that:

The management ... of TCs [teachers colleges] is centralised under the director of teacher education in MoEVT. MoEVT recruits, and promotes college tutors, admits student teachers, appoints and transfers college principals and tutors. Curriculum development and review for TCs is a professional task of the Tanzania Institute of Education [TIE]. (p. 2)

In this situation, the ESDP plans through TIE necessitated the implementation of professional training courses to teachers and education officials in different phases, regarding the introduction of new teaching approaches. More importantly, the decision to introduce the recent educational reform was centralised to Government leaders, political activists and education experts who provided directives for implementation in teacher education colleges and schools (Donche & Petegem, 2011; Meena, 2009; Vavrus, 2009). That being so, terms such as social constructivist teaching, competency-based curriculum, participatory teaching approach, constructivist teaching, and learner-centred curriculum are used interchangeably to refer to this recent education reform in Tanzania (Msonde, 2011). The use of various terms might mean that tutors, educational officers, and research experts have different understandings of new teaching approaches that influence teacher education programmes. Nevertheless, Tanzanian teacher education colleges adopted the new teaching approach in 2008 and the tutors began learning how to use the new curricula with the student teachers (URT, 2008). Table 1.2 illustrates the shift of teaching approach from teacher-centred to social constructivist teaching/pedagogy.

### **1.5.1 Social science teaching in the certificate teacher education programmes in Tanzania**

With the context of change to teaching approaches as shown in Table 1.2, teacher education curricula, including the social science — history, geography, and civics — were reviewed. For example, a review of objectives of social science teaching in certificate courses for teacher education changed to reflect

**Table 1.2:** Shift of teaching perspectives from transmission to social constructivism

Domain	Transmission teaching	Socio-constructivist pedagogy
<b>General approach</b>	Fixed roles, guided by directives and technical rationality	Guided by construction of knowledge and flexibility of roles
<b>Goal and Objectives</b>	Defined by the teacher	Derived from the learner or negotiated between the teacher and learner
<b>Task ownership</b>	Teacher-centred and low voice of student (didactic)	Learner centred and high voice of students (dialectical/interactive)
<b>Content focus</b>	Discipline-based on text books etc.	Interdisciplinary-based social interaction, internet search based resources.
<b>Assessment focus</b>	It is a product of teaching, based on command – control; norm referenced	It is authentic and interwoven with the learning process; criterion referenced
<b>Education of teachers</b>	Developing acquisition of skills and techniques	Linking theory and action, developing reflective and diagnostic abilities
<b>Teacher responsibility</b>	To instruct or transmit knowledge to students	To promote student learning process by providing opportunities for direct integration with knowledge.
<b>Technology use</b>	Drill and practice	Communication, expression, collaboration, information access

**Source:** Reviewed from studies (Joia, 2001; Keiny, 1994; Khine, 2006; O'Neill & McMahon, 2005)

the social constructivist approach. According to Jamhuri ya Muungano wa Tanzania – JMT (2009a, 2009b, 2009c), the new social science teaching objectives are to:

- a) Enable student teachers to master the teaching of subject matter and to develop social science knowledge and competence.
- b) Enable student teachers to evaluate and maintain Tanzania's culture, to develop thinking skills and civic education competences and adapt them in teaching.
- c) Prepare student teachers with pedagogical knowledge of teaching social science subjects so that they are able to:
  - Deal with crosscutting (controversial) issues.
  - Deal with special needs and inclusive education, research, measurement and evaluation issues.
  - Develop critical and creative thinking skills with respect for human rights and integrity.



In this regard, social science studies take into account the teaching of content knowledge and principles of teaching (JMT, 2009a, 2009b, 2009c). Social science subjects are taught as separate disciplines in a two-year training programme. Apart from teaching the content knowledge and principles of teaching, student teachers are taught education professional courses (educational measurement and evaluation, philosophy of education, educational management and administration, educational research methods, and job skills). More importantly, JMT (2009a, 2009c) indicated that the intentions of training student teachers the principles of teaching are to:

- Develop the ability to analyse social science curricula.
- Apply participatory teaching methods.
- Apply social sciences knowledge in real life.
- Creatively improvise and make teaching materials to enhance the teaching of social science subjects.

Further, these developed intentions took into account the importance of this level of teacher education programme in Tanzania, which has a diversity of culture and languages from 120 tribes (URT, 2013). Changes to teacher training considered the community's needs, and resulted in education policy requiring tutors and student teachers to be trained in and to be able to use the indigenous national language of Kiswahili in teaching. As URT (1995) indicates:

Medium of instruction for teacher education at certificate level shall be Kiswahili and English shall be a compulsory subject. While for diploma and degree level in teacher education and training, English shall be used, except for foreign language teaching, which will be in the relevant language itself and Kiswahili shall be a compulsory subject. (p. 49)

In the same vein, student teachers were assessed in two ways: through formative and summative assessments. In this case, apart from the assessments conducted at the college level, the MoEVT through the National Examination Council of Tanzania (NECTA) assesses the student teachers when they complete their two-year studies to determine their grades and certificate qualifications (JMT, 2009a, 2009b, 2009c). Additionally, the syllabi proposed social science teaching methods and resources to ensure student teachers'

achievement in each topic. Some of the proposed teaching methods were case study, observation, group work, demonstrations, experiments, research, debates, projects, brainstorming, presenting summaries and feedback (JMT, 2009a, 2009b, 2009c). Accordingly, tutors in teacher training colleges were not only encouraged to use the proposed teaching methods and resources but also to improvise and search for teaching resources in other alternative places. Furthermore, tutors were expected to use teaching resources proposed in the syllabus, such as internet searches, CDs and DVDs, books and to search resources from other possible sources. Though tutors and student teachers were encouraged to find other useful teaching methods and resources, the new teaching approach would underpin all of them, as well as the tutors' beliefs and practices in social science teaching (Khine, 2006; Meena, 2009; Msonde, 2011).

### **1.6 The research problem**

A number of scholars advocate the need for both tutors and teachers to demonstrate competencies in social constructivist teaching concerning the subject matter, pedagogy, teaching resources, and learning context if quality teaching is to be assured (Cox & Graham, 2009; Harris, Mishra, & Koehler, 2009; Jimoyiannis, 2010; Meena, 2009; Vavrus et al., 2011). In addition, studies recommend the use of social constructivist approaches for PLD (Kafyulilo, 2010; Kitta, 2004). However, findings show that tutors' knowledge of social constructivist teaching in teacher education programmes is still not clear due to limited studies in the context of developing countries (Hardman, et al., 2012; Kafyulilo, 2010; Kitta, 2004; Msonde, 2011), even if many studies have been conducted in the developed countries (Cox & Graham, 2009; Harris, et al., 2009; Jimoyiannis, 2010). In Tanzania's teacher education context, funding organisations and individual researchers have focused on developing understanding in the areas of sciences and mathematics for different levels of teacher education programmes (Kafyulilo, 2010; Kitta, 2004; Msonde, 2011). In addition, few studies explored issues of instructional languages particularly in the colleges for certificate and diploma in teacher training programmes (Hardman et al., 2012). Therefore, with limited literature in social science disciplines for certificate, diploma, and university teacher education levels, there

was a need for a study to investigate tutors' knowledge and skills in applying social constructivist approach in teaching.

Teacher education programmes are the foundation for the development of other units in the education sector such that the educational managers also gain from emphasising professional training when building capacity in tutors' pedagogical content knowledge (Hardman, et al., 2012; URT, 2001b). However, many scholars have shown that tutors have relatively limited competence in applying social constructivist approaches to teaching (Beaty, 1998; Boyd, 2010; Harland, 2001; Meena, 2009). Based on existing evidence, tutors' application of the social constructivist approach to teacher training programmes has a significant role to play in improving the performance of student teachers (Meena, 2009; Vavrus, et al., 2011). Therefore, this study was designed to investigate the beliefs and practices of Tanzanian social science tutors in relation to transferring the knowledge and skills acquired from their professional training in social constructivist approaches when teaching social science in teacher education programmes. The research question is detailed below.

### **1.7 Research question**

The following research question was adopted for this study: What are the influences and outcomes of the implementation of social constructivist curriculum on tutors' beliefs and practices in social science teaching in Tanzanian teacher education programmes? Specifically the study addressed the following research sub-questions.

- 1) What are tutors' understandings of the social constructivist approach to teaching?
- 2) What are tutors' beliefs about the role of social constructivist approaches in teaching?
- 3) Do tutors integrate social constructivist approaches in teaching? And if so, how this is achieved?
- 4) What are tutors' suggestions for the future teaching of social science?

## **1.8 Significance of the study**

This study is intended to provide an understanding of the beliefs and practices of tutors with regard to the training programme (s) of social constructivist approaches in social science teaching in teacher education colleges. The study is expected to contribute knowledge for policy decision-makers, curriculum developers, and educational researchers, about social constructivist teaching in teacher training programmes. Further, it is expected to provide a knowledge framework for social constructivist teaching that might be adapted for other contexts of teacher training programmes. In addition, the study is expected to add knowledge to both local and international literature on social constructivist approaches in social science teaching and the transfer of knowledge and skills to the classroom (Baldwin & Ford, 1988; Broad & Newstrom, 1992; McDonald, 2012a).

## **1.9 Position of the researcher in research**

The primary role of the researcher in this study, as far as the qualitative study data are concerned, it is to have “a direct role in obtaining information as either the interviewer, observer, or the person who studies the artefacts and documents” (McMillan, 2008, p. 273). At the starting of data gathering, the researcher was wary of the potential impact of his personal beliefs, values, experience, and biases in influencing the gathering of information, interpretations, and sense-making which could impact upon the trustworthiness of the study (Lichtman, 2010). In recognition of these influences, a dual role was adopted: insider and outsider in the research process. As an insider, the researcher was an instrument for gathering data and analysis. During the collection of information, the researcher through his eyes and ears noted what he saw and heard from the participants’ setting and made sense of them to obtain information that were relevant to the research question. In this situation, the researcher’s experiences in qualitative research methods, designs, and analysis procedures influenced his process of understanding, interpreting, and debating critically the phenomena in question.

In his second role as an outsider, the researcher was observing participants' practices and recording their views as well as interpreting them according to the transfer of training, critical pedagogy, and social constructivist views in response to the research problem. Moreover, the researcher's broad experiences of teaching social sciences in secondary schools, educational courses in teacher education colleges and universities contributed the interest and motives to investigate the influences and outcomes of implementing the social constructivist approach on tutors' teaching practices and beliefs in Tanzania concerning their PLD experiences. Furthermore, the researcher's university education experiences in Tanzania and at the Victoria University of Wellington [on research methodology and human ethics] developed awareness of the limits and biases that could inherently influence the gathering of information, analysis, interpretation and discussion of findings. Thus, the researcher employed a range of strategies including triangulation of data gathering methods, member checking and gathering data from different sources to overcome some of the anticipated influences (McMillan, 2008). This helped the researcher to minimise bias in undertaking fieldwork, analysing data, and compiling the final thesis report.

### **1.10 Theoretical framework**

This study was investigated via three frames of reference. The overall theoretical framework relates to the transfer of training perspective. This implies that the investigation examined how well tutors in social science incorporated behaviours, attitudes, and beliefs from their PLD into their work with student teachers. There were two other theoretical positions that influenced the study. The critical pedagogy approach was employed alongside social constructivist theory to interpret and discuss critically the studied phenomena (McLaren & Kincheloe, 2007). That being so, critical pedagogy – a social critical theory family – is concerned with individuals' understanding of the world and how they are influenced by the realities as well as the ways they use to transform them. Thus, critical pedagogy and social constructivist frameworks study the phenomena from the perspectives of participants' natural settings. According to Kincheloe (2008, p. 10), critical pedagogy holds the beliefs that:

- Any education is politically biased.
- The impact of neo-colonial structures shape education and knowledge.
- The understanding of the context of educational activity or practice is a primary factor.
- The balance between social change and cultivation of the intellect should be the focus of education.
- The world is understood through the development and use of generative themes and the process of problem posing.
- Tutors should be researchers who generate knowledge to teach individual learners and they should study individual learners' behaviours and the forces that shape them.
- The focus should be on the alleviation of human suffering, consideration of first-hand information, and the prevention of individual learners for the knowledge they bring to the classroom.

Centred on critical pedagogy beliefs, the researcher had a broad view to interpret and debate the research phenomena that were grounded in the social constructivist approach. On one hand, social constructivist theory was used as a lens for this study (Piaget, 1977; Vygotsky, 1986; Windschitl, 2002). Central to this theory is the individual human who via interaction with others creates knowledge in the views of her/his respective cultural context (Baviskar, Hartle, & Whitney, 2009). Beck and Kosnik (2006) and Kim (2001) identified the key beliefs of the social constructivist theorists thus:

- Knowledge is constructed by students.
- Knowledge is experience-based.
- Learning has a social dimension.
- All aspects of a person (i.e., attitude, emotions, values, and actions) are connected.
- All learning communities are inclusive and equitable.

According to this theory, individual learners construct and acquire new ideas from others after assessing these ideas through dialogue (Baviskar et al., 2009). Accordingly, the ability to construct and assess knowledge depends on background experiences that facilitate the interpretation of new phenomena

within a particular cultural setting of the individual learner. However, Beck and Kosnik (2006) contended that for a fruitful interpretation of the reality to occur, learners need to engage in a group discourse in which experiences are shared, as this would realise an authentic solution to problems. In addition, learning is considered as an activity of becoming a complete social being through both physical and intellectual developments (Windschitl, 2002). The process of becoming a social being requires interaction with others in cognitive learning communities (Baviskar, et al., 2009; Beck & Kosnik, 2006).

Central to this study, critical pedagogy and social constructivist theory provided a wider chance to illustrate and debate concepts and phenomena of the research question. In this study, concepts such as learning context, teacher beliefs, teaching approaches, professional learning and development, and teacher education, were understood by employing critical pedagogy and social constructivist lenses. Thus, critical pedagogy (McLaren & Kincheloe, 2007) and social constructivist theory (Beck & Kosnik, 2006) were appropriate for a study that engaged the researcher in studying the participants' beliefs and practices in the context of social science teaching in Tanzania.

### **1.11 Definition of research terms**

The key terms used in this research are defined:

- A tutor refers to a professional educator of student teachers for Tanzanian teacher education colleges. The word lecturer is common for universities in the context. The word "tutor" is similar to a "lecturer" in other contexts of the world.
- A teacher refers to a professional teacher teaching in primary or secondary schools.
- A student teacher refers to a trainee registered to pursue a certificate, a diploma, or a degree in a teacher education programme.
- A pupil refers to a child/person attending primary or secondary school studies.
- A learner refers to both a pupil and a student teacher or simply written as pupil/student teachers. In some situations, the teachers or the tutors

become learners in the teaching process because they can learn from pupils/student teachers during the interaction process.

- A teacher education programme refers to a tertiary teacher training programme for both on-the-job teachers and tutors, and student teachers. The teacher education programmes include short time courses (workshops, seminars, symposiums) and long courses (certificates, diplomas and degrees). In circumstances where the discussion of the phenomena refers to both teachers and tutors, the slash is used. For example, tutor/teacher.
- A Teacher Education College refers to a training institution offering on-the-job and initial training courses for certificates or diplomas in teacher education.
- A professional learning and development programme (PLD) refers to any professional training programme for tutors to gain knowledge and skills of a new teaching paradigm, such as the social constructivist approach. However, in some situations the study discussed PLD to refer both tutors and teachers because sometimes they are used interchangeably or both by researchers or simply called teachers or tutors (Anangisye, 2010; Aydeniz & Hodge, 2011; Beaty, 1998; Gardner & Jones, 2011). The focus of such discussion in this research is on tutors.
- Transfer of training refers to the effective application of knowledge and skills acquired from a professional training programme to a job setting.
- A social constructivist approach (SCA) refers to a new teaching paradigm that emphasises the individuals' construction of knowledge in a social setting.
- A social constructivist teaching/curriculum (SCC) refers to a package of new teaching paradigm that goes to a certificate course in teacher education for tutors and student teachers in social science subjects, teaching materials, classroom situations, policies and programme designs.



## **1.12 Chapter summary**

Chapter One presented the context of education in Tanzania focused on the research problem and its background. It provided an overview of education trends and reforms, teacher education programmes, and recent teacher education in Tanzania. Also, presented in this chapter were the research problem, research question, significance of the study, position of the researcher, and theoretical framework. Lastly, the key research terms were defined. The next chapter discusses the literature underpinning this research.

## **Chapter Two**

### **Literature review**

#### **2.1 Introduction**

The preceding chapter discussed the background to the research problem. This chapter discusses the literature related to the impact of professional learning and development (PLD) in social constructivist curricula implementation on tutors' beliefs and practices regarding teaching in teacher education. Consideration is given to teaching orientations, the philosophical underpinnings of social constructivism and commonly contested views in teaching practices as well as the essence of social constructivist idea in education reforms. This is followed by a discussion of the essence of social studies and its contested views in teaching. Thereafter, it discusses the PLD experiences in the implementation of social constructivist curricula on the tutors' beliefs and practices in teaching. Tutors' exposure to the social constructivist approach through their initial teacher education and continuing PLD was expected to enable them to transfer the learned experiences to the context of teaching student teachers. Experiences and practices in integrating social constructivist approach in teaching are discussed alongside the identification of gaps. Lastly, the research questions are presented, supported by literature.

#### **2.2 Teaching and learning orientations**

Teaching orientations (curricular orientations) develop both the tutors' and teachers' acquired beliefs and propositions about teaching. Learning theories vary in foci and develop several patterns of teachers' behaviours and beliefs about learning, the knowledge to teach, and the teacher and learner's responsibilities (Pratt & Associates, 1998). Studies suggested five orientations of teaching and the ways the tutors and teachers adapt them in teaching and learning context: transmission, apprenticeship, developmental, transactional, and transformational or social reform orientations (Kember, 1997; O'Neil & McMahon, 2005; Pratt, Collins, & Selinger, 2001). Transmission orientation embraces some features of the behaviourist view (Clark & Voogel, 1985) and emphasizes the organisation of representations in a rational way for the learner

to understand. Transmission orientation stresses the tutor's or teacher's mastery of knowledge and high quality of the presentations of authority knowledge to learners. Learners are more likely to be passive when the transmission mode is operating. Teachers in the transmission stream view "learning as a matter of accumulating a body of information and reproducing it in tests or assignments" (Pratt & Associates, 1998, p. 42). The tutor'/teacher's responsibility is to prepare the content by setting achievable targets and assessments and reporting feedback using formal procedures. However, the authoritative knowledge is considered valid and an end in itself.

The apprenticeship orientation emphasises situating teaching and learning in an authentic learning context in which a number of skills or bodies of knowledge are considered relevant. In this orientation, teaching is towards developing a learner's identity under the guidance of the expert in the field. Teachers and tutors are committed to teach social norms and values to move their learner's ability from simple and low risk environment to the most sophisticated, complex, and learning strategies. There is an expectation that the learners would develop skills for problem solving and identity formation within a cultural context.

A third approach is the developmental orientation, which emphasises facilitating learners in developing thinking and problem solving skills as a professional person. The role of a tutor/teacher is to ensure the learner behaves in a professional way in terms of thinking and handling difficult situations, hence it is a learner-oriented teaching curriculum. Accordingly, tutors/teachers are obliged to help learners understand the content within the field in practice. This orientation builds on a cognitive view of learning emphasising active performance of task-oriented activities in different learning environments (O'Neil & McMahon, 2005). There is an expectation that the tutors/teachers should design lessons to enable learners to think beyond their present levels of understanding and doing things. In other words, tutors/teachers are emphasising the improvement of the quality of thinking instead of the content quantity. In this orientation, it is expected that learners should be engaged primarily in exploring the source of the knowledge and build from this to a richer understanding of situations.

The transactional or nurturing orientation is aimed at developing and achieving learners' expectations. It takes into account that the relationship that exists between the tutor/teacher and learner is of paramount importance and the subject matter is secondary to this relationship. In this case, the purpose of the relationship is for the individual learner to attain confidence and satisfaction in learning experience. The tutor/teacher demonstrates high levels of knowledge, trust, respect, encouragement, and support to learners (Kember, 1997; Pratt & Associates, 1998). Content becomes the means toward achieving the learning goals; learners celebrate greater sense of autonomy and independence in learning. Pratt and Associates (1998) argue that the self-efficacy and self-esteem of the student affect the learning process and therefore they are more important than the achievement or standardisation procedures. Studies indicate that there are potential values and dilemmas in the nurturing or transactional orientation of teaching (Kember, 1997; O'Neil & McMahon, 2005; Pratt & Associates, 1998). It is stated that learners have the choice of the content to learn, that tutor/teacher has less to do compared to the learners who receive high chances to engage in active learning activities, and that legitimacy is on learner-tutor relations at the expense of subject content. However, some more pertinent questions with regard to learners' ability to participate in the nurturing orientation are warranted. Questions such as the following need to be considered: Do learners have the knowledge and skills to choose the content? To what extent is the chosen content relevant to the teaching and learning context? These issues are discussed in the literature review section, designing learning environments.

Transformational or social reform approach is concerned with the understanding of the relationship that exists between the social, economic, cultural and political aspects of development and the way these influence the people. Moreover, teaching aims at developing the individual learner in intellectual, moral, physical, and emotional ways. The advocates of this orientation hold a pragmatic view that there are different ways of looking at phenomena. Stating this differently, they believe that both authority and knowledge form part of learning and therefore learning should be relatively co-constructed (Pratt & Associates, 1998). According to Mezirow, Taylor, and Associates (2009), this

orientation emphasises teaching a learner to be a productive member of a society and argues that effective teachers should believe in critical dimensions to motivating learners' learning outcome. In addition, assessment should promote the performance of tasks in the learning practice. Learners learn to analyse information and think critically to construct new ideas that are necessary to challenge the existing conditions. The contrasting idea is that, the transformative perspective has the likelihood of causing teacher overload, given the amount of tasks and activities during planning. This situation may compromise the teacher's/tutor's teaching competence when there are limited teaching resources. In essence, the social reform orientation backed up by the information processing, social learning, and cognitive learning theories led to the social constructivist orientation of teaching (Kember, 1997; O'Neil & McMahon, 2005; Pratt & Associates, 1998; Pratt et al., 2001).

These five teaching orientations are inter-dependent, "they all have the potential to overlap and mutually influence one another" (Bransford, Brown, & Cocking, 2000, p. 154). Accordingly, when investigating any shift of behaviours, beliefs or attitude toward the implementation of a training programme, consideration needs to be given to these different approaches to fully appreciate the behaviours, attitudes, and decisions displayed in the teaching/ learning context.

Social constructivist orientation suggests the implementation of a social reform curriculum in the context of Tanzania. In this process, a critical examination of the philosophical explanations of social constructivism is necessary as it relates to teaching orientations discussed above to discover the applicability of this curriculum orientation and the needed information for improving the quality of education in the context.

### **2.3 Social constructivism philosophical underpinnings and the contested views in teaching**

Social constructivism and its application in teaching is discussed with emphasis on the underlying conception of social constructivism, the governing teaching beliefs, designing learning environments, and challenges of the approach in practice (Adams, 2006; Karagiorgi & Symeou, 2005; Khine, 2006; Oxford, 1997; Phillips, 1995; Richardson, 2003; Windschitl, 2002).

### **2.3.1 Overview of social constructivist philosophy**

Social constructivist concepts have widely pervaded contemporary debates in the literature about teaching and learning (Oxford, 1997; Phillips, 1995; Rogoff, 1995), especially teacher education in enhancing learners' learning (Gordon, 2009b). The underlying philosophical views of constructivism are that people create knowledge from their real world context. Ontologically, the philosophy of constructivism comes from the understanding of reality as Oxford (1997) noted that "reality exists only in ideas or ideals" (p. 37). For idealists, reality is not static, but liable to transform people's thoughts or mind. Epistemologically, constructivism comes from the philosophy of knowing and generation of knowledge. Stated somewhat differently, idealists are concerned with the growth of knowledge through cognition processes, from simple to complex levels of understanding of phenomena (Oxford, 1997; Phillips, 1995). Discussing Kant's epistemological thought, Oxford (1997) noted that the human mind has concepts that interpret the characteristics of reality according to the source and situation of that reality in context. The idealists view knowledge building as a function of experience, analysis, and interpretation of realities or the world; subsequently, the understanding of knowledge is limited to the constructors or knowers involved in the learning situation. Thus, these epistemological and ontological views resulted in the emergence of different terms to explain the construction of knowledge in practice.

There is agreement between scholars that knowledge creation has invariably proposed different terminologies in the literature: "individual, social, psychological, cognitive, radical, critical and trivial constructivism" (Gordon, 2009b, p. 40); "radical, social, physical, evolutionary, post-modern, and information-processing" (Karagiorgi & Symeou, 2005, p. 18); "teaching for understanding, teaching for meaning, authentic pedagogy, child-centred, progressive pedagogy, and transformative teaching" (Windschitl, 2002, p. 136). The literature provides inconsistent views about the type of constructivism to adopt for effective teaching and learning, which are likely to create confusion for tutors/teachers in practice. Cognitive development theories (Piagetian information processing and Vygotsky's socio-cultural learning) and other scholars' (Jerome Brunner, John Dewey, and Paul Freire) initiatives to develop

their understanding of human behaviour, beliefs, and attitudes in practice might have influenced contemporary debates and contradictions of ideologies regarding the building of knowledge.

Piaget's (1896–1980) cognitive development framework focuses on utilising language to understand the individual's internal progress of mental processes and actions (Piaget, 1977). Piaget holds the idea that individuals perceive and make sense of the world and use that experience to understand or to transform their existing beliefs and practices through assimilation. Piaget (1977) believed that individuals modified their beliefs, attitudes, and practices to adapt to new understanding of reality via accommodation. Accordingly, knowledge construction was the function of an individuals' inquiry and reasoning processes and of interaction with the environment (Gordon, 2009a, 2009b). Thus, the cognitive development framework indicates that individuals are responsible for ensuring a balance between assimilation and accommodation for effective meaning making and transformation of the existing situation (Mezirow et al., 2009; Oxford, 1997). Alternatively, Piaget's case study procedures identifying the theory of cognitive development to be considered a socially constructed knowledge grounded on individual's perceptions and cultural setting. In a social constructivist view, it can be argued that, although Piaget's study was not concerned with the importance of social context and culture, it suggested the existence of social and cultural aspects of learning and cognition (Oxford, 1997). For example, Piaget's knowledge construction was situated in the particular language of the socio-cultural context, with three research participants and resources that suggest an acknowledgement of social construction of knowledge (Gordon, 2009b).

On the other hand, Vygotsky's (1896-1934) social learning theory focused on social and cultural aspects of individual's cognitive development (Vygotsky, 1986). In this sense, Vygotsky's (1986) cognitive development framework involves social interactions in two stages. As in the first place, he argues that cognitive interaction is initiated between individuals and then incorporated within the mind of the individual to understand phenomenon. This implies that there is a social interaction between peers, the teacher/tutor, and the individual's mind.

The individual learns by interacting with an immediate environment and develops concepts that are shared in a group setting. The second place is the mental development that the individual achieves through the support of an expert, a guide person, and other individuals in a social setting (Zone of Proximal Development). In the meantime, the language of the cultural context and social interactions facilitate the mental development process. Hence, language is considered to be important in the social process of meaning making and social interactions are situated in collaborative and cooperative environments that promote scaffolding and critical thinking among individuals (Gordon, 2009a, 2009b). Such learning environments enhance social constructivism. However, Vygotsky's framework is criticised for its emphasis on the social rather than the individual position in the construction of knowledge and for the missing explanations about the connections between the existing external and internal world in the individual's mind (Liu & Mathews, 2005). Consequently, it is difficult to identify the social cognitive process inside the individual mind, except when the individual is connected to peers.

Blumer's (1986) philosophical view clarifies the disparities between Piaget and Vygotsky's theories of cognitive development. Blumer's sociological and philosophical arguments focused on studying social life in order to invent ways of understanding subjects, which were situated in the behaviourist framework. Blumer argues that the individual is inseparable from the society because the individual and society make sense of the same meanings of life. Building on this argument, Cowie and Roebuck (1975, as cited in Blumer, 1986, p. 2) indicate premises of symbolic interaction. Authors state that:

- Human beings act towards things based on the meanings they have for them. Such things include everything that the human being may note in his world;
- The meaning of such things is derived from or arises out of the social interaction that one has with one's fellows;
- These meanings are handled in, and modified through, an interpretative process used by the person dealing with the things he encounters.



With regard to these premises, Blumer sets a principle that knowledge or meanings have a social value that humans and society understand based on attributed meanings and actions displayed. Consequently, the individuals and general society derive meanings via shared interpretations of things, people or phenomena (Oxford, 1997). According to Oxford (1997), the concepts of learning communities, situated learning, contextualisation, setting and activity learning are significant aspects of social constructivism. Thus, knowledge construction that involves participants of all ages in the community-based, place-based, and activity-based environments is likely to bring change in the ingrained beliefs, attitudes and values because they derive the same meanings and interpretation processes of the phenomena they are engaged in producing.

### **2.3.2 Social constructivist teaching views**

The social constructivist view builds on the belief that individuals produce knowledge socially and culturally, and also that individuals' activities construct their understanding of reality — learning is a social process (Kim, 2001). Accordingly, Richardson (2003) notes that the focus of social constructivist pedagogy is “the consideration of how individual learner learn to ways of facilitating that learning, first in individual learners and then in groups of learners” (p. 1626). Scholars and literature (Adams, 2006; Arends, 2012; Baviskar et al., 2009; Jonassen, 1999; Kanselaar, 2002; Karagiorgi & Symeou, 2005; Khine, 2006; Pitsoe & Maila, 2012; Richardson, 2003; Windschitl, 2002) debate various characteristics of social constructivist pedagogy, but they agree that it:

- Acknowledges the multiple representation and complexities of worldviews from a broad range of knowledge sources in the cultural context.
- Requires active collaboration and cooperative, uncompetitive and autonomous environments for deep learning through which individuals' beliefs and background understanding are co-constructed in group settings.
- Demands creativity and reflectivity in the teaching and learning process.
- Depends on the context and content of knowledge construction — authentic learning context.

- Emphasises the use of multiple authentic assessment and feedback procedures regarding the evolution of ideas and thinking processes.
- Relies on transparency and encouragement of students by teachers, and teachers in the teaching and learning activities.
- Needs a learning environment equipped with rich sources of information and facilities (technological and non-technological) to facilitate learning.
- Acknowledges teacher's professional ethics, pedagogical expertise and content knowledge to support pupils learning. This suggests that the teacher is required to excel in facilitation and guidance and to create a learning environment in which learners can be motivated to construct knowledge. They should provide content and resources to solve relevant problems at appropriate times and link these resources and problems to learners' prior knowledge.
- Focuses on construction of individuals' beliefs and background knowledge in a social situation.

From the outlined characteristics, Taylor (2009) identifies six interdependent key characteristics of the social constructivist pedagogy: (1) individual experience, (2) critical reflection, (3) dialogue, (4) holistic orientation, (5) awareness of context, and (6) authentic practice. Using Taylor's view, a tutor/teacher could not only engage the learners in critical reflection by utilising their education background, but also in the use of authentic learning activities to motivate the learners. However, Taylor (2009) was not concerned with the position of a tutor's or teacher's experience and technological resources as significant features in creating an environment conducive for meaning-making in practice. The tutors' engagements of student teachers in utilising these features for knowledge construction practices should mean they are considering the social constructivist lens.

### **2.3.3 Designing the learning environments**

The ongoing debate in literature suggest the appropriate design of learning environments to promote collaboration and cooperation for effective teaching (Adams, 2006; Baviskar et al., 2009; Karagiorgi & Symeou, 2005; Langan, Sheese, & Davidson, 2009; O'Neil & McMahon, 2005; Taylor, 2009). In

attention to this, Karagiorgi and Symeou (2005) highlight the characteristics of the environments that tutors/teachers should design for a collaborative and socially mediated process of knowledge building. These are described as:

Student-centred, student-directed, collaborative, supported with teacher scaffolding, authentic tasks and based on ideas of situated cognition, cognitive apprenticeship, anchored instruction and cooperative learning. Such learning environments involve an abundance of tools to enhance communication and access to real-world examples, reflective thinking, multiple perspectives, modelling or problem solving by experts in the context domain and mentoring relationships to guide learning. (p. 19)

Accordingly, Langan et al. (2009) note the need for the values of constructive thinking in a socially constructed learning environment to ensure harmony and freedom of participation and expression of participants. These values include: (a) collaboration (make learning a social and individual asset) (b) deep learning (make connections within subject parts) (c) reflection (assess the present content knowledge with the past) (d) engagement (developing arguments based on evidence of content learned) and (e) caring (establish support, tolerance, and sharing with others). Langan et al. (2009) note the orchestration of the values at various learning levels in the classroom when teachers have the opportunity to engage learners (pupils) in the construction of knowledge situated in learners' own realities. Thus, in the social constructivist view, tutors are expected to ensure that lessons are designed to develop the student teachers (socially, physically, mentally, and emotionally) in all aspects of their professional career (Windschitl, 2002). To achieve this, tutors need to possess the knowledge, skills and attitudes necessary for effective preparation and implementation of a classroom learning environment that facilitates the student teachers to construct knowledge.

In designing learning activities that conform to the social constructivist pedagogy, tutors are expected to prepare lessons by selecting appropriate teaching resources and methods as well as constructive assessments. According to Hunt, Wiseman, and Touzel (2009), the important aspects of designing the lesson plan constitute:

- What to teach

- How to teach
- How to evaluate
- Time allowed to explore and practice new learning
- Summary and conclusion.

Hunt, Wiseman, and Touzel’s (2009) list suggests a behaviourist view of lesson planning because they are not primarily concerned with the significant role of the learning context, teaching resources, or authentic practice in promoting knowledge construction in the classroom as other scholars have indicated (Khine, 2006; Taylor, 2009). This being so, O’Neil and McMahon (2005) recommend designing the learning outcomes in alignment with the new teaching paradigm. Table 2.1 indicates examples of the shift in the design of learning outcomes from the traditional to the new approach of teaching.

**Table 2.1:** Comparing traditional and social constructivist-oriented learning outcomes

Traditional approach	Social constructivist approach
<b>The course will cover:</b>	By the end this module the student will be able to:
• <b>The shape of the earth</b>	✓ Recognise the shape of the earth
• <b>The evolution of man</b>	✓ Critique the stages of the evolution of man

**Source:** Adapted from O’Neil and McMahon, 2005, p. 30

Importantly, O’Neil and McMahon (2005) consider that involving students in planning lesson would help them gain ownership of the lesson and to be responsible for their own learning challenges. Authors assert that:

It allows the ...[students] to set [some] of their own learning objectives/outcomes, dependent on prior knowledge ... through the use of problems/issues/triggers, encourages the ...[students] to develop their own learning goals, thereby filling the gaps in their knowledge or understanding.  
(2005, p. 30)

Since, the social constructivist view recognises that teaching should focus on the individual learner who is responsible and accountable for their own learning, the student teachers in teacher training programmes should be involved in the preparation stage of the lesson to provide high level of choices and active

learning algorithms (Baviskar et al., 2009; O'Neil & McMahon, 2005). The learners need to have a choice about what to study and how to study under the teacher's guidance (Gordon, 2009a; O'Neil & McMahon, 2005). To achieve this, Adams (2006) puts forward that "asking pupils what they wish to consider and how they wish to investigate and present their work engenders feelings of importance and worthiness" of the knowledge building practices (p. 252). Thus, teachers are expected to involve pupils in setting learning objectives, selecting teaching methods and teaching aids as well as setting assessment procedures. As Cranton (2010) notes:

The participatory planning process creates enthusiasm and even excitement regarding the upcoming classes. It also challenges their perspectives that the teacher always needs to be in charge of content ... it is well worth the effort when learners know they have designed "our course". (p. 185)

However, teachers' knowledge and skills are paramount in the lesson planning process because pupils have limited pedagogical experiences of lesson preparations (Adams, 2006).

Following scholarly debates focused on social constructivist-based learning approaches (Gordon, 2009a; Kanselaar, 2002), Taylor (2009) reports that there are limited literature on how best to develop a lesson, and promote the classroom environment. Subsequently, Baviskar, et al. (2009) postulate the following four critical criteria to facilitate the knowledge construction process in the classroom - ECAR: (1) Elicitation of prior knowledge of the learners (2) Creation of cognitive dissonance (3) Application of the knowledge with feedback (4) Reflection on learning. In the first place, the social constructivist view recognises the individual learners' prior knowledge acquired through informal and formal procedures at home and schools that is brought to the classroom. In relation to this, Dewey (1950) emphasises that:

The first stage of conduct with any new material, at whatever age of maturity, must be inevitably be of the trial and error sort. An individual must actually try, in play or work, to do something with materials in carrying out his own impulsive activity, and then note interaction of his energy and that of the material employed. (p. 181)

In relation to the first criterion, Dewey notes the role played by the learners' prior knowledge in developing critical thinking instead of regurgitating knowledge supplied by the experts. This is similar to Baviskar's et al. (2009) assumption that the learner is not "a *tabula rasa*, to be filled with learning via transmission-based teaching and improved stimulus-response connections, thereby communicating and instilling a set of predetermined facts" (p. 245). Teachers/tutors are needed to explore learners' background experience or foreground knowledge and use it as a foundation in the co-construction of new knowledge. Baviskar's et al. (2009) argue that when the prior knowledge is not examined there is a likelihood of the learners to ignoring that important knowledge and establishing wrong information in relation to the current knowledge constructs. Activities useful for eliciting learners' prior knowledge and designing learning activities include:

- Using formal pre-tests and quizzes
- Asking learners informal questions about what they know about the topic;
- Using formal interviews with students
- Creating concept maps
- Requiring students to present what they know regarding the topic and creating networks of concepts
- Checking the completion of an activity with students to gain insight of what they know their misinterpretations, and the focus of the lesson.

The second criterion is the creation of cognitive dissonance and confrontation in a non-competitive setting as well as assured tolerance towards criticism and acceptance of ideas from others. Tutors/teachers should understand the differences learners bring to the classroom regarding their background knowledge of their socio-cultural situations. To stimulate cognitive dissonance, tutors/teachers are expected to engage learners in a problematic situation with a high order disposition of inquiry process (Baviskar et al., 2009). Stated somewhat differently, tutors are expected to make sure they engage student teachers in situations where they are able to interrogate issues of subject teaching between themselves and the tutor about their foreground knowledge in relation to the prior experience.

The third criterion is the application of knowledge with feedback in which tutors/teachers are expected to promote cognitive dissonance activities to enable the learners to improve their background knowledge in the context of new learning. Hence, tutors need to guide or facilitate the student teachers to develop new subject constructs and modify their prior ideologies and attitudes towards learning. In addition, tutors should facilitate the knowledge of a subject to student teachers and make sure they establish links between what they already know, and the new learning, and between subject topics and other subjects (Langan et al., 2009; Windschitl, 2002). Furthermore, in order to ensure permanent retention of knowledge the tutors should teach student teachers to apply the constructed subject information to different contexts. Baldwin and Ford (1988) point out that if the prior knowledge is not integrated into understanding of the new situation, the learners might demonstrate an inability to acquire new constructs. Adding to Baldwin and Ford's (1998) views, Baviskar et al. (2009) recommended the use of the following procedures to apply the constructed knowledge of subject in practice:

- Checking the validity of the knowledge constructed.
- Using quizzes, presentations, and group discussions.
- Comparing the constructed knowledge with other scenarios.

The fourth criterion is reflection on the knowledge construction process. Tutors/teachers are expected to guide learners to examine the new knowledge they have constructed after they had validated it. In the reflection process, learners determine what has been learned to form a base for future procedures and learning opportunities. In this criterion, the tutors/teachers might engage learners in activities such as writing reflective journals, and using creative dissonance activities for example to explain to colleagues a phenomenon studied in that particular lesson (Baviskar et al., 2009).

Although Baviskar and Associates did not mention the closure of a lesson as an important factor in social constructivist teaching, Hunt, Wiseman, and Touzel, (2009) describe the closure stage as being specifically for making the summaries and conclusions that offer scenarios for a better understanding of the knowledge constructed and a place for building the next lesson. The authors

note, however that, although such closure of lessons informs tutors/teachers about the knowledge constructed, they might not be able to know the extent of learners' understanding of the knowledge constructed. They note that some teachers ignored the closure stage of the lesson, putting more emphasis in the development of knowledge, which involve them much time for learning (Hunt et al., 2009). Hence, for effective closure of the lesson, tutors are expected to use multiple ways of generating summaries and conclusions to vary the learning situations. In this sense, when “test-like questions that function as learning aids are employed to the closure they stimulate thinking and knowledge construction” (p. 71). This means that tutors should ask questions of student teachers “to state in their own words, important points of information’ constructed in the lesson” (p. 3). Therefore, tutors are expected to demonstrate the understanding and ability needed to implement social constructivist based teaching strategies that stimulate the learning environment for student teachers in subject lessons.

### ***2.3.3.1 Teaching strategies***

The social constructivist pedagogy emphasizes active learning, authentic learning and collaborative learning, evaluation as well as multiple perspectives strategies (Adams, 2006; Karagiorgi & Symeou, 2005; Khine, 2006).

#### *Active learning*

With active learning strategies, the tutors are expected to design lessons with complex problems that motivate the individual student to gain methods and experience of solving such problems when they are exposed to different situations. To this end, tutors and teachers should use classroom exercises, excursions, computer-based assignments, writing of portfolios and reflective journals to confront the minds of learners in the knowledge construction process (Baviskar et al., 2009; Khine, 2006).

#### *Authentic learning*

According to Dewey (1950), for authentic learning:



There must be more actual material, more stuff, more appliances, and more opportunities for doing things, before the gap can be overcome. And where children are engaged in doing things, it is found, even with comparatively indifferent modes of instruction, that children's inquiries are spontaneous and numerous, and the proposals of solutions advanced, varied and ingenious. (p. 182)

In this quote, Dewey is emphasizing the importance of designing a learning environment that reflects real life. This is considered important to social constructivist teaching (Kanselaar, 2002; Taylor, 2009; Windschitl, 2002). Tutors/teachers drawing on a social constructivist pedagogy are expected to enable the learners to feel that they are interacting with the actual environment, stimulating reflective thinking, and applying the constructed concepts in practice. In doing so, tutors/teachers avoid superficial teaching and the occurrence of surface learning among student teachers. Tutors/teachers are urged to employ case-based learning, cognitive apprenticeship, situated learning, and extended anchored-learning (Kanselaar, 2002). Thus, Taylor's (2009) five elements defining authentic relationships are applicable for tutors/teachers in establishing relationship between learners. These elements involve developing (1) a strong sense of self-awareness, (2) deep awareness of the needs and interests of learners and how they may differ from the interests of the educator, (3) the ability to be genuine and open with others, (4) awareness of how context shapes practice, and (5) engagement of individuals in critical reflection and critical self-reflection about practice. According to Taylor, these elements are significant in increasing the probability of sense-making and tutors/teachers are expected to consider them when designing the lesson plans in order to promote their relations with learners in the context-based learning situation.

Furthermore, for effective authentic learning learners should learn how to build arguments and reasoning skills. Jonassen (1999) discusses four methods of developing arguments that tutors/teachers need to employ in facilitating learners' learning: to provide a set of directions to make the arguments, to use question prompts to stimulate learners' argument construction, to involve individuals in collaborative construction of the arguments, and to set situations

that enable the learners to visualise the arguments through symbols and graphics. Scholars (for example Blumer, 1986; Habermas, 2005) writing about symbolic interaction and communicative reasoning acknowledge the four methods of enhancing authentic learning situations. Subsequently, the completion of knowledge construction requires the tutors/teachers to engage learners in the assessment of these procedures to determine the quality of thinking and knowledge constructed, and the effectiveness of the learning procedures and their applicability to similar situations.

### *Collaborative learning strategy*

Social constructivist teaching requires the design of learning environments that are collaborative and enriched with cooperative learning strategies to develop individuals' critical reflection and validation of their beliefs and premises (Alcantara, Hayes, & Yorks, 2009; Karagiorgi & Symeou, 2005). For tutors/teachers, the idea of considering cooperative learning is central to eliminate issues of social inequalities (ethnicity, race, and cultural disparities) and to ensure group compositions (for example, to ensure the balance of sex and age differences but with heterogeneity) in creating learning communities (Van der Linden & Renshaw, 2004). In this way, cooperative learning is ideal for collaborative learning in promoting the social constructivist teaching. According to Alcantara, et al. (2009), the collaborative learning strategy embraces social constructivist beliefs in that it:

- Establishes a social space that actualises the conditions for engaging in effective discourse.
- Follows an epistemic framework that is holistic, integrating feeling with cognitive knowing.
- Fosters critical reflectivity on personally embedded assumptions and premises.

Further, tutors are expected to position learning activities in an environment that motivates student teachers to build knowledge through dialogue and critical reflection regarding their different views. In other words, tutors are expected to pass their power to student teachers so that they learn from a student teacher and promote collegiality. Dewey (1950) argues that in such a situation of

shared responsibility, “the teacher is a learner and the learner is a teacher without knowing it, a teacher-and -upon the whole, the less consciousness there is, on either side, of either giving or receiving instruction, the better” (p. 198).

Similarly, Gordon (2009a, 2009b) discusses the techniques of promoting collaborative learning, arguing that it should be a dialogue situated in activities such as class-based discussions, conversations in small groups, and learner-presentations focusing on social issues that are affecting learners in learning , for example problems drawn from centralised curricula. On one hand, learning activities need to be designed to develop learners’ abilities to create and assess arguments as well as negotiate their differences in view. In other words, learning situated in such an environment becomes vivid and open and provides different insights and alternative thinking. Collaborative learning is a social process and involves group formation, inquiry conditions formation, sense-making, and decision-making (Alcantara, et al., 2009). This means that ideally, all aspects of learning are collaborative; the lesson planning, lesson implementation and evaluation. Dekker, Elshout-Mohr and Wood (2009, p. 156) argue that in collaborative learning social norms needs to be considered:

- When working together as pairs, both ... tutors/teachers and learners should try to solve the problems by talking and sharing their strategies.
- When tutors/teachers and learners have different approach to solving the problem but they must reach consensus to one approach to the problem.
- When they raise multiple answers to the problem, learners and tutors/teachers must work collaboratively to clear the differences.

Conversely, the level of social collaboration may vary when the autonomy of the tutors/teachers is shared with learners because in some circumstances tutors/teachers need to use their professional and psychological experience to control and guide the learners who need support to achieve their goals. This is what Jonassen (1999) reports that when learners have limited experience to share in the knowledge construction activities, they should be supported through modelling, coaching and scaffolding strategies. Hence, tutors/teachers are needed to maintain collaborative relationship with learners in a conditional and asymmetrical manner. According to Mayer (1999, as cited in Karagiorgi &

Symeou, 2005), although social context promotes social construction of knowledge, not all social context facilitates knowledge construction. Social context becomes meaningful in knowledge construction when collaborative learning activities enable individuals to integrate their developed concepts, ideas, and theories into real-world practice (Alcantara et al., 2009).

### *Multiple perspectives*

Karagiorgi and Symeou (2005) indicate that knowledge construction should be situated in an approach that allows multiple representations of themes and situations. They argue that, “any specific concept must be approached via a wide range of learning contexts to aim transfer of the knowledge in a broader range of domains” (p. 20). In this sense, tutors/teachers are expected to design learning in a situation that engages learners in different cases and situations of conceptual understanding. In any case, learners should experience different subject learning styles (seating arrangements, techniques, motivations and rewards) that are applicable to a wide range of situations and representations of subject themes. In the same way, tutors/teachers are expected to design teaching and learning activities that are based on social and cultural contexts to address different views with multiple representations of concepts in relation to the real world. As Gordon (2009b) notes, individuals who are “socially and culturally embedded rather than isolated” generate knowledge (p. 39). In a social constructivist view, if this is not considered then the result is that all learning becomes superficial and impractical to life experiences. As Karagiorgi and Symeou (2005) assert that, “when learning of a concept occurs as separate topic, the learning remains inert and superficial, bringing about boredom, negative effect on motivation and incapability of transfer to meaningful real world situations” (p. 20).

### *Evaluation*

Scholars agree that assessment is of paramount importance in a social constructivist curriculum (Adams 2006; Karagiorgi & Symeou, 2005). These scholars view that although teachers are expected to ensure a free environment for knowledge construction, and developing interpretations about the real world, they have to confine these actions within the philosophy of education in that

particular context. According to Karagiorgi and Symeou (2005), the constructed models, beliefs, theories, and conceptions are transformed and assessed during learning. In the social constructivist approach, the assessment is concerned with the learning process and learners' understanding of tasks within the cultural context. That being so, tutors are expected to assess student teachers' ability to explain the subject concepts and to create arguments to defend their understanding of those concepts to their peers. Similarly, the tutors should provide opportunities for the student teachers to play an "active role and critical role in assessing their own learning by articulating what they have learned and how they have made the connection to their previous experiences" (Karagiorgi & Symeou, 2005, p. 21). Furthermore, they argued that assessment is fundamental for determining the student teacher's transfer of learning, responsibility and autonomy in the context of learning. The literature (Kitta & Tilya, 2010; O'Neil & McMahon, 2005) provides a range of assessment methods that embrace the social constructivist view. These methods are presented in Table 2.2.

**Table 2.2:** Assessment methods for social constructivist learning

• Product assessment	• Projects
• Portfolios	• Performance assessment
• Peer/self-assessment	• Practical tasks
• Negotiated learning and assessment	• Profiles
• Diaries, logs and journals	• Group work
	• Oral examinations

**Source:** Reviewed from studies (Kitta & Tilya, 2010; O'Neil & McMahon, 2005)

Adams (2006) reports that assessments need to be embedded within the teaching and learning as motivational factors. He views that assessments are needed to address the reasons and ways that mitigate the learners to reaching consensus. In this sense, he argues for dynamic interactions between the learners and argues that tutors/teachers need to deal with issues of assessments. According to Adams, the assessments need to address three major issues. Firstly, assessments are needed to help tutors/teachers to gain insights into what learners have learned, and how these results might be improved. Assessments should be used as a means to distinguish between the

issues that learners are able to learn independently and what they need guidance with. In this way, the tutors/teachers are expected to use their pedagogical and professional experience to support student teachers with resources and technical guidance about issues that pupils/student teachers alone might manage. Tutors/teachers can assist in the establishment of dynamic dialogues and critical reflection through which student teachers are able to gain access for peer and self-reflection in the classroom.

The second issue raised by Adams (2006) is that assessment should be used as a means to predict future learning needs. Tutors/teachers' psychological and pedagogical knowledge should enable them to explore or examine hidden beliefs and practices of learners through conversational and dialogic prompts: through interactions in dialogue and conversations between learners and by checking learners' written and oral responses are able to identify areas that require development and discussion.

The third issue is that assessments should be used as a strategy to obtain feedback and feeding forward about learning – unlike the positivist view where the assessments are used to identify the correct and wrong responses made by learners (Adams, 2006). Adams claims that tutors/teachers can ignore learners' mistakes and errors if they have no effect on learning. Rather, learners can be asked questions that clarify their misconceptions or provided cues to guide in learning. Thus, tutors/teachers should support and guide learners in learning process as well as asking critical questions to investigate the different learners' interpretations about their real world and gain insights for future learning (Adams, 2006; Schweisfurth, 2011; Vavrus et al., 2011).

Finally, scholars (Adams, 2006; Karagiorgi & Symeou, 2005) suggest the use of “divergent assessments” in which multiple assessors are involved (to avoid biases of using a single assessor) in assessing different views, ideas and concepts of learners through “goal-driven” and “goal-free” assessment. This suggestion calls for the use of a positivist view for both formative and summative evaluation. Adams (2006) uses Vygotsky's concept of the *zone of proximal development* to develop an argument that divergent assessment

embraces social constructivist view, while negotiating his idea with the importance of positivist view in summative assessment. As he asserts:

Practically, divergent assessment is non-judgemental, yields insights into understanding and prompts meta-cognition. More importantly, it recognises the need to involve...[students] in self-peer assessment through the use of discursive and collaborative learning and teaching strategies. (p. 253)

Similarly, some of these scholars view that assessments need to be context-focused to assess learners' goals, which ideally would be developed from learners' own perspectives, and would address issues within their social and cultural context (Adams, 2006; Karagiorgi & Symeou, 2005). On the other hand, the use of divergent assessments might cause problems to some tutors/teachers who would be likely to fall back onto the traditional teaching approach, with which they are more familiar. Accordingly, none of these views is suitable in all situations; the social and cultural context should guide tutors/teachers' choice of the type of assessments to use and to embrace the social constructivist view (Adams, 2006; Schweisfurth, 2011; Vavrus et al., 2011).

### ***2.3.3.2 Technology use in social constructivist pedagogy***

Studies have indicated the significant role of technological resources in enhancing the SCA in teaching (Kafyulilo, 2014; Keengwe, Onchwari, & Wachira, 2008; Khine, 2006; Koehler & Mishra, 2009). Ideally, technological resources ranging from low-level equipment, such as audio-visual resources, to high-level digital equipment are important in enhancing new approaches of teaching (Baran, Chuang, & Thompson, 2011; Koehler & Mishra, 2009). Schmidt, Baran, Thompson, Mishra, Koehler, and Shin (2010, as cited in Baran et al., 2011, p. 371) identify that technological knowledge ranges from "low-level technologies such as a pencil and paper, to digital technologies such as the internet, digital video, interactive whiteboards and software programs". As noted, they believe that environments enriched with technology motivate interaction between learners and tutors/teachers for meaning-making process. For details, Khine (2006) and Jonassen (1999) describe the roles of technology use in enhancing the social constructivist teaching milieu. Table 2.3 illustrates these.

**Table 2.3:** Roles of technological resources in social constructivist teaching

Parameter	Specific roles
As tool to support knowledge construction	For representation of learners ideas, understandings, and beliefs. For producing organised, and multimedia knowledge-base by learners.
As information medium for exploring knowledge to support learning by construction	For accessing the needed information For comparing perspectives, beliefs and world views.
As context to support learning by doing	For representing and simulating meaningful realities of the context. For representing beliefs, perspectives, arguments and stories of others that are different from one's own. For defining a safe, controllable problem space for learners' thinking.
As social medium to support learning by conversation	For collaborating with others. For discussing, arguing and building consensus among members of a community.
As intellectual partner to support learning by reflection	For helping learners to articulate and represent what they know. For developing reflection on issues learned and how they came to know them. For supporting learners' internal negotiations and meaning-making for constructing personal representations of meaning. For supporting mindful thinking.

**Source:** Reviewed and adapted from Khine (2006, p. 26)

On the other hand, studies on computer-based technology integration in education have long debated the challenges of employing computer software and hardware in teaching (Groff & Mouza, 2008; Kafyulilo, 2014; Keengwe, et al., 2008).

In the United States of America, Groff and Mouza (2008) explored six critical challenges that influence the integration of computer-based technology resources to enhance social constructivist teaching in the classroom. A first challenge is related to legal issues: policy, legislation, and research undertakings outside the tutors or teachers' teaching routines. Groff and Mouza argue that technology integration can help to address some challenges in teaching within the policy framework, foster changes in the content and quality of teaching and prepare students for the increasing use of technology



worldwide. Such policies were rarely implemented, making it difficult to integrate the technology in the context. In addition, research into the best practices of technology use in the classroom provides confusing evidence. According to Groff and Mouza (2008), while some studies investigated the extent to which technology enhances learners' learning, when compared to other teaching strategies, researchers often seemed to separate technology from the curricula. Recent studies on technology use have also noted it to be an important tool for enhancing the learning environment (Groff & Mouza, 2008; Kafyulilo, 2014; Keengwe et al., 2008). Yet there is limited evidence in the literature to show how computer-based technology resources can best be integrated to facilitate the introduction of technology and the use of technology in the classroom.

A second challenge is related to the characteristics of the technology itself, since there are aspects that may hinder or facilitate the integration of technology in practice. According to Groff and Mouza (2008), these characteristics influence tutors'/teachers' use of technology in the classroom: (1) the context in which the technology is adopted, (2) the tutor/teacher who serves the innovator, (3) the technology's enhanced innovation, and (4) the operators of the technology innovation.

A third challenge is concerned with barriers from education leaders and the community's will to adopt the technology (Groff & Mouza, 2008). These authors note that supportive college environments and the community could motivate tutors' use of technology in the classroom. Under these circumstances, the community and educational leaders, as well as the college culture, should provide support in terms of the appropriate classroom physical architecture compatible to the adoption of computer-based technology hardware and software resources. However, this type of investment requires funding and technical resources for which many educational institutions may not be able to afford the costs.

A fourth challenge is related to tutors'/teachers' pedagogical knowledge of using the technology in the classroom (Groff & Mouza, 2008). Tutors are required to shape their attitude towards the use of technology in the classroom if implementation is to be successful. In explaining this challenge, Kafyulilo (2014)

notes the resistance of teachers in using mobile phones in Tanzanian secondary schools that:

The use of mobile phones distorts students' behaviours as the majority of them do engage in some non-learning related activities, such as texting each other during class hours. Some teachers also reported that some students actually used mobile phones for flirting and watching pornographic contents, which are against the morals and ethics of the society and of the school. (p. 214)

Subsequently, it can be implied from the teachers' beliefs and practices that the introduction of technology needs to be preceded with a shift in beliefs and attitudes towards using technology (Kafyulilo, 2014). Likewise, tutors/teachers need to work in a classroom environment equipped with technology rich resources to be able to integrate them into social constructivist teaching (Khine, 2006; Keengwe et al., 2008).

A fifth challenge is related to the limited participation of primary *operators* (in this case, the student teachers) in the reform process. This influences the integration of technology in the classroom (Groff & Mouza, 2008). Some commentators argue that social constructivist teaching requires active involvement from student teachers in the planning and learning processes, and if they are not considered in these processes, resistance to using technology in the classroom may develop (Adams, 2006; Karagiorgi & Symeou, 2005). In that sense, learners' resistance to technology use need to be transformed through open-ended discussions and participation in the reform project to help them acquire new beliefs and attitudes towards the use of technology in practice.

A sixth challenge is emerged from application of the technology itself. Groff and Mouza (2008) argue that the characteristics of the technology hardware and software might be the source of the barriers to technology use in the classroom. For example, problems related to failures of functioning of the hardware, incompatibility of software, insufficient memory, and distortion of files and lack of up-to-date operating systems discouraging the tutors/teachers and learners to use computer-based technology in the classroom. Figure 2.1 below

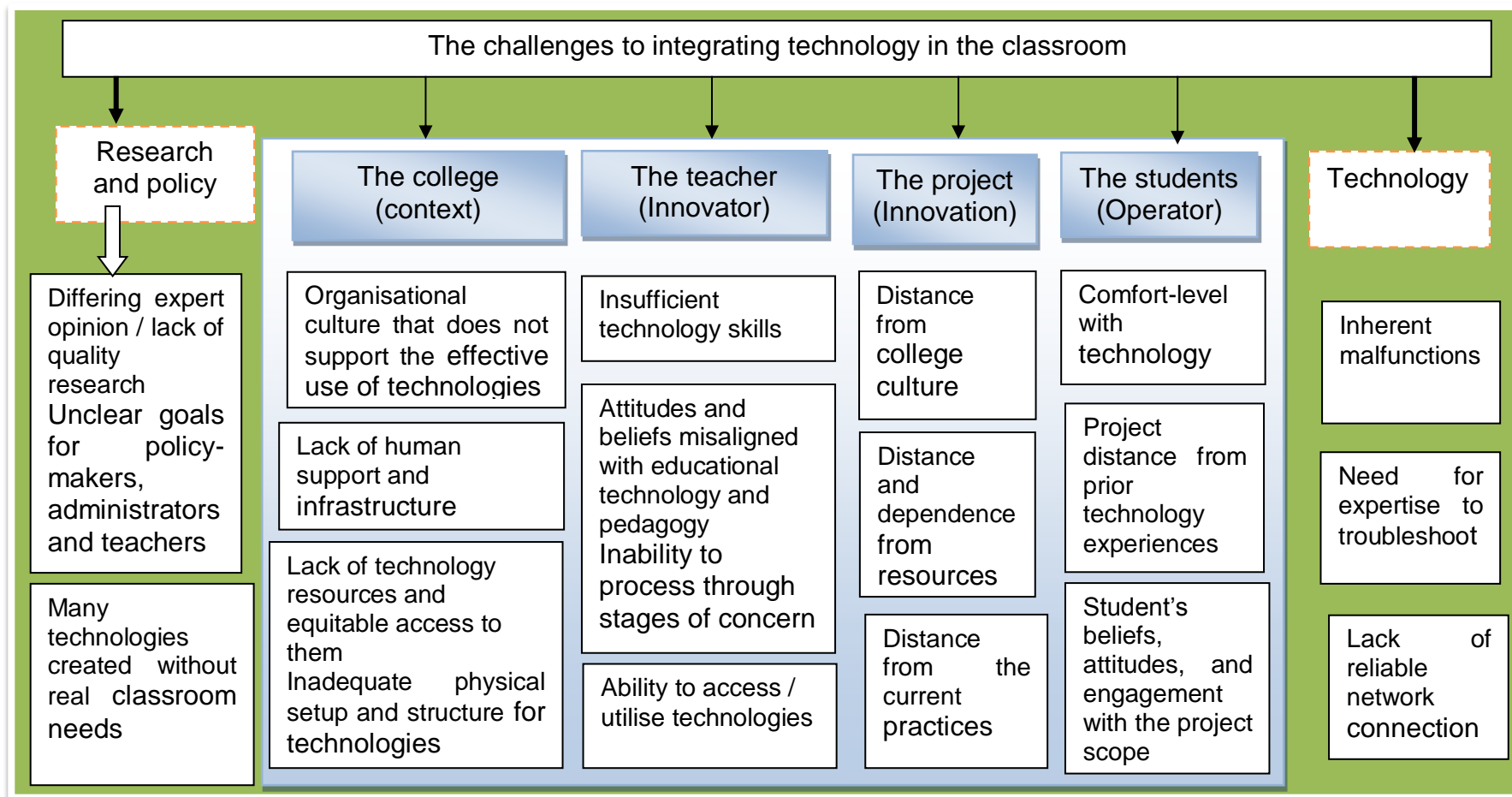
summarises the challenges to the integration of technological resources in the classroom.

Considering these challenges, the role of technology in education (in Table 2.3) suggests that it is important in creating environments conducive for the implementation of the new teaching approaches. Tutors are expected to have the exposure to SCA and use of technological materials in teaching while embracing the social cultural context for effective teaching.

#### **2.3.4 Challenges of the social constructivist approach in practice**

Studies have consistently revealed that tutors/teachers have limited understanding of how to teach using a social constructivist approach (Donche & Petegem, 2011; Karagiorgi & Symeou, 2005; Windschitl, 2002). Because of this, they are likely to face a number of dilemmas in using this approach in teaching. Karagiorgi and Symeou (2005) and Windschitl (2002) identify four categories of dilemma:

- a) Conceptual dilemmas are rooted in tutors/teachers' attempt to understand the underpinning philosophical assumptions and existence of social constructivism. In this sense, tutors' understanding of the concept of social constructivist approaches to teaching is of paramount importance prior to the implementation of the approach in the classroom. If this is not considered, there is a possibility that tutors will not employ the new approach and continue with the traditional teacher centred approach, by which they themselves were schooled (Schweisfurth, 2011; Vavrus et al., 2011).
- b) Pedagogical dilemmas for tutors/teachers arise from the use of this complex approach to designing curricula and fashioning learning experiences that embrace the social constructivist view. The new teaching paradigm requires more time for learning, preparation, resource, and the use of collaborative and cooperative learning strategies (Keengwe et al., 2008). Hence, these strategies demand, and implement lessons in the classroom, which is a key tutors'



**Figure 2.1:** Challenges to classroom technology integration (Groff & Mouza, 2008, p. 24)

competence, experience to design challenge for many tutors in the colleges of teacher education (Hardman et al., 2012; Vavrus et al., 2011).

- c) Cultural dilemmas emerge between tutors/teachers and learners during the radical reorientation of class roles necessary to accommodate the social constructivist ethos. Tutors/teachers experience challenges negotiating learners' beliefs and practices to construct local knowledge and providing opportunities to participate in the classroom discourse. Tutors face dilemmas in negotiating between their beliefs and practices in integrating the new approach and the student teachers' complex beliefs and practices in the cultural context which tend to resist sudden changes (Schweisfurth, 2011).
- d) Political dilemmas are associated with resistance from various stakeholders in school communities when institutional norms are questioned and routines of privilege and authority are disturbed. These political aspects influence classroom learning, due to the educational practices of power relations among students, pupils, tutors, teachers, parents, college administrators, college boards, and other stakeholders.

Despite these dilemmas, there is an expectation that tutors' professional learning about social constructivist teaching could expose them to these dilemmas and creatively think about the appropriate ways to integrate the new approaches in teaching. Likewise, through the PLD, there are expectations that tutors have developed an understanding how to deal with the challenges of teaching in practice.

## **2.4 Essence of social studies and contested teaching views**

Social studies emerged from the ideas of French philosophers, Auguste Comte (1798-1857) and Emile Durkheim (1858-1917), who proposed the social interaction and co-existence as the phenomena to explore the subject matter of social studies using the basic methods of observation, interviews, surveys and case studies (Boutellier, Gassmann, & Raeder, 2011). These methods were of paramount importance to the current research that was designed to explore tutors' beliefs and practices in the implementation of the SCA in social science.

The following paragraphs discuss the literature related to social studies and teaching (Aitken & Sinnema, 2008; Banks, 1995; Dewey, 1950).

Dewey's (1950) work *Democracy and Education* discusses the importance of social studies education and the essence of discipline-based curricula in social studies. Dewey emphasises the importance of social studies by associating education with development arguing that, since people are concerned with development for better lives, education is life and through it, society develops. In other words, Dewey views education as a product of social being whereby individuals construct knowledge to suit their social lives, and he argues that through education, people develop the desire to relate with other people in the society and to safeguard their well-being. On these premises, Dewey's idea is that through social studies, people understand humanity in all aspects as well as how people's understanding and practices relate with nature – this is the connection between the study of history and geography. In this sense, the association of human affairs with nature brings development.

Furthermore, Dewey (1950) believed the essence of separation between science and subject teaching to be a factor that contributed to the underdevelopment of the study about human affairs in association with nature. He argued that because of this, the hegemonic relationship between the naturalistic and humanistic philosophical stances retarded the development of social studies (Manley-Delacruz, 1990). Further, he explained that humanistic views were submerged into the naturalistic view during the renaissance era when the Roman and barbarian cultures of Europe embraced Greek philosophy. Greek philosophy was concerned with the indoctrination of authoritative knowledge and dismissing humanistic knowledge as immaterial (Freire, 1973). Stated somewhat differently, the materialistic or naturalistic view gained the support of the bureaucratic systems and political context, and this discouraged studies in human affairs (Dewey, 1950; Manley-Delacruz, 1990). Consequently, with the rise of modern science human affairs and issues of social life were studied through natural science philosophies (Dewey, 1950). In this situation, science studies dominated the field of humanities and the majority of the studies were concerned with material development rather than human

development. Additionally, experts who were indoctrinated in the natural science tradition were used to designing the social studies curricula, and subsequently there was a separation of social studies' body of knowledge into themes, which formed independent disciplines such as history, geography, and political science (Manley-Delacruz, 1990). In any case, the following question was pertinent: What are the teaching methods used in teaching social studies? In this study, the researcher was of course expecting that participating tutors are employing methods of teaching that are grounded on subject studies and not science *per se*. As section 2.3 discusses, tutors are required to use methods that not only enable the learners to perform things but to learn the subject (Dewey, 1950; Freire, 1972). With regard to this, Freire (1972) recommends the use of problem posing and problem-solving strategies in teaching and learning instead of the banking approach, which assumes learners have nothing to contribute in learning. These recommendations are important for the study that investigates tutors' implementation of SCA in Tanzania.

A study by Aitken and Sinnema (2008) in New Zealand identifies a need for studies to examine the different strategies of teaching social studies to learners with diverse needs in learning. Further, the authors report that the synthesis of learning outcomes based on the themes of social studies disciplines ensure uniformity in teaching learners with different learning needs. Authors describe and synthesise learning outcomes as working better where different social studies disciplines were taught as an integrated discipline. In their study, they note that the synthesis of learning outcomes in social studies reflected four main learning domains: (1) knowledge recall and concept understanding, (2) cultural identity, (3) skills development, and (4) effective learning (Aitken & Sinnema, 2008). These domains are important in any investigation onto tutors' behaviour, beliefs and practices concerning the implementation of the SCA for effective teaching.

Another study by Banks (1995) indicates the need for transforming the current social studies teaching practices to include the new global demands of knowledge and skills (popular and academic knowledge). Banks considers that there is a need for social studies curricula in colleges to engage the student teachers' inquiry process for knowledge construction in ways that are beneficial

to the welfare of their society. Other commentators however, caution that the new demands are likely to create differences between individuals and society in different levels of power and classes because of inconsistent cultural and policy practices (McDonald & Tufue-Dolgoy, 2013; Pitsoe & Maila, 2011). Having this caution in mind, a critical analysis of Banks's (1995) study about the scope of social studies in pedagogical knowledge and learning outcomes is significant to enhance the quality of teaching.

In brief, Aitken and Sinnema (2008) and Banks (1995) studies imply that for the effective teaching of content, professional development for tutors is important in any innovation introduced in teacher education programmes.

In a critical view, DeLeon and Rose (2010) also discuss the need for a shift in social studies teaching towards the social sense-making approach, and away from the traditional academic rationalist view. In their analysis, they found that the purpose of social studies education in practice was dichotomously shaped, a notion explained in critical pedagogy as that education is always biased to political ideologies, which tend to ignore issues of its complexities (McLaren & Kincheloe, 2007). In this case, social studies pedagogy and curricula have been directed toward (1) transmission of cultural heritage, (2) understanding of social studies disciplines, (3) reflective thinking on subject disciplines, (4) individual development, and (5) cultivation of social change (DeLeon & Rose, 2010). Thus, social studies teaching serves a diversity of curricula aims, but also promotes rigid political and cultural adherence to the society it comes from through the transmission of funded knowledge from Government approved textbooks and syllabi. In this sense, social studies teaching prepare learners to enter into the adult life practices of the society unquestioningly. This suggests that social studies learning is unlikely to provide learners with the opportunity to develop the competence and confidence to critically understand the hidden curricula agendas and to comment on existing social studies education or the social life experiences. DeLeon and Rose (2010) put it like this: "Many texts are marred by an embarrassing combination of blind patriotism, mindless optimism, sheer misinformation, and outright lies ... add to the evidence supporting conservative cultural community as the dominant pattern of social studies education" (p. x).



In line with this, DeLeon and Rose (2010) propose new directions to help learners and tutors/teachers adopt new approaches of looking at social studies, revising it to suit living expectations. As authors argue that social studies should be designed to recognise, address and challenge learning experiences that are (1) grounded in the traditional positivism frameworks, (2) generated and accepted by the privileged class, (3) consistent with social reproduction and replication of a society. Moreover, authors suggest the use of situational teaching methods that engage participants in higher order thinking – reflective thinking, creative thinking, dialogue and problem solving – to review textbooks, critique learning approaches, learning environment, socio-cultural and political practices. Further, DeLeon and Rose (2010) argue that when students are considered citizens while engaged in the critical understanding of the social studies education, they are able to (1) develop critical literacy skills, (2) learn to interrogate hidden agendas, and (3) recognise the urgency to remake themselves, social institutions and culture. Understanding of these issues might provide learners with opportunities to change fear, injustice, and oppressive powers in society. Hence, social studies relies on the critical examination of the past and interdisciplinary approaches that should be integrated into the current curriculum to develop the learners' competence and critically understand rigid trends of political, cultural and socio-economic practices that influence their learning and society. Consequently, DeLeon and Rose (2010) assert that:

Emphasis on “free markets” development, privatisation and the entrepreneurial individual, has restructured education toward producing society based upon greed, accumulation and competition and undermines our collective ability to make decisions that promote the common good and environmental sustainability. Through reimagining social studies education, these types of ideologies can be resisted and rethought. (p. xiv)

The quotation reminds the discussion about social constructivist teaching (in section 2.3.2), the contested teaching aspects of social studies (in section 2.4), and the need for developing an understanding of the reasons of introducing social constructivist idea in education reforms (at this era) that are advocated in the global policy agendas.

## 2.5 Essence of the SCA in education reforms

The introduction of SCA in education reforms is traced from the process of policy making and implementation in the missions of globalisation. That means, the fundamental mission of globalisation is to ensure economic growth (Dale, 1999, Verger, Novelli & Altinyelken, 2012). Globalisation as a social science phenomenon manifests itself in the manipulation of cultural, political and economic aspects (Dale, 1999). Globalisation appeared to have originated after Cold war that divided World into two hegemonic blocs: Eastern and Western blocs which aggravated political crisis and a great fall in the world economy (between 1980s and 1991). This situation called attention of political leaders and international institutions to debate upon the solutions of reverting the falling economy, referred to as the “Bretton Woods Agreement” (Dale, 1999, p.3). According to Dale (1999), the two blocs attempted to deal with the situation in two approaches: First as an individual state that is ought to compete with others, to maintain the power *status quo*, and second as a member of the international organisations (such as, International Monetary Fund, World Bank, European Union, North America Free Trade Area, Asian Development Bank, G-7, OECD, and regional organisations). The international organisations ensure that members have common understanding in transforming the existing economic problems worldwide. In this situation, the common understanding include aspects of “fiscal discipline, public expenditure priorities, tax reform, financial liberalisation, exchange rates, trade liberalisation, foreign direct investments, privatisation, deregulation, and property rights”(Dale, 1999,p.4). On one hand the two approaches focus on transforming the environments of economic growth and increasing the power to compete with other nations within and outside their territories, which influenced change in different sectors at local and global scale, including the education sector. Verger et al. (2012) asserts that,

Education policies and programmes such as child-centred pedagogies, school-based management, teachers’ accountability, public-private partnership or conditional-cash transfer schemes are

being discussed and implemented everywhere to the point that they have acquired the status of global education policies.(p.3)

In the process of globalisation, the education sector is considered important to change the economic focus from industrial to post-industrial era of “knowledge-based economy” (Robertson, 2005, p.152). Globalisation of education sector seems to be the core function for economic growth that is informed by research, high quality human labour market and technology. This is expected to instil in the individuals the ideology of competition in the production of knowledge and develop the ability to compete in the market economy for social transformation. The agencies of globalisation have developed strategies of achieving the knowledge-based economy. According to Robertson (2005, p.152), the introduction of globalisation policies in the education sector is to ensure: (i) The balance between knowledge and resources has shifted toward knowledge, (ii) the long-term economic growth will be much more dependent on knowledge, (iii) education will play a critical role in economic growth and thus education systems will need to respond in new ways to the demands of the knowledge economy. Despite of the little benefits the less developed countries are receiving, the countries are highly depending for expertise and material aids from the developed countries, which reduce their capacity to the aid agencies to penetrate their education policies to change the nation education policies. In other words, globalising education policies have more significant effects in less developed countries than the developed ones because of their less dependence from external supports. Verger et al. (2012) explored the circumstances employed by the developed countries in globalising education policies to the recipient contexts. These are:

- Generation of new inputs for education policy by making and identifying new problems which need to be addressed by the education policy.

- Alteration of the capacity of the welfare states to establishing education and non-education problems via education policy, as well as their capacity to provide and finance education directly.
- Revitalisation of the role of international agencies involved in making education policies. New international actors are introduced in the education policy making process.
- Transformation of legal procedures of the recipient contexts by employing some international organisations during policy making and dissemination process.
- Intensification of the international circulation of policy ideas and transformation of education practices and delivery of education patterns (cross-border distance learning for the acquisition of globally designed curriculum) through Information Communication Technologies.
- Creation of transnational private market of education provision that complements or competes against the national education providers. This is a challenge to the conventional system of education provision in the recipient contexts.
- Strengthening neoliberalism as the existing political-economic ideology worldwide through the circulation of globalisation education policy ideas.
- Development of transnational social justice movements that struggle for the realisation of education as a global public good and its endorsement as a human right. (pp.5 -7)

With regard to these circumstances, it was inevitable for Tanzania to adopt the social constructivist curriculum in the nation education policy to build a population that will suit the 21<sup>st</sup> century that is competitive for social, economic, political, and cultural environments (URT, 1995). In this situation, the adoption of this western model in the less developed contexts involved the professional development based on policy transfer. The implementation of professional development programme and its effectiveness in practice requires an analysis of transfer of training

frameworks that could bring effective knowledge transfer procedures and suitable to a particular social, political and cultural context.

## **2.6 Professional development and knowledge transfer aspect**

The literature discusses four PLD issues in relation to the social constructivist approaches, teachers'/tutors' teaching beliefs, the professional development in tertiary education, and the transfer of training aspect of professional development in teacher education.

### **2.6.1 PLD and social constructivist approaches**

Studies have utilised the social constructivist approaches in the implementation of PLD for tutors to improve the transfer of knowledge, skills and attitudes in teaching (Kafyulilo, 2010; Kitta, 2004; Pitsoe & Maila, 2012). Grounded in the context of South Africa, Pitsoe and Maila (2012) reviewed the characteristics of a PLD programme that embraced the social constructivist ethos in an attempt to positivist professional learning approaches. They criticised positivist PLD as being mechanistic and one size fits all, an approach focused on the transfer of knowledge rather than knowledge creation. Accordingly, whether a PLD is based on a positivist or an interpretivist view, the most important aspect is the ability of that PLD to enable tutors to change their behaviours, beliefs and attitudes in the job setting. In any case, this change in the tutors' behaviours, beliefs, and attitudes need to be reflecting the mission of PLD. In advancing their argument for the PLD based on social construction of knowledge, Pitsoe and Maila (2012) argue that:

- a) It holds a contingent view. By designing professional learning in this view, it matches the social constructivist beliefs that there is no permanent reality. Such PLD is developed from the perspective of a historical context of the student teachers through collective social sharing of the understanding about reality. Similarly, the supervisors and trainers in the PLD programme for tutors are situational and dependent onto the context.
- b) It has a holistic and artistry aspect. The aim of PLD is to develop understanding of complex issues of a particular phenomenon within a certain locality or context. A tutor or a supervisor in professional training is

concerned with understanding how tutors are able to construct knowledge rather than with ways in which they do things. As a result, the tutor and the student teachers become either the tutors or student teacher because they all have the opportunity to learn from each other through problem posing and dialoguing (Freire, 1972).

- c) It focuses on social change via modification and achievement of life experience in the society.

In the same vein, Pitsoe and Maila (2012) present a variety of PLD models suitable for achieving individual and group learning goals. These are illustrated in Table 2.4 below.

**Table 2.4:** The PLD model

PLD model	Descriptions
<b>Individual guided learning</b>	The goals and methods of learning about the practice of solving the existing problem in teaching are designed by the motivated individual. This develops the attitude and sense of professionalism in the individual tutors.
<b>Observation and assessment</b>	This involves a tutor observing another tutor during teaching in the classroom and reports feedback for reflection. In this way, the observer learns from the practice of a colleague.
<b>Involvement in a development and improvement process</b>	This learning framework involves the tutors in the process of programme planning, implementation and assessment to solve a particular problem of the college or classroom situation. The dialogue and process of establishing the programme results in the tutor's construction of new knowledge.
<b>Training</b>	This is learning from an expert presenter. The expert sets the learning needs with the aim of creating a particular awareness, knowledge and skills. The expert ensures control of transfer strategies of the programmes on the job.
<b>Inquiry</b>	This involves determination of the learning problem by one or more tutors who also set the strategy to provide answers to the problem. It involves identifying the problem, gathering information from different sources, analysing the information and improving the situation. This approach is grounded in the belief that reflective practice signals the qualities of a professional tutor.

**Source:** Models of professional development enhanced with emergent paradigm (Reviewed in Pitsoe & Maila, 2012, pp. 321-322).

Accordingly, Pitsoe and Maila (2012) emphasise that to foster quality education, there is a need for PLD embracing social constructivist approaches to consider “the environment, the “self”, content knowledge and pedagogical content

knowledge” (p. 322). In this sense, they recommend the policy environment that supports PLD experiences grounded in SCA that are:

- Influenced and guided by contingent theories.
- Contextualised and adopting a bottom-up approach.
- Grounded on tutors’/teachers’ beliefs and experiences of the context.
- Integrated with district-term plan.
- Driven by disaggregated information on student learning outcomes designed in accordance with tutor/teacher identified needs.
- Primarily school-based (2012, p. 323).

In their review, Pitsoe and Maila were not concerned with transfer of learning, time taken for learning or tutors’ motivation. Nevertheless, in expanding the Pitsoe and Maila’s view that PLD should be “primarily school-based”, Penetito (2009, p. 7) characterises successful professional learning as grounded in a particular place (such as a school or college), arguing that it:

- Emerges from the particular attributes of a place: The content is specific to the geography, ecology, sociology, politics, and other dynamics of that place.
- Is inherently multi-disciplinary and often promotes teaching among tutors/teachers and community resource people.
- Is inherently experiential: This includes a participatory action or service learning component in many training programmes.
- Connects place with self [morals] and community: Because of the lens through which place-based curricular are viewed, these connections are omnipresent. These curricular include multi-generational and multicultural dimensions as they integrate with community resources.

In their arguments, both Pitsoe and Maila (2012) and Penetito (2009) recognise the role of the “self” in promoting the quality of professional learning that embraces the SCA. In this situation “self” involves promoting tutors’ professional codes of conduct and ethics that cherish SCA in teaching.

Nevertheless, Anangisye (2010) studied the role of promoting tutors’ ethics in teacher education colleges in Tanzania and noted different challenges in

developing ethical issues for tutors. Such challenges are (1) the absence of a course in professional ethics, (2) tutors' limited professional competence such as the work-related knowledge, functional expertise, behavioural indicators, and ethical understanding, (3) shortage of qualified tutors, (4) lack of teaching materials and resources, and (5) decay of moral values in the society that signify irresponsible parents and society on moral issues. Anangisye (2010) concludes that the society is responsible for both teacher training colleges and promoting moral values and ethics. He recommended the need for a favourable policy environment for the introduction of compulsory courses in teacher professional ethics to expose tutors on job ethics and to promote education at home to be the foundation of creating ethical student teachers, ethical tutors, and ethical society.

Central to this section was the expectation that tutors have attended quality professional learning opportunities grounded in social constructivist beliefs. Tutors' were expected to have developed new pedagogical approaches towards social constructivist curricula and to have generalised them to the job settings.

### **2.6.2 PLD and tutors'/teachers' teaching beliefs**

Studies have indicated that teachers'/tutors' beliefs influence classroom practices in many ways (Handal, 2004; Meena, 2009; Raths, 2001; Zheng, 2009). Handal (2004) explored teachers' teaching beliefs in the integration of technology in Australian context. Handal notes that planning for the implementation of educational innovation for teachers is proven to fail when the teachers' feelings, conception, and perceptions about teaching are not considered in the programme development. Among other factors, professional learning goals that are based on teachers' behaviours, attitudes, and beliefs are considered to stimulate the teachers' ownership and success in the actual employment of the innovation programmes. Accordingly, Handal found that teachers are likely to resist change where there are missing beliefs to support it, ingrained conventional practices, limited continuous professional training, insufficient time for teaching preparation, and insufficient educational software and hardware to support teaching (Handal, 2004). Hence, the role played by



beliefs in guiding tutors'/teachers' decision-making for social constructivist teaching and learning is of utmost importance.

Another study by Rath (2001) establishes the connection between school teachers' beliefs and teaching in the United States. The findings indicate that teachers were well-informed about teaching, and believed that the problems facing pupils were caused by their life experiences. Teachers did not consider the role played by pupils' beliefs and attitudes in teaching and learning. In response, Rath proposes to design learning programmes that take into account the current dispositions of pupils and teachers: in other words, PLD that integrates the dispositions of pupils and teachers, which is considered to promote the value of content knowledge and collaborative learning, and support the needs of pupils. In this regard, there is a need for teachers to integrate the social constructivist approach based on knowledge value, collegiality, and advocacy of pupils for effective teaching (Rath, 2001).

In brief, Handal (2004) and Rath (2001) studies acknowledge that teachers' beliefs are crucial in professional learning and in stimulating classroom teaching and learning activities.

Despite the studies focus on teachers' beliefs in schools, the findings are important in understanding tutors' beliefs, behaviours and attitudes that influence the transfer of professional training experiences on the job. Furthermore, changing the beliefs and attitudes of tutors via PLD in tertiary education is central to the implementation of any educational innovation. Thus, there was a need to investigate them in existing situation of teacher learning programmes in tertiary education colleges.

### **2.6.3 Professional development in tertiary education**

The literature discusses the PLD for tutors/lecturers by examining the approaches of becoming a lecturer and the experience of educating lecturers for tertiary education (Aydeniz & Hodge, 2011; Beaty, 1998; Boyd, 2010; Gardner & Jones, 2011; Harland, 2001).

### **2.6.3.1 *Becoming a tutor/lecturer in tertiary education***

The concept *tertiary education* refers to post-secondary education programmes leading to the award of certificates, diplomas, and degrees for adult learners (URT, 1995). Tutors/lecturers in teacher education have complex work and responsibilities. They are qualified professionals and have additional skills to educate student teachers on how to teach in schools (Swennen & Van der Klink, 2008).

Studies in the Tanzania context show that the minimum qualification of tutors in tertiary education must be a degree in the respective field (Beaty, 1998; URT, 1995). Tutors/lecturers begin teaching in tertiary education through different routes according to priorities of the institution and the fields taught. According to Beaty (1998), described key aspects of PLD for university lecturers that they need to (a) learn professional knowledge which most beginning lecturers' lack, (b) develop pedagogy skills and technology integration techniques, and (c) develop ethical practices, attitudes, and principles underpinning the teaching profession. Arguably, practice has shown that most of the lecturers have limited knowledge of these aspects (Beaty, 1998; Boyd, 2010; Harland, 2001). Beaty (1998) detailed key features that are necessary for any PLD for lecturers in universities: setting the time for the lecturers to learn; practising as a lecturer in the university context environment; keeping portfolios and diaries as a reflections of the learning practices; engaging in group context of learning communities; accompanying experienced professional peers; arranging continuous rewarding system for lecturers; ensuring accreditation systems to approve and monitor the quality and qualifications of lecturers. The training of lecturers needs to be a pre-requisite to the adoption of innovations for effective teaching in teacher education programmes (Beaty, 1998). To achieve these require the university's capacity and will to provide policy environments that promote the implementation of PLDs.

Swennen and Van der Klink (2008) writing about the PLD for teacher educators (lecturers) in the context of Netherlands identifies two routes to becoming a lecturer in tertiary education. The first route requires academic members experienced in research but with no experience of teaching upgrade to become a lecturer. The second requires professional teachers who have worked in

primary or secondary education upgrade their career to become tutors/lecturers in teacher education colleges. However, there are evidence that, regardless of the route to enter teaching career in tertiary education, some lecturers seemed to have limited pedagogical knowledge to undertake their roles and responsibilities in teaching (Beaty, 1998; Boyd, 2010; Boyd & Harris, 2010).

Furthermore, Swennen and Van der Klink (2008) argue that professional lecturers might upgrade their career by participating in two phases of induction programmes. These phases include: (a) continuing professional development that links work in schools and initial teacher education after completing teacher education courses, and (b) socialising with experienced lecturers in terms of professional practices and organisational culture, meaning beginning teachers develop teaching competences and confidence. According to Swennen and Van der Klink (2008), there is limited evidence about lecturers' induction programmes. Authors propose:

It would be very useful for ... [lecturers] and researchers to engage in research about the needs of beginning ... [lecturers], the way in which ... [lecturers] prefer to learn and what expert ... [lecturers] and heads of teacher institutes consider they need to learn. (p. 223)

Considering this proposal, Swennen and Van der Klink (2008) argue that the curriculum for lecturers is designed either in a concurrent or in a consecutive structure. In this case, while the concurrent structure of professional and academic subjects are organised separately and taught by the same experienced lecturers in the programme, separate experienced lecturers teach the consecutive structure in different times as they start with academic modules before the professional courses to complete the programme. Further, Swennen and Van der Klink argue that some countries give authority to the respective university education institutions or education departments to design the curricula (which cover professional and academic courses) for lecturers. The methods of teaching the teacher education curriculum adhere to the approach that the lecturer learned through:

- a) A transmission approach: The teaching emphasis is more authoritative knowledge in practice (for experienced lecturers) and the beginning lecturers will have less opportunity to set curriculum goals and to follow it.

- b) An interactive approach: The focus of teaching is more collaborative and provides opportunities for the lecturers to follow the needs of curriculum.
- c) A transformative approach: The teaching emphasis is on knowledge construction, creative learning and understanding (Swennen & Van der Klink, 2008).

Given the above approaches, lecturers might be facing difficulties in teaching when teaching approaches change without undertaking training on how to integrate the new approach in practice. Consequently, this increases the chances of producing incompetent student lecturers in teacher education who deliver low quality of teaching on the job (Karagiorgi & Symeou, 2005; Swennen & Van der Klink, 2008; Windschitl, 2002).

Studies show that the dominant PLD for lecturers in teacher education include the initial teacher education to learning the teaching career, and the continuing professional learning programmes (Beaty, 1998; Boyd & Harris, 2010). The initial teacher education programmes differ in design and duration (Beaty, 1998; Swennen & Van der Klink, 2008). Tutors/lecturers to participate in a continuing PLD organised at institutional and departmental levels to improve their teaching. Such training programmes intend to develop less experienced and experienced tutors/lecturers in some specific skills and knowledge related to their field of specialisation (Aydeniz & Hodge, 2011; Boyd & Harris, 2010; Yariv, 2010). Ideally in the training programme the tutors/lecturers are engaged in academic dialogues such as seminars, training workshops, live paper presentations, pedagogical knowledge learning, and training programme assessment. As a result, participation in these kinds of learning communities improves tutors/lecturers teaching confidence and competencies.

Aydeniz and Hodge (2011) highlight an important issue. This was a study of a science university professor in United States of America and it was found that he was recruited to teach in a teacher education course without the pedagogical knowledge and skills. The study indicates that the professor attempted to negotiate his dual entities as a “scientist” and as a “teacher” in teaching and he did this in a cognitive sense; however, he lacked pedagogical knowledge in

practice. Nevertheless, he was highly rated for achieving research priorities in the department. Predictably, it was concluded that a training programme on pedagogical knowledge was necessary for this category of professor (lecturer) who lack pedagogical experience in teaching (Aydeniz & Hodge, 2011).

Another similar study by Gardner and Jones (2011) explored student teachers and the challenges resulting from the preparation of pedagogical knowledge and skills in the United States of America. The findings indicate that for a long time the projects of researchers and professional training practitioners overlooked lecturers in universities, which resulted in a high dropout rate of student teachers in the science education field. The science lecturers did not believe in pedagogical knowledge and skills in the learning process of graduate student teachers (p. 33). According to Gardner and Jones (2011), this is because some scientists:

- Are unaware of the effectiveness and frequency of research in education.
- Trust anecdotal evidence of student teachers who were successful in the current system more than educational research.
- Distrust unfamiliar methodologies of science education researchers.
- Do not have time to learn new teaching methods.
- Fear a focus on teaching will reduce their credibility as a researcher.
- See few institutional or departmental rewards for improved teaching.

From these premises, it is evident that the use of an apprenticeship for professional learning is important. An apprenticeship arrangement requires new lecturers to learn from their fellow experienced lecturers in practice. In this practice, some experienced scientists (lecturers) who lack pedagogical knowledge are assigned to train student teachers for teacher training programmes. Hence, this practice influences new lecturers and student teachers in learning science education especially in terms of pedagogical knowledge.

Furthermore, Gardner and Jones (2011) discuss three PLD experiences for science lecturers in practice that were introduced in the international awareness creation conferences for universities held in 1986. These include: (a) a single-campus-wide workshop (featuring general aspects of teaching) (b) an intensive

apprenticeship approach (a beginning lecturer is accompanied by a mentor) (c) a graduate course was used to orient beginning lecturer in pedagogical knowledge. The pedagogical knowledge acquired in the training programme changed beginning lecturers in terms of teaching perspectives, assessment, learning outcomes and content knowledge. According to Gardner and Jones (2011), the characteristics of an effective PLD for lecturers are:

- Focused on an intensive, on-going venture, and connected to practice.
- Focused on student teacher learning and addressing the teaching of specific curriculum content.
- Aligned to college or university improvement priorities and goals.
- Designed in a strong working relationship among colleagues.

Given these characteristics, Gardner and Jones (2011) overlook the important elements such as the learning transfer and the time for learning, that promotes the quality of professional learning that are supported by other commentators for effective PLD (Baldwin & Ford, 1988; McDonald, 2011). Hence, professional development is crucial for lecturers to cope with the emerging professional, academic, and workplace challenges to improve teaching and the quality of education in teacher training. Gardner and Jones's (2011) conclusion suggests the need for PLD which is more specifically designed for lecturers to improve the quality of teacher training programmes.

From this view, the discussion about the literature on tutors/lecturers learning to teach is important because tutors' beliefs and practices in teaching are influenced by the introduction of innovations in teacher education. The literature suggests how tutors/lecturers are exposed to different approaches of teaching student teachers in tertiary education, especially teaching in the new curriculum. Thus, prior experience is important aspect in the transfer of training and in embracing curriculum designed in a social constructivist framework, which is the focus of this study.

#### **2.6.4 Professional development and training transfer**

Studies show that professional development programmes embracing the transfer of training component are effective in promoting the performance of

teachers, student teachers, and tutors at work (Bransford et al., 2000; Broad & Newstrom, 1992; Daffron & North, 2011; Leberman, McDonald, & Doyle, 2006). To discuss this, three issues are considered: the concept of transfer of learning, the context of successful training transfer, and the policy issues on the transfer of innovation.

#### ***2.6.4.1 Defining transfer of learning***

Transfer of learning is an important feature of any professional learning, including the integration of innovation in teacher education (Daffron & North, 2011; McDonald, 2011). Transfer of learning is the use of previous knowledge and skills to deal with the present challenges in the same or new contexts (Bransford et al., 2000; Leberman et al., 2006). The concept of transferring knowledge and skills learned via a planned course to a particular occupation is referred to as *transfer of training* (Daffron & North, 2011). In this sense, tutors need to make sure their knowledge and skills initially acquired from the PLD are transferred effectively to the workplace. Transfer of training is important in helping the tutors and students in teacher training programmes to:

- Understand a variety of professional development analogies, metaphors and similes, applicable in teaching and learning contexts.
- Keep up with the new world of innovations and their influence in different professional training and job practices.
- Develop thinking skills and the ability to recall experiences useful in the training process and apply them to a variety of environments (Leberman et al., 2006; McDonald, 2011).

Given the importance of transfer of training, it is necessary to organise PLD which is effective for successful transfer of training on the job (Daffron & North, 2011; Leberman et al., 2006). Furthermore, the context in which the PLD is conducted matters in terms of bringing positive transfer of training to the job.

#### ***2.6.4.2 The context for successful training transfer***

Transfer of training emphasises the need for training activities that facilitate on-the-job application. Broad and Newstrom (1992) view successful learning transfer in the workplace as a function of key PLD actors – supervisors, trainers

and trainees – with the amount of time and activities needed for them to undertake the PLD in three phases: before, during and after implementation. Figure 2.2 presents the phases of any successful training transfer.

		Time of transfer training		
		Before	During	After
Actors	Supervisor			
	Trainer			
	Trainees			

**Figure, 2.2:** Phases in the transfer of training (Broad & Newstrom, 1992)

Daffron and North (2011) argue that to promote training transfer it is essential “in the planning, delivery, and post-training phases of the course that the designer (supervisor), trainer, and the training participant consider the necessity of generating workplace support as well” (p. 138). This argument emphasises the need for involving all participants to ensure the occurrence of training transfer in the three phases. Additionally, Daffron and North emphasise the importance of designing support strategies for PLD to enable participants to transfer the learned knowledge, skills and attitudes to the job. Hence, Leberman et al. (2006) support designing those strategies as they are not considered in many PLD programmes. According to Leberman et al. (2006), there are many levels of observing the training transfer, which should be attended to. They include:

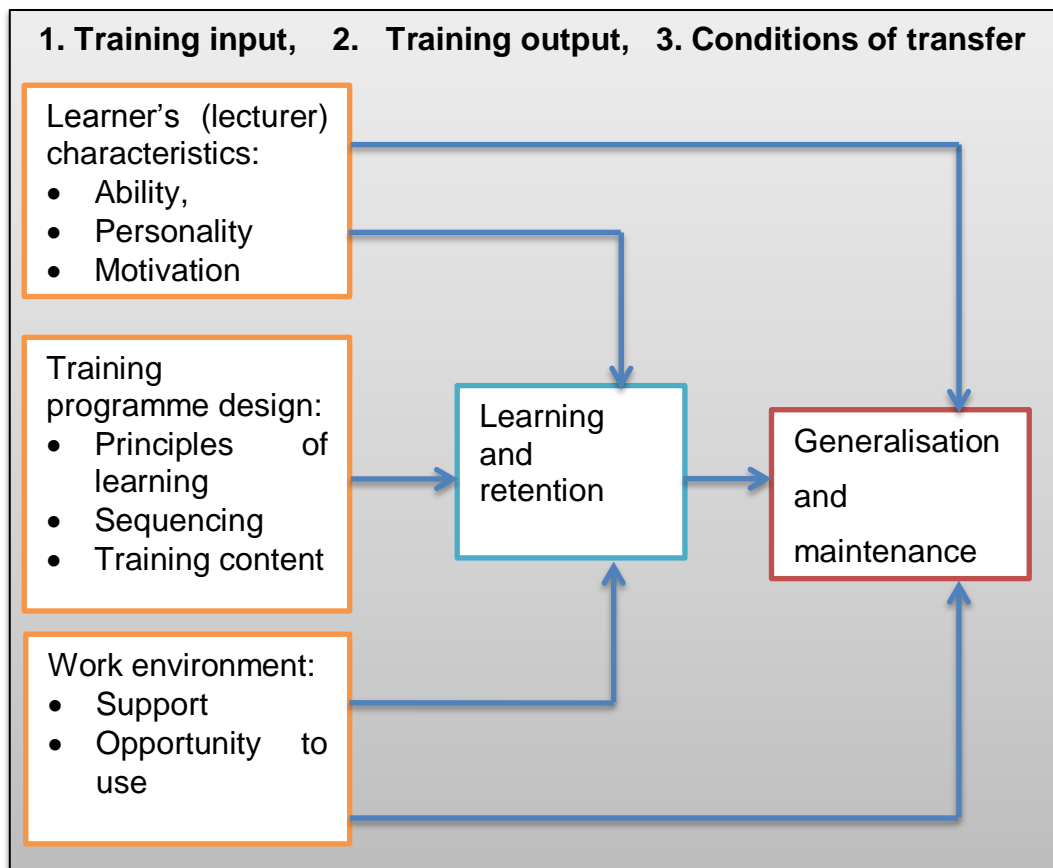
- Positive transfer, which entails that knowledge learned in a particular setting promotes the understanding of another phenomenon in a different setting or situation.
- Negative transfer, which entails that the prior knowledge does not promote understanding of new phenomenon in a different setting or situation.
- Simple transfer, which entails little or no prior knowledge is needed to understand a particular phenomenon in different environments.



- Complex transfer, which entails that the prior knowledge, skills, and attitude make it difficult to deal with the same phenomenon in another setting.
- Near transfer, which entails the closeness or immediate use of the learned experience [in terms of time lapse, or likeness on information] within the training transfer context or the context of the job in which the same phenomenon is transferred. For example, the knowledge learned in the classroom is used immediately to solve problems in the classroom or to repair the classroom furniture.
- Far transfer, which entails the use of transfer from the context of the training to another dissimilar setting. For example, the application of knowledge acquired in the classroom to improve the home garden.
- Automatic transfer, which entails that the individuals' prior knowledge is employed to understand a phenomenon which resembles the original training context (making it easy to distinguish the occurrence of the phenomenon from the training transfer context to the job setting).
- Mindful transfer, which means much thinking on the part of the individual is required to distinguish a phenomenon in different situations (for example, from the training transfer context to the job).

Accordingly, these training transfer concepts are useful in assessing the levels of the knowledge transferred to the job and in identifying barriers. In other words, the levels of transfer reflect the key actors' efforts employed to consolidate the key features of a successful training programme in the three phases. Studies report the features of the successful training transfer (Baldwin & Ford, 1988; Bransford et al., 2000). In this research, the researcher acknowledges the applicability of Baldwin and Ford's (1988) training transfer framework, which was presented on a seminal report with three basic features for a successful professional learning, namely: the learner's characteristics, programme design, and workplace culture. These features are illustrated in Figure 2.3.

To discuss these features as shown in Figure 2.3, Baldwin and Ford note that each tutor has their own characteristics and motivations regarding work, which



**Figure 2.3:** Transfer of learning framework (Baldwin & Ford, 1988, p. 65).

shape individual personality. In addition, tutors differ in experiences, learning abilities, and ways of spending time and collaborating with peers in learning (Baldwin & Ford, 1988). Thus, tutors' expectations about the PLD influence their decision to engage or not to engage in learning activities. Personality and motivation are important factors to consider in the pre-training to promote transfer on the job and retention of learned materials. Thus, tutors' attributes are central in designing and understanding the effectiveness of the PLD of the SCA implementation and its transfer to the work environment.

However, to ensure the retention of the learned materials there is a need to control through the condition of transfer, maintenance, and generalisation. To ensure the transfer of social constructivist beliefs and practices to the job, tutors' professional learning experiences are expected to consider the conditions of transfer on the job setting.

Secondly, learning programme design need to be appropriately arranged to embrace the learning outcomes, delivery approaches, content sequences, time

for learning, and learning resources to facilitate the learning transfer (Baldwin & Ford, 1988; Daffron & North, 2011). In this case, the role of the supervisors or tutors' expertise is also important in creating a meaningful and enjoyable PLD learning environment that facilitates interactions through dialogue, peer coaching, and ensures effective transfer of learned experiences on- the-job context (Broad & Newstrom, 1992). In addition, the tutor's ability to collaborate with PLD supervisors and to motivate beginning tutors towards learning expectations promotes learning and retention of transferred experiences. However, a weak supervisor or training design — is likely to lead to the failure of tutors to transfer and generalise the PLD's learned experiences to the job.

Thirdly, work-place organisational culture has an important influence on the learning transfer with regard to the support the tutors receive from the organisation's leaders, supervisors, and peer-workers in undertaking PLDs. Accordingly, studies have shown that peer-workers and organisational leaders can significantly influence the tutors' participation in the learning transfer process (Bransford et al., 2000; Daffron & North, 2011). Hence, the support and the assurance of opportunities from co-workers and workplace leaders for undertaking the training programmes are crucial in motivating tutors to participate and transfer the learned experience from the training to the job. Work-place culture has a direct impact on learning outcomes and the ability of the tutors to sustainably retain and apply the learned experience in different learning contexts (Baldwin & Ford, 1988; Hasan & Hynds, 2014). In this case, it is not only the organisational culture that influences the learning and retention of constructed knowledge but also the participants' culture and personal problems brought into the PLD context. Thus, PLD for tutors is expected to enable tutors to mediate the ways student teachers are trying to experience and construct knowledge about the culture embodied by the content of the professional learning design, especially by considering the role of indigenous pedagogical approaches. Consideration of the cultural context is of paramount importance in introducing new experience to achieve the training transfer in practice.

### **2.6.4.3 Policy issues and transfer of innovation**

Rogers (1995) explored the features necessary for the diffusion of new ideas, projects and programmes from one location to another geographical context. The features include: (i) the innovation itself (ii) the communication channels (iii) the time and (iv) the social systems. Rogers argues that an understanding of the essence of innovation (idea) and its relevance to the needs of individuals and society might lead to adoption of the idea. According to Sahin (2006), communication channels are vehicles of disseminating the information about the innovation from the creator to users. Hence, the speed of adoption of innovation is determined by the effectiveness of the communication channels and time taken to attract a wide range of population in different geographical and cultural settings. An idea can spread within a short time via communication agents such as mass media, journals, and books. Social systems involve the different structures or categories of the individuals bearing a particular set of beliefs and practices that influence the adoption the innovation (Rogers, 1995). For example, civil societies that abide by religious values may influence the diffusion of the innovation. According to Rogers, people are interested in adopting innovation depending on its relative benefit, complexity, compatibility, trialability, and observability in practice. The degree of benefits of the innovation in providing a wide range of opportunities for users to apply it in different situations motivates the rate of adoption. Similarly, the complexity or simplicity of the idea influences the people's adoption of it. Rogers (1995) and Sahin (2006) view that the innovation needs to be easy to try in the context of users and the results should attract other users to adopt it. With regard to the decision to adopt the innovation, Rogers (1995) described five important stages:

- a) The knowledge — the user creates awareness of the “what”, “how”, and “why” of the innovation.
- b) The persuasion — the potential user is convinced to change the existing beliefs that lead to rejection or adoption.
- c) The decision — the user makes a choice to reject or adopt.
- d) The implementation — the user practices the innovation or modifies it to suit the context.

- e) The confirmation – the user seeks support to maintain use of the innovation.

Stone (2001) reports on the influence of international policy transfer in practice by highlighting the constituents, role players and the policy networks, and political approaches of policy transfer. Stone argues that policy transfer engages the key actors in lesson-drawing, convergence of ideas, and diffusion of common practices. In this sense, policy transfer has an entrepreneurship function to the actors. The key actors in the policy transfer are primarily officials in the state, political leaders and their agencies. Moreover, officials from non-governmental organisations who have interest in policy issues explore them from different global policies to challenge the existing situation. Stone and some scholars note that research organisations, tertiary education institutions and universities, consultants, non-governmental institutions, and interest groups in knowledge transfer in collaboration with state officials play a role of advocacy and promotion of the policy transfer (McDonald, 2012b; Stone, 2001). In this way, she argued, policies, ideologies, institutions, beliefs, and the lessons from policy failures constitute the package in the transfer of policy process. While Verger, Novelli, and Altinyelken (2012) presented the circumstances of globalising education policies (in section number 2.5), Stone (2001) presents four approaches adopted by key players to the transfer of policies in various political situations. They include:

- a) Penetration: This involves the super powers using coercive strategies in diffusing the policy to the recipient nation that is expected to conform to it. It involves the international donor agencies safeguarding the interests of Government officials in the recipient nation from the non-state public.
- b) Emulation: This approach involves the borrowing of the policy as a whole with minor changes. The recipient nation adopts the materials, equipment, and procedures to the context. Authors of knowledge and experts of lessons from other nations that have implemented the policy monitor the supervisors and implementers of the policy in the recipient nation.
- c) Harmonisation: This approach involves consensual agreement of interdependence to realise certain shared political interests with a set of jurisdictions, rules and procedures. It may involve denouncing some of

the nation's autonomy to adhere to the terms of reference. The Western countries acknowledge this approach.

- d) Transnational policy learning communities: This approach involves the formation of regular meetings for policy professionals and experts to discuss common issues of interest in order to reach common understanding and awareness of their differences. Hence, to achieve common understanding entails the common policy practice irrespective of cultural and geographical difference.

Through these approaches, the agents of policy transfer employ networks that facilitate the creation of evidence-based arguments to disseminate their agendas, to conquer the opponents, and to persuade more supporters about the issues on debate. In this sense, policy networks play a role to pass their agenda that attracts a large audience to realise the interests of international organisations, and donor agencies both governmental and non-governmental (Stone, 2001). Thus, people in the recipient nations are likely to reject or accept introduction of innovation through the policy networks framework and influence the training transfer.

Another study by McDonald and Tufue-Dolgoy (2013) reports on the practices of a Western-oriented inclusive education model imposed on Samoa's context. The model gained the support of international policies and donor agencies, despite not being matched with Samoa's culture and educational policies. The model followed a top-down diffusion approach that faced resistance from teachers who maintained teaching in their traditional ways. In the same way, the authors noted that this practice of policy transfer entailed the ideology of "cultural assimilation" and increased pressure on teaching and learning resources in the developing context. As McDonald (2012b, p. 1817) reports about policy transfer to developing country contexts that:

Education is a global phenomenon and policies and ideas are exported as students, policies and programs across-national borders. ... Unless imported policies and ideas are contextually acknowledged, strategically planned, and implemented within a cultural frame of reference then adoption may be thwarted.

This quotation implies that global policies and top-down introduction of national education projects suggest that some key actors lack ownership of the reforms which tend to disregard the significant role of indigenous culture. Therefore, they were unlikely to succeed.

Thus, studies about transfer of training and innovation (McDonald, 2012b; McDonald & Tufue-Dolgoy, 2013; Rogers, 1995; Stone, 2001) recommend the consideration of social, economic, cultural, technological and political differences as well as the transfer of training in the whole planning and adoption of educational reform agenda.

## **2.7 Experiences and practices of integrating SCA in teaching**

Hammond and Manfra (2009) in the United States described three parts of a pedagogical model, “giving, prompting, and making” (p. 172) that influence decisions of teachers in the selection and use of appropriate teaching resources and learning activities in social studies. As noted in the literature, the model considers the transmission, transaction, and transformation teaching emphasising the interdependence between orientations in embracing SCA (Hammond & Manfra, 2009). The authors contend that transmission involves *giving* pupils authoritative knowledge that is replicated through examinations and tests, while transaction refers to *prompting* (similar to the Vygotsky’s (1986) concept *zone of proximal development*) students with teaching resources. Transformative teachers empower pupils to engage in the *making* theories and tangible technologies in learning — a sense-making approach. Finally, Hammond and Manfra (2009) and other scholars (Harris et al., 2009) urge that teachers who understand different teaching approaches are needed to challenge and improve the implementation of SCA in practice. The authors add that giving, prompting, and making concepts require a scientific inquiry to attest to their relevance and validity. Thus, the researchers validate their framework in practice, the implication being that to test them is the same as testing the existing teaching approaches.

Jimoyiannis (2010) studied four science teachers involved in educating school-teachers in Greece’s secondary schools on the use of information

communication technology (ICT) in science teaching. An intensive study explored the teachers' perceptions and experiences about the established "technological, pedagogical science knowledge" model (p. 1259). The teachers indicated that technological, pedagogical science knowledge was meaningful and that they were motivated to use it, but the findings revealed difficulties faced by teachers in using ICT in teaching and learning contexts. Jimoyiannis reports suggested that, "teachers' beliefs were strongly influenced by broader contextual parameters of the secondary school condition and the whole educational system" (p. 1266). Thus, the research proposed the need to study the contextual parameters in the classroom, school, and educational systems as a whole to properly determine the influence they have in the integration of innovations such as ICT in science education.

Schweisfurth (2011) undertook a review of research on SCA focused on non-Western countries. Schweisfurth's review of 72 articles about the enactment of social constructivist curricula reports that the majority were debating issues related to strategies to employ in introducing reforms and implementation, the problems of teaching resources and personnel, as well as intercultural interactions and power relations in carrying out reforms. The review was devoted to identifying the implications of the reform activities for alternative plans, empirical studies and learning. Moreover, the reviewer expresses the concern about the foundations and applicability of new teaching approaches in a particular context. In this context, the reviewer raises queries about whether the social constructivist teaching was free from contextual issues and the most appropriate procedures of doing it. Schweisfurth (2011, p. 427) study indicates the existence of challenges to enacting an innovation based on SCA, and reports that there was a misalliance between issues of policy and curricula enactment stages: "formulation — adoption — implementation — reformation". That means, policy statements sometimes are not consistent with expectations. Schweisfurth advocates the consideration of curricula development processes in introducing educational reforms. Key to this argument is that such multi-logical practices of introducing educational reforms led to a number of complexities, which influence teachers and tutors in the teaching and learning



context. Thus, she noted that the cultural context, personality, and PLD opportunities influence both tutors' and teachers' behaviours on the job.

Schweisfurth (2011) assessed the classroom learning context of social constructivist approaches in non-Western countries, and notes that a shortage of teaching materials and facilities, limited tutors'/teachers' teaching knowledge, and large classes negatively impacted upon the enactment of SCA in teaching. Moreover, her study indicates that even in the context of abundant resources and teaching forces, there is a need for high quality tutors, teachers, mentors, and enough time and space to critically analyse important issues across sectors affected by educational reforms. In this context, the study puts forward evidence that the centralised evaluation and inspections' procedures in pre-service and in-service teacher education programmes are not supportive to social constructivist approaches (Schweisfurth, 2011). Rather, tutors' and teachers' knowledge of SCA acquired from the PLD programme diminish over time within the job context. The author observes that the contextual factors seemed to influence the beliefs of tutors'/teachers' choice of the professional learning careers because the evidence indicates that to become a tutor/teacher in developing countries is not a first priority. Rather the value of academic grades in their transcripts dictates the choice of teaching career – in this sense, low grades attract more pupils and student teachers to enter teaching. In such situations, the commitment and motivation of these student teachers toward the teacher education programme confronts tutors' and teachers' enactment of SCA. Furthermore, Schweisfurth notes different definitions of culture between the scholars that reflected the influence and power relations of the context of the individual scholar. For example, she found that in some cultural contexts, learners are obliged to listen to their elders and this same cultural practice was portrayed in the classroom environment. Hence, Schweisfurth (2011, p. 428) argues that “in the global south where classrooms interactions may look teacher-centred to an outside, while actually being variations of ... [social constructivist teaching] adapted to the cultural practices and resource realities”.

Here rests the argument about the consideration of dominant cultural factors in the importation and introduction of educational reforms and innovation in a particular context in which some cultural issues are rigid to change. Further,

Schweisfurth's (2011) argues that the enactment of educational reforms in many parts of the world is inseparable from the role played by donor agencies. She noted that the missions of donor agencies favour the interest of the bearers or the creators of the reform project. In this situation, the importation of innovation is argued to most likely be a result of decisions made by the international aid institutions.

In her conclusion, Schweisfurth (2011) poses questions about the new approaches to teaching that are context-sensitive and challenging in the enactment process, asking: Is there a need to examine the appropriate ways to adapt the new context to the innovation? For example, prior to the enactment of social constructivist approaches in teaching, considerations for short and long-term plans must be implemented in stages. In addition, the critical examination of the context where the innovation works, to who and how this can be implemented are the concerns for the adoption of social constructivist approaches to teaching.

A survey conducted in Sub-Saharan Africa by Vavrus et al. (2011) surveyed about the adoption of social constructivist approaches to ensure quality education in 54 countries – Tanzania as one example. This survey identifies some challenges and how to respond to them when implementing the new teaching approaches in Tanzania. Vavrus et al. (2011) note that tutors and teachers have limited understanding and experience of using the new teaching approaches. The study revealed tutors using the *technical rationality* framework in the teaching of content knowledge due to their experience of using the traditional behaviourism approach (Vavrus et al., 2011). This argument indicates that tutors in colleges have been taught in schools and teacher learning courses and they imitate their teachers as role models in using the traditional teacher-centred approach, which influence their transfer of knowledge of the new approaches to teaching. Hence, tutors are training student teachers in the ways they had been taught during their initial professional learning stage. Another challenge is the inadequate exposure to classroom settings because some tutors began teaching in teacher education colleges without prior experience of teaching in schools. There is a belief that someone graduating with a degree at the university is able to teach student

teachers in colleges. In this regard, tutors are confronted when they enter classroom settings, which require to them use SCA. Moreover, the survey results indicate that inadequate school-based professional learning opportunities had a negative impact on teaching. The language of classroom teaching was a further problem for tutors because of limited linguistic skill in expressing ideas and setting questions that enhance reflective thinking among student teachers. In addition, summative assessment procedures made it difficult for the tutors to implement new approaches, which embrace more formative/authentic assessments. Furthermore, the authors note that teachers are constrained with overcrowded classrooms in schools, which limit the ability to use various cooperative learning approaches that require movement in classrooms (Vavrus et al., 2011).

In this context, the survey reports recommendations to improve the situation through the provision of professional learning to tutors via workshops and outreach programmes, and revision of initial professional learning curricula to integrate the pedagogical knowledge with the content knowledge (Vavrus et al., 2011).

Hardman et al. (2012) studied whether tutors and teachers need to undertake pre-service and in-service PLD in response to the recent educational reforms in Tanzania. The study covered teacher education colleges and primary schools (teacher education colleges involved 3 principals, 18 tutors and 18 student teachers whereas in primary schools; 3 heads of schools, 18 teachers and 18 pupils were involved in the study). Tutors and teachers were selected from 3 subjects: English, mathematics and sciences. The study drew experiences from the baseline study of primary school interactional and discourse practices and a review of teacher education programmes. Hardman et al. (2012) assert that “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 reforms” (p. 6). This quotation implies that the authors designated the role of tutors and teacher education for primary schools as central to the overall process of training teachers in order to ensure quality education throughout the system. That means the introduction of educational

reforms should start with tutors in teacher training colleges who train the student teachers to teach in schools. These views shape the discussion that follows.

Hardman et al. (2012) found that the majority of student teachers came from low income and non-professional families, and had low entrance grade to teacher training programmes. In such situations, low income and low entrance qualifications in the teacher education courses might be significant factors that shape the relationship between student teachers and tutors in the implementation of SCA in classrooms. For example there are possibilities of the classroom to be divided into hierarchical structures of those who are rich and those who are poor which can make the poor student teachers or tutor to be inferior to the rich student teacher or the tutor. Another example is that student teachers who were not well supported by parents when in schools are likely to have limited concentration in learning and led to their low grades in final exams and content of the subjects. Hence, SCA would expect the student teachers to use the previous knowledge and skills in understanding the present situation, a factor that is not likely to happen for them in learning process. The authors report that tutors not only demonstrated incompetence in Swahili, the language of instruction but also in the use of English language in communicating academic issues. In addition, it was revealed that the dominant teaching approaches were in a question and answer format, and the use of illustrations on the chalkboard, which amounted to about 80% of the classroom teaching and learning time (Hardman et al., 2012). For example, two tutors were observed to use lecturing in the teaching of practically based lessons. Furthermore, tutors were observed to have limited understanding of primary education in establishing their arguments. Instead, they provided examples and practices based on personal ideas, which did not reflect realities. Hardman et al. (2012) note that, tutors were rarely able to probe more information from student teachers or to comment and advance arguments based on student teacher's ideas. This is might be a reflection of lack of connection between the teacher education colleges and primary schools on current experiences and realities. These tutors had experienced the teaching practice in teacher education colleges during their studies at university, which allowed them to teach in colleges, but they lack experience of teaching in schools because they are not

trained to teach in schools. In this situation, Hynds and McDonald (2010) support the idea of reviewing the university programmes for tutors; part of their teaching practices should be conducted in primary schools. Moreover, Hardman et al. (2012) indicate the problem of centralised assessment practices in teacher education colleges that promote rote and superficial learning because most of the questions enable the student teachers to recall content knowledge acquired from tutors' lesson notes to obtain grades. Furthermore, during the practicum, student teachers are allocated to different schools to teach and tutors visited them for assessments. The study indicates that student teachers complain about the lack of information prior to the visit of tutors in schools who seem to rush the assessments and do not provide effective feedback to student teachers about teaching practices. However, student teachers complained about the situation that may well have been caused by the heavy workload for tutors' supervision, exacerbated by the big ratio between tutors and student teachers in college classrooms (Hardman et al., 2012).

In their discussion, Hardman et al. (2012) indicate that there is a need to consider the cultural situation in the whole process of introducing educational reforms in the initial and on-the-job training programmes to conform to the scientific principles of curricula developments. In this context, authors appeared to support that educational reforms reflect more the external beliefs of international donors than they do the characteristics of the local contexts where the reforms are implemented. Authors note that regardless of external influences, tutors have the repertoire to transform the prevailing manner of teachers' teaching in primary schools by introducing collaborative approaches together with traditional approaches such as drilling, questioning and telling to enhance cognitive dissonance and engagement among pupils. In consequence, the initiative is likely to lead to a blending of local culture with educational reforms informed by international policies for compatibility. Importantly, Hardman et al. (2012) discuss the need for professional learning projects to develop teachers' pedagogical knowledge through connecting university's practices that enable tutors to establish projects in classroom learning and assessment activities as well as developing supervision and assessment skills in student teachers. In addition, the existence of ambiguous educational policies

regarding teacher education welfare, such as poor remuneration, uncertain promotion prospects, and poor working conditions, discourages tutors and teachers enacting knowledge acquired from the training programme (Hardman et al., 2012). Further, they point out that tutors/teachers have little chance to participate in writing curricula and implementing them in schools, partly because of the absence of links between teacher education colleges and schools. Professional learning is considered costly in terms of investments and logistics to establish the links for enactment.

To conclude, Hardman et al. (2012) recommend a consideration of cultural factors in reforming teacher education and ensuring the acquisition of broader demands faced by the education system in the country. They argue that teacher education lacks links between classroom learning and practice, and suffers from an inadequate supply of teaching resources for better implementation of SCA. In addition, they note that the implementation of school-based teacher education is more difficult than college based professional learning for initial and experienced tutors in developing country contexts because many schools are not equipped with enough resources and professional mentors.

Another study by Kitta (2004) explored the role of collaborative approaches in teaching secondary school teachers' knowledge and skills in Tanzania. The findings relating to classroom activities indicate that mathematics teachers transferred their training experiences to the classroom setting because they were able to utilise the teaching materials effectively in their teaching. The study does not explain the extent to which the experience is transferred to classroom setting by teachers. On one hand, the results reflect an improvement in pupils' understanding and indicate that they valued the subject matter due to the activity-based learning strategy (Kitta, 2004). Hence, the experience of Kitta's study helped the researcher to understand the context of the present study that investigates the tutors' beliefs and practices in the implementation of social constructivist curricula in teacher education colleges.

A similar study conducted by Msonde (2011) to investigate 3 secondary teachers of geography and mathematics involved in a professional learning programme about new approaches to teaching in Tanzania. Teachers were trained for 2 days to understand the models and apply the SCA. They were

given chances to practice the knowledge acquired from training in their school for about 12 months before the researcher came to observe them teaching in classrooms. The results indicate that the ways the teachers were using to learn SCA were strongly related to the ways they used to apply that knowledge in classrooms. Msonde (2011) argues that the more teachers are engaged in the learning communities, the better they develop a complex means of experiencing the transfer of knowledge and skills in the job practices. Further, he advances the idea that a gradual and transformative experience is the function of context variation of professional learning and provision of sufficient time for learning (Msonde, 2011). In establishing his claim, the author overlooked that the more teachers are engaging in professional learning opportunities, the more resources and facilities, more well-trained trainers and mentors as well as more sophisticated pedagogical knowledge are needed to deal with large classes. Since the study employed a variation model, the results did not explain whether the same pedagogical approaches used for three teachers work for large classes, for example of 60 student teachers.

In concluding, Msonde notes that there is a dialectic relationship between the nature of PLD employed in training and the understanding and ability of teachers in the enactment of the training transfer to on-the-job setting. In addition, he reports that teachers demonstrated technical practices regarding social constructivist teaching, which were modified through the learning studies that develop their new practical understanding on the approach relevant to the school setting. However, Msonde involved three participants with similar backgrounds and a short training programme, factors that may mean these teachers may revert to the previous ways of teaching in the near future given the absence of strategies for continuous professional learning, as some scholars debate as a necessary context for successful training transfer (Baldwin & Ford, 1988; Broad & Newstrom, 1992). Thus, transfer of training strategies for continuous professional learning after the actual training could have been put forward to sustain and generalise teachers' knowledge and skills in practice, a similar view noted by Schweisfurth (2011). Further, there are limited findings in Msonde's (2011) study that explain how participants were monitored and controlled regarding influences external to the studied group when they were

applying knowledge from the training experience for 12 months in practice, which was important to ensure knowledge generalisation to job.

Kafyulilo (2010) explored the competency of 29 Tanzanian science and mathematics undergraduate student teachers with regard to the integration of cooperative learning approaches. Evidence shows that student teachers demonstrated limited competency in the application of ICT to enhance cooperative learning approaches in teaching due to contextual factors. With regard to the practices and beliefs that promote student teachers to link technology with pedagogy and content in teaching science and mathematics, the findings show that the cooperative learning approaches engage student teachers in the use of technology in teaching and learning processes. Kafyulilo concludes that “planned interventions involving student teachers in hands-on activities have the potential to develop student teachers’ competencies in technological pedagogical content knowledge” (p. 42). On one hand, assessment of three variables of knowledge – technology, pedagogy, and content – was important and the results indicate that the contextual parameters hindered integration of social constructivist approaches in teaching.

Another similar study by Meena (2009) investigated 12 tutors’ conceptions of curriculum innovation and future curriculum approaches in eight Tanzanian teacher education colleges. He reports that the curriculum contained irrelevant content for these levels of certificate and diploma in teacher education programmes and that the content was more suited to the university education curriculum. In addition, the author notes that the curriculum was not critically examined for the suitability of the content to the local context. Consequently, student teachers were taught irrelevant content that is beyond their level of understanding. One of the significant pillars of a SCA is the engagement of student teachers in classroom learning research to improve practices of both student teachers and tutors in teaching. The research component is not emphasised in the curricula. In this context, tutors are proposing the need for a close link between the college practices and the school curricula, a belief that is most cherished in SCA. Similarly, they felt that there was a need to establish a link of teacher education curricula at the levels of certificate and diploma to



enable student teachers to advance in their studies into the university teacher education programmes.

Meena's (2009) indicates the dominance of question and answer formats and group discussion teaching techniques. He found that tutors express concerns about large classes, time, and student teachers' behaviour to be the significant aspects that influence teaching practices. Further, he argues that tutors have difficulty employing collaborative approaches when faced with large classes, shortage of teaching resources and overloaded curricula within a limited time, making it difficult to be fair to student teachers to pass national exams. In addition, tutors demonstrated limited knowledge and skill regarding employing collaborative approaches, which caused some of them to use transmission approaches. Hence, the situation highlights the need for continuous on-job professional learning opportunities among tutors. Moreover, the author reports that tutors are not satisfied with student teachers' reliance on pamphlets for their learning because tutors believe that such pamphlets are limiting student teachers' understanding and opportunities for obtaining knowledge from different sources. Meena reports that although the modules had shallow content, tutors were using them to design their lessons and to teach student teachers because the national examination questions are directly extracted from the modules. It was noted that tutors had limited understanding of curriculum innovation, which led to superficial interpretation and implementation of that curricula in practice. Furthermore, Meena concludes that the curriculum innovation had been introduced via a top-down model, which lacked critical analysis of the context and led to resistance from tutors in the implementation of the curricula in practice. Evidence indicates that responsible agencies – Tanzania Institute of Education, National Examination Council, and the Education Inspection Unit – have not coordinated curriculum innovation implementation and offered inadequate support for tutors' teaching and learning activities.

Debates from the literature indicate that studies have been conducted in the areas of sciences, mathematics and languages in higher learning institutions, involving teachers in primary and secondary schools as well as tutors in teacher

education colleges (Kafyulilo, 2010; Kitta, 2004; Vavrus et al., 2011). These studies discussed issues related to transfer of experiences acquired in professional learning in practice. The studies raised some common issues faced by tutors, including shortage of resources, large classes, centralised curricula reforms, complications with the language of instruction and hard working conditions, all of which influence the implementation of the new curricula (Meena, 2009; Vavrus et al., 2011). However, there are limited studies that specifically explore the feelings, beliefs and engagement of tutors in the use of new teaching approach after they had participated in the learning transfer experience in social constructivist teaching. Furthermore, evidence identified that the integration of SCA in teaching social studies disciplines in teacher education were unexplored in favour of science disciplines (Kafyulilo, 2010; Kitta, 2004; Msonde, 2011).

In addition, there are many studies in areas of tutors' knowledge in developed countries, but far fewer from the developing world. Few studies have been conducted in Africa, particularly discussing social studies tutors at the certificate level of teacher education. In this sense, more studies are needed to investigate the tutors' beliefs and practices regarding social constructivist approaches in Tanzania – focusing on social studies, and certificate courses in teacher education. Tanzania focuses on training many certificate teachers for primary schools because they are needed in many schools scattered across the country, and these teachers educate the majority of the people in the country. Thus with teacher education being the centre of professional learning and quality of education in the country, this research is designed to investigate the influences and outcomes of implementing the SCA on tutors' beliefs and practices in Tanzania.

## **2.8 Research question**

This study was conducted in the context of Tanzania's teacher education colleges. It was guided by the following overarching question: What are the influences and outcomes of implementing the social constructivist approach on tutors' beliefs and practices when educating social science students in

Tanzania's teacher education colleges? Specifically, the study addressed the following research questions:

- What are tutors' understandings of the social constructivist approach in teaching?
- What are tutors' beliefs about the role of social constructivist approaches in teaching?
- Do tutors integrate social constructivist approaches in teaching? And if so, how this is achieved?
- What are tutors' suggestions for the future teaching of social science?

## **2.9 Chapter summary**

This chapter has discussed the approaches adopted by tutors in teaching, the philosophical underpinnings of social constructivism and dictates for effective teaching. It discussed the integration of social constructivist approaches in PLD to promote the transfer of training, tutors' teaching beliefs and PLD in tertiary education. In addition, the issues of policy transfer in connection with learning transfer are discussed. The experiences and practices reflecting the use of SCA in PLD to promote training transfer were discussed in detail to indicate the gaps in knowledge. Lastly, the research question was presented.

The literature has demonstrated the need for investigation of the influences and outcomes of the implementation of SCA on social science tutors' teaching beliefs and practices after attending a PLD on the new social constructivist curriculum and especially, to assess whether tutors are able to educate student teachers in teacher education programmes. The area for investigation identified, the next chapter discusses the methodology in relation to the research questions.

## **Chapter Three**

### **Methodology**

#### **3.1 Introduction**

The previous chapter discussed the literature relevant to the influences and outcomes of the implementation of social constructivist curriculum on tutors' teaching beliefs and practices in Tanzania, noting that specifically the study requires address of the following research questions:

- 1) What are tutors' understandings of the social constructivist approach in teaching?
- 2) What are tutors' beliefs about the role of social constructivist approaches in teaching?
- 3) Do tutors integrate social constructivist approaches in teaching? And if so, how this is achieved?
- 4) What are tutors' suggestions for the future teaching of social science?

In this chapter, the qualitative research approach, design, setting, and participants' selection are discussed. This is followed by discussion of data collection methods, analysis and interpretation procedures, and the trustworthiness of the research. The research ethical issues of the study are also outlined in this chapter. Table 3.1 illustrates the design of the research.

#### **3.2 Qualitative research approach**

This research employed a qualitative approach (McMillan, 2008; Patton, 1987) to explore the perceptions and practices of the participants regarding the implementation of the social constructivist curricula in a teacher education course. Transfer of training, critical pedagogy and social constructivist lenses suited the qualitative research approach, which engaged the researcher in the understanding of cultural and sociological backgrounds reflected in the interactions, social structures, and cultural influences of human behaviours (Creswell, 1994; Grunbaum, 2007).

**Table 3.1:** The design of the study

The feature	Descriptions	Rationale in the study
<b>Research focus</b>	An investigation of the influences and outcomes of social constructivist curriculum implementation on tutors' beliefs and practices in Tanzania	Reveal the problem and form a base for improvements and future researches
<b>Research approach</b>	Qualitative research	Revealing perceptions and practices from the participants' setting
<b>Research design</b>	Single case exploratory design, social constructivist teaching	Obtain rich descriptions for understanding and interpreting the studied phenomenon
<b>Participants selection</b>	Purposive selection of participants	Participants had instructive experiences and beliefs for the study
<b>Recruitment procedures</b>	A voluntary process involved 9 tutors who educate students for a certificate course in teacher education.	Engage in the construction of knowledge based on participants' view and experiences.
<b>Data gathering methods</b>	Documentary analysis, observations, open semi-structured interviews, photographing, voice-recording, reflective journals.	Gain rich information and triangulation – increase trustworthiness of the study and to answer the research question.
<b>Unit of analysis</b>	The researched aspects of the phenomenon and Employed thematic analysis	Understanding and interpreting the case in depth
<b>Conclusions and recommendation</b>	To provide the basis for the beneficiaries to use the findings	Improve practices and to undertake further research

**Source:** Researcher's own creation

Epistemologically, research employs a researcher as the 'primary instrument' of data collection, thus qualitative methodologies require the researcher to identify his key "personal values, assumptions and biases that might influence the research process at the outset of the study" (Creswell, 1994, p. 163). In the case of this study, the researcher's influences were expected to be his professional values, his research experiences, his cultural experiences, and his social classes. In view of critical pedagogy, the researcher had a significant role to understand how he might influence the research process, specifically, in data collection, data analysis, interpretation, and discussion of the findings. While as noted in Chapter One, the researcher was required to take careful steps to

minimise bias, he was also well positioned to work with participants to understand their beliefs, opinions, and practices in the implementation of social constructivist curriculum in the teacher education context (Creswell & Plano Clark, 2011).

Methodologically, the approach relied on the use of multiple sources of information to explore and understand realities as they appeared in the natural setting (Creswell, 1994; Grunbaum, 2007). This is in keeping with the view expressed by Patton (2002) who argues that qualitative research utilizes three methods of collecting information, namely: “in-depth, open ended interviews, direct observation and written documents” (p. 4). Since qualitative research relies on “tacit knowledge”, the subjectivity of data provides different meanings and multiple realities. Further, the subjectivity of realities is the interest of qualitative researchers, as part of the job the researcher to discover the meanings attached to that information and to reconstruct them based on information from various sources in a particular context and time (Martens, 2005). Thus, for a study invested in understanding participants’ perceptions and experiences regarding the implementation of social constructivist curricula in a teacher education course, a critical stance and a qualitative methodology were appropriate.

Qualitative research employs approaches that allow the researcher to enter into the inner world of the participants to explore their views within their social and cultural context (Creswell, 1994). As noted, the intention of the research presented in this thesis was to investigate the influences and outcomes of SCC implementation from the perspectives of participants’ beliefs and practices, thus the researcher focused on making sense of the participants’ beliefs, values, and practices and how they socially (de)constructed to understand their cultural context. The researcher was interested to describe and interpret those beliefs and practices to better understand how participants understood them in their socio-cultural context (Grunbaum, 2007). That meant the researcher relied on the participants’ information.

The researcher was interested in the “idiographic interpretation” of complexity of the particulars or concepts of the aspect of a phenomenon being studied (Patton, 1994). A qualitative approach aligned with case study design, an understanding of participants’ beliefs and practices in the implementation of SCC in practice gained with this methodology produces findings that might be transferred to a similar context.

Finally, qualitative research focuses on meaning making based on individual behaviour within a social setting, which also aligns with social constructivism. According to Lodico, Splaulding, and Voelgtle (2006), meaning making is a function of the “individuals’ context-specific interactions and perspective in social constructions of realities” (p. 8). By employing transfer of training along with critical pedagogy and a social constructivist lens, the researcher was able to look at the research problem from several dimensions in procedures of the research. The three angles of viewing at the phenomena suited to this qualitative research approach in writing, discussing, and shaping ideas of the chapters throughout the thesis.

### **3.3 Case study design**

The research undertaken for this thesis employed an exploratory case design (Berg, 2009). According to (Yin, 2009), a research design is “a logical plan for getting from here to there; where here may be the initial set of questions to be answered and there is some set of conclusions about these questions” (p. 26). The study explored a case of “social constructivist teaching/curriculum” from which the ideas and actions of 9 participants were considered for analysis, interpretation, and development of this thesis (Grunbaum, 2007).

Qualitative case study design is often used in social science disciplines of anthropology, political science, sociology, law and education (Creswell, Hanson, Clark Plano, & Morales, 2007; Grunbaum, 2007; Johnson & Christensen, 2012). It has been identified with several dimensions such as the “social and structural dimension, contemporary dimension, holistic dimension, multi-research dimension, controllability dimension, and triangulation dimension” (Grunbaum,

2007, p. 82). The researcher considered these dimensions when deciding upon the case study design as best suited to understanding the research question.

Case studies investigate the meanings of a particular phenomenon from the participants at their original setting. The researcher was exploring people's beliefs and practices regarding the implementations of SCC in their working context. With a social and structural dimension, 9 participants were observed in the classrooms to examine how they were able to interact with students. Moreover, these participants were interviewed to capture information regarding their opinions, beliefs and experiences in implementing the new teaching approaches.

This design was chosen because it best enabled the researcher to describe and interpret the meanings of participants' views and practices. Qualitative case studies enabled the researcher to make sense out human behaviours through asking how and why questions regarding the existence of the behaviour in a particular environment. Because the researcher was concerned with sense making as observed from the participants' perceptions and practices to understand the research question and explain the context in general that influenced the implementation of SCC in teacher training, this holistic view aligned the case study to the presented theoretical framework.

According to Grunbaum (2007), case studies are qualitative in nature aimed at providing descriptions, explorations and explanations about human behaviour in its particular context. A similar view is expressed by Johnson and Christensen (2012) that the main intention of case study is to provide detailed descriptions of a case or cases in response to the main question. Thus, researcher considered employing the case study to explore the opinions, beliefs, and practices of participants regarding the implementation of SCC in teacher training environment to be specifically relevant.

Another dimension is concerned with issues evolving during the research process, over which the researcher may lose control due to limited understanding of appropriate procedures for solving them (Grunbaum, 2007; Yin, 2009). Sometimes the issues might take long time to be resolved. In few



instances, the researcher lacked control of the responses from the participants, so he allowed them to continue freely expressing their situation for more insights and understanding, thus enriching the data. This approach became useful in understanding participants' beliefs and practices concerning the implementation of the SCC in teacher education.

What is more, case study employs various sources of data to make sense of the phenomenon, meaning they allow the triangulation of data collection methods (Creswell et al., 2007; Grunbaum, 2007). They maintain that findings are described in the form of a case or themes.

Yin (2003) reports the application of case study is productive in understanding the contemporary and past educational phenomena that influence the participants in their context. Yin also maintains that there is not a clear demarcation between the issue studied and the context. The researcher considered that the issue studied influenced the context of teacher education situated in the developing economies, especially Tanzania.

Above all, the discussed features qualified the use of case study design to explore and investigate the influences and outcomes of implementing a new SCC on tutors' beliefs and practices in Tanzania's context. Further, in view of social constructivism, the researcher considered the use of case study design appropriate to gather relevant information for this research in the context.

### **3.4 The setting**

In this study, the researcher was guided by the research proposal in undertaking the selection of a research site, participants, data gathering methods, analysis procedures and human ethics issues. This research explored nine tutors' teaching beliefs and practices in teacher education colleges. The researcher was conscious of the fact that teacher education colleges are scattered across different regions of Tanzania and this research was conducted in the Southern Highlands Zone, which constituted three regions: Njombe, Mbeya, and Rukwa. The zone was the main research site and the regions formed three small sites. In each region, a regional administrative secretary

endorsed the implementation of the research project. At the district level, a district administrative secretary represented the regional administrative secretary in the same role. Teacher education colleges were selected purposely (Patton, 2002) with several considerations, which included:

- a) Geographical location: The researcher considered the higher number of the certificate in teacher education colleges in the zone, which offered the researcher a wider range to consider not only the number of choices but also the accessibility to the respective college in the research site.
- b) The researcher's knowledge and experience of the sociocultural context of these regions was considered for facilitating data collection for the study, and reduced research costs. However, the researcher maintained his position as an observer, interviewer and studied the documents as a means of minimising biases.
- c) Participants' characteristics: According to URT (1995), the major qualification for a tutor to teach in this category of teacher education colleges was a bachelor of education degree; passed in one academic subject and with qualifications in education. The researcher sought the importance of studying tutors' perceptions and experiences in the implementation of SCC in this category of teacher education colleges. The researcher believed that the behaviour of both tutors and student teachers influenced the classroom teaching practice and then the graduates of these colleges were expected to become educators of the majority children in the country.
- d) Ownership: The colleges were owned and managed by the state based on the MoEVT policies. The MoEVT employed qualified permanent tutors who obtained all the necessary benefits that assured their commitment at work. In contrast, teachers in private teacher education colleges are free to work in more than one college and sometimes they are not permanently employed.

### **3.5 Participants' selection**

Purposive sampling technique (Patton, 2002) was used to recruit 9 participants; 3 participants from each research site. The participants were the trainers of

student teachers in a certificate course in teacher education for primary schools. Qualified tutors with a degree level or more in teacher education, who had completed the 3-year period of the government's mandated working probation, participated a PLD on SCA, and who belonged to one of the three social science subjects (history, geography, and civics) were recruited to participate in the study. One tutor was selected from each subject in the small research site. The researcher explained the research aim and procedures as well as the ethical issues to volunteering in the study. A list of the subject tutors was obtained from the academic dean's office and was used to indicate the tutors who volunteered. In each subject, tutors were recruited based on who was the first volunteer, the second, and so forth. Hence, the first volunteer was recruited, and when the first volunteer withdrew from the research, then the second volunteer was consulted to replace them. Each teacher who was recruited identified a class for the research. A student teacher volunteer from research class was informed about (1) the purpose of the study, (2) that his/her participation was voluntary, and (3) those who volunteered were provided with information sheet to read and a consent form. Similarly, the researcher reminded the student teachers and tutors about their right to freely withdraw from the study at any time or stage of the data collection.

The sample size and the purpose sampling were considered to obtain relevant and rich information about participants' beliefs and experiences regarding SCC in their context. The participants' immersion in the studied context, and their critical views regarding social science teaching helped the researcher to obtain the findings relevant to the research question and also better understand the teaching and learning context. Furthermore, the sample size was planned to help the researcher to manage the resources within the limited funds and time needed for data collection and analysis as well as the thesis development in general.

### **3.6 Data collection methods**

This study applied four methods of gathering information: reflective journals, document analysis, classroom observation, and in-depth (open ended) semi-

structured interviews (Patton, 1990). The methods are capable of generating first-hand information from an event or material in its original setting, which according to Yin (2009), was able to guide the gathering of information aligned with the research question: What are the influences and outcomes of the implementation of a new SCC in teacher education on tutors' beliefs and practices in Tanzania? Small questions were generated to simplify the collection of relevant data from different sources (see, Appendix VIII) that responded to the main research question. Table 3.2 illustrates that detail.

### **3.6.1 Documentary analysis**

Analysis of documents involved reading several written documents to obtain information in the form of excerpts or passages for the study (Patton, 1990). Some of the research documents include official publications and reports, Government acts and policy statements, programme records, newspapers, photographs, letters, diaries, artistic works, and survey responses (Mogalakwe, 2006; Patton, 1990). The researcher utilised the protocol of documents analysis to gather information from the policy, syllabi, the social science teachers' teaching portfolios, and artefacts. The informed consent obtained from the social science tutors and the researcher's documentary analysis guide facilitated the analysis of the teaching portfolios and artefacts: schemes of work, lesson plans, lesson notes, syllabi and education policy (Wolf & Siu-Runyan, 1996). The researcher was specifically interested in collecting data from the above-mentioned sources: data related to the design of the lesson, time for student learning, teaching techniques, teaching aids or materials, student assessment and evaluation, and the mode of student teacher's participation in teaching and learning activities.

According to Wolf and Siu-Runyan (1996), teaching portfolios and artefacts serve a variety of purposes but their focus is to achieve the core mission of student teacher learning. They maintained that these artefacts help to "guide the student teachers, tutors, parents, administrators, and policy makers in making informed decisions about the design and use of portfolios" (p. 36). The researcher believed the analysis of most relevant documents — schemes of

**Table 3.2:** Data collection methods per variables observed for each question

	<b>Main question: What are the influences and outcomes of the implementation of a new SCC on teachers' beliefs and practices in teaching social science in Tanzania?</b>			
<b>Methods of gathering the information</b>	1. What are tutors' understandings of social constructivist approach to teaching? (Understanding)	2. What are tutors' beliefs about the role of social constructivist approaches in teaching? (Beliefs)	3. Do teachers integrate social constructivist approaches in teaching? And if so, how this is achieved? (Transfer)	4. What are tutors' suggestions for the future teaching of social science? (Future teaching)
<b>Documents analysis</b>  (Policy document, teaching artefacts, syllabi)			The education policy directives, the time of learning, the techniques / approaches, teaching aids / materials, student's learning assessment and evaluation	
<b>Classroom observation</b>  (Teacher-subject-student interactions )		Classroom interactions, class caring, content knowledge, classroom lesson and design, relevance and use of the teaching aids	Classroom interactions, class caring, content knowledge, classroom lesson and design, relevance and use of the teaching aids	
<b>Semi-structured interviews</b>  (tutors)	Social constructivist teaching, preparation of lessons, learning environment, students participation, assessing student learning	Social constructivist teaching, preparation of lessons, learning environment, students participation, assessing student learning		Preparation of lessons, learning environment, students participation, assessing student learning, social science teaching prospects

**Source:** Researcher's own discovery

work, lesson plan and lesson notes – would produce rich data about their informed decisions about planning and implementation of SCC in practice. Moreover, the policy document was analysed to align its details with the social science syllabi to examine how these details influenced tutors' decisions in the development of teaching portfolios and artefacts based on social constructivist

beliefs. The data were transcribed and locked in the researcher's portfolio for further analysis, interpretations and discussion.

### **3.6.2 Classroom observation**

Classroom observation was used to collect data about the practices of social science teachers when educating students in the classroom discourse cognisant to the social constructivist beliefs (Patton, 2002, 1990). Although the researcher recognised the demerits of qualitative observation method, its merits were considered more relevant to this study. Patton (2002, p. 264) outlines the following merits of direct observation:

- The inquirer is better able to understand and capture the context within which people interact. Understanding context is essential to a holistic perspective.
- First-hand experience with a setting and people in the setting allows an inquirer to be open, discovery oriented, and inductive because, by being on-site the observer has less need to rely on prior conceptualisations of the setting, whether those prior conceptualisation are from within documents or verbal reports.
- The inquirer has the opportunity to see things that may routinely escape awareness among the people in the setting.
- There is a chance to learn things that people would be unwilling to provide information [through interviews], especially to strangers.
- Fieldwork is the opportunity to move beyond the selected perceptions of others. By making their own perceptions part of data — a matter of training discipline, and self-awareness — observers can arrive at a more comprehensive view of the setting being studied than if forced to rely on second-hand reports.
- Getting close to the people in the setting through first-hand experience permits the inquirer to draw on personal knowledge during the formal interpretation stage of analysis. Reflection and introspection are important parts of field research.

These merits of direct observation informed the researcher's decision to employ field observation. The researcher used the classroom observation to gain understanding and rich information that deepened the data collected from documents and interviews. Furthermore, the researcher believed that through the observation method, observable information from the participants' behaviours, interactions, and activities, as well as the physical layout of classrooms and visual materials at the setting were to be identified and recorded accordingly.

Nine participants were observed teaching in the classroom. The student teachers from the tutors' selected research classes were consulted for a debriefing meeting in which they were informed about the research's purpose, procedures of collecting data, their role in the research, and procedures to volunteer to participate in the research, as well as the human research ethical concerns involved, as detailed in section 3.9 of this chapter.

Student teachers were informed that their participation in the research was voluntary and that they had freedom to withdraw any time during the data collection process. Moreover, each volunteer student teacher was requested to read the information sheet before completing the consent form. Student teachers were informed that whatever decision they made regarding withdrawal would not cause harm. All students completed the consent to participate in the research. This was not only revealing a common experience for them but also a part of learning because in teacher learning they also learnt research basics course.

Arrangements were made with tutors to obtain their classroom teaching timetables. Although the tutors had already filled out the consent before researcher began documents analysis, they were reminded about their freedom to withdraw whenever they felt uncomfortable to continue with the research. The researcher observed each tutor three times (3 x) in different periods that were allocated in different dates for classroom teaching. The researcher's understanding of social constructivist pedagogical approaches and type of topics as well the variation of time for teaching periods informed the decision to

observe each tutor in three different periods located in three different dates. This decision was aimed at obtaining relevant, consistent, and rich data that reflected the tutors' teaching practices in accordance to the social constructivist beliefs. Although, the researcher planned to observe tutors within a period of 45 minutes, the situation was different in the field. Although many of the observed tutors arranged their time in 45 minutes to one hour, four tutors were able to complete within that time and five tutors exceeded the planned time for teaching. The contingent factor of classroom context was the main reason for some teachers to exceed the time of teaching.

During classroom observation, the researcher collected data by writing notes concerning tutors' teaching practices, classroom layout, and artefacts, voice-recording and taking photographs of teaching artefacts and classroom layout, thus became an instrument of data collection (Johnson & Christensen, 2012). Usually the researcher requested permission from the student teachers to take photographs concerning the student teachers' seating arrangements. These photographs were taken when the student teachers went out of the room either for a break or for extra curricula activities. In some classrooms, photographing was impossible because of ethical or time limitations as the researcher excluded student teachers from photographs during classroom teaching. In the classroom, the researcher was interested to collected qualitative data from tutors' practices with special focus on:

- How tutors were interacting with student teachers, the use of cooperative teaching and learning approaches and the classroom discourse.
- How tutors cared for the class through motivation, managing time for student teacher learning, attending student teachers' learning problems, and establishing a sense of togetherness in the classroom teaching process.
- How tutors demonstrated mastery of the content knowledge, use of prior knowledge for new learning, creating chances for the student teachers to construct knowledge and arguments, employed the content knowledge created within parts of the social science subject and in their real lives.
- How classroom teaching was informed by the lesson preparation and adopted social constructivist features.



- How teaching aids and low-level technological aids were employed in classroom teaching. The researcher observed the characteristics of teaching aids/technological teaching aids (These included the globe, internet use, chalkboards, books and journals, calculators, flip charts and maps, models, tutors' improvised teaching aids).

Furthermore, the researcher used a photo camera when observing tutors' teaching in the classroom to capture specific resourceful data such as diagrams, sketch maps, "models", charts, and graphs for data thickening and validation (Johnson & Christensen, 2012). In addition, the camera was used to gather information about classroom layout, for example, the classroom seating arrangement. Tutors and student teachers were voice recorded over the whole lesson. Ethical considerations were observed during photographing and voice-recording process.

In completion of each classroom observation session, the researcher had a brief discussion with the tutor to ask questions to gain some clarification or opinion about the issues observed in the classroom setting. Briefing discussion was between 5 to 10 minutes, and sometimes there was nothing to discuss because tutors repeated same information or practice observed. The researcher wrote the classroom observation transcripts, which were shared with the subject tutor to check if what was written in the transcript meant the same or a different thing. The researcher provided freedom for the tutor to change, or remove any information that he/she did not want to appear in the transcripts. This process of adjustments and reflectivity with participants during data collection was important in checking the information in transcripts for reliability. Moreover, the advantage of reflectivity and adjustment allowed the researcher "to probe emergent themes or to take advantage of special opportunities which ... [were] present in a given situation" (Huberman & Miles, 2002, p. 16).

### **3.6.3 Semi structured interview**

An in-depth open-ended semi-structured interview as outlined by Patton (1990) was used to collect information from the participants regarding their beliefs and practices in implementing SCC in teacher education colleges. Moreover,

participants were required to explore the suggestions for the future of social science teaching. Berg (2004) urges, “preparation is a major guideline in interviewing” (p. 105). The researcher prepared semi-structured interview schedules to guide data collection, which had five instruments accompanied by follow-through probes to explore information. According to Patton (1990, p. 343), the interview guide serves the researcher to:

- Carefully decide how best to use the limited time available in an interview situation.
- Interview a number of different people more systematic and comprehensively by delimiting in advance the issue to be explored.

The semi-structured interview was chosen because of its flexibility to many situations and the opportunity for the researcher to probe more information from informants (Mertens, 2005). Further, the key rules of interviewing informed the researcher on how to administer the interview instruments and protocols of interacting with the participants to gather relevant – rich information. According to Berg (2004, pp. 110 - 111), the rules are:

- a) Never begin an interview cold: Remember to spend several minutes chatting and making small talks with the subject.
- b) Remember your purpose: You are conducting an interview in order to obtain information. Try to keep the subject on track, and if you are working with an interview schedule always have a copy of it in front of you.
- c) Present a natural front: Be sure to offer the subjects appropriate non-verbal responses. If they describe something funny, smile, if they tell you something sad, look sad, and if they present something upset them, try to console them.
- d) Think about the appearance: Be sure you have dressed appropriate for both the setting and the kind of subject you are working with. Generally, business attire is most appropriate. Remember to think about how you look to other people.
- e) Interview in a comfortable place: Be sure that the location of interview is somewhere the subject feels comfortable.
- f) Don't be satisfied with monosyllabic answers: Be aware of when subjects begin giving yes-and-no answers. Answers like these will not offer much

information during analysis. When this does occur, be sure to probe with questions, such as, “can you tell me a little bit more about that?” “What else happened?” Or “even uncomfortable silence”.

- g) Be respectful: Be sure the subject feels that he/she is integral part of your research and that any answer offered is absolutely wonderful.
- h) Practice, practice and practice some more: The only way to become proficient in interviewing is to interview. Develop your own repertoire of actions.
- i) Be cordial and appreciative: Remember to thank the subject when you finish and answer any question he/she might have about the research. If you mess things up through inappropriate actions, you may close the door for future researchers.

Based on the above rules, the researcher was confident and comfortable to apply them in the interview process. The researcher requested permission from the teachers to start data collection first by having a meeting with teachers, providing them information sheet and a consent form for completion.

With tutors' permission, the researcher recorded voices of the interviewees, which assured accurate collection of original data from the participants. Each interview session was between 40 minutes to one-hour-long, and was designed specifically, to collect the tutors' beliefs and perceptions related to the understandings social constructivist teaching concept, planning and preparations of lessons, learning environment, student's participation and assessments.

Each interview took about three to three and a half hours for the researcher to transcribe. The completed interview transcripts were shared with the respective participant to check the correctness and mistakes, and to check if the ideas reflected what was said at the participant's settings. Each participant was requested to read the transcripts, to make corrections, and delete information that did not reveal what they meant during the interview meeting. Through reading the interview transcripts, the participants were able to obtain immediate feedback concerning the study. However, participants were reminded to

observe ethical issues by not disclosing the information they read from the transcripts to a third person.

### 3.6.4 Reflective journal

Jasper (2005) describes a “reflective journal” as the data collection method for research practitioners in order to learn through the experiences of their research processes. This was a method of ensuring trustworthiness in qualitative research, because the researcher develops creativity and critical thinking skills to link theory, research, and practice (Jasper, 2005; Service, 2012). The reflective journal was used to gather information about the researcher’s field experiences (the events, behaviours, and perceptions regarding the research processes and other people) at the site and the ways these experiences influenced the researcher and the study in practice. Table 3.3 below illustrates the time spending in the field.

**Table 3.3:** Summary of spending time in one site

Time per task	Reporting / Exit	Documents analysis (3hours)	Classroom observation (45 – 60 minutes)	Open structured Interviews (45-60 minutes)	semi-Interviews
Week 1	✓	✓			
Week 2		✓	✓		
Week 3			✓	✓	
Week 4			✓	✓	
Week 5				✓	
Week 6	✓				

**Source:** Researcher’s own discovery

### 3.7 Data analysis and interpretation procedures

Data analysis and interpretation relied on what the researcher saw and heard from the voices of participants, observed documents, or learned from the physical context of this study (Lichtman, 2010). According to Lichtman (2010),

“a researcher is expected to analyse the data in a manner that avoids misstatement, misinterpretation, or fraudulent analysis” (p. 57). Although the researcher’s philosophical view might have influenced the research process, the

interpretation of findings were backed up with evidence to ensure ethical concerns and authenticity of this study.

According to Huberman and Miles (2002), analysis of “qualitative data is essentially about detection and the tasks of defining, categorising, theorising, explaining, exploring, and mapping are fundamental to the researcher’s role” (p. 309). They advise researchers to employ methods that facilitate qualitative data analysis. In this study, the importance of employing thematic data analysis procedure to the qualitative case study was paramount in exploring “participants’ perceptions and practices and the way they [these participants] make sense of their lives” (Creswell, 1994, p. 162). The assumption is that there is no single reality because people look at issues in their context, and attempt to understand them in different ways. Because the “research issue is the social distribution of perspectives on the phenomenon” (Flick, 2002, p. 185), the researcher explored beliefs and practices of the nine social science tutors regarding the implementation of SCC in teacher education course.

As noted, data were collected through open semi-structured interviews, documentary reviews, classroom observation, photographs, voice recording, and researcher’s journals. The nine tutors were voice-recorded when teaching in the classroom and during interviews. The researcher inductively analysed to obtain rich and thick description of data that facilitated interpretation and sense making. Interpretation involved “explaining the findings, answering ‘why’ questions, attaching significance to particular results, and putting patterns into analytic patterns” and themes (Patton, 1994, p. 375). Ideally, a thematic analysis was employed in the “de-contextualisation” and “re-contextualisation” of the information (Creswell, 1994) based on the social constructivist beliefs.

Thematic analysis guided by Lichtman’s (2010) framework was chosen because of its ability to work when more than one theory is employed to investigate a single case, and it is flexible to adopt other techniques of analysing data within thematic data analysis framework (Braun & Clarke, 2006; Lichtman, 2010). Thematic analysis involved some simple descriptive procedures to analyse some data obtained from the classroom observations and documents analysis. The simple descriptive analysis was possible with the use of computer software

such as Microsoft word and Microsoft excel software and Nvivo 10. The data employed simple descriptive analyses which were presented in different forms such as figures and tables (some with percentages and averages). In a social constructivist view, “the patterns, themes, and categories of data analysis come from the data; they emerge out of the data rather than being imposed on them prior to data collection and analysis” (p. 390). Following this view, the researcher analysed the data based what transpired from participants’ practices and perceptions in understanding their realities regarding the implementation of the SCC in teacher education programmes.

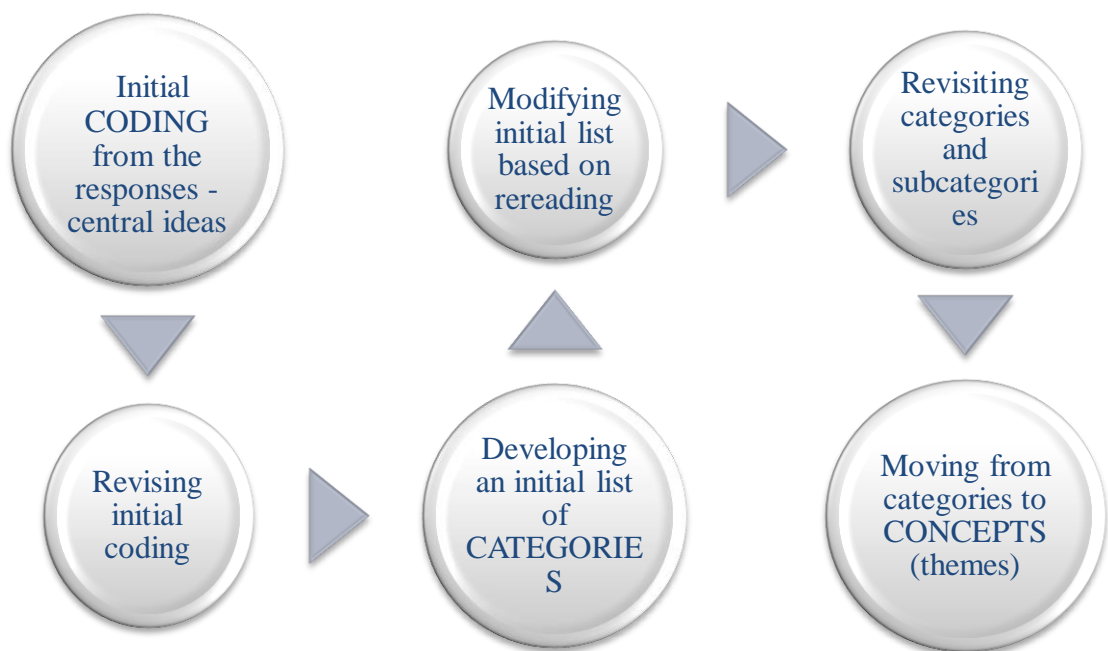
The activities of data analysis were conducted in two phases: during and after data collection. In consideration of the Huberman and Miles (2002) ideas that:

Overlapping data analysis with data collection not only gives the researcher a head start in analysis, but more importantly, allows the researcher to take advantage of flexible data collection. (p. 16)

The researcher conducted initial analysis during data collection by analysing the documents, organising voice-recorded data into transcripts, and checking data consistencies and relevancies. In this phase, participants shared the information with the researcher to read and to check the transcripts from interviews, teaching artefacts, and classroom observations. Participants not only read and corrected information that was not reflecting what they meant in the data collection setting but also added and removed some ideas in the transcripts that reflected or not their beliefs and practices regarding the implementation of SCC. These data were securely stored in the researcher’s laptop and hard drive and files were protected using a password known only by the researcher. Similarly, hard copies were always locked in the researcher’s bag and kept in a room that was only accessible to the researcher.

The second phase involved rigorous procedures of data analysis. The researcher immersed in various sources of data to read trying to understand them for familiarisation before starting the coding process. The familiarisation process provided some insights of the important codes and concepts revealing from the data.

According to Huberman and Miles (2002), “the analyst during familiarisation is not only gaining an overview of the richness, depth, and diversity of data but also beginning the process of abstraction and conceptualisation” (p. 312). Having this assertion in mind, the researcher organised all data transcripts from different sources to facilitate the process of analysis (Braun & Clarke, 2006; Lichtman, 2010). These data were then analysed using the Lichtman (2010) three Cs’ framework for qualitative research: Coding to Categorising to Concepts, a thematic analysis procedure. The three Cs are divided into six steps. Figure 3.1 below illustrates the steps.



**Figure 3.1:** The three Cs steps of thematic analysis (Adapted from Lichtman, 2010, p. 198).

Informed with the details of the Lichtman’s thematic analysis and the experience of other literature, the researcher analysed the data following the steps. In the first step, nodes were created in phrases or short sentences. The nodes were coded with phrases, sentences, and quotes, short paragraphs from different sources. Two ways were used to create the nodes. The researcher read and reread the transcripts, which helped him to identify some important emerging ideas that helped to form the name of a node. The node represented a code or

sometimes a pattern. The list of nodes was developed in a word document. The researcher also used Nvivo 10 software to generate the key nodes emerging from a range of data sources and the list was established. The two lists were compared to identify similar nodes, and differing nodes, as well as redundant codes. Few differing nodes were maintained because of the meanings attached to them and other nodes became child nodes. Redundant nodes usually had few codes hence they were removed.

Using Nvivo 10 software cluster coding similarities (see Figure 3.2), and cluster coding by sources (see Figure 3.3) were computed to weigh the value of the code or a pattern based on the items coded from single source and different sources. This was used to satisfy with the representation of data from different sources for rich and thick descriptions to facilitate interpretations and sense making. Indeed, these ways of creating codes informed decisions of the researcher about the useful codes to be considered. This method is supported by Lichtman (2010) and claims that:

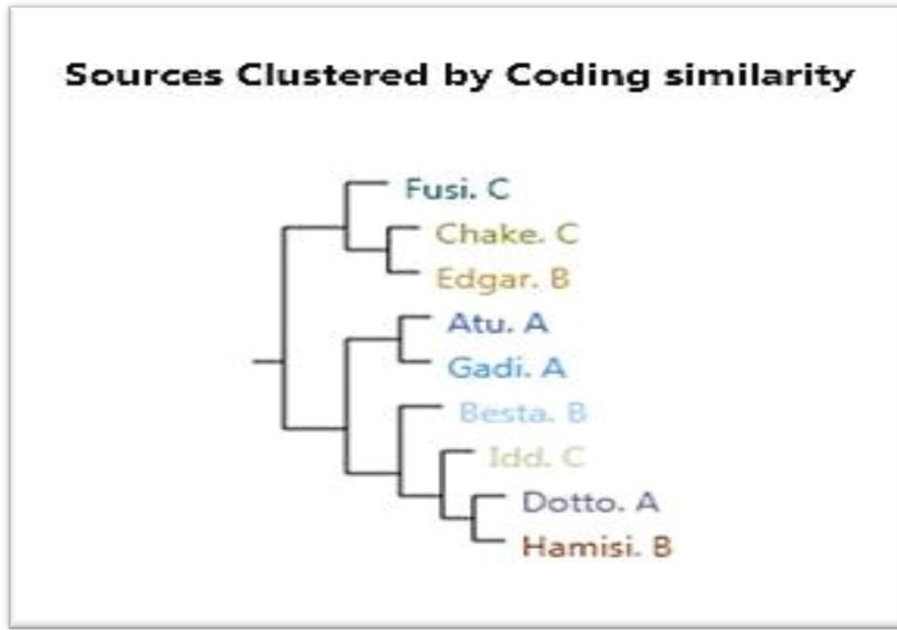
When organising your codes, it is your task to decide the most informative or logical manner of sorting. You need to determine from the data what meaning you think can be found. Sometimes your initial thoughts are quite superficial. You will find that reorganising, rewriting, and rethinking leads to more powerful ideas. (p. 200)

In the second step, the nodes were revised (e.g. by using simple descriptive techniques) to improve them. For example, some of the nodes had few codes from other sources. The researcher revisited the specific source to see if there was any information to code to the node. Similar few codes became child nodes and others were upgraded to a parent node or formed pattern because either they coded same information or they were presenting the same idea. In this step, some of the nodes were re-named to capture the meanings of the information coded to them as the researcher went back and forth to read and rereading the data sources and therefore some redundant nodes were removed and the number of nodes was reduced.

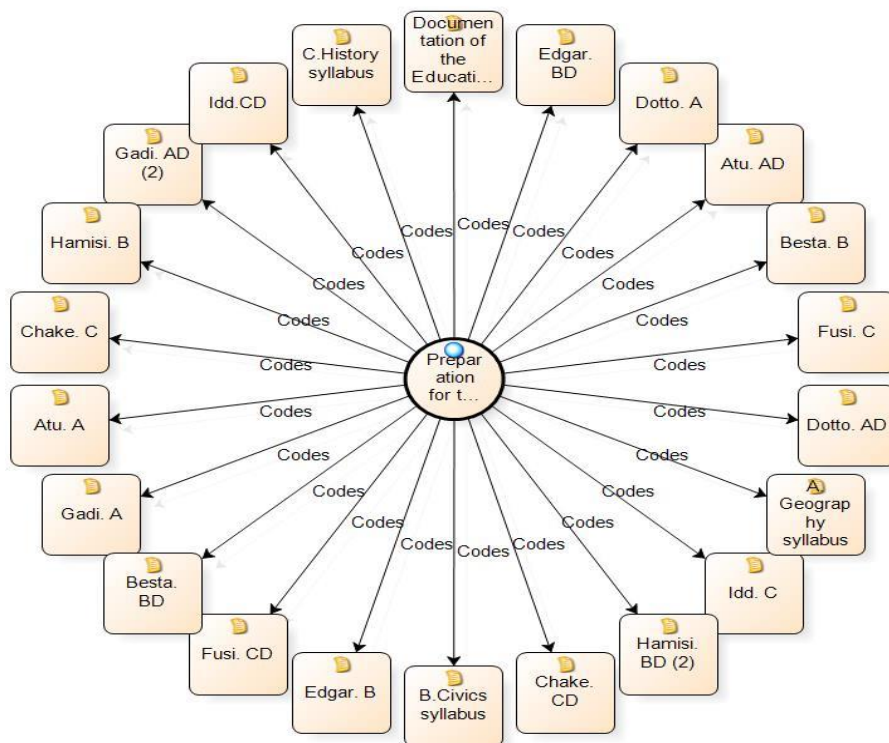
The third step, the categories were created based on the coded nodes. The task at this step was somehow simplified by the second step because the researcher had hard (paper) copies of the created codes in each node to read



and make sense of the ideas. After checking and rechecking of the codes as well as revisiting their sources of data, many nodes were reduced to child



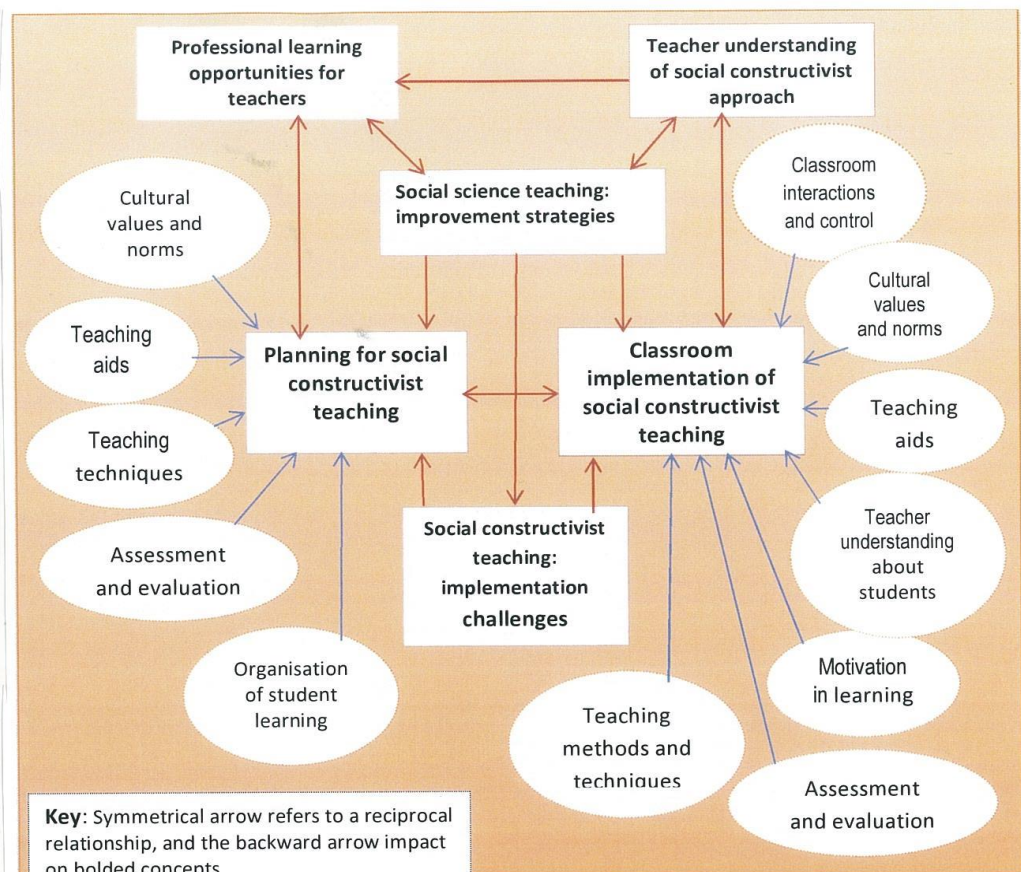
**Figure 3.2:** Source clustered by coding similarities



**Figure 3.3:** A representation of coding by sources.

nodes, some were removed, and some became parent nodes. Hence, the categories were created based on the names of the parent nodes and this gave researcher the opportunity to write details of each category before shifting to the next step.

In the fourth step, categories were revised whereas those presented close ideas either were combined or became subsets of the main topic (node). The information in each category was revised in conformity with the title of that node. The names of some nodes changed to reflect the ideas attached to each of them. At this step, the researcher began to see real picture of the direction of the findings. Figure 3.4 presents a mind-map established to describe the connections between the *categories* and used as a framework for understanding a range of findings addressing the research problem.



**Figure 3.4:** Mind mapping the categories and subcategories

Following detail in Figure 3.4, the researcher developed themes based on the categories. The categories were studied to identify those with redundant views

and to remain with only those presented critical ideas in addressing the research problem. A more critical approach was needed for the researcher to decide which categories were redundant and which were not. According to Lichtman (2010), this is a stage where the researcher was required to exercise critical thinking. None of the categories was removed in this process during this analysis, but a few subcategories were removed and few major categories combined or changed in title to form themes. Some contents in each category were modified to match with the title of the theme.

Finally, the themes were revised to see whether they reflected the meaning of attached to the original data sources (Lichtman, 2010). According to Creswell (1994), “meaning and interpretations are negotiated with human data sources because it is the subjects’ realities that the researcher attempts to reconstruct” (p. 162). Based on Creswell’s view, the researcher noted that the analysis, interpretations, and sense making of the categories were intended to show how the information gathered in the field revealed the meanings perceived by participants regarding the implementation of SCC.

By employing the critical pedagogy and social constructivist views, the researcher engaged himself in self-examination, self-questioning, self-challenging, self-criticising, and self-correcting during data analysis intended to achieve a better understanding of the realities concerning the implementation of SCC from the experiences and practices of the participants in their context (Huberman & Miles, 2002).

### **3.8 Trustworthiness**

According to Mertens (2005), enhancing the credibility of qualitative research requires attentiveness to credibility, transferability, dependability, confirmability and authenticity. The researcher ensured trustworthiness of research as discussed below.

#### **3.8.1 Credibility**

The qualitative case study employed the critical pedagogy and social constructivist lenses to determine the appropriateness of the interpretations of

the findings and their assessments (Flick, 2002). To enhance credibility, the researcher involved rigor in the collection, analysis, and interpretation of information through triangulation of methods and data sources (Patton, 2002). A variety of data collection methods were involved: document review, observation, semi-structured interviews, photographing, reflective journals, and recording of participants' voices as well as researcher made notes for consistence and richness of data. During data analysis, the researcher ensured the consistence of data from different sources was used to generate the codes and patterns as well as themes.

There was a prolonged period of data collection, about 5 months. In addition, the classroom observations for each participant were conducted for 3 sessions on different days to provide chance for the participants to prepare themselves for teaching and to vary the context of teaching and ensure rich data. The researcher transcribed the data collected from different sources (mentioned above) and provided the participants to check for validation.

The researcher conducted peer checking prior to the administration of research methods and instruments in the field in improving data collection process. Comments from research supervisors and fellow student teachers not only enabled the researcher to modify research methods and instruments to obtain the intended answers from participants but also to improve the research process more generally. Before the beginning of data collection, participants were introduced to the purpose of research project and their right to volunteer, consent, and withdraw as they saw fit.

A number of chances for 'member checks' involved the participants in the field to read and modify researcher's developed transcripts to make sense of communicative validation of information and interpretation (Flick, 2002). The researcher gave enough time to meet with each participant to read and reflect on transcript's ideas before they made the decision to modify the information. Whenever the participants faced issues that were not clear due to topographical errors or misunderstandings of concept meaning were discussed with the researcher for validation.

### **3.8.2 Transferability**

Huberman and Miles (2002) argue that transferability requires asking two key questions: Does the study acknowledge its scope and boundaries? Do the description of people, settings and events allow comparisons with other samples and in other contexts? The research process undertaken in this study was aligned to the main research question, which focused on the investigation of tutors' beliefs and practices in the implementation of SCC in Tanzania's teacher education programme. The research question provided focus on the selection of the research approach, design, and data analysis, relevant sample to the context of research. Mertens (2005) argues that the great concern of a reader about the transferability of research is on how to distinguish between "the study site and the receiving context" (p. 256). The researcher explained the context, the time, and the sites in which the research was conducted that might be useful for the reader to determine the opportunities for transferability of the findings.

The researcher designed the research cognisant with Huberman and Miles' (2002) argument that qualitative research is "transferable within the community, group or institution studied to persons, events, and settings that were not directly observed or interviewed" (p. 53). In this qualitative case study, nine tutors who educated certificate teachers for primary education were involved. The findings of this research are transferable within the teachers college context, the students and teachers who were not involved in the study. Moreover, the research findings are transferable by employing the same procedures to similar contexts, for example where teacher education colleges offering same programmes.

### **3.8.3 Dependability**

The research proposal was the basic guide to make sure each stage of the research process was implemented appropriately. The researcher acted consistently with the established protocols for collecting information from a wide coverage of settings in terms of times and participants to ensure saturation and consistence of information (Mertens, 2005). In the same vein, sample selection was oriented to participants "whose perspectives on the issue seemed to be

most instructive for analysis and which therefore were defined in advance” (Flick, 2002, p. 185). Moreover, allowing enough time for data collection and feedback to and from the participants enhanced the reliability of findings and the overall process of the study. Debriefing procedures during the preparation of research methods and instruments as well as at beginning of gathering the information from the participants were planned to ensure the reliability of data. Moreover, the period for data collection from nine participants in three different teacher education colleges was 5 months, a long enough period to ensure dependable findings. Further, the researcher’s reflexive analysis of research activities and overlapping data collection methods provided rich descriptions that were consistently responding to research question.

#### **3.8.4 Confirmability**

Huberman and Miles (2002) ask a question: “Are the study’s procedures described so explicitly that we can follow the sequence from initial question to conclusion?” (p. 272). The study was carried out cognisant to research procedures explained during proposal development and approved by Victoria University of Wellington’s committee of human ethics research.

The analysis involved special software for the organisation of data from different sources, which facilitated the presentation and interpretation of findings. The researcher’s coding and re-coding practice ensured the relevant information was generated from the different sources of data. Similar practice involved in the creation of patterns from the codes, and themes from patterns. However, the researcher acknowledges biases of using own words in some parts of findings, professional values, and cultural background that might have influenced the research process. To minimise the researcher’s influence over the findings, the data were presented in quotes, tables, graphs, photos, and figures. Each chapter and section of the research was linked to either the preceding or the next one to create logic and uniformity of research process.

#### **3.8.5 Authenticity**

Authenticity of research is assessed by considering the balance of the different value perceptions involved in data collection (Huberman & Miles, 2002). In this study, the researcher employed purposive sampling to obtain participants, case

design, and a tailored research approach to ensure authenticity. For example, a relevant and manageable number of participants from their natural setting allowed the researcher to have enough time to collect relevant and rich information from different sources. Information was obtained in an environment safe for expression (selected by negotiation between a participant and researcher) and the researcher was sensitive to ethical concerns for participants to construct knowledge. When the information reached saturation point, the researcher made a decision to continue with the next step of the research process.

Ontologically, participants benefited from immediate feedback and conversations conducted after each classroom observations. Further, the researcher's transcripts from observations and interviews provided insight to participants regarding their beliefs and practices in the implementation of social constructivist approach in teacher education. Participants who were stimulated by knowledge construction process recommended issues for improving their teaching practices (Mertens, 2005).

### **3.8.6 Reciprocity**

Following the social constructivist view, social interaction in meaning making is of great importance. Lincoln (1995, as cited in Mertens, 2005) argues that "the researcher need to demonstrate that a method of study was used that allowed the researcher to develop a sense of trust and mutuality with the participants in the study" (p. 259). The research method provided the participants opportunities for mutual interaction with the researcher in the context of knowledge construction. Participants interacted with the researcher in different events or settings. These included: (1) Debriefing meetings that allowed participants to decide to volunteer and consent to participate in the research or not. (2) The participants were observed teaching in the classrooms for three different periods and in the conversation immediate after the classroom observation. (3) Participants were involved in the interview session and in checking the transcripts. (4) Deciding with the researcher about the appropriate environment for their interviews, the appropriate ways for checking the transcripts, the appropriate ways to be observed teaching in classroom and to communicate

effectively in their own setting. These considerations admitted many relevant contexts, and allowed for mutual interaction between researcher and participants. Thus, the researcher developed a feeling of being one of the community members.

Therefore, trustworthiness, relevance of research design, rigor of data analysis, and interpretation procedures focused on research problem were considered in improving the quality of findings, conclusions, and recommendations of this study (Johnson & Christensen, 2008; McMillan, 2008).

### **3.9 Ethical considerations**

There is not a research free of ethical concerns as far as the humans have a stake in the knowledge construction process. Writing about the major ethical issues, Diener and Crandall (1978, as cited in Johnson & Christensen, 2012, p. 100) noted three areas of concerns for social science researchers: the “relationship between society and science, professional issues, and the treatment of research participants”. In their argument, they viewed that the dynamics of social issues and values motivate and direct what researchers need to study for the benefit of a society. They advance that the growing problems regarding the decay of research’s moral values (for example, plagiarism, lack of confidentiality for and consent from participants) calls for harmonising principles to guide researchers. Researchers need to abide with the ethical principles when conducting research that involve humans to avoid causing any physical and psychological effects. However, they report some circumstances in which informed consent cannot be applicable. These circumstances are:

- When the identity of the research participants will be completely anonymous and the study involves minimal risks.
- When it is not feasible to obtain informed consent due to cultural norms of the population being studied and when the study involves minimal risk.
- When signing the consent form to participate would subject the participant to possible legal, social, or economic risk (Johnson & Christensen, 2010, p. 110).



From these circumstances, the researcher was informed about the consideration of ethical issues from the proposal development stage of this study. Some of the identified ethical issues were related to interactions with participants and entrance procedures to the institutions, which were involved in this study.

Therefore, the researcher's adherence to ethical principles designed a qualitative case study with respect to the approval provided by the Human Research Ethics Sub-committee of the Faculty of Education of VUW (see Appendix I). The researcher obtained the permission from Tanzania's Ministry responsible for teacher education – following the submission of ethics approval letter from VUW – to introduce the researcher to the Regional Administrative Secretaries, then to the District Administrative Secretaries (see Appendix II). The District Administrative Secretaries endorsed a letter to introduce the researcher to the teacher education colleges in the districts. With the introductory letter from the District Administrative Secretary, the College Principals introduced the researcher to the respective Heads of Department arrangements to meet the participants was scheduled. Before embarking into the field, the researcher was specifically concerned with ethical issues related to voluntary informed consent, confidentiality and anonymity, beneficence, and data interpretations, (Berg, 2004; Johnson & Christensen, 2012; Lichtman, 2010; Mertens, 2005).

### **3.9.1 Voluntary informed consent**

Berg (2004) argues that “informed consent means knowing consent of individuals to participate as an exercise of their choice, free from any element of fraud, deceit, duress, or similar unfair inducement or manipulation” (p. 64). The researcher requested the permission of the participants for their involvement in the research. The participants were informed in two ways:

First, they participated in a debriefing meeting that familiarised the researcher to participants and explained the purpose of research as well as procedures to carry out research activities in the respective site. The debriefing meeting informed that their participation is a voluntary decision and that they can

volunteer through sending text messages to the researcher or visiting the researcher's office at the college campus – whose location was made known to the participants.

Second, participants who volunteered to participate in the study were provided with an information sheet to read and then consent their participation by signing the form. Information sheets and consent forms were supplied to the tutors who volunteered to participate in the study (see Appendix III & IV). In the same vein, student teachers (these were adult learners aged above 18 years old) from tutors' research class were also provided with information sheet to read and consent to participate or not in the study (see Appendix V & VI). The researcher translated information sheets and consent forms for students from English into Kiswahili language for easy understanding because the majority of student teachers spoke English as a second language (see Appendix VII). Student teachers were not competent enough in English language compared to their tutors to rely on English alone.

The researcher expected that some student teachers would not provide their cooperation in the research because of language issue, but in fact, all student teachers volunteered to participate. This is because the majority of these student teachers undertake a research course for a first time at the college and this was an opportunity for them to learn it through practice. The research was sensitive in data collection activities to remind participants about their right to withdraw or not during the research process to check their readiness to continue in the study.

Furthermore, the researcher asked for permission from tutors and student teachers to be observed, have their voices recorded, and have photos of teaching aids and classroom settings taken. Tutors were asked to consent to be recorded their voices during interview discussions. They were informed that all data would be securely kept, and destroyed 5 years after the completion of this study.

Thus, communication was maintained between the researcher and participants during data collection. Participants were free to communicate by using mobile phones and face-to-face conversation regarding the research issues. They were

also provided with email addresses and phone numbers of both principal researcher and supervisors to maintain communication during and after data collection concerning the research issues.

### **3.9.2 Confidentiality and anonymity**

Berg (2004) distinguished the concepts of confidentiality and anonymity when noting that confidentiality is “an active attempt to remove from the records any element that might indicate the subjects’ identities” and the anonymity simply “the subjects remain nameless” (p. 65). The researcher maintained confidentiality and anonymity by protecting the identities of participants and the teacher education colleges involved in the research. In explaining the importance of confidentiality, Johnson and Christensen (2012) argue that “maintaining the privacy of the data from the research participants is essential to the conduct of an ethical study because participants can be harmed when their privacy is invaded or when there is a violation of confidential information” (p. 122). To avoid this, the researcher employed pseudonyms that were easy to recall during data collection, analysis and interpretations of the findings. Moreover, the Nvivo 10 software was used to mask any information or unwanted information that was revealing the identity of a place in the photographs. Furthermore, the researcher asked the consent of participants during the conversations after classroom observations and using a particular photograph.

As noted, during data collection, the information collected was stored in the researcher’s laptop, upon which the files were locked with passwords known only by the researcher. The data in prints of transcripts and electronic form were securely locked and protected file with password not accessible to anyone, except the researcher. These data were stored in hard copies in the researcher’s office cabinet during data analysis and thesis writing for reference. All data will be securely destroyed five years after the completion of the study.

### **3.9.3 Beneficence**

Mertens (2005) reports the ethical principle of beneficence as an act of “maximising good outcomes for science, humanity, and the individual research participants and minimising or avoiding unnecessary risks, harm, or wrong” (p.

33). Protection of the participants against any risk, harm or inappropriate manipulation was a priority for the researcher in carrying out the research process. To avoid any form of misconduct with the participants and those who were not involved in research, the researcher maintained respect and code of conduct as a researcher regardless of close relationship or friendship developed during data collection and after in the fieldwork (Lichtman, 2010). The focus of the researcher was to achieve the goal of data collection at a low cost.

### **3.10 Chapter summary**

This chapter introduced the research question and discussed in detail the research approach and methodology, including its connection with the critical pedagogy and social constructivist lenses. These were followed by discussion of the rationale and procedures that the researcher considered in the selection of participants, and methods of gathering information for analysis. The trustworthiness regarding data collection was discussed next to the data analysis tools and procedures, as were issues of human research ethics. The next chapter presents the results.

## Chapter Four

### Results

#### 4.1 Introduction

The previous chapter discussed the methodology used to conduct the research presented in this thesis. As noted, the study was designed to investigate the influences and outcomes of the implementation of a new social constructivist curriculum (SCC) on tutors' beliefs and practices in a Tanzanian teacher education programme. Specifically the study addressed the following research questions in relation to tutors' PLD programme about social constructivist teaching:

- 1) What are tutors' understandings of the social constructivist approach in teaching?
- 2) What are tutors' beliefs about the role of social constructivist approaches in teaching?
- 3) Do tutors integrate social constructivist approaches in teaching? And if so, how this is achieved?
- 4) What are tutors' suggestions for the future teaching of social science?

The data were gathered through classroom observation, documentary analysis, and open semi-structured interviews. Additional data were gathered through photographs and researchers' notes. Lichtman's (2010) thematic analysis framework was employed to organise and present the findings.

In this chapter, the results are presented in two categories of contextual influences about the implementation of this new SCC in teaching in teacher education. These are the professional learning and development (PLD) experiences, and the contingent teaching challenges. Similarly, four categories of outcome factors concerning the implementation of SCC in teaching were identified. These were tutor understandings of social constructivist approaches (SCA), planning and preparation for teaching, SCA implementation in the classroom context, and the improvement and maintenance approaches in teaching. The results related to influences and outcomes are interrelated and complex. Figure 4.1 illustrates this complexity.

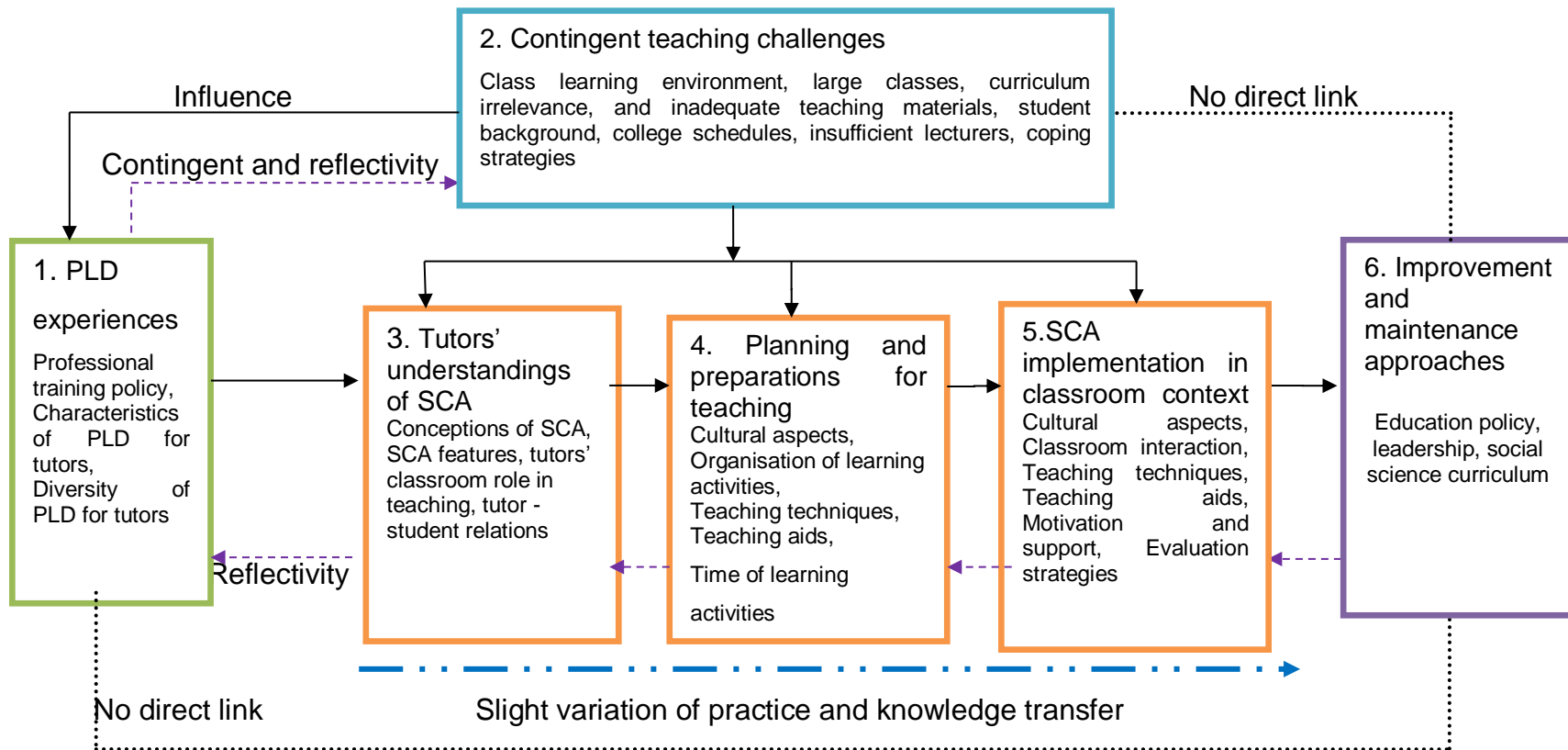
Figure 4.1 reports the results of six interrelated conceptual complexities between the contextual influences and outcome factors. These are:

I. Contextual influences

1. *PLD experiences* directly influenced the (3) tutors' understandings of SCA, (4) planning/preparation for teaching, and (5) SCA implementation in the classroom context.
2. *Contingent teaching challenges* indirectly influenced the (6) improvement and maintenance approaches through the (3) tutors' understandings of SCA, and the (4) planning/preparation for teaching as well as the (5) SCA implementation in the classroom context. In addition, the contingent teaching challenges directly influenced the (1) PLD experiences, (3) tutors' understandings of SCA, (4) planning and preparation for teaching, and (5) SCA implementation in the classroom context.

II. Outcome factors

3. *Tutors' understandings of SCA* was directly influenced by (1) PLD experiences and (2) contingent teaching challenges, and indirectly by (2) contingent teaching challenges via (1) PLD experiences. In this case, the results indicated that (3) tutors' understandings of SCA were reflected through (1) PLD experiences in responding to the influence of (2) contingent teaching challenges. In addition, the tutors' understandings of SCA were indicated by a slight variation of practice and knowledge transfer in (4) planning and preparation for teaching and the (5) SCA implementation in the classroom context.
4. *Planning and preparation* for teaching influenced (5) SCA implementation in the classroom context.
5. *SCA implementation in the classroom context* influenced the (6) improvement and maintenance approaches.
6. *Improvement and maintenance approaches* were indirectly influenced by the (1) PLD experiences through (3) tutors' understandings of



**Figure 4.1:** Revealing evidence of implementing the new SCC in Tanzania's teacher education programme

Key:   
 ← - - - - - Contingent and reflectivity factor   
 - - - - - No direct link   
 - . . . -> Knowledge transfer intensity   
 - - - - - Influence

SCA, (4) planning and preparation for teaching, and (5) SCA implementation in the classroom context. In addition, the improvement and maintenance approaches have a reflective practice (dependence) with the (5) SCA implementation in classroom, (4) planning and preparation for teaching, (3) tutors' understandings of SCA, and (1) PLD experiences and the (2) contingent teaching challenges. In this case, the improvement and maintenance approaches have no direct link to (2) contingent teaching challenges, and the (1) PLD experiences.

The two categories of results are described in parts II and I. Part I describes results related to contextual influences and part II presented outcome factors of the implementation of the new SCC.

## **PART I: CONTEXTUAL INFLUENCES**

Part I presents the results of the investigation into the influence of contextual influences on the implementation of SCA in teaching in relation to PLD experiences for tutors. The two major categories refer to types of PLD experiences for tutors, and contingent teaching challenges, which influenced the implementation of SCA in practice.

### **4.2 PLD experiences for tutors**

Results regarding tutors' PLD experiences were concentrated around three issues. These were the training policy issue, the quality of PLD programmes for tutors, and the diversity of tutors' PLD experiences. These results were important to understanding the amount of tutors' experience transferred to the job as a result of PLD on SCA.

Findings revealed that training courses on social constructivist teaching were implemented in respect to the current professional training policy statement. In this case, the education training policy influenced the training programmes including the diversity of PLD experiences for tutors. This experience was considered crucial for a relevant teacher PLD course.



#### **4.2.1 Professional training policy**

Data indicated that policy of PLD made it clear that tutor qualifications and teaching resources were needed to enhance transfer of training and implementation of social constructivist approaches. Many interview respondents reported that the directives of the teacher training policy influenced the tutors' PLD as the agency responsible for teacher training (Teacher Education Division of the Ministry of Education and Vocational Training - MoEVT) considered this policy. Tanzania Institute of Education (TIE) has responsibility for obtaining funding and managing PLD programmes. Moreover, the education policy statement identified the necessary entry qualifications for potential student teachers and tutors for each particular PLD programme. For example:

The minimum qualification for tutors at certificate and diploma level tutors' courses shall be the possession of a valid university degree, with the necessary relevant professional qualifications and specialization. (URT, 1995, p. 48)

This policy also indicated the PLD materials to be employed in the implementation of the training programme. Some of the learning materials included non-printed teaching aids, and printed materials such as books and pamphlets, which were also indicated in the syllabi. Internet services were included to support not only the teaching and learning activities but also management functions. The education policy made it clear that TIE was concerned with the coordination of the training programmes and the supply of teaching materials for teacher PLD. As noted, "TIE shall establish facilities and programmes for training and further professional development of tutors of teachers colleges" (URT, 1995, p. 48).

#### **4.2.2 Characteristics of PLD for tutors in teacher education colleges**

The characteristics of a training programme believed to a factor that influenced the ability of tutors to learn new approaches and enhance their effectiveness in social science teaching. Tutors' participation in training programmes appeared to influence their beliefs and practices when attempting to adopt new teaching

approaches. Interviews with some tutors and documents analysis proposed important characteristics for the development of PLD to maximise the transfer of training among tutors on the job. These characteristics are described below and they include:

- The link of a training experience from PLD to on-the-job setting.
- The relevance of trainers' entry qualifications to the training programme.
- To test the training programme in a small area before the actual training.
- To set enough supervision and time for learning.
- To design a manageable training programme.
- To ensure motivation for both the student teachers and tutors.

According to tutors, linking the training programme with job practices was considered important for a well-functioning PLD programme. As this was reflected in the education policy, "the curriculum at all levels of education and training shall emphasise and promote the merger of theory and practice and the general application of knowledge" (URT, 1995, p. 54). To consider this policy directive, tutors' applied the knowledge constructed in the training programme in the job environment. They argued that the overall training policy influenced their PLD experiences. Furthermore, they noted that PLD needed the integration of the newly emerging training needs that were relevant to the context at that particular time. As it was noted in the policy document: "tutors need to be regularly exposed to new methodologies and approaches to teaching consonant with the ever-changing environment" (p. 50).

Considering this matter, tutors' teaching in practice indicated the connection between the knowledge constructed in the classroom and real life experience. Tutors reported that they set a special time for the student teachers to practice the experience acquired in the classroom for short and long time bases to improve the quality of teaching. In this case, the tutors' practice was meant to validate the knowledge constructed in the classroom and to conform to the training policy statement on "the merger of theory and practice" (URT, 1995, p. 54) for a PLD course. One tutor explained:

We work as a team to achieve all these and thereafter we send them in the neighbour primary schools to practice teaching. Each student teacher

prepares a single lesson to teach in one period. ...This is just to prepare them to go to the BTP [Block Teaching Practice] in March.

The qualifications required for admission to the programme were considered to influence the implementation of PLD. Many respondents were concerned about the need for relevant admission qualifications for both tutors and student teachers prior to the starting of a training programme. Additionally, they reported that both tutors and student teachers should have strong education backgrounds to benefit from the PLD programme and to facilitate their employment opportunities. Thus, they argued that there was a need for having well trained tutors to improve professional training programmes.

Some of the respondents reported a need to pilot the training programme and the learning materials with a small sample of the population prior to the implementation of professional training programme. This was considered to be one of the approaches of enhancing some tutors' exposure to the PLD on SCA. The researcher worked with one of the tutors who had been involved in a pilot study on new teaching approaches when he was a primary school teacher before he was promoted to teach in the college as a tutor. This tutor explained his experience regarding participation in the pilot study. Supervisors in that study taught him the new teaching approaches and observed him teaching in the classroom. The tutor explained that when he was promoted to teach in teacher education colleges, he was trained to be a trainer of his fellow college tutors on the new teaching approaches. With his experience, he noted that the trial of a PLD programme helped to identify its potential problems and benefits. He commented that the PLD programmes for tutors were preceded by testing on a small scale on the job to check for quality and control procedures. As one tutor narrated:

Tutors from the college came to undertake a pilot study in primary schools about the new teaching approaches. I was among of the primary school teachers who were selected to participate in that training for three months.

He added:

We implemented the programme and we found the possibility of employing the new methods of teaching. I told my tutor that, 'it is possible to use these methods, but there are problems'. There were problems such as congested classroom and shortage of teaching materials. Some of the techniques could not apply because of large class size.

The majority of the respondents, as well as the documentary analysis, indicated that supervision and time allocated for learning influenced the PLD programme in practice. However, few tutors reported that the policy and the syllabi directed them to practice knowledge constructed in PLD before the actual generalisation to the job. Although, tutors were involved in PLD course for 3 months, some of them reported they had not completed the programme. This meant that the PLD programme had problems with supervision. One tutor noted:

There was training for tutors under TEP ...They told us that, we are just introducing you to one of the series of this training programme and that you will ... continue with this training for several times. Those who went before us spent three months... [in] the training. Until now, I have not seen the continuation of that training programme.

Another characteristic mentioned in the findings was the manageability of the PLD programme. The findings proposed that there was a need to recruit a manageable number of student teachers in consideration of the available teaching facilities and tutors. The teaching facilities included the classrooms, teaching aids, and books. Tutors reported having faced some difficulties with teaching large classes with insufficient resources such as desks, chairs, and books. They had difficulties in managing the classes, assessing learning activities, applying a variety of teaching techniques, and managing time. Because of this, they were proposing to be producing student teachers with superficial knowledge of the teaching career. As one tutor put it:

However, no books, no teaching materials, and the form of the classrooms are not favourable. If you enter the library to search for books ..., you find 2, 4 or 20 books for 250 student teachers to read. Our work becomes so difficult in this situation.

Motivation is one of the characteristics to consider in PLD implementation. For instance, findings showed that both tutors and student teachers were motivated by the implementation of PLD because it influenced their transfer of knowledge to real life experience. This is important for the transfer of training and social constructivist perspectives in promoting learning process. It was noted in this context that while the college administration motivated tutors to get better performances from student teachers, the tutors motivated student teachers to perform well in their subjects. Moreover, it was noted from tutors' practice that they employed motivation such as persuading, praising, encouraging, and awarding while the student teachers were reluctant and passive in the knowledge construction activities. As one tutor noted:

Student teachers are motivated to learn if they answer well the questions. I use the primary and secondary motivations: the primary motivation includes clapping hands, or you say '*pasha*' [A Swahili word that means 'to warm']. Secondary motivation offered by the head of department who give them the pencils, books, notebooks... money rose from the tutors' pocket, not the college treasurer.

He added:

Student teachers who are doing well in civics should also be motivated. ... So, we have to motivate the department of civics by awarding prizes, money, learning materials, books.

#### **4.2.3 Diversity of tutors' PLD experiences**

With regard to tutors' PLD, it was revealed that the majority of tutors attended a variety of context-based PLD experiences on social constructivist teaching that required the use of interactive and cooperative learning approaches. That means, the training provided a wider experience for tutors to practice new approaches by experiencing different learning environments and trainers that might have influenced their teaching habits. Apart from the training programme organised by the MoEVT, some tutors were engaged in other similar PLD programmes that were not directly intended to improve their teaching at work. Moreover, the findings suggest that tutors were involved in one or more PLD

courses that were in different forms, both formal and informal. Table 4.1 illustrates the identified PLD experiences.

**Table 4.1:** Types of PLD experiences

Type of PLD experience	Descriptions	Source of support (s)
Individual-based PLD	This was a form of tutor learning organised informally based on personal PLD initiatives for a particular knowledge and skills via reading books, journals, pamphlets, and manuals. The tutor could search for materials on the internet and consult professional subject experts.	Individual initiatives
Departmental-based PLD	This was PLD organised in either formal or informal contexts to share knowledge and skills about any pressing matter. Sharing of knowledge involved working in a team to address an issue, sharing knowledge with a colleague in the department through 'open-talks.'	Individual and Departmental initiatives
Work place - based PLD	Learning organised at the work-place and supported by the Ministry of Education directives to learn needed knowledge and skills. The PLD involved seminars, conferences, and workshops within the college.	Government, UNICEF, SIDA, UNESCO, World Bank and GESCI
Community -based PLD	This was a learning approach aimed to train tutors to be able to carry out a particular programme in the community. However, the training yielded significant knowledge and skills for tutors' social constructivist teaching. They were organised based on educational seminars, and workshops at a zone, or nation-wide level.	UNESCO, UNICEF, World Bank in collaboration with the Government via MoEVT
Practice-based PLD	This was a type of training that involved qualified professional tutors learning knowledge and skills by participating in the trial of an educational project on a new teaching approach. The aim was to test the validity and reliability of a certain learning programme before implementing it to a larger population. Similarly, tutors not only supervised student teachers' practice of teaching (during fieldwork) but also they acquired some knowledge.	Government collaboration with SIDA
Initial teacher PLD	This was a training programme based on the common formal education system of novice tutor learning. The individual person registered in any recognised university to pursue a teacher education degree or diploma.	Individual person and Government support

The diversity of PLD experiences seemed to have equipped the ability of many tutors to develop different understandings about social constructivist teaching that influenced social science teaching. Table 4.2 illustrates the PLD experiences, the number of tutors, and the specific training courses attended. The details of these PLD experiences are presented in the next sections after this table.

**Table 4.2:** Tutor’s involvement in PLD experiences

<b>PLD experience</b>	<b>Type</b>	<b>Course name (programme)</b>	<b>Tutors’ name</b>	<b>Total</b>
<b>Individual-based PLD</b>	Informal	Based on individual choice	Fusi, Atu	2
<b>Departmental-based PLD</b>	Informal	Based on individual choice	Atu, Iddi	2
	Formal	Shared by individuals	Chake, Edgar, Fusi	3
<b>Work place-based PLD</b>	Formal	Teacher Educators Programme: Trainer of trainees	Atu, Doto, Chake, Gadi,	4
		Teacher Educators Programme: Tutor initiatives course	Atu, Besta, Chake, Dotto, Fusi, Gadi, Edgar	7
	Formal	Technology integration in education	Hamisi	1
<b>Community-based PLD</b>	Formal	Complimentary Basic Education in Tanzania, In-service Teacher Training for Primary Education	Atu, Besta, Chake, Gadi	4
<b>Practice-based PLD</b>	Formal	The trial phase of new curriculum in primary schools	Gadi	1
<b>Initial teacher PLD</b>	Formal	University degree in teacher education	Atu, Chake, Fusi, Hamisi, Iddi	5

#### **4.2.3.1 Individual-based PLD**

Tutors were involved in PLD experiences based on individual learning initiatives – an approach that embraces social constructivist beliefs in which individuals use their own experiences and co-construct the knowledge in a social setting for validation. Based on the interview information, two tutors were engaged in individual-based PLD experience. The tutors were engaged in reading books, journals, pamphlets, and manuals as well as searching for the materials from the internet and consulting professional subject experts. As one tutor stated, “I read some of the ‘modules’ [pamphlets] we used to train primary school tutors new teaching approaches. I use them to teach my student teachers at the college”. Tutors who learnt through this approach explained that their decision to learn was informed by many challenges related to the new teaching approaches and limited opportunities for a formal PLD at work. One tutor argued:

Another thing is to improve teaching ... maybe [there are needs] to have in-service training. Some tutors are old [stayed long in the service], they learned old topics, they learned before the change of curriculum. Those who did not learn the new approaches should attend in-service training to be equal with their colleagues who learned the new approaches.

This PLD experience embraces the social constructivist pedagogy in that it suggests individual tutors to engage in critical reflection of their background experience to create awareness of the context of work and improve the job practice. These findings suggest that tutors chose this PLD experience by considering their background in solving the present situation on the job.

#### **4.2.3.2 Departmental-based PLD**

Results indicated that two tutors were engaged in peer learning and collaborative approaches organised formally and informally to learn social constructivist approaches for transfer into the job. Tutors employed informal learning procedures in the department through sharing some pressing issues with adoption of new teaching techniques in teaching, use of teaching materials,



and construction of knowledge with student teachers. As one tutor said: “I learn from my fellow staff members and sometimes we can sit together to discuss and obtain new ideas”. In the same way, they were able to collaborate as a team to discuss an issue with colleagues in the department or in ‘open-air-talks’ (free conversation between members from within or outside the department). Tutors noted that when issues were not solved in the informal conversations they organised a formal discussion that might involve even participants from other subjects’ department for a deep debate about the problem. As one tutor put it: “You may announce for a conference ... in the college to attend it. Perhaps, you distribute the topic to your colleagues to share with tutors from other subjects”.

In the formal departmental learning, tutors had some opportunities to learn with student teachers on issues concerning the subject. Tutors and student teachers organised subject clubs that provided them the opportunities to collaborate to plan issues to learn in the subject. Subject clubs were made known to the general teaching and learning schedules in the college. One tutor elaborated, “There are subjects clubs in which the student teachers discuss different topics. In case of a problem facing student teachers, I go with some staff members of geography department to support them”.

Tutors reported that student teachers searched for topics for discussion and planned how to learn those topics with tutors. Thus, both formal and informal departmental type of PLD utilised a range of resources (paper, chalk, pen, and books) obtained from the individual or departmental initiatives.

The PLD approach embraces the SCA by involving the individuals in the knowledge construction process situated in a social setting. SCA propose that individual constructed knowledge gain meaning when that individual is engaged in collaborative learning communities to examine the phenomena in their context.

#### **4.2.3.3 Work place-based PLD**

In another context, it was found that 12 tutors were trained via different workplace-based PLD opportunities (on training of trainers, technology integration in education and training for newly employed tutors). These

opportunities were organised at the college with support from the Ministry of Education in collaboration with international aid agencies (such as UNICEF, UNESCO, Sida, World Bank and the Global e-Schools and Communities Initiative or GESCI) to enable them to implement the SCA.

Many tutors reported that PLD was organised and supported by the college administration at the work place. The focus of the training programme was either to comply with the directives of national wide PLD programmes for the adoption of a particular innovation or evolving learning needs within the context of teaching. The nation-wide PLD programmes organised in the form of educational seminars, and workshops based at the district, regional or a zone level. The Government initiated the Teacher Educators Programme through which different courses were conducted: trainers of tutors' course, training on technology integration in teacher education, and the Teacher Initiative Programme on competence-based curricula.

Through the trainers of tutors' course, four tutors were trained on new teaching approaches so that they were able to train their colleagues in their respective colleges. The training of tutor trainers' course involved tutors from different Government-owned teacher education colleges. It was noted that about eight (8) tutors believed they had benefited from this PLD experience – the four (4) who were trained as tutors to train their colleagues and four (4) who they then trained at their respective colleges. During interviews some tutors acknowledged to being trained in the new teaching approaches by fellow tutors who had attended the course. One tutor said, "I knew that through a seminar on paradigm shift [competence-based teaching] conducted by our fellow staff who attended a training of trainers' course organised by the Ministry [of Education]".

Another PLD programme for tutors involved the integration of technology and education with regard to the new teaching paradigm. The Open University of Tanzania and The African Virtue University facilitated this training programme. One tutor attended this training. The tutor reported:

It [the programme] was conducted at Kleruu teachers college by OUT [the Open University of Tanzania] and the African Virtue University. The main matter of the training was about integration of ICT in Education – that was

the key issue. We were facilitated on [use of the] teaching methods so that we can deliver this competency in teacher training colleges.

In addition, the MoEVT initiated the Teacher Educators' Initiative programme to training new tutors to be able to teach the new SCC. This programme was spread in different areas of the country to train new tutors in all teacher education colleges. One tutor asserted:

We were just beginning the job. We were taught some techniques of teaching such as jigsaw puzzle, and gallery walk; people are given some works to do and later they post on ... and others can pass through to observe those group works.

The findings suggest the PLD experience considers social constructivist belief that knowledge construction is a social process grounded in the participants' cultural contexts. The PLD is an example of a situated/anchored learning approach that is organised within the social cultural environments of the teacher training colleges that is familiar to the tutors. The tutors utilised the teacher training college contexts to understand the new teaching approaches and their applicability in practice which provided more opportunities of knowledge construction (deep learning).

#### ***4.2.3.4 Community-based PLD***

Findings revealed that four tutors were engaged in formal community-based PLD practices in nearby schools that enabled them to learn and adopt SCA in teaching. One example of these community-based educational programmes was the In-service Teacher Training for Primary Education (ITT-PST) intended to educate primary school teachers on the new teaching approaches. Another was a training programme based on the Complementary Basic Education in Tanzania (CoBET) organised by the Institute of Adult Education (An agency of the Ministry of Education). The tutors in these programmes were trained to teach teachers from primary and secondary schools to use the new teaching approaches to teach adult pupils who had not benefitted from the formal primary and secondary education system. One tutor asserted:

We got training so that we train the primary school teachers how to use participatory teaching techniques. In this training, we also got a training concerning the issues of 'paradigm shift' on competence - based teaching. In that training, we got knowledge about the higher levels of student participation in learning.

Another tutor added:

I was trained to be a trainer via an adult education programme, which was planned by UNICEF to train secondary school teachers to be able to open classes for the dropouts of secondary education. We were trained many teaching techniques to train teachers to be able to teach secondary education to those adult learners. This programme for adult learners has its own curricula.

With regard the above quotations, it was noted that the Tanzania's Government in collaboration with international institutions (such as Sida, UNICEF, and UNESCO) supported the implementation of community-based education programmes. One tutor noted that the community education programmes aimed at achieving Tanzania's 2025 development vision and global millennium development goals (MDGs). These educational programmes not only involved tutors implementing the programmes but tutors were also guided and learnt new teaching approaches. Respondents reported that a number of training programmes were organised in the form of educational seminars, workshops, and symposiums and were held in selected regions or zones in the country.

The findings reveal a PLD experience that allows the learner to learn the reality by understanding the situations that challenge the community and devise ways of bringing a social reform – a key idea of social constructivist teaching.

#### ***4.2.3.5 Practice-based PLD***

One tutor was identified as having developed knowledge and skills on social constructivist approaches when he was involved in a practice-based PLD experience that might have influenced his teaching practices in teacher education colleges. Practice-based learning was a type of training that involved primary school teachers in a project trial on SCA. For the first time primary

school teachers from different sampled schools employed the new knowledge and skills and were observed by tutors in the classroom. The researcher worked with one of the tutors involved in a pilot study on new teaching approaches in primary schools before he was promoted to teach in the college as a tutor. When the new curricula were introduced at the national level, the same tutor was selected to attend the “Training for Trainers Course” designed for tutors to be able to train fellow tutors at the college level. The project was organised by the MoEVT and utilised tutors in teacher education colleges to participate in the trial of new teaching approach in primary schools. In this situation, not only did the promoted tutors learn the new teaching approaches but also trainers who supervised the project gained experience in how best to teach the new SCC in teacher education colleges. As one tutor responded:

I was teaching in a primary school before I was promoted to teach in the [teacher education] college. Tutors [project supervisors] came in primary schools to undertake a pilot study about new teaching approaches. I was among of the primary school teachers selected to participate in the training programme for 3 months.

To a certain extent, this tutor obtained double advantages of the training programme, as he benefited from it during the trial stage as a primary school tutor and later as a college tutor when the same project was introduced in the colleges. The researcher noted a significant difference between this tutor and other tutors at the college in the degree of understanding and implementation of the SCC. The tutor demonstrated high understanding in lesson preparation and in social science teaching. The tutor reported:

We implemented the programme and I noted the possibility of employing the new teaching methods. I told my tutor [project supervisor] that, “it is possible to use these methods, but there are problems”. There were problems such as congested classroom and shortage of teaching materials. Some of the techniques could not apply because of large class size.

This PLD experience suggests the belief of SCA that learners or tutors need to engage in deep learning organised within the real contexts of their job to experience the situation for a considerable period of time. In this situation, the

tutor is expected to participate in the learning process as a researcher or a participant in the research process.

#### **4.2.3.6 Initial teacher PLD**

It was evidenced from the interviews with five tutors that they learned new teaching approaches via the initial teacher PLD programme from various universities in the country and this situation might have influenced their teaching practices. One tutor argued: “I learned via different educational courses when I was in the university. For example, I learned this knowledge through courses in the pedagogy of teacher education and the curriculum and teaching”.

The initial teacher learning was a formal type of PLD based on a formal education system in which a novice tutor was registered in a recognised institution of teacher education to pursue a degree programme for the qualification. The education policy required a degree qualification for all tutors to teach in teacher education colleges. Although, five tutors mentioned having attained a university degree in teacher education, the nine tutors who volunteered in this research met the qualification. One tutor indicated having not attained any other training apart from the university education. Responding to the researcher’s question about how tutors knew the new teaching approaches, the conversations were:

*Interviewer:* How did you learn a social constructivist approach?

*Informant:* I learned it from the university!

*Interviewer:* Did you attend any other training programme to learn the new approach to teaching?

*Informant:* Training programme other than university education...? No I didn't.

The initial teacher PLD exposes tutors and student teachers to the principles of teaching, the subject content and professional knowledge and skills. The PLD enabled the tutor to obtain a variety of experience applicable to different teaching contexts. Tutors acquired the theories of learning, including SCA through the initial teacher PLD which needed additional training on the job and in the context of curriculum reform to improve their teaching practice.

To sum up, the main objective in this aspect was to explore tutors' exposure to PLD experiences on social constructivist teaching and the strategies these tutors employed to learn the SCA. The results indicated that the educational policy influenced the design of PLD experiences for tutors. In this case, the training policies provided directives on the training needs and resources, and the approaches of introducing, managing and implementing the training programmes. Results show that the majority of types of PLD experiences — such as training based on individual, departmental, workplace, community, and field practice as well as initial teacher PLD — gained support from the MoEVT, which collaborated with international agencies. These PLD experiences not only suggested an increase in tutors' exposure to the social constructivist teaching, but also invariably influenced their ways of implementing the new approach in the job. Tutors seemed to have been involved in these PLD experiences and for the most part, they learned knowledge and skills of SCC. In addition, tutors appeared to have limited knowledge and skills in social constructivist teaching in relation to the influence of PLD experiences each one attended and the education policy directives, which influenced their knowledge transfer in practice.

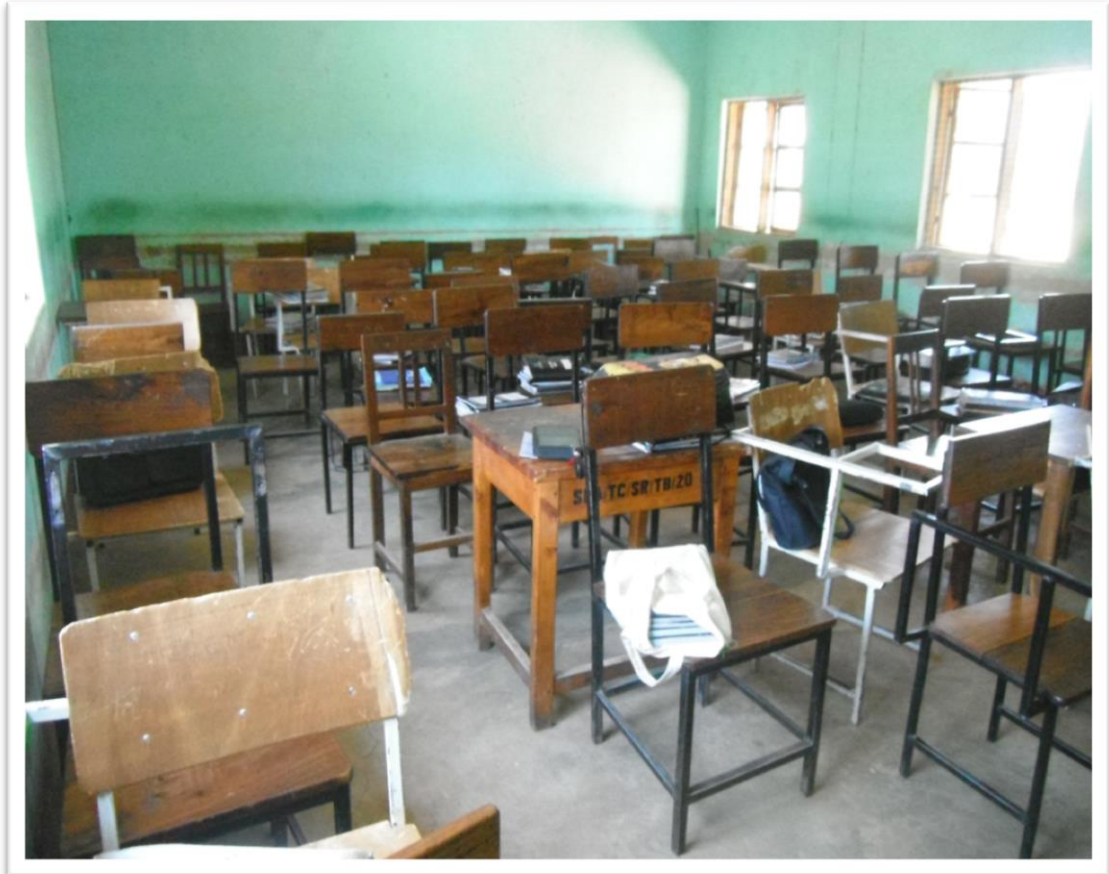
### **4.3 The contingent teaching challenges**

The results revealed that tutors' implementation of social constructivist curriculum was influenced by the contingent teaching challenges. These challenges were related to the physical condition of the classroom learning environment, teaching in large classes, irrelevant curriculum and inadequate teaching materials, student teachers' previous education, and insufficient tutors as well as the tutors' strategies to cope with those challenges in teaching. Tutors' responses in interviews and classroom observations identified the challenges in the transfer of training in the job.

#### **4.3.1 The classroom physical conditions of learning**

Classroom physical conditions and the seating arrangements were found to deter tutors' implementation of social constructivist approaches in teaching and learning practices. Interviews and classroom observations indicated that the

situation of classrooms in the colleges was similar – they were the same but different sizes. Many classrooms were observed to be overcrowded by desks and chairs, while in some classrooms there were shortages of such equipment (See Photo 4.1).



**Photo 4.1:** Classroom layout used by 78 student teachers

Photo 4.1 shows a classroom that lacked desks and created difficult teaching situation. Additionally, findings indicated that the rows and columns were the dominant style of seating arrangements in all classrooms. This seating style required the student teachers to sit and face the tutor in front of the classroom. Such structure posed some problems in knowledge construction activities because the student teachers always faced the front of the classroom. Some tutors argued that student teachers in this style did not have the opportunity to share ideas with someone behind the row.

One of the classes was conducted in a big hall (in the college dining or conference hall) that accommodated between 100 and 170 student teachers



(See Photo 4.2). In this situation, student teachers were observed to struggle to hear their tutors and fellow student teachers because the hall did not have sound support system. Hence, the situation seemed to influence tutors' beliefs and practices in implementing the new teaching approaches.



**Photo 4.2:** A hall used in teaching 165 student teachers

#### **4.3.2 Teaching in large classes**

The researcher discovered that larger class size and overcrowded classrooms brought challenges: supply of clean air, opportunity to use some of the teaching approaches, using teaching aids, and conducting evaluations of student learning. These challenges influenced tutors' implementation of new teaching approaches.

Findings indicated that the usual class sizes were between 68 and 80 student teachers, but some went beyond 100, and as described above, one class held in the dining hall had 165 student teachers. Tutors also struggled to apply suitable teaching techniques in these halls. For example, one of the observed tutors teaching in a hall used group discussions and presentation techniques; the size of groups was between eight (8) and 14 student teachers surrounding a big table. Some of the student teachers did not get a place to sit where they were able to view the group leader; instead, they stood aside and did not fully participate in the discussion. In such large classes, it was not only difficult for tutors to teach, but also to conduct evaluations of student learning because tutors could not manage the task. One tutor argued: “The situation makes us face difficulties to manage classes and to give assignments to student teachers. ... not so often, the group assignments are provided to student teachers”. Large class sizes made it difficult to use some collaborative learning approaches — such as gallery walk, project work, group discussions, questions and answers, jigsaw and excursions — which were interactive. Nevertheless, tutors reported that they were urged to employ collaborative learning approaches enhanced with teaching materials to facilitate student teachers’ construction of knowledge. Furthermore, many tutors reported a shortage of teaching materials, which influenced their efforts to support the large number of student teachers in knowledge construction. One tutor said: “We don’t have the teaching and learning materials. The classes are big; we can’t apply different methods ... for example, jigsaw, but the classroom environment is not conducive”.

#### **4.3.3 Curriculum discrepancies and inadequate teaching materials**

Evidence indicated that the curricula discrepancies and inadequate teaching materials such as the syllabi, books, and materials written in Swahili influenced tutor’s implementation of social constructivist approaches (See Figure 4.5 & Table 4.7). Based on the directives from the MoEVT, teacher education colleges obtained curricula materials such as the syllabi, books, and internet facilities. The Tanzania Institute of Education represented the MoEVT in the preparation and supply of curricula materials in teacher training institutions. It was noted that social science was taught in three separate areas — geography, history, and civics — before the introduction of the new teaching approaches.

While geography and history were transformed into a single discipline, social studies, civics continued to be taught as an independent discipline with its own syllabus. In this case, the amalgamation of geography and history syllabus created imbalances of content knowledge between the two subjects, as there was more history content than geography. Hence, there was a problem which affected tutors in teaching the integrated social science curriculum in that the time allocated for teaching was not equivalent to the number of topics in the syllabus. Thus, the formation of the new social science curriculum was just the accumulation of the old curriculum contents that reflected the teacher-centred teaching approaches. One tutor noted:

The syllabus has combined history and geography topics. They have integrated the two subjects to form social studies subject. It becomes so difficult to teach them. It is difficult in sense that there are so many history topics in this syllabus. ...They have integrated the subjects but in teaching, the topics of geography and that of history appear separate.

In addition, while some syllabi missed some content/topics, in other syllabi the topics were too detailed, and took much of the time that could have been used for teaching other topics. One tutor argued:

Some of the topics are too detailed. For example, the topic of “the state” has so many subtopics... I think some of these topics were supposed to be written in brief. ... Because the way it (syllabus) is now, it confuses the student teachers.

Moreover, with exception of the syllabi, many of the curricular (teaching) materials were in English language. Materials written in English language made it difficult for some tutors and student teachers to comprehend the content of the subject and its application in practice. This situation not only seemed to complicate tutors' lesson planning and preparation of social constructivist teaching, but also the construction of knowledge by the student teachers.

Further, tutors surveyed the teaching materials from the internet and most of them were in English language. It appears that tutors translated those materials into Swahili language to compose lesson notes and to teach their subjects to

student teachers. In this situation, tutors experienced problems of translating teaching materials. One tutor said:

We do not have books that are in Swahili. You are forced to read various books from different sources and yet they are written in English language. You need to translate them ..., Therefore, you find that the meaning of the translated information is different from the original ones.

In addition, findings indicated that the unreliability of internet services in teacher education colleges increased the shortage of online teaching materials. Internet services relied on the supply of power to run the computers in teacher education colleges. Power interruptions made it difficult to obtain internet services and reliable teaching and learning materials. In this case, solar and hydroelectric were the major sources of energy to teacher education colleges. With this situation, some courses that depended solely on the use of internet services were made optional for the student teachers. For example, the Information and Communication Technology (ICT course), which used to be compulsory for all student teachers became optional because of unreliable internet services. One tutor elaborated:

The ICT lab was designed for the student teachers to learn ICT subject. The subject is now optional for the student teachers because of the existing problems. The use of ICT is important for student teachers to learn because some schools have ICT facilities. ... if they graduate from the college without ICT learning, they will have difficult teaching situation in schools.

What is more, many tutors expressed their concern regarding the quality of teaching materials supplied by the TIE. They argued that the teaching materials were of low quality due to limited content details and misleading facts or information. In this context, TIE — a MoEVT responsible department for the preparation of curricula materials — supplied those teaching materials to teacher education colleges. TIE was charged with preparing and supplying high quality teaching aids, books and pamphlets to support teacher training in the colleges. However, some of the pamphlets (known as “modules”) and books from TIE had misleading information that raised problems in classroom teaching. The TIE seemed to hire low quality professionals to develop teaching manuals and

pamphlets. One tutor hypothesised that, “they [TIE] have taken people somewhere to compose those modules, to them [this] is like a project because they sell them [teaching modules]”. Further to this, not only did the content of the pamphlets not reflect the syllabi but the books were insufficient to teach social sciences. As the tutor argues, “You know these syllabi are the new. You find that, the books that are supporting [the topics in] the syllabi are not available”. Moreover, added to the shortage of teaching materials, some of the content lacked clarity. As one tutor put it:

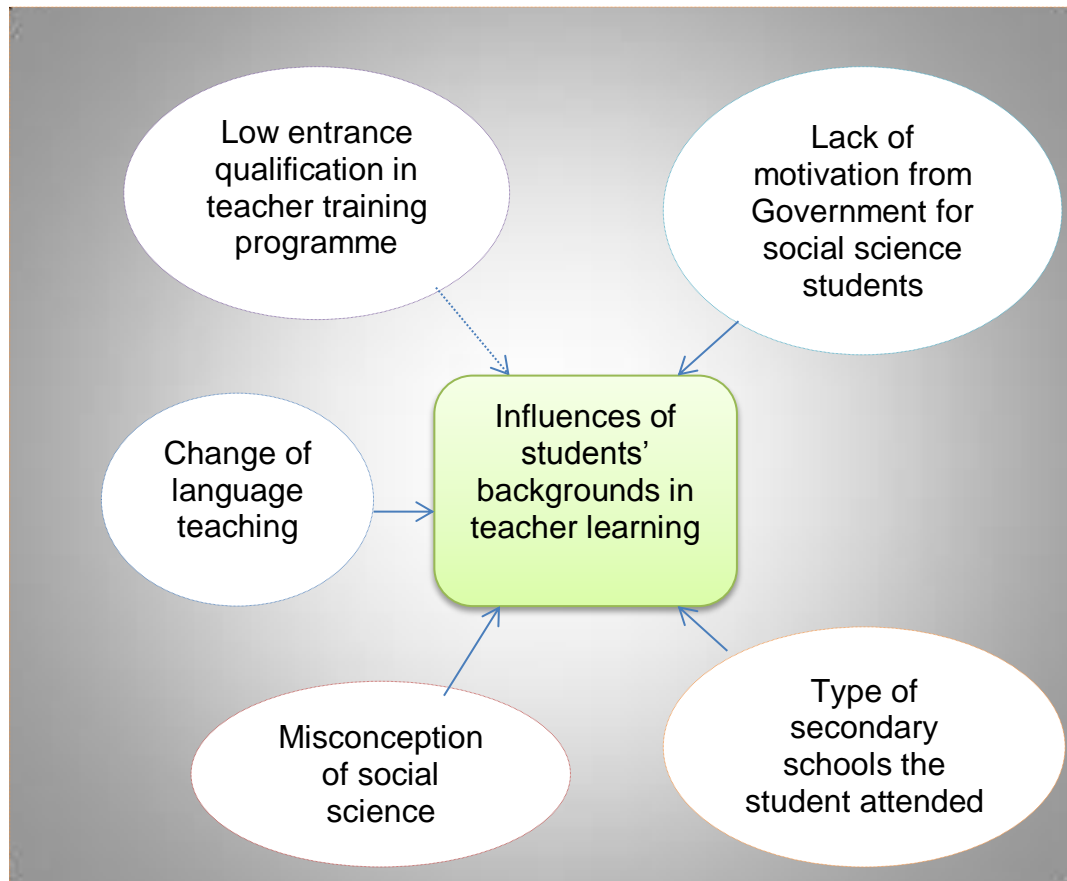
I lacked facts because the modules that were prepared by TIE have so much incorrect information, misleading facts. The modules are shallow; the issues are not written in detail. ... I requested for civics books from the college administration, I received few books and yet they have shallow knowledge to teach.

#### **4.3.4 The influence of student teachers’ previous education in learning**

Many tutors indicated in interviews that the student teachers’ previous education in primary and secondary schools influenced the implementation of new approaches in social science teaching practices. In addition, the qualification required for admission to teacher learning courses, and the student teachers’ misconceptions regarding the subject matter of social sciences influenced existing social constructivist teaching. Figure 4.2 presents the detail.

With regard to the influence of previous education, the student teachers had problems in transferring their experience because of the language they used in learning. For instance, student teachers learned secondary education in English language and when they came to the college, they changed to Kiswahili. Many tutors argued that student teachers could not express themselves clearly in Kiswahili about the concepts that were acquired in English. One tutor said:

If the student teachers learn in English at the college, they will face problem to teach in Kiswahili in those schools. Student teachers will tend to use English words during teaching because they do not understand that concept in Kiswahili words. However, these student teachers will know few concepts of geography in Kiswahili language.



**Figure 4.2:** The influence of student teachers' background in knowledge transfer

That meant student teachers had difficulty in recalling concepts (in English) acquired in secondary school subjects to understand issues in teacher learning activities (in Kiswahili). In this case, the changes in the language of classroom teaching affected student teachers in the construction of knowledge. One tutor noted:

Although student teachers have been developing knowledge of subject from primary education, secondary education, and to the present teacher training ... they do not show that they possess knowledge of history subject ... Therefore, there should be strong foundations in the primary and secondary education to give them knowledge to apply in future learning.

Another issue the respondents raised related to the influence resulting from attending either a day school or boarding one. A few tutors argued that student teachers whose background was a day school system were considered to have less exposure to social or community life. Limited exposure to social life was

considered to influence teaching and learning at the college where they live in boarding situation. Tutors argued that student teachers from secondary boarding schools mixed with people from different cultural backgrounds, and therefore, were more socially exposed to community life and had high learning ability. One tutor argued:

Most of the student teachers come from day schools and some from boarding schools. The boarding scholars participate well during learning. Day scholars had less time to interact in schools because after school hours they go home and participate in family chores. Therefore, they have problems fitting in here.

Some tutors were concerned with entrance qualifications of student teachers into the teacher-learning programme. They argued that the student teachers were admitted with low grades, or were weak performers in secondary education, and should not have qualified for admission. In social constructivist teaching, the situation was suggesting that the student teachers had limited background experience that is important in the understanding the current problem. In addition, these tutors noted that the practice was a violation of the teacher training policy, which states that, "the minimum admission requirement for teacher education certificate course shall be division III of the certificate of secondary education examination" (URT, 1995, p. 48). In this regard, one tutor advanced the idea that:

The Ministry [of Education and Vocational Training] sent us student teachers who did not do well in secondary (education) schools. These are failures, which got division IV: points 27, 28 and so on...! If the Ministry [MoEVT] could recruit student teachers, let say, of division III and II, I. I'm sure we could produce the best teachers.

Another tutor who seemed to be not happy with the ways the education policy was implemented added that:

I told you the other day that, student teachers who are enrolled to our college, their level of learning is not good. The policy of the Government needs only the minimum pass to be enrolled is division III, 25 points but they are working beyond the policy. They are bringing student teachers with division IV, 27+ points. Most of them, if you take 100 people, 90% are in

division IV. The time when you are teaching, you need to involve them by participatory methods. When it comes to the exams, they do fail!

From the quotations, it was noted from many tutors that student teachers needed more help in aspects of content knowledge, pedagogical knowledge, and advice in learning practices.

Furthermore, many tutors reported that student teachers had misconceptions about learning social science subjects that influenced their construction of knowledge in the classroom. Some tutors reported that student teachers spent more time on pedagogical courses than on the content of social science, which was believed to be easier to pass in exams. They highlighted that many student teachers and the community at large had limited knowledge of the subject matter of social science teaching and that they needed education. One tutor commented:

Many people do not understand the history subject; they associate the history subject with storytelling. They cannot make a difference between history and storytelling. History tells us about events and these events are about truths. Storytelling is about cooked, fabricated information. It is about fiction.

Another tutor added:

The student teachers don't put more effort to study history because nobody fails in the national examination. This situation is quite different in other subjects such as pedagogical courses because if student teachers fail them they will not become teachers and automatically loses the job opportunity.

In addition, one tutor noted that the lack of motivation for student teachers who perform well in social science subjects appeared to develop misconceptions among them that influenced the learning of the subjects. One tutor asserted:

We see student teachers who pass in science subjects and according to the national regulations, they are motivated but those who perform well in civics are not motivated. Civics is the first [mother] subject in our country. It is hanging like unknown subject or unimportant subject!



Therefore the experience of student teachers was constrained by the present learning process and this appeared to influence negatively the implementation of SCA in practice.

#### **4.3.5 College administration events and norms**

Data revealed that college administration events and norms influenced student teachers and tutors in the implementation of social constructivist approaches in different ways in practice. Such practices involved ad-hoc events and timetables that led to the postponement of classes and delays in completion of the syllabi, and inadequate opportunities for in-job training courses for tutors. They argued that these practices were leading to superficial training of student teachers at the college.

In most situations, tutors and student teachers were engaged in college events that required cancellation of classroom teaching and learning activities. For example, the college engaged the student teachers in extracurricular activities such as gardening, livestock keeping, crop cultivation, and cleaning the surroundings. The researcher observed that student teachers were engaged in harvesting college farm crops under the tutors' supervision. On that particular day, the researcher's plans for data collection were postponed because tutors did not enter classes for teaching; they were needed to supervise student teachers in extracurricular activities.

There were events that involved the reception of political and Government visitors for which the tutors and student teachers were assigned to different responsibilities. Tutors noted that sometimes the visitors could not provide prior notice of the visit. Hence, tutors and student teachers were invited to attend an *ad-hoc* college meeting that involved tutors and student teachers, or tutors or student teachers only. College meetings were organised by the leaders either to provide directives from the top Government leaders or to discuss an agenda about certain practices for both the student teachers and tutors in the college. Tutors reported that they were hired for several events such as marking the mock and national examinations, supervising national censuses, and other nation-wide campaigns. In addition, tutors reported that sometimes they were

needed to attend seminars and that this caused student teachers to stay idle waiting for the return of the tutor to the college. Some tutors explained that sometimes they assigned group tasks for student teachers to work on during their absence. Therefore, these findings proposed that tutors were involved in a chain of events and tasks that consumed teaching time. When they returned to the class, they opted for the lecture method for a quick completion of the course content to enable the student teachers to write for the national examinations. In this situation, the student teachers got superficial teacher training. As the tutor noted:

There are so many events in the colleges. As we are talking today, some of the tutors have travelled to go to write mock examinations. Who is teaching their subjects? Student teachers will miss lessons today, tomorrow, the day after tomorrow, until Friday. ... Is she going to be a competent teacher to teach in schools? It is impossible!

Then he added:

You find that there are ... [194] periods to complete teaching the course, about 90 or 80 periods only are taught and the rest of the periods are not taught. We have many tasks to do in these colleges including our personal tasks.

#### **4.3.6 Imbalance and shortage of tutors in social science**

Tutors expressed their feeling about the shortage of subject tutors in some social science subjects, noting that the shortage of tutors influenced the adoption of social constructivist approaches because tutors had to teach many student teachers. The situation was caused by the large ratio of student teachers to tutors due to the increased enrolments in teacher education colleges. Another reason for the shortage was that some tutors left the college to pursue professional courses in other colleges and universities without someone to replace their post. In the same vein, some tutors do not come back to the college, but instead opt to obtain a new employment other than teaching. Thus, it was noted that while in some colleges there were many tutors teaching the same subject in social science, others had just one tutor to teach the whole subject in all classes. A tutor explained:

We are two tutors in this college. My colleague has joined to the university to pursue a master's degree in education, in a different subject. Now he has dropped geography to study psychology. That means, [when he completes the studies] he will no longer work with me because he will be transferred to the psychology department.

#### **4.3.7 Coping strategies for contingent teaching challenges**

Tutors (individually and in groups) were involved in critical understanding of the situations that challenged the implementation of SCA on the job and developed a variety of survival (coping) strategies for those contingent teaching challenges. Semi-structured interviews and classroom observation data revealed some of the coping strategies tutors developed for meeting the challenges of social constructivist teaching. Table 4.3 illustrates the details.

Analysed data indicated that the contingent teaching challenges influence the tutor's ability to generalise PLD experiences on social constructivist teaching into practice. Challenges related to the physical classroom situation and seating arrangements made the teaching and learning difficult because of limited space, limited clean air and limited opportunities for employing variety of teaching approaches. This situation, combined with overcrowded classrooms, social science curriculum discrepancies, insufficient teaching materials, and a big ratio difference between tutors and student teachers (1:35), appeared to constrain tutor's teaching practices and impacted upon the student teachers' abilities in knowledge construction. Data indicated that college events and norms, student teachers' backgrounds, and the shortage of tutors appeared to influence significantly the tutor's knowledge in implementing social constructivist approaches. Tutors' critical views about the existing teaching challenges proposed their creation of coping strategies, which seemed to be not effective enough to deal with situations in practice.

**Table 4.3:** Coping strategies towards challenges for the implementation of social constructivist teaching

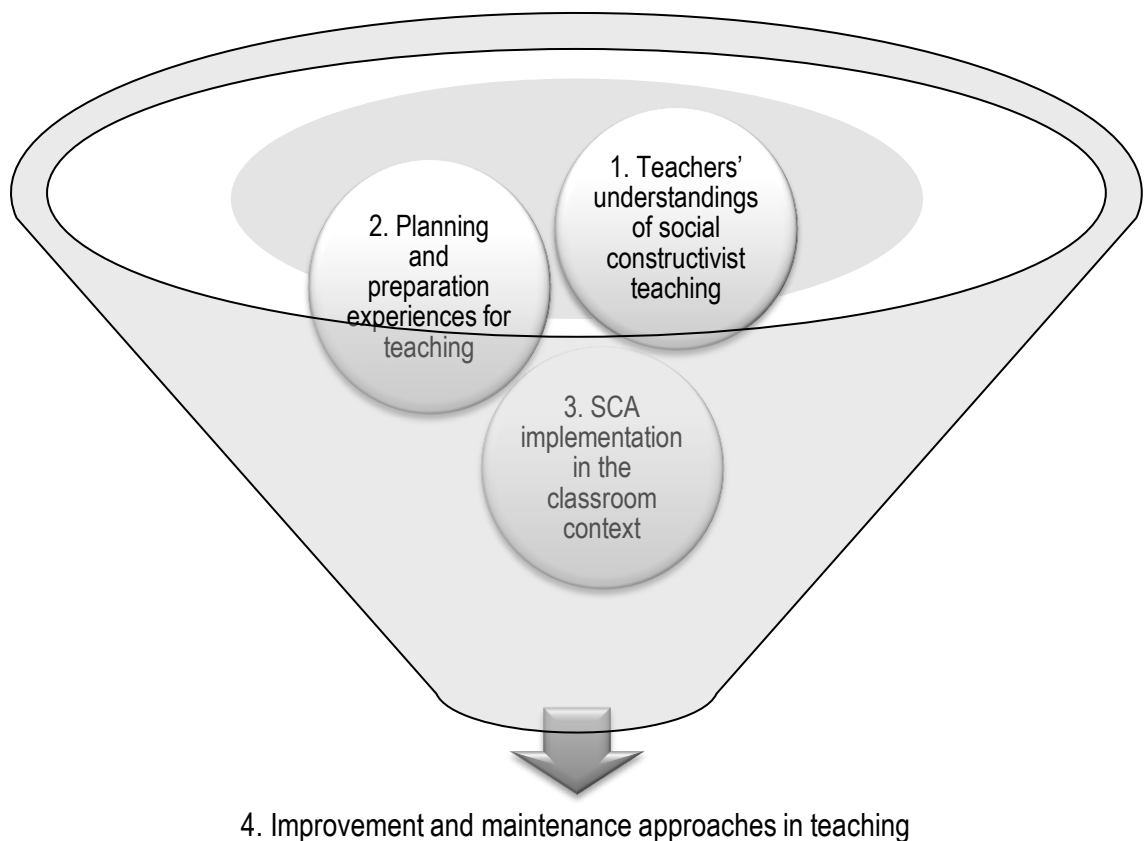
<b>Contingent teaching challenges</b>	<b>Tutors' coping strategies towards the challenges for social constructivist teaching</b>
<b>Teaching in large classes</b>	Tutors utilised the dining hall to teach large classes instead of splitting them in class-streams.
<b>Techniques for large classes</b>	Tutors employed lectures, interactive lectures, group discussions, group presentations, question and answer techniques.
<b>Assessment in large class size</b>	Tutors provided group tasks to student teachers. They asked few questions for the student teachers to write about to avoid the marking load.
<b>Marking assignments in large class</b>	Some tutors marked by impression the essay questions, Checked the group presentations and awarded group marks, The tutor and student teachers collaboratively designed the marking schemes and marked the questions in the classroom by exchanging the student teachers' exercise books.
<b>Student's evaluation in large class</b>	Tutors asked few questions: 2 or 3 student teachers responded per question. Tutors designed some questions to guide them in the evaluation process.
<b>Shortage of teaching aids and books due to large class</b>	Tutors involved student teachers in preparing some teaching aids. Tutors and student teachers either bought or photocopied the curriculum materials. Tutors either borrowed teaching materials from nearby schools or searched for materials from the internet. Tutors skipped teaching topics without books. Tutors provided student teachers with some lesson notes to guide them in learning.
<b>Physical condition of the classrooms; small rooms, bad air due to congestion</b>	Tutor used large room such as the dining hall for teaching. Student teachers removed jacket in classrooms to avoid sweating due to hot weather and bad air.
<b>Shortage of curriculum materials in Swahili language</b>	Tutors translated books and internet materials from English to Kiswahili language and composed the lesson notes.
<b>Difficulties of teaching an integrated syllabus</b>	Tutors separated topics in disciplines, which were then taught separately by the specialist tutor. Tutors shared ideas to teach difficult topics.
<b>Internet and power supply problems</b>	Tutors spent night hours searching for the materials, utilising internet services when there was power supply.
<b>Influences of student teachers' previous education</b>	Tutors utilised collaborative learning approaches among student teachers. Also invited student teachers who needed support for their learning difficulties.
<b>Influences of college administration's events in teaching</b>	Tutors provided assignments to student teachers to work on during private learning time.
<b>The shortage of subject tutors</b>	Tutors provided pamphlets to student teachers to read by themselves and write some lesson notes. Student teachers conducted group presentations in the classroom.

#### **4.3.8 Summary**

Generally, these results are responding partly to the question that investigated the tutors' exposure to social constructivist approach and their teaching practices in employing the SCA in teaching. The evidence suggested that most tutors attended different types of PLD experiences situated in colleges and supported by the MoEVT in collaboration with some international agencies. Other PLD experiences relied on the individual initiatives and peers. In this case, the diversity of the types of PLD experiences and the quality of PLD invariably shaped tutors' understanding of SCA and its implementation in practice due to the influence of a number of contingent teaching challenges. These contingent teaching challenges including the classroom physical situations, irrelevant curriculum, insufficient teaching materials, large classes, inadequate tutors, college events and norms, and student's previous experiences, appeared to constrain many tutors' teaching practices. Furthermore, policy development and implementation practices seemed to be influencing tutors' PLD experiences and impacted upon the teaching of social constructivist curricula in teacher education colleges. Accordingly, tutors engaged themselves in the critical examination of these situations to devise alternative teaching strategies, which appeared to help them in teaching.

## PART II: OUTCOME FACTORS

Part II presents results related to outcome factors in the implementation of social constructivist approaches in social science teaching in Tanzanian teacher education programmes. Four major categories of results are presented. These are (1) tutors' understandings of social constructivist teaching, (2) the planning and preparation experiences for teaching, (3) the SCA implementation in the classroom context that influence, and (4) the improvement and maintenance approaches in social science teaching. These findings are useful to the discussion of tutors' beliefs and practices regarding planning/preparation experiences for teaching and the implementation of social constructivist approaches in the classroom, as well as their suggested approaches to improve social science teaching situations. Figure 4.3 illustrates the detail.



**Figure 4.3:** The trends of influences within outcome factors of SCA implementation in practice.

## **4.4 Tutors' understandings of social constructivist teaching**

This category presents findings related to tutor's conceptions and the perceived features of social constructivist teaching, the tutor's role in classroom teaching, the relationships between the tutor and student in the learning process. These results suggest that tutor's teaching beliefs and practices were developed through PLD experiences on SCA in teacher training colleges.

### **4.4.1 Tutors' conceptions of social constructivist teaching**

The diverse views reported by tutors appeared to support different beliefs about social constructivist teaching, a concept which formed the research question guiding this thesis. The diversity was reflected in the different names and labels used to explain social constructivist teaching as well as the features of social constructivist teaching. Social constructivist teaching was described variously as participatory method, learning by doing, a meaning making process, learner centred teaching, experiential learning, shared learning, competence based teaching, and a paradigm shift based teaching. These terms emerged from the tutors' interview narratives in their attempt to explain more about social constructivist approaches.

### **4.4.2 Perceived features of a social constructivist approach**

Data from the participants' interviews and classroom observations proposed features that described the "social constructivist approach" thus:

- Considers learning to be a collective or social activity.
- Offers harmonious interactions between the tutor and student teachers or among student teachers themselves.
- Values the context of learning, the need for enough time and adequate teaching materials.
- Acknowledges the use of motivation and support to student teachers in the construction of knowledge in the classroom.
- Offers basic pedagogical knowledge and skills for student teachers to learn and teach crosscutting issues (e.g. environmental education, and gender, HIV and AIDS).

Although participants had different views in explaining those features because of their PLD experiences, they shared some common understandings about the implementation of social constructivist teaching.

Many of the interviewed participants viewed social constructivist teaching as a collective social learning activity involving development of ideas, assessment of ideas, and modification of individual ideas in learning process. This meant that teaching and learning was based on subjecting the ideas constructed by individual students to a group of student teachers for confirmation and use in practice. As one tutor narrated:

In my understanding, it enables a student to acquire the ideas from those discussions or to make meaning from classroom discussion with fellow student teachers or groups and in collaboration with the tutor. This gives a chance for the student teachers to make meaning of a certain issue or concept. That one enables the student to develop concept out of the discussion and ideas contributed by different people in the classroom.

Many respondents shared the view that social constructivist approaches increased interactions between student teachers or between the student teachers and the tutor during knowledge construction. It was noted from classroom observations that student teachers had their own understandings about their lives outside the classroom, which they brought with them to share in classroom learning. Hence, these tutors considered the student teachers' experiences were important in enhancing knowledge construction opportunities for student teachers to link life experience with concepts introduced. Many tutors argued that they guided student teachers to construct knowledge and that co-construction was used as a strategy to guide student teachers' learning activities. One tutor noted:

That one enables the tutor and student teachers to share learning. That means student teachers present what they know and then I can add my ideas where they have gone wrong. So, the learning process is shared between the student and I. In doing so, we interact and the level of interactions becomes high.



Another significant feature was the relevance of context for knowledge construction. Social constructivist teaching required conducive learning environments, environments that offered freedom for student teachers' interactions for learning, enough time for student teachers learning and relevant teaching materials. Many respondents felt that such conditions of learning environment were necessary for supporting the co-construction of knowledge and applying it in practice. However, some respondents challenged the column and row seating arrangement in the classroom and commented that such formation discouraged student teachers' learning because of limited flexibility to provide opportunities for a variety of teaching approaches. As one tutor put it:

With the paradigm shift ... [to a] competence-based approach, I don't know if they talk about these issues, but we don't consider the nature of the classrooms. We are like in the church! If we consider the paradigm shift, ... [it needs] the student to have enough time to learn effectively and understand how to apply the learned knowledge in real life, then the current format of the classrooms has to change.

Many tutors seemed to be in agreement about the role of motivation and support for student learning in social constructivist teaching. Many tutors argued that through motivation they were able to improve their role of facilitating student teachers in the construction of knowledge in the classroom settings. Moreover, they reported that, student teachers should not be provided with knowledge; instead, the student teachers collectively need to construct knowledge. One of them said:

My role is to guide, to facilitate learning. To make sure that, each student participates in many ways to learn: to facilitate learning, to make sure each student has a chance to discuss with colleagues, to share ideas, to ... [listen to] their opinions, to ask questions and whatever!

Although many tutors recognised the important role of motivating and supporting student teachers in social constructivist teaching, some felt that the SCA challenged their teaching practice. They reported that the student teachers' questions and comments, the situation of the learning context, and the type of issues to teach challenged tutor's mode of teaching. However, they

noted that such challenges enhanced their thinking about how to change their teaching practices for student teachers learning. Tutors' motivation and support – such as giving awards, acknowledging and accepting ideas and recommendations from student teachers – were some of the approaches used by tutors in teaching. Apparently, student teachers and tutors developed the ability to construct ideas through collaborative learning techniques enhanced with teaching materials. Hence, the social constructivist teaching challenges helped both the tutors and student teachers to develop both relationships and confidence in knowledge construction process. One tutor commented:

Sometimes, it challenges the tutor, ok! Student teachers can give very strong answers that were not known to me. I should agree with their answers and award them because they gave more detailed answers than what I knew. Moreover, the approach puts us together and develops direct relationship with student teachers. Even ... when I am outside the classroom the student teachers can ask me anything.

What is more, some of the tutors believed that through the social constructivist approach, student teachers could acquire the basics of pedagogical knowledge in teaching crosscutting issues, including global and pressing contemporary phenomena such as gender concerns, HIV AIDS education, environmental education, knowledge of terrorism, and values education that are pervading their life experiences. They believed that such issues could be understood well when the new approaches were employed in teaching and the student teachers were expected to learn these new approaches and to use them in their own teaching. That meant tutors acknowledged the importance of the student teachers learning pedagogical knowledge and skills of teaching. They believed that the student teachers were the source of learning and they had experienced the realities of life, which enabled them to co-construct knowledge in the classroom. As one tutor put it:

The student is the [centre] of teaching and learning. Social constructivist approach believes that a student has to apply the knowledge constructed in the classroom to serve the society. It involves teaching and learning by doing, developing [the] basics of student teachers learning through participatory methods and using various sense organs in learning.

#### **4.4.3 Tutor's perceived role in implementing SCA**

Evidence indicated that many tutors had different conceptions and feelings regarding their role in classroom teaching based on the new teaching approaches, which appeared to be a useful parameter in the discussion about tutors' practices and beliefs in teaching for this research. Few tutors were unaware of the need for student teachers' participation in the preparation of lessons and evaluation of their learning practices. For example, one of the tutors when asked if the student teachers have any role to play in assessing learning practices, said, "... maybe according to the paradigm shift, student teachers have to evaluate!" Then, she added, "I don't know!" This response was one of the signs of limited understanding of the teaching paradigm itself. Although, there was no evidence of student's participation in her lesson plans, when observed in the classroom she applied aspects of the new teaching approaches. Moreover, the same tutor carried out evaluation in the classroom, which also involved the student teachers. In addition, while some perceived their role was to facilitate student teachers' discussion and to guide the student teachers on what to perform concerning learning activities, others perceived that their role was either to correct student teachers' wrong answers or not to provide the answers when student teachers were wrong. Thus, the tutor was the decision maker about student teachers learning. One tutor justified:

Aah! I facilitate because I have little time to talk and most of the time the student teachers have to say. So, me as a tutor I have to guide them. What is this about? They have to say, this is about so and so. Or if it is correct, I have to say that is correct, I do not add anything. If it is wrong, I say this is wrong!

#### **4.4.4 Tutor and student teachers engagement in SCA**

Findings indicated that in the social constructivist approaches in teaching, tutors' roles in classroom learning activities developed into different relations between tutors and student teachers regarding their participation, and different tutor's power over student teachers.

#### ***4.4.4.1 Tutors' perception of student teachers' participation in teaching and learning***

Evidence indicated that although tutors had different perceptions about the participation of student teachers in the planning and classroom learning activities, they recognised the social constructivist approach in planning based on their understanding. They explained that student teachers were involved in the preparation of some teaching materials, teaching and learning activities, and the assessment of classroom learning, with one tutor noting:

If I want to teach a topic such as “Our country Tanzania” and it involves drawing of maps, I involve them to draw the maps. Although the maps will help me in teaching, they acquire drawing skills. Therefore, they participate to prepare teaching aids, the learning activities, and evaluation of teaching and learning process.

In addition, tutors organised the student teachers' learning based on teaching techniques such as discussions, presentations, jigsaw puzzles, mingling, assignments, practicing teaching, and question-and-answer, all of which were common and involved student teachers in learning. Some tutors reported that they provided questions for student teachers to explore from different sources. Then, student teachers prepared teaching aids to help them to present their work in class. Tutors argued that student teachers prepared themselves for classroom learning activities when the learning objectives were stated clearly before the time of learning. One tutor explained:

You may use group discussion, questions and answers, jigsaw puzzles and gallery walks. I have started to use a certain technique to get them used to; what do you know? What do you want to know? What did you learn? When I use this technique, their participation is so high .... Thus, during classroom learning activities a student pays more attention to follow just from the moment you start teaching a concept, to check if answers to the concept he wanted to know have appeared or not.

Another tutor added:

Sometimes you give them a task by providing them, what do I know, and ask them to go to read about it. When you meet the student teachers in the

next period, you will be asked some questions: 'In our reading, we didn't find this thing, what the meaning of this is?' In doing so, you will realise that student teachers need to know more if they did not learn it in your previous periods.

There also appeared to be some differences in tutors' understanding of student teachers' participation especially in the evaluation process. While some tutors perceived that student teachers were involved in the evaluation process, others perceived that they were not. Although a few tutors reported that student teachers had little chance to participate in the evaluation of teaching and learning process, most of the classroom observations seemed to confirm participation of student teachers in the evaluation process. In this case, student teachers were observed commenting about tutors' use of teaching techniques, quality of teaching aids, and classroom behaviour management – such as interruptions during learning. Some student teachers urged tutors to use appropriate teaching aids and methods that could have challenged them for effective knowledge construction in classroom. One tutor said:

When you assess the student teachers' learning about the progress of the lesson in general, they explore everything concerning teaching and give their opinion. For example, student teachers can tell you that, there were 1, 2, 3 ... observed during the introduction stage. They will tell you, you were in a bad mood. ... happened during the learning process. Thus, they play role to assess their learning.

However, some tutors had no idea whether the student teachers were required to prepare themselves for classroom learning activities. Such activities were used to evaluate the general process of teaching and learning, to select teaching methods and learning aids as well as types of knowledge to learn. The skills were useful for the student teachers to learn and apply them when employed to teaching in schools. On one hand, a few tutors appeared to be amazed at how the student teachers could organise themselves for teaching and learning activities, and on the other they seemed to be conscious about the needs for student teachers to participate in the evaluation and preparation of issues for learning activities. Tutors felt that student teachers could use

evaluation for ranking, grading, and comparing their performance among themselves in the class. One tutor narrated:

Perhaps, with the use of examinations the student can understand his position in the class. For example, in the first semester my position was this one compared to her fellow student teachers ... I think they can assess. Imagine if I give a group work, the student can assess herself about her level of participation through contributions and how others in the group accept the contributions. I think it is one [of the] way [s] the student can use for student teachers' self-assessment about learning.

Furthermore, many respondents perceived some difficulties faced by the student teachers in classroom knowledge construction. According to the respondents, these difficulties were caused by student teachers' background education that hindered them to benefit from the new learning environment. They noted that even when the student teachers understood the content of the lesson, they could not express it in class. In addition, they recognised big differences in the student teachers' learning ability with some performing better than others in class. According to one tutor, "now there are other issues emerge as you saw in the classroom, they have low ability to express things. So, we facilitate knowledge to student teachers up to the level where we can...!"

As noted, they reported that many student teachers who were enrolled for the teacher-learning programme had weak performance in their secondary education examination. They added that the student teachers were coming from poor secondary schools, which had shortages of learning resources such as desks, chairs, books, and teachers. One tutor commented:

There is a big problem; we are receiving student teachers who are not capable of learning the present syllabus. ... There is a problem of these ... they call, "ward secondary education schools" (in Swahili they are called, *shule za kata*). They have few teachers, lack of teaching facilities, no desks, books, and are the ones that pour student teachers into our colleges. Therefore, we are getting student teachers who have been polluted with these ... Their brain has been distorted psychologically by the nature of the schools where they came from.

Another aspect mentioned by a few tutors was the lack of time for student teachers to engage in private studies at the college campus. They noted that this was because the college schedules gave limited chances. They stressed that some student teachers used the time allocated for extracurricular activities for private studies, to survive in their academic matters in the college. Moreover, tutors reported that because of strict college regulations and rules, the student teachers were not allowed to go outside the college boundaries to search for learning materials. These practices appeared to be not keeping with the social constructivist approach which disregards hegemonic structures instead promoting democratic teaching environments. This was not a problem for tutors who had easy access to internet and library services. Although many tutors had problems finding learning materials, some reported that they had enough time to spend on the internet searching for materials. One tutor noted:

It seems the time required for student teachers to use the internet is not there. They spend short time in the evening extracurricular activities. If the student has completed quickly her piecework, she can use the other time to go to read materials in the internet. This chance is so rare for many student teachers ... Perhaps she forges the extracurricular activities time to go to the computer lab. Yet, if a tutor finds her in the computer lab ... in that time, she will be in trouble. The situation is different for us; we have enough time for internet surfing.

However, many of the interviewed tutors and the classroom observations revealed the willingness of student teachers to participate in the construction of knowledge. Many tutors realised the need to involve student teachers in lesson preparations because student teachers seemed to be willing to participate in learning activities. Some tutors noted that when student teachers were involved in the planning process, they were able to understand what they learned, and prepared themselves for classroom learning activities. As one tutor expressed:

Because the student feel to have something to do in the process of learning than just telling her/him to stay there and listen or telling her/him that, the way you are doing is not correct. The student will just listen and feel that, now I miss some of my rights in learning. In doing so, I will be somehow like harassing this student.

#### ***4.4.4.2 Powers vested in tutors over the student teachers in teaching and learning***

Participants' interviews, classroom observations and documents analysis indicated that tutors were empowered by the policy environments, curricula documents, age and experiences, and that this influenced the tutor/student teachers relationships in implementing social constructivist approaches in practice. Many of the tutors who were interviewed revealed the use of syllabi and some teaching materials proposed in the syllabi for decision-making about teaching. Tutors noted that the PLD policy directed what they should do in their teaching and learning process. The tutors analysed syllabi issues such as teaching aids and reference materials, methods of teaching, topics required in teaching, and the time to complete them. The successful completion of the syllabi contents reflected in the performance of student teachers in the national examinations at their end of training programme. In this way, tutors were given mandate to have control over the teaching and learning process thus making the student teachers inferior. As the education policy emphasised that "the initiative to liberalise the establishment, ownership, administration and financing of teachers colleges will continue to require a centralized curriculum, its coordination and monitoring" (URT, 1995, p. 56).

Moreover, not only did tutors decide on activities to prepare for teaching and learning, they also control the classroom learning activities, with some tutors acknowledging not involving student teachers in planning of lessons. Tutors made decisions, designed assignments, and other classroom activities and marked them for student teachers. They predetermined the classroom assessment procedures and the successful completion of the lesson. Tutors guided student teachers on what to learn, how to learn, and when to learn. Tutors considered themselves as facilitators and guiders of student teachers in classroom teaching and learning activities. Tutors felt that they were facilitating student teachers (who did not have that knowledge) knowledge directed from the syllabi and student teachers were just seekers of knowledge from tutors. Tutors exposed the subject knowledge to student teachers to interact with under their guidance. As one tutor noted:



I am guided by the syllabus: It is directing you the teaching methods you should use, the evaluation methods, topic and there are guidelines of teaching methods. So, it gives focus to the classroom. We're used to them (student teachers), we got to teach them now and then! So, we know their weakness, strength ... so, we know them. In the ... [process] of knowing them, we are free to prepare a lesson because I know their mental stability.

Further, the findings suggest that tutors' beliefs predetermined issues of student teachers' freedom in learning as some tutors perceived that their knowledge could be a measure of student teachers' standard of understanding and learning. In the circumstance where the student's ideas differed from the tutor's understanding, some tutors considered such student teachers' views irrelevant.

One tutor asserted:

I facilitate because I have little time to talk and most of the time the student teachers have to say. So, me as a tutor I have to guide them. What is this about? They have to say something; this is about so and so. On the other hand, if it is correct, I have to tell them that are correct. I do not add anything. If it is wrong, I say this is wrong!

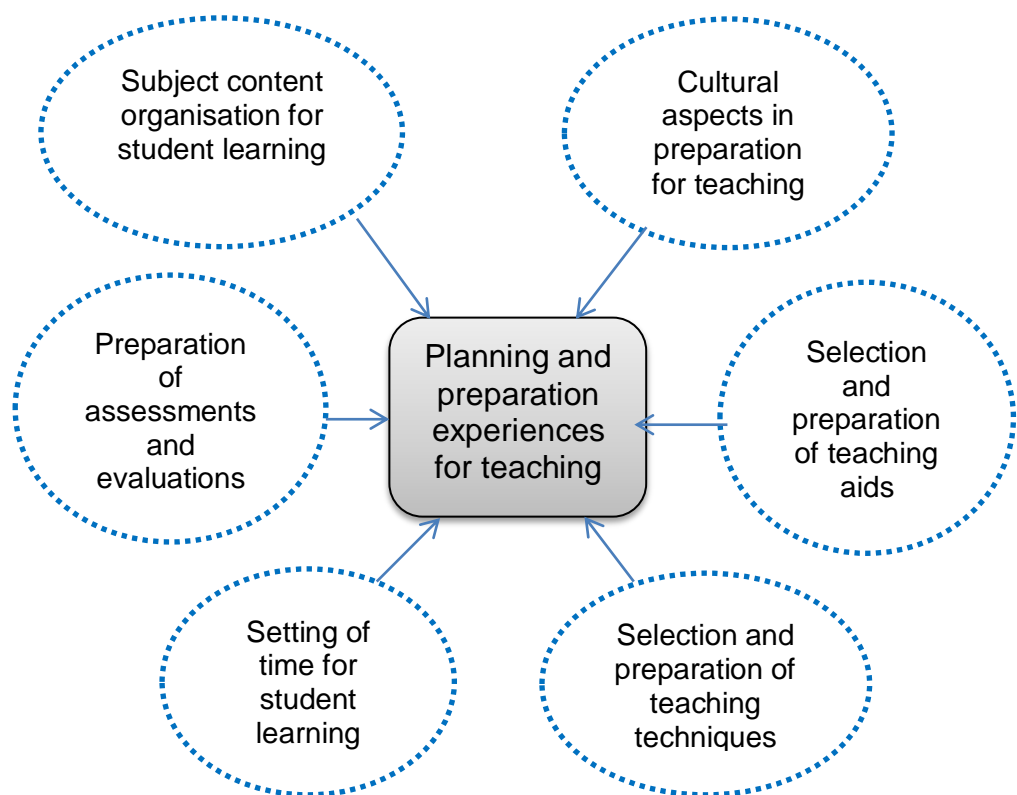
#### **4.4.5 Summary**

In summary, the results presented in this section are aimed at providing an understanding of tutors' exposure to social constructivist teaching regarding a PLD experience. Tutors demonstrated differing understandings about social constructivist teaching and their subsequent teaching roles in practice. They seemed to indicate that student teachers were not important in decision-making related to their learning. For example, student teachers were provided a limited chance to participate in decision-making about teaching and learning activities in which the tutors showed power dominance over student learning. In this sense, the policy and curricular documents and college values bestowed the tutors' power. Regardless of the differences, tutors were having common understanding of the features of SCA in practice. They appeared to have developed the notion that SCA: (1) Considers learning as social activity, (2) Offers harmonious interactions between individuals, (3) Values the importance of learning context of learning, time, and teaching materials, (4) Acknowledges the use of motivation and support to student teachers in knowledge

construction, and (5) Provides the basic pedagogical knowledge and skills for student learning.

#### 4.5 Planning and preparation experiences for a SCC

Data from respondents and documents analysis showed tutors' practices in the planning and preparation for teaching, which reflect how they organise themselves or with student teachers to teach using the SCA. The results show that tutors' planning and preparation experiences focused on six key priority areas, as illustrated in Figure 4.4.



**Figure 4.4:** Areas of consideration for planning and preparation for social constructivist teaching

##### 4.5.1 Cultural considerations in the preparation for teaching

Many tutors considered the issue of culture in designing teaching and learning activities for student teachers learning, and this has influenced teaching behaviours. Culture is what constitutes humans' common practices in their

society, and is acquired through formal and informal means. The cultural aspects of the community were also part of student teachers and tutors lives at the college. These cultural aspects included the language used to communicate, the teaching artefacts, college norms, and beliefs, social norms of relations, and obligations, all of which had significant influence on teaching and learning activities. Different strategies were employed by tutors to integrate cultural matters during planning for teaching and in classroom teaching and learning activities. They considered them for communicating learning activities in the classroom (using Kiswahili language as a medium of instruction), the preparation of teaching aids, setting communities of learning among student teachers, and the implementation of extra-curricular activities.

Apart from the use of real objects obtained from the local settings for teaching and learning purpose, some tutors appeared to improvise teaching aids in recognition of cultural aspects during lesson preparations. Moreover, the student teachers seemed to be involved in designing some of these types of teaching aids. Photo 4.3 presents the detail.



**Photo 4.3:** Teaching aid improvised by using local materials

The brown colour was made up of banana plants and the black one of wood charcoal, both obtained from the local environments. One tutor argued:

During classroom teaching, we tell them to gather some of the information concerning a certain event — for example in this environment they can collect information related to tea production, banana production, and so forth. Therefore, they have a lot of information that depends on the learning environment.

However, some tutors reported that because of the existing traditions many student teachers had a low level of participation in the preparation of teaching aids. When these tutors were asked to explain more about their claim, they could not clarify explicitly how the traditions affected the student teachers' involvement in the improvisation of teaching aids.

Another key issue reported by many tutors was the engagement of student teachers in college extracurricular activities after the classroom sessions. They mentioned extracurricular activities such as cultivation of food crops, livestock keeping, and maintaining the cleanness of the classroom and college environments. Tutors revealed that those activities provided opportunities for student teachers to apply the knowledge and skills acquired in the classrooms to the activities related to their cultural context (responding to a question that asked them to explain how student teachers applied the knowledge constructed in the classroom to real life). One of tutor asserted: "The student teachers use the knowledge in the college farms and improving the college surroundings".

#### **4.5.2 Subject content organisation for student learning**

It was found that tutors organised and planned their lesson cognisant to the analysis of the syllabi, learning objectives, student teachers' abilities, learning context, class size, teaching aids, teaching techniques, and with awareness of controversial issues, which showed influence of social constructivist beliefs. The information from respondents and documents indicated that many tutors planned to teach social science based on long and short plans, whereas each plan guided tutors on a particular aspect of the teaching preparations that embraced the social constructivist beliefs. While the long plans (the schemes of work) covered a period of 4 to 5 months, the time coverage of short plans (the lesson plan) was between 45 minutes (single period) and 90 minutes (double

period). Tutors seemed to rely on the syllabi to organise details of schemes of work from which the lesson plan was constructed. They assessed the syllabi to ascertain some of the following issues: student competencies, learning objectives, the topics, teaching methods, teaching aids and references, and the time required for social science teaching. The topics were organised according to the competencies to be taught to student teachers and they were organised sequentially based on content relatedness, levels of content difficult, and the relevant time to teach that particular topics. One tutor explained:

Sometimes, I cannot follow the order of the topics in syllabi. Instead, I check if there are means to obtain books with knowledge related to the topic from the syllabi. Perhaps, the books that have the knowledge of the topic are not found; I can just skip to teach [it] until when the materials are available. Let say, if I search and obtain the [teaching] materials from the internet, I just decide to teach the topic.

Another key issue considered by some tutors in the preparation of scheme of work was the allocation of time for student teachers to practice teaching in schools. They indicated 8 weeks for the student teachers to participate in the fieldwork to teach schoolchildren and the tutors visited the student teachers to observe them in the classroom. Tutors' consideration of fieldwork for student teachers suggested their adaptation to the PLD policy that, "the curriculum at all levels of education and training shall emphasise and promote the merger of theory and practice and the general application of knowledge" (URT, 1995, p. 54). Although many tutors appeared to report that student teachers were engaged in the actual classroom teaching and in other routine activities in the job setting, these tutors did not indicate in detail the fieldwork activities in their schemes of work.

Many tutors reported the schemes of work to have simplified their work in the preparation of lesson plan for a particular class. The lesson plan was used as a tool to organise issues and learning materials required for classroom teaching. The major details considered in the preparation of schemes of work — such as competency, topic and subtopic, teaching aids and references, teaching and learning activities, evaluation procedures, remarks, and time of learning — were

found also in the lesson plan. They organised topics and drew their emerging student learning objectives from the competencies. For example, one competency was achieved by more than one topic. In each topic, there were several learning objectives to achieve in the lesson plan and they were stated in the behavioural approach. In this case, the statement of the learning objectives was featuring the audience, the achievable learning objectives, and the time of learning as well as the condition of achieving learning. For example, some of the tutors' constructed learning objectives were as noted:

- Within a 60-minute period, each student should be able to calculate time by using longitude lines.
- Within a 50-minute period, each student should be able to: (a) explain the meaning of a planet, (b) Explain various features of each planet (8 planets), (c) show the differences of each planet.

In connection to the learning objectives, a few tutors reported that the capacity of student teachers is an important factor for them to consider in the preparation for teaching. They argued that the ability of student teachers needs to be considered in their learning with regard to the level of content knowledge, the amount of time required for learning, the evaluation procedures and the support required for student learning. One tutor said:

There are some common issues to consider in preparing the lesson plan; you have to consider time of learning, learning materials, capacity of the student teachers, and the situation of the class – the location of the period in a particular day.

From the above quotation, the class context mattered during lesson preparations as it affected student teachers' attention in learning. Tutors explained that lessons in morning hours were considered to have different levels of student teachers' attention and treatment in learning compared to the afternoon ones. They argued that such variation in the two contexts of the lessons (periods) needed special attention and treatment, not only in the preparation of these lessons but also during the actual classroom teaching and learning.

In the same vein, many tutors considered the number of student teachers in the classroom in relation to the room size, the teaching aids, and the relevance of teaching approaches during preparation for teaching. This situation was revealing that the larger the number of student teachers, the bigger the classroom and more teaching aids needed. However, some tutors reported to have some planning difficulties because they were not able to decide on the relevant approaches to teaching in a situation of large class. One tutor commented:

The number of student teachers is bigger than the size of the room. Civics is not mathematics, you have to read, and then they listen. We have to ... [involve] them. We have to use groups. How can I form groups [of student teachers] in such environment? It is discouraging grouping student teachers - who are to do movement from one part to another in the room.

Many tutors who were interviewed expressed their concern about the consideration of integrating some of the issues in teaching. Such current issues were the gender consideration in learning activities, HIV AIDS education, moral and values education, civic education, family life education, and drug abuse. Hence, teaching issues that were not in the syllabi allowed tutors and student teachers the opportunity to construct knowledge in the classroom and to learn from what transpired outside the classroom experience. Tutors and student teachers as social beings seemed to be not isolated from the issues happening in their society, but used them in classroom context. Although, tutors acknowledged the integration of crosscutting issues in classroom activities, they needed the inclusion of crucial issues in the syllabi because some tutors did not teach them to student teachers. One tutor narrated:

We are encouraged to put in crosscutting issues — that means, the issues we are dealing with them now — such as gender balance during lesson planning. Maybe I indicate the number of girls and number of boys who will be assigned a task to draw a map. How many girls and boys will be assigned to present a certain theme?

Another tutor added some crosscutting issues that were to be considered in social science teaching:

For instance, the issues of terrorism are historical events. Where can a student learn these? ...We can put some of the crosscutting issues in the syllabus, such issues of entrepreneurship and technology, which the world works with them now.

#### **4.5.3 Preparation for assessment and evaluation procedures**

Results indicated that the majority of tutors designed evaluations which reflected the social constructivist approaches. Findings revealed that tutors planned inclusive (formative) evaluation procedures that were used to help student teachers to engage themselves in the overall evaluation of teaching and learning activities (by assessing the teaching aids and techniques employed in teaching, assessing the class conduct, and discipline matters) called, “student’s evaluation”. There were some guide questions prepared by tutors to asking student teachers about the teaching process. Moreover, tutors planned for inclusive evaluation procedures in which the tutor evaluated the student learning in each stage of lesson development; these were called “tutor’s evaluation”. On top of the inclusive evaluation, some written exercises and observation oral questions helped the tutor in checking the student teachers’ progress during classroom learning activities. As noted in one document:

Assessment strategies in lesson plan involved the statement of student learning that explained what an individual student or group of student teachers were required to achieve. The tutor indicated student’s evaluation procedures such as portfolio writing, exercises, tests, quiz, and a question to ask herself concerning student learning. For example, did the student define the concepts planet and earth, explained the shape and size of the earth, and the sources of energy on earth?

On the other hand, the exclusive (summative) type of evaluation was planned to measure the student teachers’ mastery of contents in a particular topic or topics on a weekly or a monthly basis. Additionally, it included exams at the end of a semester or a year. The exclusive type of evaluation was conducted separately from the routine time of classroom teaching and learning. Table 4.4 illustrates the similarities between the proposed assessment procedures in the syllabi and



the assessment procedures considered by tutors during the preparations for teaching.

**Table 4.4:** A comparative analysis between assessment procedures proposed in syllabi and the tutor made assessments

Assessment procedures proposed by the syllabi	Assessment procedures prepared by tutors in the schemes of work	Assessment procedures prepared by tutors in the lesson plans
Accuracy in drawing maps, Demonstrations, Effective feedback, End of semester exams, National examinations, Individual and group work, Intelligence challenges, Single lesson teaching practice, Long-term teaching practice, Portfolios, Relevance of project work, Statistics, Tests and exercises.	Checking student's group work, Providing project work, Providing student teachers tests, Investigating student's work, Providing exercises, Providing individual or group tasks, Providing portfolio tasks, Investigating student participation in learning activities, Providing essay questions or project work for student teachers, Providing monthly tests, To administer semester exams, Single lesson teaching practice (SLTP).	Checking student's answers to questions, Making follow-up of student's participation in learning and group discussion, Checking attention of student teachers in learning, Providing student teachers' quiz, exercise, tests, assignments and to mark them, Checking student teachers' explanations if correct during learning, Providing essay questions and project work, Listening to student teachers' remarks, Tutors ask themselves a question: did the student teachers achieve what I wanted them to do?

#### 4.5.4 Selection and preparation of teaching techniques

The findings revealed that the majority of tutors planned and prepared teaching techniques that were considered appropriate in the context of teaching the lesson in a social constructivist way. In this case, the lesson plans and schemes of work displayed teaching techniques and associated learning tasks. They employed some teaching techniques that were proposed in syllabi and some that were not. Tutors planned how the lesson (teaching and learning activities) would be conducted sequentially according to the time available for learning.

Furthermore, the teaching and learning activities in the lesson plan appeared to be the same as in the schemes of work especially on the ways of stating the

learning and teaching activities. The teaching techniques were not revealed directly in the schemes of work and lesson plans because of the key words and phrases that were used to describe teaching and learning activities. Words and phrases such as: to guide student teachers, to guide group discussions, to guide student teachers to present, to investigate, to guide demonstrations, questions and answers, to brainstorm, to explain, to mention, and to associate were used to describe the expected learning activities. In this case, the samples of the scheme of work and lesson plan illustrated the anomalies (refer also in appendix IX). Additionally, apart from the teaching techniques explored from the syllabi, tutors used other techniques such as discovery method, lecture, problem solving, interactive lecture, jigsaw puzzles, visiting elders to obtain information, survey, individual work, assignments, mingling, pair-work, and inviting expert speakers. The other technique involved the student teachers asking themselves three questions sequentially about the issue to learn: "What do I know? What I want to know? What did I learn?" This mode of sequencing learning seemed to engage student teachers in much thinking about the subject. Table 4.5 shows the teaching and learning techniques employed by tutors.

Many documents and interviewed tutors indicated that the lesson plan activities were presented in stages of lesson development activities. These stages included the introduction, new knowledge construction, reflection, application of knowledge, and closure or consolidation. In each stage, there were columns for the tutor to write information related to teaching activities, student teachers' learning activities, time for learning, and evaluation procedures. One tutor explained:

The issues I consider, first is the learning objective. I plan the learning objective because it [lesson plan] helps me to know the issues to teach when I enter the class. I ask myself: "What activities should I do in this stage?" "What activities should the student teachers do in this stage?" Therefore, I put more emphasis on the specific learning objective and the stages of lesson presentation particularly at the knowledge generation stage because I deliver the new knowledge here [in this stage].

**Table 4.5:** A comparative analysis between teaching techniques proposed in the syllabi and those employed by tutors

Teaching techniques indicated by the Syllabi		Teaching techniques prepared by tutors
Brainstorming, Case study CDs and DVDs Charts Debate Demonstrations Discussions Drawings Feedback provision and summaries Gallery walk Group work Guest speaker Questions and answers	Semi-structured interviews Investigations Library search Panel discussion Peer learning Project Internet use, Reading for understanding Reading pamphlets, Reading records Research Role play Excursion Tests	Brainstorming Class discussion Demonstrations Drawings Group discussion Group presentations Group work Internet search Investigation Library search Questions and answers

#### 4.5.5 Selection and preparation of teaching aids/materials

With regard to teaching aids, it was revealed that tutors' planning was affected by the shortage of teaching materials and they preferred to mostly use ready-made teaching aids rather than locally improvised ones to enhance the implementation of social constructivist approaches. Hence, tutors teaching aids were limited in variety and amount in planning for teaching and learning activities that influenced knowledge construction processes. Tutors selected appropriate teaching aids for a particular lesson and aligned them to address specific learning activities. Tutors reported that they obtained teaching aids from their local environment through improvisation and borrowing from either the college library, colleagues, or nearby schools. In addition, they had opportunities to search for materials from the internet when they were assured of a supply of electricity in the college. Tutors seemed to prepare the teaching aids by observing the recommended teaching aids and others that were not recommended in the syllabi. Table 4.6 illustrates the detail.

**Table 4.6:** A comparative analysis between teaching aids proposed in syllabi and those employed by tutors

Syllabi proposed teaching aids		Tutors prepared teaching aids	
Films	Weather stations	Charts	CDs, DVDs and
Illustrations	Cassettes	Diagrams	Radio
Internet	Educational	Maps	Concept cards
service	journals	Pamphlets	Drawings and
Pictures	Maps	Pencils	illustrations
Publications	Newspapers	Photographs	Internet
Radio	Photographs	Real	Publications
Real objects	Reports	environment	Real objects
Statistics	Sculptures	Samples	Records
VHS	Television	The globe	Syllabi
The globe			

Similarly, the information from documents and interview responses revealed that tutors relied on nine books in their preparations for teaching. Most of the books were in English and the tutors translated them into Kiswahili to compose their lesson notes. There were only 40 titles of references indicated in the syllabi for social science teaching. A few of the book titles listed in the syllabi – 16 (40%) syllabi and 24 (60%) books, and mostly written in English – were available for use by the student teachers and tutors in the colleges. Table 4.7 illustrates the details.

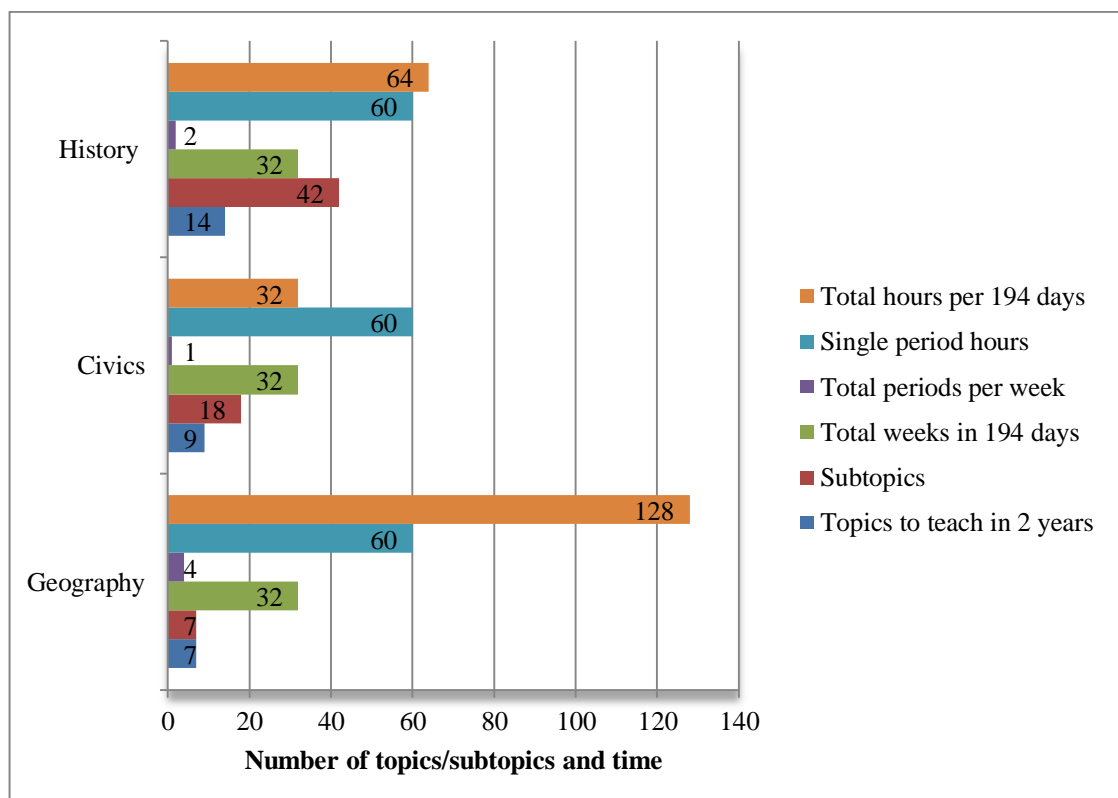
**Table 4.7:** Reference materials in social science syllabi

Social sciences	Books/pamphlets	Syllabi	Quantity of teaching materials (%)
History	13 (32.5%)	2 (5%)	15 (37.5%)
Civics	5 (12.5%)	5 (12.5%)	10 (25%)
Geography	6 (15%)	9 (22.5%)	15 (37.5%)
Overall %	24 (60%)	16 (40%)	40 (100%)

#### 4.5.6 Setting and allocating time for learning activities

Data revealed that, although tutors designed learning activities according to the time required for the co-construction of knowledge, they differed in allocating the time for learning because either there was too much content to cover or the tutor had too few periods to teach per week, which influenced the

implementation of SCA. As one tutor noted, “Student teachers will spend more time when you opt for techniques that involve them more in the learning process”. Hence, SCA needs time for tutors and student teachers in knowledge construction process. The time was set for the long and short-term learning activities, which were reflected in the schemes of work, and lesson plans respectively. Hence, it appeared that tutors were required to teach half of the course within 194 days (half of a two-year programme of teacher training). They were required to arrange that time per topic and sub-topic in preparing the schemes of work and lesson plan. Although the time required to complete the half of syllabi was 194 days, the distribution of time between the social science subjects indicated a great variation in the number of periods and topics. The findings reveal that the number of periods was arranged for a week, or a semester, and a year. These arrangements suggested that a number of periods per week remained the same in all social science subjects. Figure 4.5 illustrates the details.



**Figure 4.5:** A comparison between syllabi’s distributions of learning time per topic

With regard to the above Figure 4.5, some of the social science subjects had more topics than others. For example, history had 14 topics and geography just had seven. Some had the same number of topics and subtopics but with much time for teaching and learning than other subjects. Tutors reported to have faced difficulties preparing themselves for teaching because of the short time provided for them to complete the topics available. One tutor complained:

The syllabi have been combined history and geography topics. Now according to the teaching guide there are 2 periods per week, which cannot match the ... number of days to teach both subjects in the syllabi. Therefore, there is a big difference between the time allocated for teaching and the number of topics. The time is not enough because there are too many topics. They have integrated the subjects but in teaching; the geography topics and that of history appear separate.

The above quotation indicates some significant differences between what was proposed in the syllabi and the time allocated for a period per topic in the tutors' preparations for teaching. Some tutors organised topics with more weight in terms of time than others did or less time for particular topic than others did. Table 4.8 illustrates this detail.

**Table 4.8:** Tutor's distribution of time for student learning per topic

Tutor (Subject)	Topic	Subtopic	Periods	Time in hours	Time per period in minutes
Atu (Geography)	1	-	4	3	45
Besta (Civics)		3	8	6	45
Chake (History)		2	10	7.30	45
Edgar (Civics)		2	24	18	45
Fusi (History)		2	20	15	60
Gadi (Geography)		1	13	13	60
Hamisi (Civics)		1	13	13	60
Idd (History)		2	11	11	60

Another issue noted was variation in organising single or double periods and between the stages of lesson development activities. Some of the tutors set 45 minutes, some 50 minutes and some 60 minutes for single periods. For double periods, some tutors set 80 minutes and some 90 minutes. These kinds of inconsistencies were against the syllabi proposed time per period. According to the social science syllabi, a single period was 60 minutes and that meant

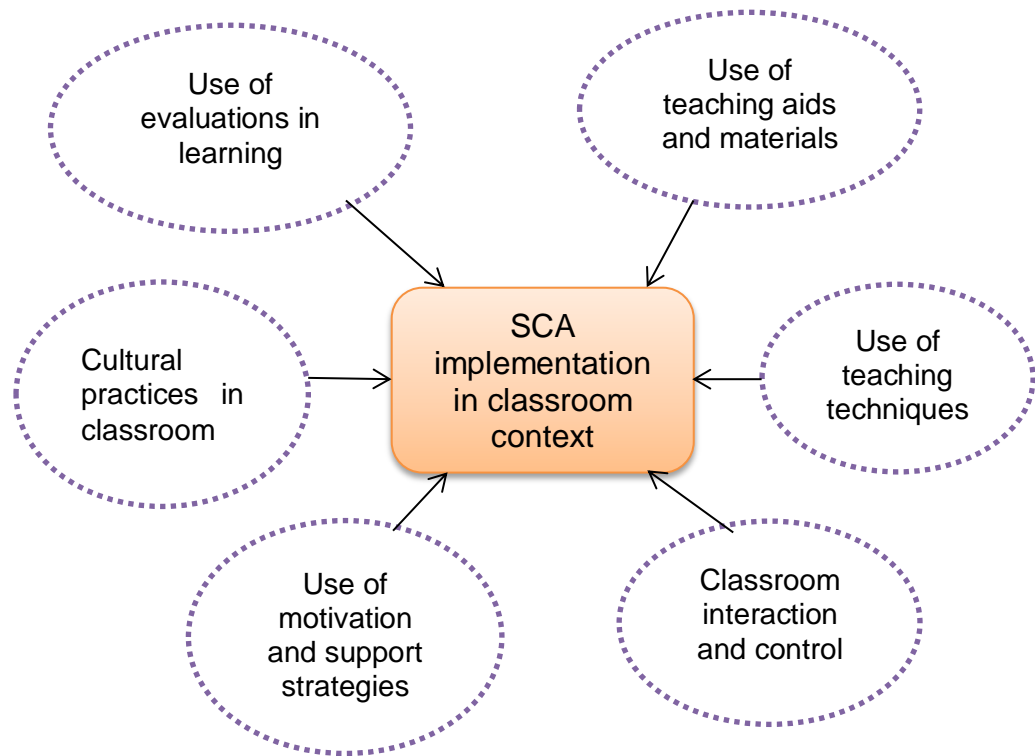
double periods needed 120 minutes. Moreover, the time for teaching and learning varied from period to period (see Figure 4.5) and stage-to-stage of the lesson development activities. For example, documents revealed that for a period of 60 minutes, one tutor planned to spend 5 minutes for the introduction of the lesson; 20 minutes for knowledge construction; and 20 minutes for the application of knowledge. Moreover, he planned to spend 5 minutes for reflection and another 5 minutes in concluding the lesson. Then the remaining 5 minutes was spent in soliciting student teachers' evaluation concerning the overall classroom teaching and learning process.

#### **4.5.7 Summary**

This section related to the question of whether or not tutors employed SCA in teaching, particularly in the planning and preparations for teaching. Results indicate that tutors demonstrated high ability to use SCA based on a "procedural approach" – acquired from the PLD experiences – and when faced with many contextual influences they resorted to traditional approaches. Findings indicate that tutors' preparations for teaching were influenced by cultural situations of instructional language, and contextual values and norms, especially in designing teaching aids and setting learning activities. Tutors' plans were based on the centralised curricula and syllabi that influenced the choice of student learning activities, evaluations, techniques, and time of learning. Selection of teaching materials and techniques were constrained by the irrelevance and insufficiency of teaching materials appropriate to the learning situations. Furthermore, the allocation of time for learning in subjects was influenced by the large amount of learning objectives in syllabi for tutors to complete within the two years of the teacher training programme.

#### **4.6 SCA implementation in the classroom context**

This category presented results related to the tutors' transfer of the PLD experience on SCA in the classroom situation. These results reveal the tutors' teaching practices on SCA in teacher education programme and the detail is presented, as shown in Figure 4.6.



**Figure 4.6:** Major areas of outcomes on SCA implementation in classrooms

#### **4.6.1 Cultural practices in classroom situation**

Results indicate that classroom teaching and learning activities were influenced by cultural practices related to tutor and student teachers' conduct, obedience to class rules and procedures, language use, taboos and customs, and inviting unexpected guests in the classroom. In this case, social constructivist approaches recognise issues of culture in teaching and learning. Cultural aspects constituted individual traits of tutors and student teachers (expressed in both formal and informal ways) that influenced teaching and learning practices in the classroom.

##### **4. 6.1.1 Tutor-student conduct relations**

Societal experience wherein the young person is the first to address a greeting to elders tends to influence the tutors/student teachers conduct relations in teaching and learning practices. In this situation, SCA in teaching was influenced by social norms of relationship and respect. In the classroom context, tutors were older than the student teachers were, and therefore the student teachers were considered less experienced and requiring the wisdom of



elders to help them during learning difficulties. To address respect and greetings, student teachers were obliged to stand up to an elderly person, such as a tutor. For instance, in one of the classes the tutor noted a strange practice when the student teachers did not stand up to greet the tutor and researcher who were just entering the research class. The tutor asked, “Why are you greeting us seated?” Then, the student teachers stood up to greet their tutor and this was a common practice observed in all classes. In doing so, tutors learned behaviours of the class that appeared to influence their teaching beliefs, and also student teachers learned certain behaviours from the tutor’s teaching practices. As one tutor put it:

They are clear to state things about their learning. We have not understood you today! Then, I ask why you didn’t understand me? The student teachers can tell you, at the beginning you were in this mood! In that section, you were fast...

Similarly, the findings revealed that student teachers respected the tutor as a parent, a senior brother or a sister. For example, phrases such as “please tutor”, “sorry tutor” and “excuse tutor”, were used by student teachers when they wanted to make a request or a comment to the tutor. In the interviews, one tutor noted, “in the course of marking the exercise, you hear a student say, excuse teacher [tutor]! This fellow wrote answers such as this, this, and this”.

In the same vein, findings revealed that student teachers were observed to help the tutor clean the blackboard or submit the exercises to the tutor’s office, a cultural practice developed from their family or community in which young sisters and brothers were considered to have fewer obligations than elders did. Hence, the elders deserved such respect and support because they have long service in their community, and they needed to deal with serious issues in the society. For instance, the tutor was observed telling the class representative to collect the exercise books and take them to her office.

Another similar practice was that of showing thanks and appreciation for an event. Findings revealed that tutors were observed to give thanks to student teachers when completing an event in the class. Such events included the student teachers’ successful group presentation, and the tutor’s successful conclusion of the lesson. Phrases such as “thank you for your presentation”,

“thank you for your participation in the lesson today”, “thank you”, were some of the phrases that were said by many tutors often during teaching. Giving thanks is a common social norm cherished by student teachers and tutors as well as the community they belong to.

#### ***4.6.1.2 Obedience to rules and procedures***

Classroom teaching and learning activities for both tutors and student teachers aligned to the college culture and influenced the way social constructivist approaches entered the classroom. Tutors and student teachers obeyed the college’s established rules and procedures in their learning process. Such rules and procedures included the students dressing in uniform, the student teachers’ list and timetable for classroom cleaning, and the tutor’s classroom attendance book. The student teachers wore uniform based on sex in which girls dressed in skirts, blouses and ties, and boys dressed on a trousers, shirts, and ties. Some girls’ dressed with a white cloth covering their head on religious grounds. Dressing in uniform was mandatory for the student teachers both inside and outside the college campus, except during the extracurricular activities or private studies. The uniform was considered to harmonise the differences in socio-economic status among student teachers themselves, and between student teachers and the tutors. The uniforms were also considered to help tutors to monitor student teachers’ discipline and cleanliness as well as to develop that attitude among student teachers in life. These practices appeared not to embrace social constructivist teaching because they created discomfort to student teachers instead of pleasant and harmonious situation for student teachers to learn, a key feature of SCA.

Another aspect of obedience was observed from the classroom cleaning practices. Student teachers appeared to have organised a daily schedule to clean their classroom environments. This schedule was fixed on one of the classroom walls for each class-member to view the date for cleaning the classroom. More than half of the tutors observed issues of classroom cleanness before starting teaching. Tutors seemed to emphasise cleanliness and obedience to the class regulations because the student teachers were expected

to practice the same when they graduated from the college to become teachers in schools.

Further, there were attendance books in the classes which each class representative presented to the subject tutor to sign out soon after completing teaching the lesson. These findings suggested a cultural practice established by the college to monitor tutors' attendance in classroom teaching and to strengthen their commitment to teaching.

#### **4.6.1.3 Usage of Kiswahili language**

Tutors observed usage of Kiswahili language in classroom learning activities to comply with the policy emphasis, curricular needs and culture of the context to embrace the social constructivist teaching beliefs. A few tutors emphasised the student teachers using proper Kiswahili grammar during classroom interactions because it was their medium of instruction. These tutors were observed discouraging student teachers who developed the behaviour of mixing words between English and Kiswahili when expressing issues to the class. This is one example of tutors struggling to achieve one of the overall aims of teacher training: To promote Tanzania's culture as required by the syllabi, which require tutors, "to enable the student teachers to increase their ability to value culture, customs and traditions of Tanzanians" (JMT, 2009a, p. iv). Many tutors used Swahili songs, proverbs, and short stories from the local community to build an environment for student teachers conducive to teaching and learning. For example, while many tutors employed storytelling to introduce the lesson, a few tutors used songs and proverbs. Tutors used storytelling to ensure active participation of student teachers in the teaching and learning process. They were short stories that took 20 to 30 seconds. In addition, tutors' emphasis on cultural aspects aimed to promote educational matters in the national development agenda. As noted from the education policy:

Development ... must be culture sensitive for it to be sustainable and able to draw on the large reserve of creativity and traditional knowledge and skills that exist in society. ... it is important that adequate resources be devoted to promoting culture activities at the grass roots level. (URT. 1995, p. 84)

#### ***4.6.1.4 Taboos and customs in classroom***

Some data indicated that taboos and customs influenced classroom teaching and learning practices. That is, tutors' implementation of social constructivist approaches was challenged by some student teachers' cultural taboos. Some tutors noted that there were some complications in teaching and learning related to student teachers' cultural background. For example, some student teachers found it difficult to speak out about some of the issues discussed during classroom learning, because for them, it was not acceptable for those issues (issues of family education such as female genital mutilation, female role-based education, and male role-based education) to be mentioned publicly, or for them to hear people talking about. Tutors reported that a few student teachers felt ashamed, dishonest, and unethical speaking such taboos in class. Such taboos and customs were based on ethnic or tribal practices. One tutor noted:

We have the problem of fear: some fear, some participate well, some hide information because of the tribe, customs, or traditions. Student teachers hide information, when you ask them they feel inferior and tell you that, "tutor, you will make me feel shy"!

#### ***4.6.1.5 Inviting unexpected guests into the classroom***

The data indicated that tutors and student teachers in some situations received or ignored visitors who entered the classroom during teaching in order to conform to social relations in the context. This practice was accepted to be able to maintain classroom environment conducive for the implementation of social constructivist approaches.

Of the tutors observed in the classroom learning activities, they showed similar feelings concerning the coming of unexpected guests (someone not a class member) in the class. In some occasions tutors seemed to welcome guests (these were other tutors and student teachers visiting the class for short time to announce some issues) to the class, sometimes the tutors ignored them and continued with teaching. When the tutors intended to ignore them, the student teachers reminded the tutors to listen to the guest knocking on the door. One of the student teachers was observed telling the tutor, "... tutor, someone is

knocking at the door!” Then, at the end of a lesson, the researcher asked the tutor about the observed practice in the classroom. The tutor explained this practice to the researcher as a normal thing because if the practice were ignored, the guest (person) might interpret to the tutor with different meanings or feelings. These meanings developed could cause a bad relationship with that person. The tutor argued that to maintain good relationship with other staff members and student teachers, the guests should be invited to the class to solve their problem. In doing so, the tutor might be attended in the same way when faced by similar situation to the guest. The tutor added that the person might be coming to the class to save you from a potential danger to your life. Moreover, the tutor urged, we have to listen to others though they are interrupting student learning.

#### **4.6.2 Classroom interactions and control**

Tutors consistently performed classroom interaction and control cognisance to student teachers’ learning, lesson introduction, new knowledge development, knowledge application in practice, reflection on constructed knowledge, and the closure of lessons. Other important considerations were the time needed for learning, freedom in classroom learning and gender issues. These issues illuminated sequentially the learning activities that engaged the tutors and student teachers in knowledge building that embraced the social constructivist beliefs.

##### ***4.6.2.1 Introducing the lesson***

In introducing the lesson to student teachers, tutors used a variety of strategies such as using gimmicks, and soliciting student teachers’ prior experiences — a reflection of social constructivist beliefs. Classroom learning activities began with the introduction of learning objectives in various ways, such as tutors either employing questions and answers or brainstorming techniques to solicit student teachers’ experience on the topic, or organising gimmicks that drew the attention of the student teachers. These gimmicks ranged from songs, proverbs, and storytelling to the presentation of real objects, maps, and drawings. For instance, tutors told the student teachers to volunteer to perform tasks on the

blackboard such as drawing maps or illustrations, or singing a song related to the lesson just introduced to them. In addition, student teachers were told either to read the title of the topic or to define the concepts in that topic title. Photo 4.4 presents one of a map used to introduce a lesson.

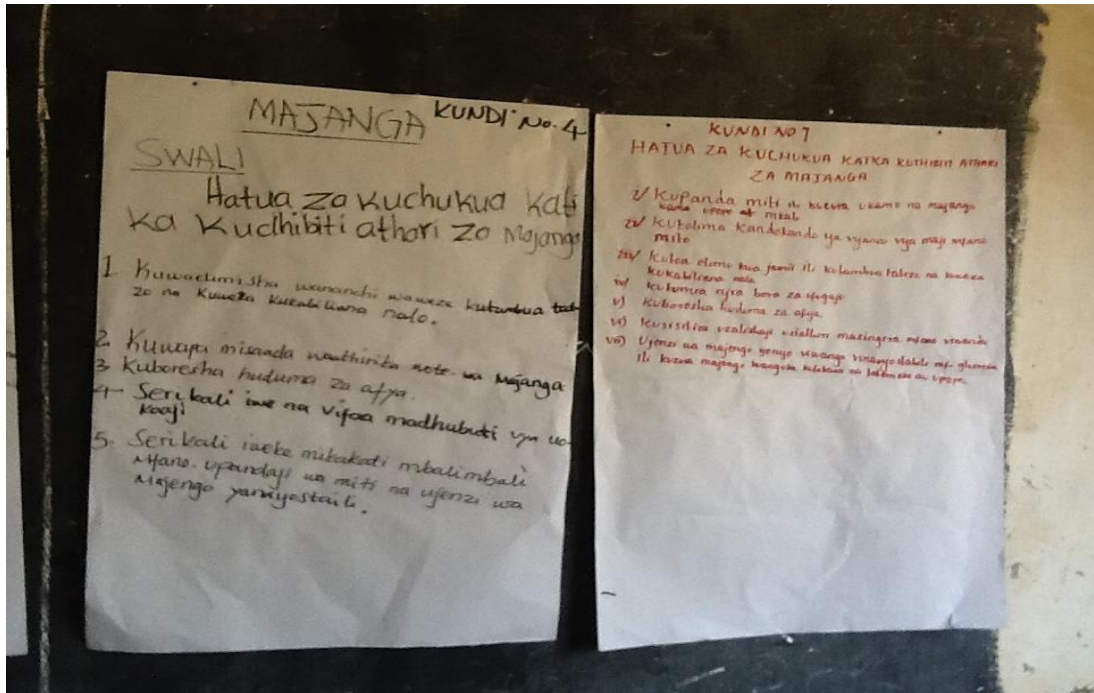


**Photo 4.4:** A map used to introduce a lesson

#### **4.6.2.2 Knowledge construction**

Results on the construction of knowledge stage indicated that 7 tutors used interactive lectures and collaborative teaching approaches and 2 tutors faced difficulties communicating the content as well as mastering the content of subject matter itself. For example data observed from the tutors' documents showed that the second stage was the knowledge construction or the new knowledge development. In this stage, the majority of tutors engaged student teachers in deep exploration of a topic using various approaches supported with teaching materials and motivation. Student teachers were engaged in learning activities in various ways. Observations of classroom teaching confirmed that student teachers were organised into learning communities such as peer

learning, group learning, group presentations and demonstration. Photo 4.5 indicates posters of student teachers' group presentations.



**Photo 4.5:** Posters used by student teachers during group presentation

A few tutors provided a specific time for the student teachers (for individual or group) to complete tasks. They were observed to monitor the student teachers' learning communities via questions and moving around to check progress of the group discussions. In addition, there were individualised tasks for student teachers that engaged them in performing activities such as exercises, assignments, and responding to oral questions from the tutor during classroom learning. Sometimes, tutors distributed learning materials such as papers, books, and atlases to support student teachers in learning activities. Student teachers were selected to either respond to a question, clarify a concept, or to comment on something concerning the learning activities. Both student teachers and tutors were engaged in discussing and giving comments concerning the lesson. Moreover, during the knowledge construction phase, many tutors were undertaking interactive lectures (i.e. occasionally student teachers were provided chances to contribute by asking and answering questions) concerning the student learning objectives particularly when teaching topics that were not familiar to student teachers. One tutor commented:

This depends on the topic. If they are familiar with the topic, their response is 100% but if they are not aware of the topic, their response is not good. For example, I struggled teaching a topic on “economy”, they had poor background about economy.

However, some tutors employed lecturing techniques during the majority of the classroom allocated time for teaching the period and provided little time for the student teachers to add information (see Table 4.8). Many of the observed tutors organised learning activities in groups and then told the student teachers to present the discussed matter to the class. While in the classroom to collect data, the researcher observed a tutor who was teaching geography faced a difficult moment to solve some issues raised by student teachers during the classroom discussions. Geography student teachers were not familiar with concept of a “lunar eclipse” and the duration of its occurrence. The student teachers wanted some clarification about the subject from the tutor who did not answer the question. Then, the tutor asked the researcher to help her to answer the question. The researcher was familiar with the topic and answered the question for the student teachers. The researcher’s accessibility to internet service was through *iPad* technology, and website links were provided for further searches. This was a strange experience for the researcher in research arena. As noted earlier in this section, this was one example of the two tutors faced difficulties in mastering the content and communicating it to student teachers.

#### **4.6.2.3 Application of constructed knowledge**

Findings revealed that the majority of the participants demonstrated their understanding in connecting classroom learning experiences via imagination and illustrations to the real life environment, – as opposed to actual situations – where student teachers were expected to work after completing their studies. Hence, the generated knowledge was applied imaginatively in consideration of social constructivist beliefs, but with some tutors having limited practical experiences.

The tutor engaged student teachers in tasks to explain the benefits of the lesson with relevant examples in practice. Student teachers were told to write



exercises from the blackboard or to respond to oral questions. Sometimes, tutors were observed to advise student teachers about the importance of the lesson they taught to real life to achieve one of the policy provisions, which require realising the student teachers' learning needs. One tutor noted:

What you see student teachers are learning in the classroom are the same things that exist in our daily life. For example, when you teach about "democracy" you ask the student teachers, "Is our country democratic or not democratic?" Some student teachers will reply, "Yes" and some will reply, "No". If you ask, "Why did you say no?" Student teachers will tell you that, "there is no free and fair election". So, [this] is something real they practice in their life.

The policy document indicated that:

The relation between education and development depends on the extent to which the type of education provided and its methods can meet the expectation of the individual needs of the society – the achievement of self-reliance. (URT, 1995, p. ix)

#### ***4.6.2.4 Reflection in knowledge construction***

This was a stage where the observed tutors were engaged with the student teachers to reflect in the process of knowledge generation concerning the lesson. Many participants appeared to perform poor in the reflection of knowledge construction activities because they demonstrated limited knowledge and skills of posing reflective questions. The large class sizes and tutors' knowledge of reflective teaching seemed to influence the performance on social constructivist teaching in practice. Many of the observed tutors used questions to get student teachers to reflect on the experience in construction of knowledge and to relate it to the real experience of life. Observation data indicated the following questions:

- What did you learn in the lesson today?
- Who can make a summary of what we have learned today?
- What issues made you unhappy in the lesson today?
- What issues made you enjoy the lesson?

Student teachers volunteered or the tutor just selected randomly a maximum of three student teachers in the class to respond to each question or to speak about the issues discussed in the class in that particular period. One tutor said, "We usually ask three or more student teachers to answer one question". Although the student teachers usually responded to the tutors' questions and concerns, sometimes they just remained quiet. In such a situation, tutors employed new strategies to make sure the student teachers answered their concerns; for example, some tutors instructed the student teachers to write down the answers, and sometimes they were observed to (struggle to squeeze between tables and desks) pass around to check if student teachers were writing something related to the questions. Then the student teachers were told to submit the written answers to the tutors, who either read them in the class or left the class to read by themselves in the office. The researcher observed the following interactions between the tutor and student teachers in classroom:

*Tutor:* Writing questions on the chalkboard for the s/teachers

*S/teachers:* Copying the questions in the exercise books

*Tutor:* What is the importance of this lesson in your life?

*S/teachers:* No reply (Making conversations among themselves)

*Tutor:* What issues made you not happy in this lesson?

*S/teachers:* Answering the question (few s/teachers replied)

*Tutor:* Ok, write down the answers and submit the papers to me

*S/teachers:* Writing down the answers (few s/teachers submitted papers)

*Tutor:* Thank you (leaving the classroom).

#### **4.6.2.5 Closure of lessons**

Data revealed differing views and inconsistencies among participants in relation to the closure of lessons, with the majority using this opportunity for providing assignments, making announcements, or explaining the objectives of the next lesson, and the minority doing nothing. There was a need to examine the relevance of the closure stage of lessons with regard to social constructivist beliefs. In this situation, while more than half of the tutors asked student teachers several questions that were related to the summarisation of the lesson, the student teachers' next learning objectives, and the postponement of the

learning activities. Other tutors used this opportunity to provide homework assignments, to collect their books distributed to student teachers, and to make announcements to the class. Sometimes, they were observed to advise the student teachers to listen and write down lesson notes, to add information concerning issues discussed in the class and to give some words of appreciation for student teachers' participation in learning. One tutor was observed telling the student teachers: "When we're discussing, you need to develop the lesson notes. Your lesson notes are better than mine because you make them yourself". This view embraced the belief of social constructivism that there are different ways of closing the knowledge construction activities.

#### ***4.6.2.6 Gender consideration in classroom learning***

Regarding gender consideration in classroom learning activities, most of the observed participants demonstrated practice that conformed to policy directives and curriculum needs. In this way, gender issues influenced the classroom implementation of the social constructivist approaches. For example, some tutors seemed to value gender balancing in conducting student teachers' learning activities. This was considered to promote and link crosscutting issues of gender in learning. One tutor explained:

We are used to asking three or more student teachers to answer one question. So, if you start with a girl, the next will be a boy and then a girl. You continue with the same procedure: boy-girl or girl-boy.

Both tutors and some student teachers appeared to acknowledge that gender balance mattered because they were observed to encourage girls to participate fully in the group debates and presentations, to organise groups for learning, and to answer questions, and to contribute to the discussions during meaning making activities. For example, a few tutors emphasised that each group should contain at least a certain number of girls for discussions, and a few student teachers were observed to encourage and comment about their fellow female student teachers as they participated in learning activities. Hence, these few student teachers showed that they were concerned about gender representation in classroom learning activities.

#### ***4.6.2.7 Ensuring a free classroom learning environment***

Results reveal that the majority participants appeared to show their willingness and commitment to ensure a free learning environment, to encourage participation of student teachers in various learning communities, and to ask questions in the classroom. However, some student teachers seemed to be new to the concepts of collaborative and interactive approaches, presenting difficulties for tutors in using the new teaching approaches, and requiring many tutors to issue many instructions for student teachers learning.

Classroom observations indicated that there were indicators of free learning for student teachers in the classroom context. Some of the observed indicators of free participation in learning involved discussions and presentations activities. Since many tutors seemed to guide the student teachers to participate freely in the collaborative learning communities based on peer learning, group discussions, and presentations and whole class discussions. The student teachers' freedom was expressed with laughter, simple jokes to fellow student teachers, in the respect that existed between the student teachers and the tutor, and between student teachers themselves in the classroom. Student teachers were observed to interact with each other through critical discussion; asking questions and creating arguments during the meaning-making process. In addition, tutors provided a few chances for student teachers to decide on the correct solution based on discussions or arguments raised. Similarly, during group presentations, student teachers got chances to ask questions of their fellow presenters, and the presenters were able to conduct the discussions until the end of their time for presentation. This was visible not only during group discussions where student teachers were free to contribute and discuss issues, but also when the tutor employed other teaching and learning techniques.

#### ***4.6.2.8 Classroom variation in the management of time for learning***

The observed tutors demonstrated a big variation – within the individual tutor's lesson and between one tutor and another – in the management of time for student learning in the classroom. One such example was the variation of time allocated for student teachers to discuss issues in groups: some set 10 minutes, some two minutes, some one minute, some 20 minutes, and some did not set

anything. About half of the tutors were observed to indicate the time for the completion of a particular learning activity and were able to alert student teachers about the remaining time for them to complete it. Some tutors gave student teachers one minute, two minutes or four minutes to make group presentations in situations where there were a large number of groups. In the same vein, some tutors told student teachers to complete an exercise from the blackboard in two minutes and to submit it to the tutor for marking. A few tutors were observed to exceed or spend less of the time allocated to complete a particular task. This practice affected the overall time allocated for the period – the time for a single period was 60 minutes. The agreement with the researcher was to plan a 45 minutes period in which they were to be observed. This situation seemed to be not embracing SCA which require enough time and involvement of all individuals in meaning making process. However, while they prepared their lessons for 45 minutes, it was not possible to keep to this time in the classroom setting. Table 4.9 illustrates how tutors differed in management of time for teaching and learning activities.

**Table 4.9:** Time spent per lesson during observed classroom teaching

Tutor's name	Lesson 1 Minutes	Lesson 2 Minutes	Lesson 3 Minutes	Average Minutes
<b>Atu</b>	52.00.	70.00	37.00	53.00
<b>Besta</b>	35.00	40.30	40.12	38.05
<b>Chake</b>	84.41	45.18	82.00	70.05
<b>Dotto</b>	51.46	77.00	72.00	66.08
<b>Edgar</b>	46.56	43.49	41.52	43.09
<b>Fusi</b>	58.00	74.00	56.58	62.09
<b>Gadi</b>	43.00	45.00	65.00	51.00
<b>Hamisi</b>	60.00	58.00	57.17	58.04
<b>Iddi</b>	49.00	52.37	47.00	49.05

With reference to Table 4.9, when they were asked to give reasons for exceeding the time they planned to teach the lesson, some of the tutors reported that the time for teaching was not enough. For example, Chake spent 84 minutes on the first lesson. During the follow-up discussion, his reflection was that 60 minutes was not enough to complete the eight objectives. His class had 79 student teachers and each group was assigned to present in 10 minutes. Another reason the tutor gave was that the number of student teachers

was large, which led to the formulation of eight groups to discuss the matters and present them in class. Therefore, the time required for the presentations was longer than the total time allocated to the teaching. Perhaps, Chake would set less time to allow other activities to take place. With exception of Besta, Edgar, Gadi and Iddi who tried to align to the time they had agreed with the researcher, the majority of the tutors attuned themselves to the usual time of 60 minutes. This findings show how tutors' experience of social constructivist teaching was confronted by the classroom learning situations, which differed accordingly with the amount of time required to explore the phenomenon.

#### **4.6.3 Use of teaching techniques in classroom**

With reference from the findings presented in Table 4.10, many tutors appeared to be employing variety of collaborative and interactive teaching techniques, hence implementing social constructivist approaches in social science teaching. Many of the observed tutors appeared to have some pedagogical knowledge of social constructivist approaches that helped them to organise student teachers in various learning communities. This situation was likely to involve student teachers in techniques which promoted social relations, interaction, and freedom in knowledge construction activities. Although these were difficult for some tutors to follow because of their limited experience with such new approaches, and the challenges of teaching class sizes. As one tutor put it:

We use brainstorming, projects, presentations, expert speakers, mingling, whole class discussion, group tasks – but it is difficult to use it due to class sizes. We do not give them lesson notes.

Though many tutors who were interviewed reported that they used a variety of teaching techniques in promoting social science teaching (as presented in the previous pattern about planning and preparation experiences for teaching), the classroom observation data revealed that some tutors employed the teaching techniques to enhance class interactions for knowledge construction. Tutors selected teaching techniques were enhanced with few teaching materials (section 4.5 provides the detail). Table 4.10 identifies the teaching techniques and the associated teaching materials tutors used to promote knowledge construction activities during observed classroom teaching.

**Table 4.10:** Teaching techniques and materials observed in tutors' classrooms for three lessons

Tutor		Lesson 1	Lesson 2	Lesson 3
Atu	Methods	Brainstorming, questions and answers, song, jigsaw, class discussion,	Proverbs, song, 10 min. Jigsaw, presentation, class dialogue,	Illustrations, demonstrations, questions and answers,
	Materials	Books	Flip chart, books	Atlas, a globe,
Besta	Methods	Question and answer,	Group discussion,	Group discussion (4-5 student teachers), presentation,
	Materials	Blackboard	Books, pamphlets, chalkboard	Chalkboard
Chake	Methods	5 min. group discussion, presentations	Group task, group presentation,	Jigsaw technique, group presentation, class discussion,
	Materials	Chart, atlases, sketch map of East Africa,	Chalkboard	Drawings, chalkboard
Dotto	Methods	10min. group discussion, 10 min. presentation,	Group discussion, illustrations	Brainstorming, question and answers, 13min. group discussion, group presentations
	Materials	1 Atlas per group, a globe, sketch diagram	A globe, chalkboard, sketch diagrams	Chalkboard, guide questions
Edgar	Methods	Question and answer, clarifications	Class discussion, 3min. group discussion, presentation, assignments	Competing camps for questions and answers, lecturing, exercises
	Materials	Chalkboard	Chalkboard	Chalkboard
Fusi	Methods	Question and answer, lecturing	Question and answers, illustrations	8min. group discussion, 4min. Presentation.
	Materials	Chalkboard	Pictures, sketch diagrams, chalkboard	Chalkboard
Gadi	Methods	Demonstration, question and answers	Illustrations, questions and answers,	Demonstration, group discussions, group presentation
	Materials	Globe, mobile phone, calculator, sketch diagrams, chalkboard	Sketch diagrams, ruler, pointer, chalkboard	Maps, chalkboard
Hamisi	Methods	Lecture, Illustrations	3 min. peer group discussions, explanations	Lecture, illustrations, 1min. peer group discussion, 2min. presentations, Storytelling
	Materials	Sketch diagram, chalkboard	Chalkboard	Chalkboard
Iddi	Methods	5min. Group discussion, presentations, lecture	Lecture, question and answers,	Class discussion, lecture
	Materials	Chalkboard	Chalkboard	Chalkboard

However, the use of some teaching and learning techniques brought problems to many tutors because they could not demonstrate understanding of how to use them in teaching. For example, some tutors who used group discussion in

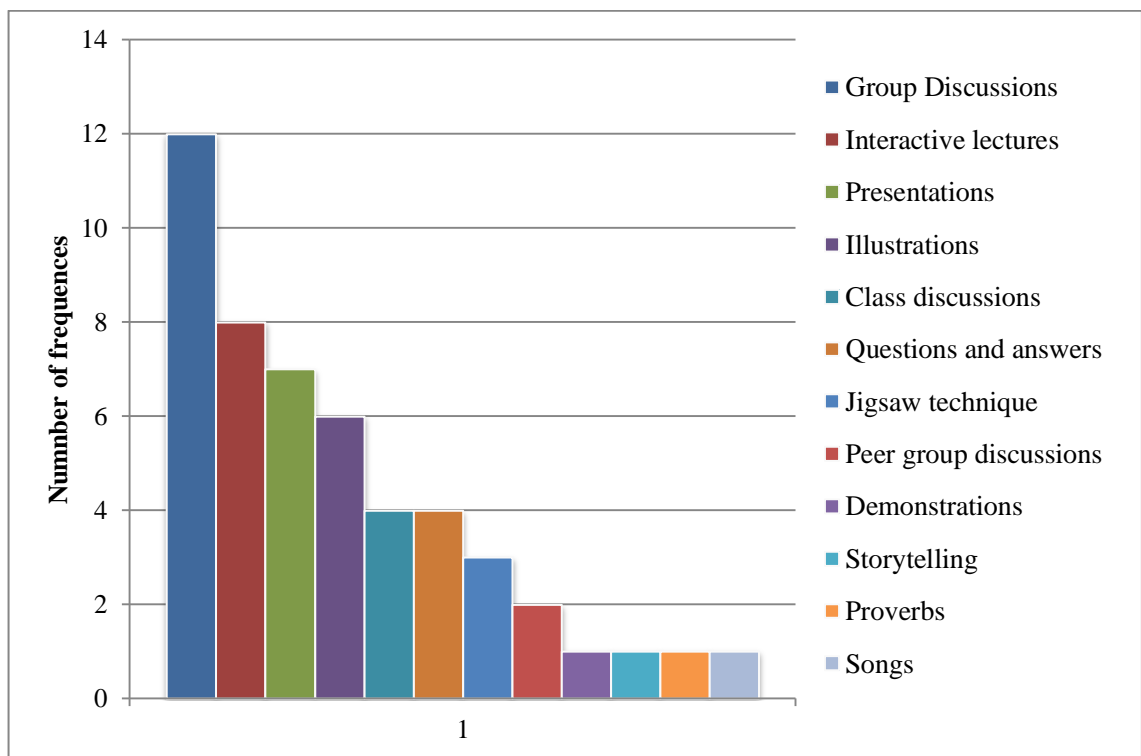
teaching were observed to tell student teachers to form groups. Some of those groups constituted many more student teachers than others. Sometimes, the groups did not have identity or a name, some did not have group leaders, learning aids, and guiding questions for the discussions. Tutors were observed to organise the student teachers' groups without proper guidance and procedures to deal with the task effectively. Such tutors were revealed to offer many instructions and announcements during student teachers' interaction, which interrupted their concentration. Some student teachers needed support from tutors: "Tutor, we do not understand our group task" sometimes during group presentations, some tutors did not recall how many groups had completed presentations; for example, one of the tutors was observed to ask a question to the class: "How many groups have not presented their work?" Student teachers kept quiet until some student teachers told the tutor that they had not done their presentation.

In connection to the description of the findings in Table 4.10, it appeared that tutors' use of teaching techniques was enhanced by teaching aids. The most dominant techniques if arranged in sequence were group discussions, interactive lectures, group presentations, illustrations and whole class discussions as well as the questions and answers. Other techniques were jigsaw techniques, peer group discussions, and brainstorming. The least used techniques were demonstrations, storytelling, songs and proverbs. Figure 4.7 illustrates the frequency of the teaching techniques employed in the classroom.

#### **4.6.4 Use of teaching aids**

Information from the classroom observations and interviews indicated that teaching aids supported the tutors' use of teaching techniques in the classroom. Many of the respondents' views were in agreement that to promote social constructivist teaching situations a variety of teaching aids were employed per lesson. There were limited variety of ready-made teaching aids (e.g. maps, globe, and manuals) and improvised teaching aids from local resources to meet the teaching requirements. For example, such teaching aids included books, drawings, maps, charts, internet searches, real objects, real environments,





**Figure 4.7:** Frequencies of tutors' use of teaching techniques

newspapers, and pamphlets. Findings revealed tutors' use of a limited variety of teaching aids during classroom teaching activities with the blackboard being the major. Other teaching aids observed during classroom observations included, the globe, drawings and illustrations, mobile phones, atlases, maps, improvised sketch maps and the globes, pencils, rulers, and books. This is illustrated in Table 4.11 (See also Table 4.10).

With the use of locally available materials and the real environment, the tutors were able to improvise teaching aids to support the classroom teaching and learning activities. However, despite using locally improvised teaching aids, the tutors complained that they had limited access to a variety of teaching aids. One tutor explained:

I use techniques, which enable the child to produce his/her own thinking, discussions, and teaching aids. Yet, we do not use them effectively because sometimes we don't have teaching aids, we don't have the teaching materials to facilitate learning. Teaching through meaning-making involves the use of teaching techniques that relate to the improvised

**Table 4.11:** Teaching materials observed from tutors' classroom in three lessons

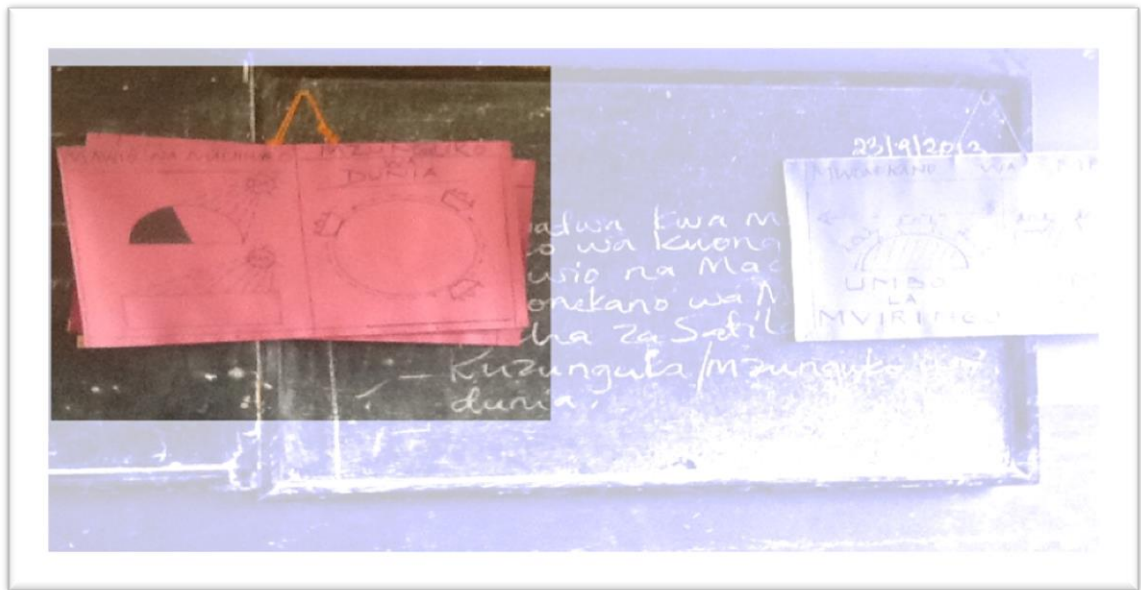
Tutor's name	Lesson 1	Lesson 2	Lesson 3
Atu	Books	Flip chart, books	Atlas, a globe
Besta	Chalkboard	Books, pamphlets, chalkboard	Chalkboard
Chake	Chart, atlases, sketch map of East Africa,	Chalkboard	Drawings, chalkboard
Dotto	1 Atlas per group, A globe, ruler, sketch diagram	A globe, chalkboard, sketch diagrams	Chalkboard, guide questions
Edgar	Chalkboard	Chalkboard, sketch diagrams	Chalkboard, drawings
Fusi	Chalkboard	Pictures, sketch diagrams, chalkboard	Chalkboard,
Gadi	Globe, mobile phone, calculator, sketch diagrams, chalkboard	Sketch diagrams, ruler, pointer, chalkboard	Maps, chalkboard
Hamisi	Sketch diagram, chalkboard	Chalkboard	Chalkboard
Iddi	Chalkboard	Chalkboard, sketch diagrams	Chalkboard

teaching aids and their application in teaching. We cannot improvise teaching aids because ... [there is a] shortage of funds.

Some of the improvised teaching aids were of low quality and they had limited originality, creativity and capacity to attract student teachers' attention in learning. Some of the problems with such teaching aids were that the printed information was faint or too small for the student teachers to view, and the choice of colours for the paper and prints was incorrect. Photo 4.6 shows an example of such improvised teaching aid used to teach a geography class.

#### **4.6.5 Motivation strategies and support in classrooms**

Data indicated a variety of ways in which many tutors motivated and supported student teachers in learning, which were significant aspects for promoting social constructivist approaches in knowledge construction. Tutors' interviews and classroom observations indicated that student teachers were motivated to learn when the tutors encouraged, persuaded, and advised them. Student teachers were also motivated when tutors used a variety of teaching strategies, provided rewards praises and prizes, used clear instructional language, used assignments and tests, expressed transparency, gave more freedom to student



**Photo 4. 6:** Observed improvised teaching aid used to teach geography class.

teachers in learning, exposed familiar topics to student teachers, and appreciated and recognised student teachers' works. As one tutor explained, motivations could be divided into two categories:

Student teachers are motivated to learn if they [have] answered well the questions. The primary and secondary motivations are used: the primary motivation includes clapping hands, or you say "pasha." Secondary motivation [is] offered by the head of department who give them pencils, books, notebooks. Sometimes, when we perform well in our subjects, we get prizes from the principal of the college. If it is money, we divide it among the department members.

#### **4.6.5.1 Encouraging, persuading, and advising student teachers in learning**

A number of tutors claimed to motivate student teachers first through encouraging, persuading, body gestures, and advising student teachers concerning learning in a stimulating environment for the social constructivist teaching. One tutor argued that the student teachers needed advice on "what to do, how to do, and what to study". They argued that they advised student teachers on matters related to how to study hard, prepare for examinations, and

be able to obtain jobs as well as good salaries. In addition, they persuaded student teachers to study hard and advance in their career and that learning to teach does not end at the level they have reached when they graduated from the Teachers' College. Moreover, they persuaded that once they graduate into their teaching careers, they have wider opportunities to study for job outside the teaching career. As one tutor put it:

The only way, I use to motivate them (student teachers) is to persuade them to advance in their studies because learning to teach does not end ... [at this level of study]. That means, through history they can make something extraordinary to go forward and obtain a different career other than teaching: a new job better than being a teacher.

Similarly, tutors used gestures such as facial contact, nodding the head, and verbal cues such as "aah", "enh", "Umh", "continue", and so on to encourage student teachers to express issues in learning. They told the student teachers about their knowledge potential that is useful to deal with issues of learning and they avoided the use of discouraging words such as "you are wrong", "that is not correct" or "you are not able to do this".

#### ***4.6.5.2 Using a variety of teaching techniques to motivate student learning***

Many tutors employed a variety of teaching techniques, which were considered to be vital in creating environments that motivated student teachers in the construction of knowledge based on social constructivist beliefs. In this case, it appeared that these tutors employed a variety of teaching techniques by sequencing activities with collaborative approaches. Moreover, tutors considered songs, proverbs, storytelling, praising words, and prizes in stimulating the teaching and learning environment. They argued that the sequence of learning activities, from introducing the student teachers to the aspect of learning, to engaging student teachers in the practical aspects of knowledge construction, to applying the knowledge learned in real life, to reflection on the knowledge constructed, to developing an evaluation process concerning the teaching and learning process motivated student teachers to learn. Similarly, tutors argued that the student teachers were motivated by

interesting short stories and proverbs that were linked to learning activities and which made them enjoy learning. Data revealed that the use of words praise such as “good”, “very good”, “well-done”, “good attempt” had great impact to motivate the student teachers in learning. Another motivational practice used by tutors was the use of rewards and prizes such as pencils, books, exercise books for the student teachers excelling in academic performances.

#### **4.6.5.3 Rewarding student teachers in classroom**

Data revealed that providing rewards to student teachers stimulated classroom interactions and knowledge construction situated on a social constructivist-teaching environment. Participants demonstrated combinations of verbal and physical procedures for rewarding good responses from a student. For example, it was that all student teachers in the classroom were involved in using “*pasha*” to reward an individual student or the class. *Pasha* is a Swahili word means to “make it warm”, for which someone has to receive a warm reward. The tutor or the student teachers selected someone who was considered the best to conduct *pasha*. The procedure to conduct this kind of reward involved rubbing hands, saying certain praising words, and clapping hands. On some occasions, after clapping hands it was extended to other body actions of the feet, the head, just to make the rewarded person enjoy it. During classroom observation, the class selected one of the student teachers to conduct the *pasha*. He began to say, “Put your hands together, pasha-pasha-pasha!” To respond, the student teachers put their hands together and started rubbing them as a sign to make them warm. When the class were rubbing hands, the conductor was saying, “Let us warm our hands for his best thoughts, intelligent answer, and do the same next time for the best of our learning. Clap your hands for him!” The class clapped three times, and said, “Thank you”. As usual, after this action, the tutor continued with teaching.

#### **4.6.5.4 The use of instructional language as a motivating factor in learning**

Many of the participants reported that the use of Kiswahili language a medium of instruction motivated classroom interactions, which helped them to understand and communicate easily the content of the subject matter. Both

student teachers and tutors were in favour of Kiswahili language as a medium of instruction in the college as they could communicate many issues easily. However, the student teachers' background of English medium of instruction in secondary education schools created difficulties; English had been a barrier to obtaining the knowledge expected of them in secondary schools. As a result, the same knowledge was repeated in tutor learning programmes at the college level. One tutor explained:

The big thing that motivates them is the language [Kiswahili]. They hate English! In the O-level [Ordinary Level of Secondary Education], they used English as a medium of instruction and when they come in the teacher training college, except for English all other subjects are taught in Kiswahili. So, they are so motivated. When we are teaching here academically is a reflection of what they learned during their O-level studies. Therefore, you find that they understand well right now compared to the time ... [when they were in] secondary school.

#### ***4.6.5.5 The use of assignments, tests, and feedback***

The use of assignment, tests and feedback based on group tasks was revealed to motivate student teachers' learning which enabled tutors to create teaching practice environments embracing social constructivist learning. Tutors provided student teachers with group tasks that required them to read and write, announcing a date for a test, and marking the tests and assignments as well as providing feedback (in oral and writing) to motivate student teachers in learning. The student teachers observed the feedback and used it either to compare their progress or to change their study habits.

#### ***4.6.5.6 Tutor's transparency and classroom freedom assurance***

Tutors' demonstrated transparency and assured freedom for student teachers in the classroom to stimulate the relationship between the tutors and student teachers, and to ensure the trust and confidence of student teachers in the learning process. Such democratic environments are vital for social constructivist teaching. In this case, many tutors provided the freedom for student teachers to ask questions concerning clarification of the difficult issues

in learning, to receive support from tutors, and to share ideas in their learning activities. Similarly, tutors demonstrated transparency about issues related to student teachers' college life of studying – for instance, telling student teachers about the type of examination or test questions they could expect, involving them in the classroom marking of their exercises, and telling them issues that the tutor faces (for example, a difficult topic to teach because it is not familiar or there is a shortage of books). One tutor asserted:

If I don't have the answers, I do not hesitate to tell them [student teachers], "I don't have the answers of this question. You have to go to find them [answers]. I will find them [answers] and we will share our answers of this question during the next lesson".

He added:

You need to be clear to student teachers. For instance, if tomorrow we will learn about "constitution" or "seasons". I must be clear to tell the student teachers that we will learn about "constitution" or "seasons" and that each of them has to prepare something.

#### ***4.6.5.7 Familiar content of the lesson in the classroom***

Some tutors explained that when student teachers were familiar with the content of the topic they were motivated to learn because they had some experience to be transferred into the new learning environment. The idea of background experience is acknowledged in a social constructivist teaching situations. Further to this, their understanding concerning the topic or course potential in life experiences, motivated student teachers in learning to realise their expectations. One tutor noted:

I think the Ministry [Ministry of Education] motivates them and our role is to reinforce it. I think they are motivated with a belief that "If I complete the studies my life will change because of the job and good salary".

#### ***4.6.5.8 Tutors' appreciation and recognition of student teachers in the classroom***

Many of respondents' data and the classroom observations indicated that tutors' appreciation and recognition of student teachers' contributions and participation in knowledge construction activities motivated student teachers to study. Calling student teachers by their names and selecting student teachers who raised their hands to provide answers were signs of recognition that appeared to motivate student teachers in learning and improved personal relations between the tutor and student teachers. Appreciation of other people's views is an important tenet embraced in social constructivist teaching and learning environments. Student teachers considered their contributions valuable and believed that they might come up with some ideas that were more useful than what they knew at that moment. Tutors acknowledged their appreciation for the student teachers' performance in the learning process with phrases such as "thank you", "thank you for your participation", "thank you for coming", and "you have done a wonderful job!"

#### **4.6.6 Assessment and evaluation strategies in classroom**

Results indicate that to promote social constructivist teaching environments, tutors employed a variety of classroom assessment and evaluation procedures during lesson presentation. Tutors engaged in continuous evaluation of the classroom learning activities and they involved student teachers in evaluating the teaching and learning process. Individual tutor's evaluations were combined with ideas from student teachers' evaluation for the overall evaluation of teaching and learning process.

##### ***4.6.6.1 Continuous classroom evaluation***

Data indicate a variety of procedures were employed by tutors to assess student teachers while the lesson was in progress to move from one stage to another. Continuous assessments appeared to be conducted at different stages of knowledge construction: introduction of lesson, development of new knowledge, application of new knowledge, reflection of new knowledge, and the closure of the knowledge construction activities. One tutor reported that:



Each stage has an assessment: In the introductory stage, there is assessment, you assess the development of the lesson, you assess the reflection of the learning process, and you assess the conclusion stage.

Thus, we assess every stage we perform during teaching.

Data indicate that the continuous evaluation involved activities such as exercises, assignments, and quizzes, then marking them as well as providing feedback. For example, one tutor wrote some questions on the chalkboard for the student teachers to write responses to; the responses were then marked in one of three ways:

- The tutor and student teachers discussed each question to agree for the answers, and then student teachers exchanged their scripts for marking and recording the marks obtained in the question. To determine the extent class of performance, the tutor asked the student teachers about the high to low passes before the script was returned to the owner to view.
- The tutor marked the scripts and indicated the marks/grades while the student teachers were continuing writing about the question in the classroom.
- Student teachers wrote the answers and submitted the scripts to the tutor's office for marking. The feedback formed a starting point for the next lesson.

Moreover, evidence showed that tutors conducted intelligence challenges, monitoring and checking student teachers' responses during the discussions of questions in order to judge student understanding of the phenomena in question. Similarly, the tutors were listening carefully to student teachers' questions, comments, and clarification of issues so as to judge their understanding was sufficient to allow them to continue with the learning process. In addition, tutors were engaged with the student teachers in this evaluation process based on the tutors' instructions that allowed them to freely follow and participate in identifying relevant activities that promoted learning and their performance in the observed activities were judged by tutors.

In some situations, the findings indicated that tutors provided chances for the student teachers to evaluate the views of their fellows concerning learning, asking questions to the class and to the tutor, responding to questions from the tutor and receiving feedback. For example, it was noted that a tutor allowed a student to comment on a particular concept and their fellows to disagree or raise more questions. Hence, the interactions between student teachers in the lesson provided opportunities for tutors to evaluate the extent to which the lesson was clear to student teachers. Feedback on this type of assessment was provided through tutors' appreciation and remarks about student teachers' contributions at the end of the lesson, as well as through student teachers' expression of happiness among themselves.

#### ***4.6.6.2 Student evaluation in learning***

Many of the observed participants administered student evaluation of the learning process. Tutors engaged student teachers with predetermined questions that provided answers about the strengths and weaknesses of the learning process, the usefulness of a lesson to the teaching career, and the issues that interrupted and annoyed the class. As noted in the reflection in knowledge construction (section number, 4.6.2.4), many tutors repeatedly asked some common questions to guide student teachers to evaluate each lesson. The questions included:

- What are the issues that annoyed you in today's lesson?
- What are the issues that made you happy in today's lesson?
- What did you learn from this lesson?
- What do you think are the benefits of this lesson in teaching?

It was observed that, because of limited time for tutors to assess a minimum of 70 student teachers, a maximum of three student teachers were randomly selected to respond to those questions. This practice constrained the implementation of SCA which needed the participation of the majority of student teachers in assessment to promote their learning process. The findings indicated that student teachers provided positive and direct responses to the

questions and tutors used that feedback as a guide for preparing the next lesson. One tutor noted:

During teaching, in each stage the student teachers will be assessing you many issues. You will be assessing student teachers at the same time they assess you in the teaching process. That is why during student evaluation the student teachers raise many issues, which help you to reflect in the whole lesson.

The tutor added:

When you assess the student teachers about the progress of the lesson in general, they explore everything concerning teaching and give their opinion. This feedback helps the tutor to make reflection of his teaching to improve preparation for next lesson. You may opt to change the teaching technique because you used a wrong one.

Furthermore, data indicated that along with student teachers' evaluation of the learning process, the tutor wrote a declarative statement that reflected the general picture of the student teachers in evaluating their learning process. For instance, documents revealed some of the following statements of student teacher evaluation:

- Student teachers have enjoyed group discussion.
- Student teachers said they have enjoyed the teaching and learning activities.
- Student teachers said they have enjoyed the lesson because of the teaching; technique that involved them in learning.
- Three student teachers explained that the lesson was well understood.

However, the student teachers themselves could have made these statements if they would be involved effectively in lesson planning. Rather the tutor made the statements for evaluation in the lesson plan in which student teachers had took no part. It was apparent from their documents that some tutors were just repeating for several weeks or months the same statement about each lesson they conducted class.

#### **4.6.6.3 Tutor's evaluation and remark**

Data from interviews and classroom observations show that tutor's evaluations and remarks were developed by relying on continuous assessments. It appeared that student teachers' evaluation also informed tutors' decisions about the achievement of the lesson and helped in the planning for future lessons. Tutors seemed to write the evaluation statements that recorded the number of student teachers registered in that class, the number of student teachers present in that particular lesson, and the overall status of student teachers' performance of the lesson. This was typical of a traditional approach of reporting student teach evaluation. For example, documents revealed the following tutors' evaluation statements:

- About 165 of 165 student teachers understood the lesson because they were able to define the concept of a planet, to mention eight planets of the solar system, and to differentiate them.
- About 68 of 68 student teachers understood the topic I taught because they have performed well in the exercise provided.
- About 67 student teachers out of 69 understood the lesson because they were able to discuss correctly the five strategies used to fight colonialism.
- About 72 of 76 who attended the period were able (a) to explain the concept civic skills, (b) to discuss the importance of developing civic and competence skills.
- All 70 student teachers who attended the period were able to explain correctly the reasons for the establishment of single party political system and their disadvantages.

From these statements, tutors constructed a remark to show the way forward to issues raised by student teachers in the lesson. Examples of such remarks were, "I have achieved the learning objectives", "I will continue with the next subtopic". One tutor explained the importance of indicating a remark after teaching the lesson that:

The remarks help the tutor to conduct small classroom research to understand the source of the problem. Why women don't perform well? Probably, they have so many family obligations to perform than men. Alternatively, do men have so many guarding during the night than women? Therefore, we explore about the issues in this way.

However, this process could have involved the student teachers so that they understood and were able to collaboratively prepare the next lessons by themselves with little support of the tutor to promote SCA.

#### **4.6.7 Summary**

The purpose of this section of research is to analyse the findings to provide an answer as to whether or not the tutors employed SCA and when they did, to investigate the ways they used to integrate it as influenced by the PLD experiences. For many instances the tutors seemed to have demonstrated a high ability to transfer PLD experiences of SCA into teaching cognisant with the socio-cultural contexts and procedural approaches and employing a variety of motivational and collaborative strategies. On the other hand, some tutors demonstrated limited pedagogical knowledge and skills in the integration of SCA in teaching.

Findings indicate the success and discrepancy in tutors' implementation of social constructivist approaches in the classroom context. Both tutors and student teachers adhered to cultural practices in their classroom teaching and learning activities. Examples of cultural practices were related to usage of Swahili language in classroom, taboos, and college culture, as well as schedules and gender considerations. Tutors' classroom interactions were tailored to a sequence of learning activities: lesson introduction, knowledge construction, knowledge application, and reflection in knowledge construction process as well as lesson closure that reflected social constructivist beliefs. Data indicated that tutors used a range of collaborative and interactive teaching approaches and rarely used lectures except when the content was unfamiliar to student teachers and learning materials were lacking. Some of the approaches were new to student teachers and they needed support, which necessitated

tutors providing many instructions during the learning process. Moreover, tutors established connections between classroom interactions and life experiences, based on imaginative and illustrative cues that often lacked practical evidence of what actually existed in school curriculum. Tutors were inconsistent in the reflection of constructed knowledge as few student teachers were involved and tutors showed limited experience of asking reflective questions to student teachers. Equally important, there were inconsistencies in how closely the closure of lessons related to what actually should be in the closure. In closing lessons, tutors appeared to be providing exercises, assignments, new learning objectives, to make informal announcements, and serendipitous (ad-hoc) conclusions. Moreover, tutors demonstrated inconsistencies in time management per lesson and between lessons, due to the reported content overload in the syllabus, examination demands, and tutors' knowledge.

Furthermore, tutors employed a range of motivation and support strategies in teaching that often involved the use of a variety of teaching techniques and teaching aids; the use of Kiswahili language; the use of group based evaluation procedures; transparency and assurance of free learning situation; teaching familiar content; recognition and appreciation of student teachers in classroom learning process. Others motivation strategies were encouragement; advising; persuading; *pasha*; and providing instructions, assignments, and feedback (oral and written). A few tutors appeared to demonstrate limited experience of employing some specific teaching techniques in classroom because they lacked knowledge of using the techniques in practice. The majority of tutors seemed to employ a limited use of ready-made and improvised teaching aids. The improvised teaching aids were of low quality in terms of their size, content, appearance, and originality. Moreover, student teachers' backgrounds appeared to hinder the implementation of SCA in the aspects of classroom interactions and knowledge construction and evaluation procedures. In this situation student teachers' evaluations on the learning process relied on tutors' guidance (formed in line with the syllabi) and who decided the future learning activities. In this situation, findings suggested that contingent teaching challenges were influencing the integration of SCA in practice.

## **4.7 Improvement and maintenance approaches for social science teaching**

Findings revealed several key issues responding to the proposal about the approaches for improving and maintaining social science teaching in response to their PLD experiences in Tanzania's teacher education programmes. The research revealed several tutors' acknowledgements about the strengths of social constructivist approaches and their proposals for improving professional training programmes. By studying interview responses, classroom observations, and documents, several approaches to social science teaching emerged. These focussed on three main issues:

- Education policy improvement practices,
- Leadership practices,
- Social science curriculum and teaching.

### **4.7.1 Education policy improvement practices**

Many participants indicated their concern regarding improvements in educational policy issues: The education system (especially at the primary and secondary levels), professional training policy, and class sizes. Moreover, they indicated the need for improvements to classroom seating structure, and education for the public on the relevance of social science to life experiences if a successful social constructivist curriculum was to be implemented.

Many tutors noted that there was a need for reformation of the foundations of the education system especially in primary and secondary education levels to make it more meaningful and productive for student teachers' learning. The reformation of the education system suggest that student teachers are likely to have productive education backgrounds in their future learning that will embrace positive transfer of learning and SCA. Tutors argued that student teachers should obtain education that could allow them to understand the reality of life, education that could prepare them to live independent lives and to obtain self-employment soon after school completion, education that would prepare them for future learning opportunities. Tutors suggested that by improving the foundations of education, they would deliver effective services in practice

because this was one of the problems faced by student teachers in learning. One tutor asserted:

There should be strong foundations in primary and secondary education to give them knowledge to apply in future learning. Therefore, when they come at this level our task will be just to give additions, if really we want to produce the best quality teachers.

Many tutors commented that aligning class size with the amount of resources available for a PLD programme is a significant factor to consider in improving the implementation of social constructivist curriculum in practice. Since tutors taught large classes, there were proposals to amend the practices by either recruiting fewer student teachers or enlarging the classrooms in ways that could allow for movement among student teachers and close interaction with the tutor. Tutors proposed that the ideal class size for any teacher-training programme would be around 25 to 35 student teachers, arguing that a small class size would enhance collaborative construction of knowledge and would improve tutors' performance. One tutor commented that:

The issues to consider in ... teaching, I think ... first, I accept these teaching techniques based on meaning-making. The second thing, if possible [there] is [a need] to improve the curricula and to reduce the class size to the required standard of the college.

Additionally, tutors criticised the architecture of the classrooms, which only allows for student teachers to sit in rows and columns. Hence, they recommended reformation of classroom layout to allow for different seating arrangements more conducive to learning. They proposed classrooms that would provide opportunities for a variety of seating styles such as circles, round tables, and others. As one tutor argued:

If a teaching approach has changed, we should not remain in the old format of classrooms. The approach could be seating in a circle format or any other format that allows student teachers to interact easily.

Finally, yet importantly, a few tutors reported the need for education of the public on the matter of social science teaching. They believed that student teachers and the communities around them had limited knowledge concerning



the subject matter of social science and its importance in practice. Tutors seemed to be complaining about student teachers who demonstrated little interest in the subject, based on the misconceptions they had been developing towards it from the moment they began to learn social science in the formal education system. The misconceptions circulated and transcended into their communities and were inherited by the emerging generation. Hence, to change the misconceptions, there was a need for deliberate initiatives to educate student teachers and their communities via different social forums at various levels, from the village to the nation. Tutors felt that people should be educated about the importance of social science teaching from primary school to university. With regard to the creation of awareness of social science teaching one tutor explained that:

In my opinion, history teaching should continue in all levels of education. In doing so, the people will develop a positive thinking about the teaching of history subject.

Another tutor added that, “The Government should consider educating people about the importance of learning civics, to know things that are important in their life”.

#### **4.7.2 Leadership practices**

Participants recommended encouraging leadership practices in teacher education colleges as they felt it ensured good leadership, provided on-the-job training opportunities, and motivated tutors. They also felt it contributed to eliminating leadership malpractices and promoted tutors’ transfer of PLD experiences to their practice.

In this respect, good leadership was expected to foster the opportunity for providing the necessary support in teaching and learning contexts, for both student teachers and tutors. The support expected from the college leadership included the assurance of PLD avenues, teaching aids and books, and access to internet services. Conducive living and working environment were also considered important, including offices and classroom furnished with desks and tables. Good college leadership was expected to minimise the number of events

(that were not in timetable) and give more time to achieving the college's core mission for teaching.

Many of the interviewed tutors reported their desire for PLD on-the job to improve their pedagogical and content knowledge in teaching. Tutors needed PLD experience to be able to teach student teachers regarding the construction of knowledge by new pedagogical approaches. Newly employed tutors especially required such training experience because they were not involved in the teacher-training course on social constructivist teaching. One tutor argued: "The tutor has reported here to teach, but this does not mean he/she understands everything". Similarly, long serving tutors also required training on content and pedagogy because their experiences in their initial teacher learning programmes appeared to be not commensurate with the newer syllabus demands. One tutor commented:

Some tutors are old, they learned old topics, they learned before the change of curriculum. Those who did not learn the new topics issue should attend in-service training to be equal with those who learned new topics.

Additionally, both long and short serving tutors needed training on instructional language. Since the initial teacher learning courses were conducted in English, they faced some difficulties teaching social science in Kiswahili. Therefore, tutors needed training in the basics of Kiswahili language to understand key concepts of social science that they might have initially learned in English. One tutor said:

We have to remain with Kiswahili because we are preparing teachers to teach in primary schools where the language of teaching is Kiswahili. Tutors should be trained to use the correct Kiswahili words in teaching. Additionally, tutors should learn more than spoken Kiswahili language to be able to deliver the correct messages.

Some of the on-the-job PLD opportunities for tutors were organised in learning situations outside colleges, such as national symposiums conferences and seminars, and were based on Government funding. Tutors felt they needed more PLD that covered different teacher training colleges, to maximise the

opportunity for tutor interaction and to allow for discussions of the most pressing matters in social science teaching. They felt that with Government support, symposiums, conferences, and seminars would be organised at the levels of a zone, a college, and a department.

Nonetheless, results suggest that both student teachers and tutors need motivation to improve their performances in classroom teaching and learning activities. According to the findings, they were motivated in a variety of ways. For instance, while tutors were motivated to teach the student teachers to increase their levels of performance in the national examinations, the student teachers were motivated to learn what was needed to pass in national examination as well as to gain good salaries after completing their courses. One tutor asserted this directly, stating, “I think they [student teachers] are motivated with a belief that, if I complete the studies my life will change because of the job and good salary”.

Leadership malpractices in policy implementation influenced the qualifications level of student teachers admitted to teacher education programmes. Tutors noted that there was a need for improvement in entry qualifications for student teachers, if tutors were to implement the new curriculum effectively. A few tutors noted that some education officials were not adhering to the teacher training policy. Similarly, many participants believed that educational leaders and officials who were responsible for administration, demonstrated leadership malpractices. As one tutor said, “because of the political nature of this country, the policy document has been violated”. This was a common feeling among interviewed tutors, and the findings revealed that there was a need for the MoEVT to abide with the education policy to improve teacher-learning courses. According to one tutor, “If the Ministry [of education] could recruit student teachers ... of division III and II, I am sure we can produce the best teachers”. The participants needed the Government to recruit student teachers who had high passes in previous education to enter teacher education programmes with the expectation of obtaining quality student teachers who would become effective teachers in teaching after graduating the programme.

### 4.7.3 Social science curriculum and teaching

The majority of respondents identified the need for reviewing the social science curriculum, especially concerning the removing of some irrelevant content and addition of relevant content. Participants felt that they needed a balance of time allowable for learning that matched the content and existing teaching materials if they were to implement social constructivist teaching. Moreover, tutors indicated the need for the inclusion of relevant social science teaching references that reflect the content stipulated in syllabi and language of classroom teaching. One tutor argued that:

We have to have a well-prepared curriculum that can explain what we are going to learn ... which [things] are relevant to our environment. Something that we have now [in the society] but not part of our society should be omitted.

Another tutor added:

I think books are required. Our student teachers need books to practice writing lesson notes. If there would be enough reference materials, they could help the student teachers to obtain knowledge in different sources, which means the student teachers' participation in learning would be good.

Another suggested improvement was to embed entrepreneurial skills in social science teaching. Tutors felt that if entrepreneurial education would be considered, the experiences might help tutors and student teachers to creatively establish projects affiliated to social science subjects that might generate and boost extra income other than what they got from their normal teaching career. Tutors felt they spent much time after job hours on un-productive practices, which they felt could exploit for enterprising projects. Although tutors were paid salaries for teaching, they believed that their engagement in social science enterprising projects might cut-down some of their living expenses. One tutor asserted that:

For the entrepreneurship, student teachers can learn it to deal with their living. For instance, to learn how I can use history in entrepreneurship practices. Therefore, topics like these could be great evidence that we have shifted from one stage to another. We add a historical event to entrepreneurial practices.

Another tutor added:

Even if you work as a Government servant, you should know what kind of activities you could do after official hours of your permanent work to raise your income. You engage yourself in entrepreneurship activities instead of going somewhere to spend time on drinking alcohol.

What is more, some tutors were of the idea that issues of social and cultural heritage, military poise, Government decree, court procedures and practices, national constitution formation procedures, and understanding of basic legal skills are crucial in the current teaching of social science in Tanzania. For example, they argued that basic legal literacy would help tutors and student teachers to avoid unnecessary crimes they commit in their job due to ignorance of legal matters (See Table, 4.12 for detail). As one tutor put it:

That is why some student teachers when they are employed to teach in schools they commit many crimes. You hear teacher so, so and so has raped a pupil, done what...! and they end up in jail because they don't know basic legal knowledge. ... Where are they going to learn this if it is not taught in civics?

#### **4.7.4 Summary**

This summary of results responds to the research question on tutors' suggestions for improving social science teaching. What is evident from the findings is that if SCA are to be fully realised in Tanzanian teacher training programmes, there is a need for improvement and maintenance in three crucial areas. First, there is a need for attention to education policy issues, including reform of the basic education, addressing class sizes and classroom architecture, and efforts towards changing the public outlook on social science education. Secondly, there is a need to address leadership practices with emphasis on good leadership in the provision of on-the-job PLD experiences for both social science and Kiswahili as a medium of instruction and the assurance of motivation for tutors. Thirdly, there is a need for review of the social science curricula with attention paid to removing irrelevant content and adding content that better reflects the needs of the people, if effective SCC needs to be implemented in teacher education colleges.

**Table 4.12:** Suggested topics to improve the future of social science teaching

Subject	Needed topics	Not needed
History	Contemporary history: Terrorism phenomena, international relations, technology, entrepreneurship in history, Importance of history education in life Societal heritage: language, customs and traditions	Colonial invasion
Geography	Economy Basics of economy; entrepreneurship	
Civics	Court procedures: How cases are carried out in courts? National constitution: Detail of how to form a constitution, rights and responsibilities of citizens The presence of the military: How the national security and defence force functions? The Government decree: The rationale for the union of Tanganyika and Zanzibar, the role of executive, judiciary and parliament as well as their relationship in the Republic of Peoples of Zanzibar and the United Republic of Tanzania Job/work environment and culture Environmental education The functions of international agencies and organisations (for example, Organisation of Africa Union and New Partnership for Africa's Development)	

## 4.8 Chapter summary

This chapter has presented the results of a study designed to investigate the influences and outcomes of the implementation of a new SCC on tutors' beliefs and practices in teaching social science to Tanzanian teacher education programmes. The results are summarised according to the four sub-questions of the research question outlined in the beginning of the chapter. The summary of the results is:

The first question explored the tutors' understandings of the concept of social constructivist teaching and the analysed data revealed that:

- i. Tutors seemed to have different ideas about the conception of SCA, but they shared common beliefs that it is (1) a social action of learning, (2) characterised by a harmonious interactions between individuals, (3) a process of meaning-making enhanced with motivations and support from the tutor or peers, (4) an opportunity for learning basics of the pedagogy for teaching, (5) a context-bound style of learning, and that is (6) enriched with teaching materials and (7) sufficient time for understanding the world.
- ii. The variety of PLD experiences invariably appeared to shape the individual tutor's understanding of social constructivist teaching and the subsequent implementation of SCA in practice.
- iii. Policy implementation practices influenced the PLD experiences and the integration of SCA in teacher training colleges. In this case, the design of PLD programmes, social science curricula, and teaching materials depended on leadership practices.
- iv. A variety of PLD opportunities were situated in colleges and supported by the Government in collaboration with international aid agencies that had relatively influenced the SCC process in Tanzania.

The second question studied the tutors' beliefs regarding the role of SCA in social science teaching and the analysed data suggested that:

- i. Tutors' beliefs and practices regarding transfer of training programmes were constrained by a number of contingent teaching challenges: the college's events and norms, the language of teaching and learning, gender issues, socio-cultural and political situations, student teachers' prior experience, teaching materials, physical conditions of classroom, and shortage of tutors.
- ii. The policy directives, the centralised curricula, and the syllabi as well as the teaching materials available, influenced the tutors' freedom to choose the student learning activities, type of evaluations they could provide for student teachers, and the time available for teaching. Tutors faced difficulties in sharing their power with student teachers because of the rigid system, which gave most of the power to decide upon the student

learning to tutors. Thus, student teachers appeared to have limited responsibility and accountability for their own learning activities. Student teachers' participation relied on individual tutor's beliefs and behaviours. Teaching and learning were examination and certificate centred activities.

The third question explored whether or not tutors were actively integrating SCA into social science teaching, and when they were employing it in practice. Results revealed that:

- i. Tutors overwhelmingly appeared to design teaching and learning activities based on social constructivist beliefs. This process was made possible by some tutors embracing a "technical approach" to the adoption SCA in practice.
- ii. Tutor/student teacher relationships considered the aspects of respect, friendliness, obedience, and adherence to social norms of conduct and culture were the key factors in promoting teaching and learning activities. However, these aspects constrained tutors' practices of integrating of SCA in teaching.
- iii. Tutors' practices of SCA implementation in classroom suggested that they used a range of collaborative and interactive teaching approaches tailored in a sequence of learning activities (introduction of lessons; development of knowledge; application of knowledge; reflection in the knowledge; and ending the lessons) that enabled tutors to adopt their PLD experiences in teaching situations. By employing the sequence framework, many tutors demonstrated a high level of utilising SCA in teaching.
- iv. Tutors seemed to employ a variety of approaches to introducing and ending their lessons, including introducing the lesson by previewing student's experiences and mind challenges, and using gimmicks, and songs. The lessons ended with exercises and assignments, assessing learning processes with student teachers, making announcements and showing appreciation to student teachers, highlighting future learning



activities, and imposing ad-hoc conclusions. These aspects were suggesting that lecturers' effective use of SCA in practice.

- v. A variety of motivational and support strategies were employed by tutors to create environments conducive to the transfer of training on SCA. Tutors motivated and supported student teachers by using multiple teaching techniques and teaching aids, using the native (Kiswahili) language, using variety of group based evaluation procedures, assuring transparency and freedom in learning activities, providing instructions, teaching familiar content, and recognising and appreciating their student teachers' work. Other strategies involved using persuasion, encouragement and advice, as well as assessments and feedback, both oral and written.
- vi. Some tutors demonstrated a bounded rationality in teaching practices that was caused by limited practical experiences of what was happening in classrooms in schools (especially when they attempted to provide vivid examples); partial knowledge of the specific procedures of using a particular teaching technique; partial knowledge of interrogating reflective questions; and partial creativity in the improvisation of culturally-based teaching aids. This situation influenced their ability to transfer learned experience in teaching environments.
- vii. The change of language of teaching and learning from English (in previous education) to Kiswahili (in teacher education colleges) invariably appeared to influence both tutors and student teachers in the creation of concepts and sense making.
- viii. Tutors' engagement in the critical examination of teaching and learning situations was considered to be a threshold of creating coping strategies towards the challenging situations of advancing their PLD and teaching missions.

Finally, the study explored the tutors' suggestions for the future teaching of social science. Findings indicated that:

- i. Tutors' need improvements in the social science curricula, syllabi and teaching materials to be able to implement SCA cognisant to the demands for the diversity from student teachers and the community.

- ii. Leadership practices invariably influenced training policies about the implementation of PLD opportunities. Tutors need assurance of good leadership in the provision of on-the-job PLD, in both social science teaching and Kiswahili language as a medium of instruction. They also need motivation to promote the transfer of training to practice. Similarly, the limited on-job PLD continuum adversely influenced the sustainability and generalisation of the tutors' training experience from their PLD.
- iii. Improvement and maintenance practices in policy development and implementation is proposing reforms in the basic education system, including reducing large class sizes, changing classroom architecture, and changing the broader community mind-set on social science education.

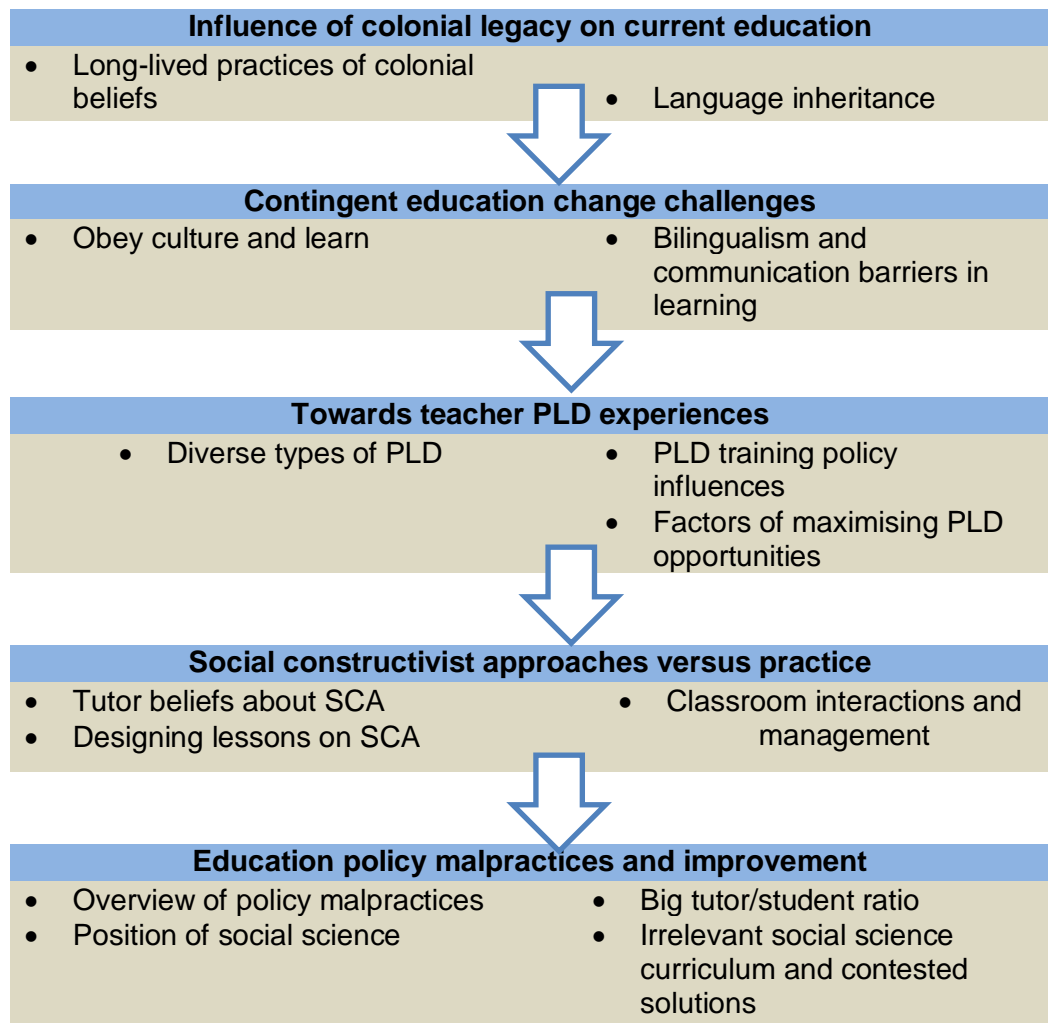
The next chapter discusses these results and considers a range of issues relevant to understanding and interpreting these findings.

# Chapter Five

## Discussion

### 5.1 Introduction

The previous chapter presented the results. This chapter discusses these results as they relate to influences and outcomes of the implementation of social constructivist curriculum on tutors' beliefs and practices when teaching social science in Tanzanian teacher education programmes. The influences and outcomes are responding to tutors' PLD experiences of SCA in teacher education colleges. Figure 5.1 illustrates the arrangements of critical issues discussed in this chapter.



**Figure 5.1:** Critical issues of SCC implementation in teacher education programmes in Tanzania

With reference to the literature review and scholars' works, the research identified and discussed five critical issues. As shown in Figure 5.1, the issues include the influences of colonial legacy on current education, the contingent challenges in educational change process, teacher PLD experiences, the social constructivist approaches versus teaching practice, and education policy malpractice and improvement strategies in Tanzania.

## **5.2 The influence of colonial legacy on current education**

The findings are proposing that the colonial legacy on the post-colonial education via secular education and centralisation of curriculum influenced not only tutors in the current implementation of the new teaching approach but also the whole education system in the context. Tanzania (then called Tanganyika) experienced colonial invasion from 1880's to 1961. This was enough time to change the indigenous education and the peoples' ways of thinking about education and development in a way that has so far been permanent.

### **5.2.1 Long-lived practices of colonial beliefs**

Findings suggested that the long-lived colonial beliefs and practices embedded in socio-economic and political imperatives are influencing post-colonial educational reform and development policies. The main objective of the colonial education system was to implement a secular education that prepared a few elites to hold junior posts in the colonial administrative structure. Since Tanzania's independence, and up until the present, the same secular education system has been implemented in the country. Initiatives to revamp or to blend it with indigenous education have not been achievable due to the intervention of neo-colonial international policies. Employees who acquired Western education values and culture have been the key people in implementing the educational reforms. Describing this somewhat differently, the post-colonial educational reforms have been driven by some elites who hold on to colonial and Western beliefs and practices regarding education making it difficult to engage the processes of educational change that embrace the socio-cultural context. In this sense, whether consciously or unconsciously, the integration of indigenous education in many reform processes is still under emphasised because some

Tanzanian education policies still reflect the colonial education system, which schooled its writers. This reflects Freire's (1972, p. 122) assertion that:

Cultural conquest leads to the cultural inauthenticity of those who are invaded; they begin to respond to the values, the standards, and the goals of invaders. Those who are invaded come to see their reality with the outlook of the invaders rather than their own; for the more they mimic the invaders, the more stable the position of the latter becomes.

The implications contained in this quotation match the reported findings that tutors and student teachers relied more on funded knowledge than the personal construction of knowledge that suited their home environment. The majority of tutors relied on the modules and books prepared by experts from Tanzania Institute of Education for the preparation of lessons. It was observed from the findings that tutors used text materials published in the Western countries to teach social science (Meena, 2010). This situation appeared to mimic the academic rationalism approach of the colonial secular education system. Certainly, the adopted secular education promotes the existence of examinations and certifications of graduates, education for credentials (Nyerere, 1967). Nyerere (1967, p. 242) noted that:

Our present system of [education] encourages school pupils in the idea that all knowledge, which is worthwhile, is acquired from books or from "educated people". ... Government and Party [ruling party] themselves tend to judge people according to whether they have "passed school certificate", "have degree." ... If a [person] does not have these qualifications we assume he/[she] cannot do a job; we ignore his/[her] knowledge and experience.

In addition, the results show that, although there were some modifications towards adopting the social constructivist view, the current teacher education curriculum follows a system of examination, grading, and certification, typical of the colonial education system (Tilya & Mafumiko, 2010). This is not commensurate with indigenous education presented in Chapter One (Adeyinka & Adeyemi, 2003). The researcher discovered that whereas tutors' employment was determined by performance in examinations at university, the recruitment of new student teachers in teacher education colleges required only pass

grades of secondary education examinations. This practice is proposing a “diploma disease” model of education provision (Dore, 1980, 1977), which is not commensurate with the SCA. Dore described the diploma disease model of education as one that focuses on enabling the learners [student teachers] to acquire certificates, diplomas and degrees as a testimony of knowledge mastery and academic qualifications (Nyerere, 1967). Moreover, Dore (1977) criticised the model for its focus on examination performance rather than learning and described it as “ritualistic tedious, suffused with anxiety and boredom, destructive of curiosity and imagination; in short, anti-educational” (Dore, 1977, p. ix).

Findings reveal the existence of large classes of student teachers in the teacher education colleges. These findings align with Dore’s (1977) argument that the examination-oriented model attracts more people to study for highly valued jobs, a situation that is prevalent in classless societies where competition for a better life is high and there are few top posts in the employment cadre. The situation emphasises teaching of student teachers to compete in exams, through memorisation rather than knowledge construction via cognition. Tanzania is one of the developing countries whereby the majority of the people are all competing for educational achievement and struggling for better life. Dore argued that there are many bureaucratic organisations in developing countries in both the private sector and the government, which need qualified professionals to serve in higher employment posts. Consequently, Tanzania is facing mass enrolment in schools and tertiary education because parents need their children to acquire education for better paying jobs to improve their living standards. Since examinations have been the criteria to obtaining better jobs, all teaching is pre-deterministic, competitive, and exam-oriented. Such a formalistic and competitive education model encourages memorisation and is incongruent with social constructivist beliefs, which focus on developing the whole learner’s abilities within a non-competitive learning environment and culturally responsive context. This resonates with literature on the influence of examinations in social constructivist teaching (Adams, 2006; Meena, 2009; Windschitl, 2002).

Social constructivist views hold that tutor teaching should be focused on student learning, understanding and gaining wisdom, rather than knowledge mastery and examination performance. Critical pedagogy is concerned with removing suffering of humans and bringing justice (Kincheloe, 2008). In this case, critical pedagogy provides the clue that examinations are one of the leading causes of student teachers' failures, promoting reproduction of authoritative knowledge in exams, and blaming the student teachers for failing exams and causing them psychological and physical trauma. Through critical consciousness, tutors and student teachers need to use these challenges as the means to construct methods of understanding them and to take social action.

In addition, findings indicate a top down imposition and management of the educational reform that mirrors the power distribution. Subsequently, tutors and student teachers exist at a lower level in the hierarchy. The administrative and rigid system of the Government has led to a centralisation of the social science curricula and policy, which seemed to be shaping the existing tutors' teaching beliefs and practices in teacher education colleges. This is an administrative structure and practice emanating from the colonial legacy, which embrace hegemonic relations for political, socio-cultural or economic interests. For instance, findings indicated that many tutors were advised to use curricula materials and syllabi designed by TIE (for the Ministry of Education); tutors had no part in the planning process and this led to irrelevant curricula content and shallow teaching manuals. This finding echoed in the existing literature (Meena, 2009; Msonde, 2011) about tutors' teaching ideologies and professional training programmes to promote SCA in practice. Furthermore, the findings showed that tutors had limited opportunities to participate in the introduction of social constructivist teaching, revealing the persistence of subordination behaviour in power relations (Rossatto, 2005). Tutors are subordinate to the top educational officials in issues of decision-making and implementation of the education change process. As the literature indicates, when participants are not involved in the change process, the project is likely to fail due to participants' lack of acceptance and motivation to implement it (Broad & Newstrom 1992; Fullan, 2006b; Rogers, 1995).

Results in this study reveal that the tutors and student teachers seemed adopt the global culture of dressing student teachers in uniforms, which was emphasised by the teacher education policies and colleges' culture; making it a mandatory practice. This practice was likely to develop a structural conditions and social distances between tutors and student teachers in classroom learning activities, making it difficult to create an environment conducive to the implementation of SCA. Furthermore, this practice was unlikely to keep with the indigenous education system, where the learners appeared not to dress in uniforms and they were able to learn with fewer problems (Adeyinka & Adeyemi, 2003). In addition, the situation is likely to reflect the exercise of power over the student teachers by tutors that deny student teachers' clothing rights and thereby cultivating a mechanistic discipline in the classroom and college community. Likewise, college regulations and norms, which are mandatory (such as dressing in uniforms) for the survival of the student teachers in teacher education programmes promote confusing power relations between tutors who enforce them and student teachers. In some circumstances, the findings appears to suggest that the culture of uniforms and the related college by-laws created disharmonious structural and social conditions among student teachers towards tutors and college leaders. The researcher's experience showed that there have been cases of student teachers being punished by tutors when they fail to comply with the college regulations. For instance, student teachers were punished when they were identified not dressed in uniforms within and outside college campus. This behaviour of student teachers to not dress in the uniforms may imply resistance to that particular college (institutional) culture, perhaps because it is felt by student teachers to be humiliating. This practice of uniform wearing appeared to be a dominant practice in Tanzania and African context generally, which was unlikely to exist in the indigenous education practices. This is an example of what Freire (1972) asserts: when people seem to be fully indoctrinated by the cultural invasion, it is difficult to resume the indigenous cultural values as well as the education system.

In this sense, it is also difficult to create a balance of power, justice, and equality in classroom learning as proposed by the social constructivist approach. The



long-lived influences of the colonial legacy are likely to continue playing multiple roles in promoting and hindering the implementation of SCC in Tanzania. For instance, they promote investments in education projects (e.g. technology integration in education) to foster SCA but the existing colonial legacy – such as the use of secular education system, top-down education policy-making, and reliance on external technical support – actually reinforce inequalities, making it difficult for the majority of people to participate in education reform opportunities. Critical pedagogy recognises the values of the social-cultural context in promoting relevant pedagogical approaches in teaching and learning through which any cultural aspect imposed in the context is constructed to fit into the indigenous environment. The policy environment should allow tutors to engage student teachers in learning and to understand situations that deter changes and devise strategies for effective implementation of SCA.

### **5.2.2 Language inheritance**

The research indicates that the use of foreign languages such as English rather than indigenous languages for classroom teaching and learning activities, as well as for educational record keeping and administrative functions by the government, has increased communication barriers among educational stakeholders. It suggests that the national curriculum, the policy documents, and educational circulars are published in English Language, which is spoken by the minority of Tanzanians (URT, 2011). It was discovered that tutors translated materials written in English language into their native Kiswahili language in order to prepare the lessons and teach the student teachers. Similarly, the researcher's experience during data collection in this research revealed that even though the interview questions were asked in English, only one respondent was able to express his/her feelings in English for 45 minutes while the majority made it for a few minutes and then switched to the native Kiswahili language. Moreover, the results indicated that tutors lacked confidence about the materials they translated from another language and needed support from books published in Kiswahili language. In this situation, it may be asked why Tanzania is in a dilemma about using the native Kiswahili

language — which is spoken fluently by almost 95% of the population — for teaching in all levels of education to avoid the instructional language dualism problems (Brock-Utne & Holmarsdottir, 2004). In responding to the dilemma, Brock-Utne and Holmarsdottir (2004) argue that the decision about language of classroom teaching in Tanzania context has remained “a political choice, a choice that redistribute power in a global context, as well as within an African country, between the elites and masses” (p. 68). Hence, using the language of the majority people in Tanzania would enable them to obtain privileges that are missed by relying on minority language; this could include promotion of the implementation of education change programmes, especially teacher training programmes.

Therefore, it is implied from the results of this research that the colonial legacy is likely to have successfully created disharmonious structural relations, and subordination among the people in the society, and that this affects policy decision-makers, tutors, and student teachers as well as other educational stakeholders (Rossatto, 2005; Verger et al., 2012). There is a need for critical tutors to engage student teachers in a dialogue to critically examine the language challenges in teacher education colleges and to take social action as the social constructivist view suggests. Considering this situation, critical pedagogy is proposing that colonial education and administration legacy are shaping the present beliefs and practices of Tanzania’s population and culture, teacher education policies and the education system in general (Kincheloe, 2008; Verger et al., 2012). Thus, a critical awareness approach needs to be employed for the entire population to transform the existing impact of neo-colonial practices that are likely to be embedded in the political, economic, and socio-cultural structures in Tanzania and the African context generally. In addition, the practices might be leading to the contingent teaching challenges in implementing educational reforms in the context of Tanzania.

### **5.3 The influence of contingent challenges in educational change process**

The research presents tutors were influenced by contingent challenges in the educational change process regarding the implementation of SCA in teacher training programmes. These findings are discussed with regard to two aspects; the cultural influences in learning, and bilingualism and communication barriers in learning.

#### **5.3.1 Cultural influences in learning**

The study reports that the culture of the colleges and of the tutors as well as student teachers is significantly influencing classroom learning activities. In this case, both the student teachers and tutors obeyed the college norms and values as well as their social norms in order to implement classroom learning activities. For instance, the findings presented in section number 4.6.7 suggested that student teachers' practice of respecting and caring for elders, greeting manners, dressing, and taboos (related to sex-and-age based indigenous education), appeared to influence the implementation of social constructivist teaching. Subsequently, tutors seemed to be facing a dilemma about whether to suspend their cultural practices in favour of the new teaching approaches or to maintain both of them in the knowledge construction process. Notably, it was evident from data generated by this research that tutors allowed the student teachers to engage in religious affiliated periods scheduled in the college curriculum to develop their cultural beliefs and those of religious doctrines existent in the community. Therefore, student teachers seemed to dress in their uniforms with respect to college norms, but colleges' values also observed the religious needs of student teachers.

Dressing in uniforms and teaching of religious doctrines help to stimulate good social relations and authority between the tutors and student teachers to maintain *discipline and respect* for the development of professional ethics (Jimmie, 2013). This evidence is in line with Anangisye's (2010) study on promoting tutor ethics in teacher education colleges in Tanzania as one of the responses to the "moral problems" existing in the society. In this situation,

Anangisyé urges that tutors have a responsibility to promote appropriate characteristics in student teachers through teacher training courses that could trickle down into schools and general society. To achieve this, teacher-training policies are important; they should provide information about the content of professional ethics teaching in teacher education colleges. According to Freire (1998): “Teaching requires a recognition that education is ideological; teaching always involves ethics; teaching requires a capacity to be critical; teaching requires humility; and teaching requires critical reflection” (p. xiii). Anangisyé and Freire’s views suggest a holistic education that matches Adeyemi and Adeyinka’s (2003) philosophical examination of Africa’s indigenous education, as discussed in Chapter One. This finding regarding cultural influences in teaching and learning corroborates the literature within Tanzania (Anangisyé, 2010; Hardman et al., 2012; Vavrus, 2009; Vavrus et al., 2011; Vuzo, 2013) and outside Tanzania (Karagoirgi & Symeou, 2005; Pitsoe & Maila, 2012; Schweisfurth, 2011), which overwhelmingly argues that consideration of the role of cultural-context in the adoption of educational innovation is vital to promoting a meaning-making environment. Conversely, the incompatibility of the design of innovation within the context and culture of student teachers and communities around them is likely to hinder the implementation of education reform. As noted in this study, home education and religious beliefs taught moral values and norms to student teachers seemed to support their behaviours, making it difficult for tutors to employ the new approaches because student teachers behaved according to their socio-cultural ways of learning.

It was further evident in this study that tutors employed cultural environments for co-curricular activities, such as gardening, livestock keeping, and crop growing to promote social relations between student teachers and tutors, and to integrate classroom-acquired knowledge in the lived experience. These co-curricular activities situated in the cultural environment not only developed student teachers’ creativity, tolerance of ambiguities, and interpersonal skills, but also their functional literacy and attitude toward work. Moreover, they helped to link classroom activities to the occupational and cultural practices (Jimmie, 2013; Lackeus, 2013). For deep learning, such practices are needed in order to link indigenous education taught to student teachers at home and the

knowledge obtained in the formal classrooms. These practices are what Haskell (2001, p. 221) called:

Deep-context teaching [needed to] address the counter-productive erroneous' knowledge, beliefs, expectations, values, and assumed implications, about a subject matter, about learning; these are direct at changing awareness, motivation levels, and student reception of instructional materials, whether written or verbal.

### **5.3.2 Bilingualism and communication barriers in learning**

Furthermore, the findings in this research reveal that although bilingualism as an aspect of culture partly is beneficial, it creates communication barriers to the implementation of social constructivist approaches in teacher education colleges. For effective deep learning both tutors and student teachers need to embrace communicative thinking and reasoning competencies (Habermas, 2005). More importantly, interpersonal and intrapersonal communication skills are partly shaped by linguistic development, and embrace leadership experiences, social norms, values and culture. In this study, it was discovered that tutors and student teachers experienced some troubles using Kiswahili language in teaching. This trouble resonated with existing literature (Dewey, 1950; Vuzo, 2014, 2010; Vygotsky, 1986) on enhancing reflective thinking. Hence, tutors should develop linguistic competencies to student teachers to stimulate high-level cognition abilities in social science teaching. As Dewey (1950, p. 21) noted about the habit of language that:

Fundamental models of speech, the bulk of the vocabulary are formed in the ordinary intercourse of life, carried on not as a set of means of instruction but as a necessity. The babe acquires, as we well say the mother tongue. While speech habits thus contradicted may be corrected or even displaced by conscious teaching, yet in times of excitement, intentionally acquired modes of speech often fall away and individuals relapse into their really native tongue.

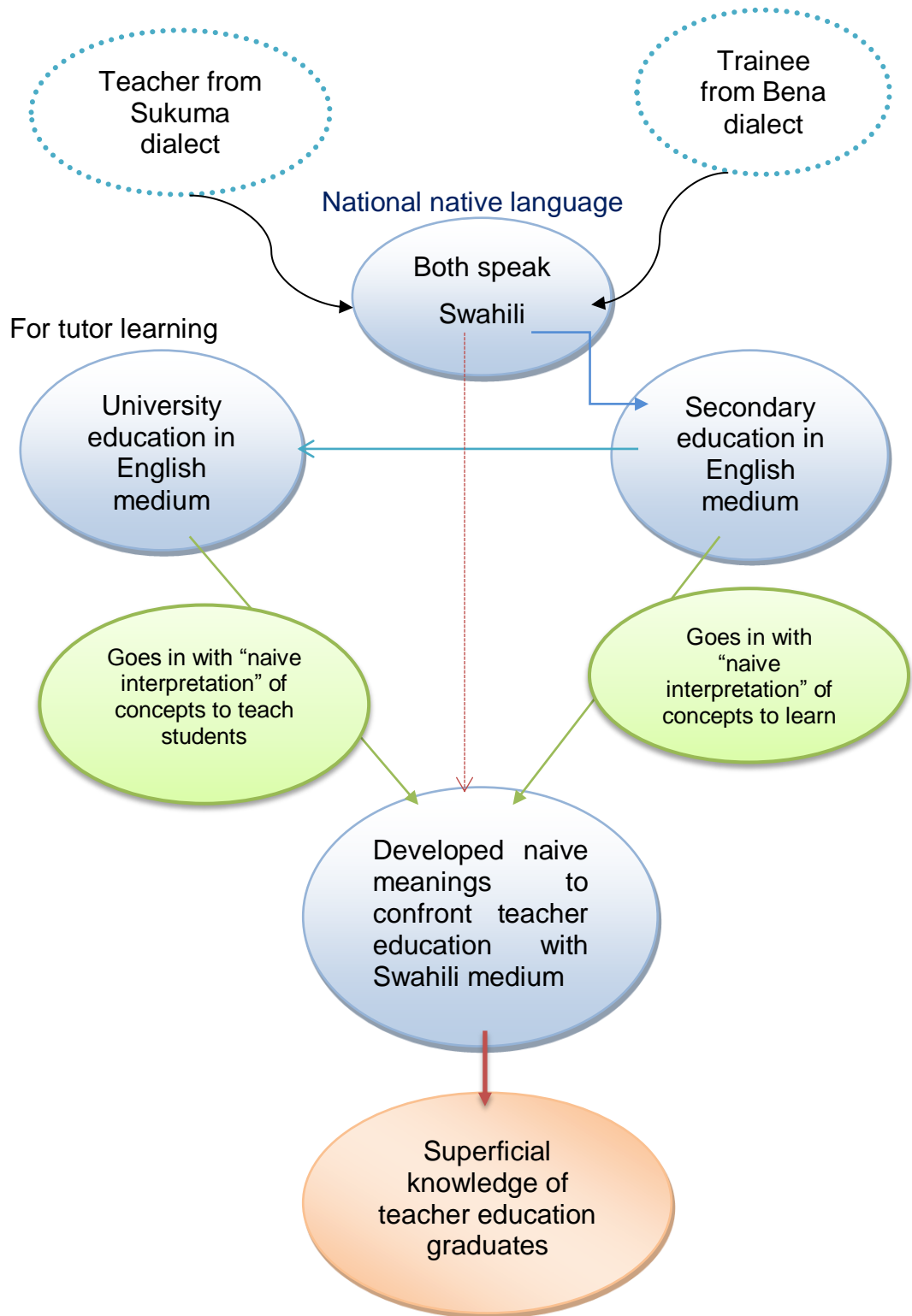
In relation to this argument, this research reports that bilingualism in instructional language causes problems for both the student teachers and tutors, which influencing their knowledge construction and the application of that

knowledge in practice. Evidence from some tutors during classroom teaching proposes that they struggled to:

- Correct student teachers who were code switching between Swahili and English.
- Translate English books to cope with shortage of books written in Swahili for the subject.
- Demand a professional learning opportunity on the basics of Kiswahili for teaching.

In regard to this, the researcher discovered that the background experience of tutors and student teachers affected the transfer of training experiences. Whereas tutors experienced their initial teacher professional learning course (at the university) in English and the student teachers learned secondary education in English; both come to meet at the teacher training college where Kiswahili is the medium of instruction (URT, 2013). Some tutors and student teachers struggled to find appropriate ways to understand concepts and subject matter during the co-construction of knowledge and use of that knowledge in reality. In this situation, both groups developed tacit knowledge of the concepts in Swahili language and used them in understanding the concepts. Similarly, findings indicated that, sometimes when they failed to obtain the correct meaning of concepts in Kiswahili, they fell back to the understanding of that concept in English language. Hence, this became their way of survival in the knowledge construction process and because of that, tutors much teaching and learning time was lost because of translating. This factor might have contributed to the superficial learning of student teachers in teacher education programmes. These findings corroborate Vuzo's (2010) investigations that there was no connection between the language used in learning at home and in schools among teachers and pupils. Figure 5.2 illustrates the essence of instructional language complexities of this situation.

To embrace social constructivist beliefs, both tutors and student teachers would learn their teaching career by the language they are expecting to use on the job. They should experience learning by using the first language throughout their education journey to avoid confusion in future learning opportunities. Concerning the principles of language in learning, Dewey (1950) asserted that:



**Figure, 5.2:** Complexities of instructional languages in knowledge transfer

The use of language to convey and acquire ideas is an extension and refinement of the principle that things gain meaning by being in a shared experience or joint action; in no sense does it contravene that principle. (p. 19)

Dewey's assertion implies that there is a need for policy reforms to provide opportunities conducive to the implementation of SCA and avoid challenges that are facing tutors when educating student teachers in teacher education programmes. More importantly, critical pedagogy beliefs about understanding the cultural context where the teaching and learning activities are taking place are vital to consider; history is important to understanding the present, as is the tutors' role as a researcher of student teachers to explore the forces behind shaping the educational programmes (Kincheloe, 2008; McLaren & Kincheloe, 2007). In employing the critical view, it is acknowledged that tutors were expected to utilise their professional experiences as researchers by researching critically the educational challenges affecting their teaching career and social life, to investigate the causes of challenges facing student teachers, and to take social action.

#### **5.4 Towards PLD experiences for tutors**

The findings reveal the PLD experiences for tutors regarding the implementation of SCA with emphasis on the diverse PLD experiences; training policy influences on PLD, and factors in maximising the transfer of PLD experiences and they are discussed in detail below.

##### **5.4.1 PLD experiences overview**

The research finds that tutors' PLD experiences are influenced by a number of contextual factors such as the existing training policies that direct required training needs and resources, and approaches to introducing and implementing the training programmes. Moreover, the PLD programme required attention to addressing job practices, the relevant entry qualification for tutors, prior testing of the PLD programme, consideration for time, supervision and motivational opportunities, all of which are significant in shaping tutors' conceptions of SCC in practice. Furthermore, the results indicate that the diverse types of PLD experiences not only affect tutors' conceptions about social constructivist teaching but also influence consistently their ways of transferring that understanding to on-the-job.



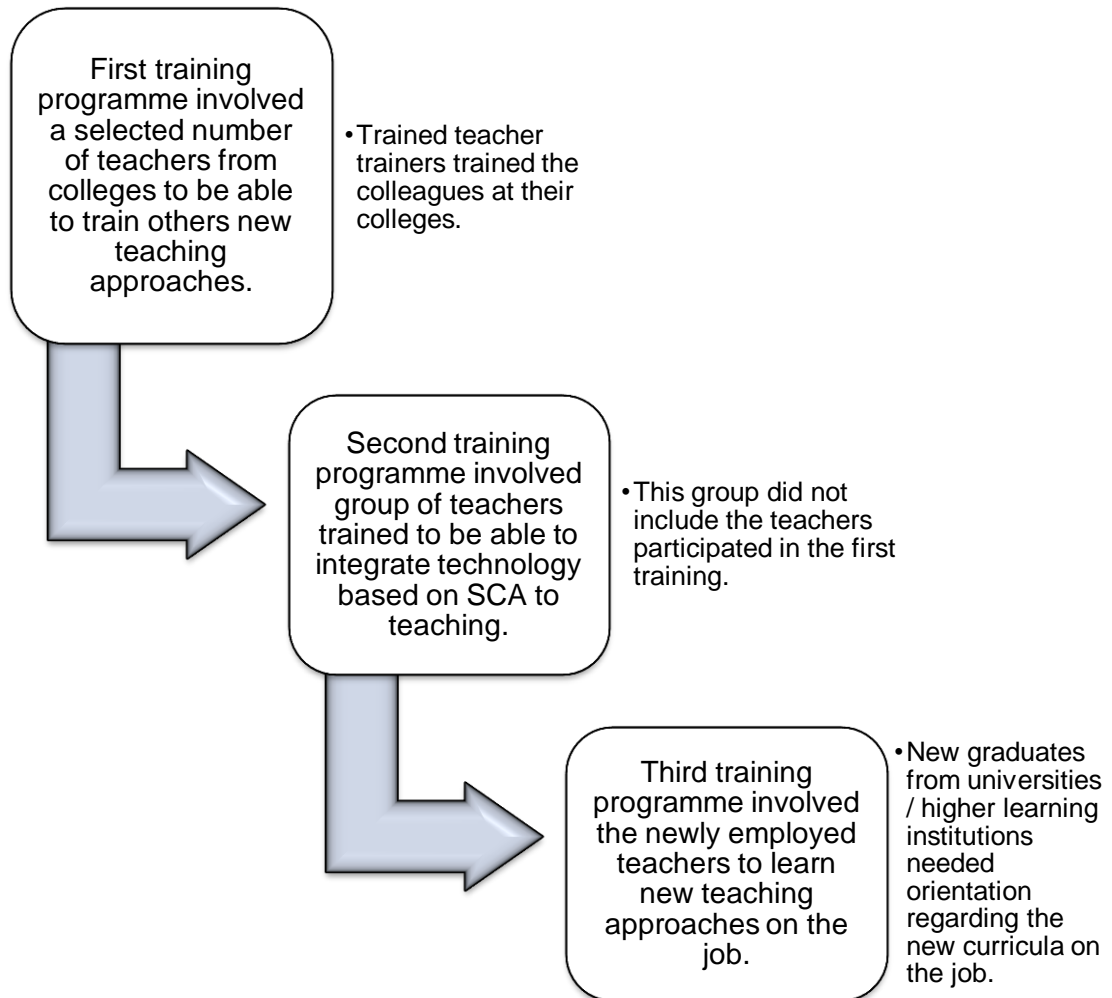
## **5.4.2 The diversity of PLD experiences**

The study reports that diverse types of PLD experiences made significant contributions to enhancing the process of change in education. This research is proposing that tutors were engaged in different formal and informal PLD experiences based on individual and departmental initiatives, community and practice-based programmes, work place-oriented and initial teacher learning programmes. These variations of professional learning contexts are likely to have promoted “overlearning” (expanding similar course content in different PLD contexts), the tutors’ generalisation and retention of the constructed knowledge as well as the sustainability of learned knowledge in the job setting (Baldwin & Ford, 1988). Stated somewhat differently, the participation by tutors in various PLD programmes is likely to indicate that the knowledge acquired from a single training programme is inadequate and does not actually help them to deal with their teaching and learning challenges. Subsequently, their option to survive in teaching is to get involved in other professional learning approaches to be able to teach effectively. These premises for the survival options might suggest that tutors made correct decision when the formal PLD programme supporting the educational change did not consider tutors’ feelings, conceptions, or perceptions. These findings are reflected in the literature discussing key determinants of the transfer of training in the job setting (Bransford et al., 2000; Hynds & McDonald, 2010): a favourable context for training opportunities to practice the knowledge, motivation, and the amount of initial learning for generalisation. Therefore, well-designed training programmes for tutors grounded in their worldviews, the organisation’s values and working context are likely to produce promising results in the transfer of training experience to the job (Hynds & McDonald, 2010). Hence, it is worth discussing the types of PLD experiences in this section.

### ***5.4.2.1 Place-based learning***

Results in this study show that tutors were trained via different place-based professional learning programmes. Such courses included the training of trainers, technology integration in education, and training for newly employed tutors. The Ministry of Education and Vocational Training, in collaboration with

international agencies, supported the implementation of PLD based on the college environments. The data indicated that the focus of these training programmes complied with policy directives on the adoption of the curricula in evolving learning needs from the teaching and learning context. Figure 5.3 presents a model that indicates trends for the implementation of these training programmes.



**Figure.5.3:** A model for tutors' training on SCA in practice

Figure 5.3: indicates that in the first phase, trained tutors managed to train their colleagues in their respective colleges. The second and third phase involved the trained tutors only who were expected to transfer their training to the job. Thus, it appeared that tutors involved in these training courses used that experience

to integrate social constructivist teaching on the job. The literature (for example, Baldwin & Ford, 1988; Hasan & Hynds, 2014) recommends the consideration of socio-cultural aspects as important motivational factors in the transfer of training to the job. However, there is missing evidence concerning strategies to ensure that tutors are able to sustain the learning experience on the job. This study found that tutors resorted to using alternative means of PLDs to implement SCA such as individual based learning and peer learning. In addition, there is evidence that tutors were demanding extra professional training regarding issues affecting them in integrating new approaches in teaching. Therefore, the absence of training transfer strategies to allow the conservation and generalisation of tutors' experience combined with limited supporting situations are likely to be affecting tutors' ability to apply training experiences and skills in teacher education colleges in Tanzania.

#### ***5.4.2.2 Individual initiative PLD***

Furthermore, evidence in this study identified PLD based on individual efforts to develop knowledge and skills of integrating SCA. In this case, an individual tutor pays the costs of professional learning. A number of factors informed tutors' decisions to involve themselves in individual types of learning initiatives, including a lack of college-based PLD opportunities and the challenges faced by tutors during classroom teaching. This is reflected in literature by Pitsoe and Maila (2012) who explain that professional learning based on individual efforts is used to deal with existing problems in teaching, and also to express a sense of professionalism. Hence, PLD opportunities are needed to promote self-learning and collaborative learning, and to develop the attitude of learning and working in different situations. Moreover, this suggests that tutors need opportunities to engage with professionals in their subject areas for dialogue and construction of self-understanding.

In a social constructivist view, tutor's training activities should focus on developing student teachers in the social, emotional, moral, physical, and intellectual aspects of life which deconstruct and constructs their living realities (Taylor, 2009; Windschitl, 2002). The focus on such knowledge enables tutors

to support student teachers in developing self-learning attitudes that could prevail on the job and portray a sense of professionalism in teaching (Meena, 2010; Pitsoe & Maila, 2012). However, individual learning initiatives might also signal a lack of institutional support, necessitating the individual tutor to search for means of surviving in the challenges of teaching. Results of this research showed that Tanzanian tutors are engaged in reading books, journals, pamphlets, and manuals as well as sourcing materials from the internet, and consulting professional subject experts to obtain the knowledge and skills concerning SCA because they were missing the formal PLD experiences. This suggests that the professional learning model is appropriate only where tutors' behaviours align with workplace environments enriched with relevant resources and supported by the college culture and community (Baldwin & Ford, 1988; Broad & Newstrom, 1992; Groff & Mouza, 2008).

#### ***5.4.2.3 Departmental-based PLD***

The evidence from this research shows that department-based professional learning enabled tutors to understand and implement the SCA. This is a type of peer and collaborative professional learning approach arranged with both a formal and informal base. As colleagues in the department tutors shared ideas about common pressing issues in adopting the SCA and when the issues were not solved, the discussion was extended to a formal meeting of all members in the department. The source of issues for discussion was tutors' teaching experiences and discussions of student teachers in subject clubs. Through these processes, tutors develop understandings of social constructivist approaches, gain perspectives on their socio-cultural contexts and learn to transfer that experience into the classroom. These findings corroborate the literature, which discusses the fact that a major concern in professional learning is the integration of theory with practice and the sensitivity to indigenous culture (Baldwin & Ford, 1988; Hasan & Hynds, 2014; Hynds & McDonald, 2010; McDonald, 2012a, 2012b; Pitsoe & Maila, 2012). This is what Pitsoe and Maila (2012) called "inquiry framework" of learning grounded on reflective indicators of the real setting.

#### **5.4.2.4 Community-based PLD**

Results in this study revealed that tutors who were engaged in formal community learning practices developed their understanding of social constructivist approaches and applied them to classroom teaching. Community-based professional learning experiences involve tutors in a formal programme focused on educating the community in which tutors were hired to educate them with the needed knowledge and skills. In this training, tutors were taught new teaching approaches, which were implemented through community-based learning and subsequently the same skills were used to train student teachers in teacher education colleges. For example, educational programmes focused on Complimentary Basic Education and In-service Teacher Training Education for Primary Education, organised and supported by the Institute of Adult Education for MoEVT in collaboration with international agencies. Jimmie's (2013) study on student teachers' engagement in extra-curricular activities indicated that they were motivated to participate in community activities to gain social capital and exposure in their job-oriented activities for good character development. It was evident from the findings that some tutors appeared to be enjoying the opportunity of working outside the college community and meeting people with different experiences to share in teaching and learning contexts.

Conversely, in practice, this experience of professional learning is wasteful of time and it would more profitably be used in teaching the student teachers. Evidence showed that tutors were frequently hired to implement activities not related to the college, and in their absence student teachers remained without tutors to teach them, so lagged behind in their teaching schedules. To survive in this situation, tutors rushed their teaching and prepared group work for student teachers to work on during their absence. The group work was not effective in terms of feedback to student teachers, because there were many groups of student teachers, and tutors were required to speedily assess the work to get it completed. Moreover, the community-based PLD seemed to suffer from having no follow up on the job, no mechanism put in place to check how the tutor who participated in the programme was transferring the knowledge gained. Thus, although this form of programme is reported to socially benefit tutors' learning, it

should be cautiously employed to avoid compromising tutor's practices in the implementation of social constructivist teaching in practice.

#### **5.4.2.5 Practice-based PLD**

The results show the experience of a tutor who developed the knowledge and skills of social constructivist teaching via participation in a field-based learning programme. This educational programme aimed at testing the suitability of the SCC in the context of selected primary schools in which this tutor taught before being promoted to teach in teacher education colleges. This corroborates the literature (Hardman et al., 2012; Swennen & Van der Klink, 2008) on teacher learning and qualifications. Interestingly, the same tutor participated in the "training of tutors' course" for training colleagues at the college. The results show that the tutor demonstrated a high level of integrating SCA in the classroom and in designing lessons. The tutor's participation in a variety of PLD opportunities in different situations is likely to have contributed the high performance level in using the new teaching approach. However, when many participants are involved in this training programme approach, it should be adopted with caution to avoid the high cost of investment. In literature, the participation in different learning communities of the same aspect leads to overlearning and promotes transfer of training (Baldwin & Ford, 1988). However, MoEVT supported this project. Although a few participants attended this type of PLD experience, it should be recommended that to increase their experience in the quality of teaching and productivity new tutors have teaching backgrounds in schools before they upgrade to teach in teacher education programmes (Hardman et al., 2012; Vavrus et al., 2011).

#### **5.4.2.6 Initial teacher PLD experience**

All tutors who participated in this research appeared to have developed knowledge and skills for teaching using the SCA during their initial teacher training programmes at the university. As noted in previous chapters, a minimum of a bachelor degree qualification is required for tutors to teach a certificate course in teacher education for primary school teachers in Tanzania (Beaty, 1998; URT, 1995). Although the participants attained the required degree to teach in teacher education colleges, they noted that some of their

colleagues employed to teach in the colleges were supposed to teach in schools, rather than teacher training programmes. Arguably, the practice suggested that there was a misallocation of professionals in the field, and the tutors felt that their employer (MoEVT) was making a mistake employing them in an area they had not studied at university level. This anomaly reflects the literature discussing about employment of tutors who lack the pedagogical knowledge to teach student teachers in teacher education programmes (Boyd & Harris, 2010; Hardman et al., 2012; Swennen & Van der Klink, 2008; Vavrus et al., 2011). However, the findings in this research imply that the implementation of initial teacher professional learning has poor connections between the university education (for training tutors) and the colleges, and between schoolteachers in certificate/diploma courses. Consequently, tutors (university graduates) appeared to demonstrate limited exposure to issues of schools that affected them in connecting teacher training and school practices. It was noted repeatedly in the findings of this research that some tutors faced some trouble citing vivid examples from schools when educating student teachers in classrooms because of limited connections between the college and schools (Beaty, 1998; Hardman et al., 2012; Vavrus et al., 2011). Hynds and McDonald's (2010) evaluation of professional learning based on the partnership between universities and schools noted that tutors were motivated by such partnerships to improve their teaching practices, and they recommended this to promote the transfer of learning. There is a need for teacher education colleges and universities in Tanzania to establish close relationships to discuss critically issues that affect teaching and to design strategies of solving them collectively. Although Hardman et al. (2012) highlighted the high costs of investing in such partnership due to limited facilities and resources, it might work in teacher education colleges where there are internet connections and established centres of professional learning.

Therefore, the diverse types of PLD experiences focused in the job environments needed modification. This research proposes that the use of PLD experiences should be more productive in enhancing transfer of training on the job. This situation reflected literature related to effective professional training anchored to on the job environments (Kitta, 2004; Msonde, 2011; Pitsoe &

Maila, 2012). Also, it is consistently suggested that tutors should use these avenues in training student teachers by establishing collaborative partnerships between colleges and schools to link what they are learning at the college to job environments when they graduate (Beaty, 1998; Hynds & McDonald, 2010).

#### **5.4.3 Training policy influences on PLD**

The results of this study revealed that national training policy influenced tutors' PLD experiences in the implementation of the SCC. This research notes that student teachers' qualifications and teaching resources are important to the transfer of training. In Tanzania, tutors seemed to receive directives from the top educational officials concerning the implementation of social constructivist approaches in teacher education colleges, a typical top down approach (Meena, 2009; Msonde, 2011; URT, 1995; Vavrus et al., 2011). Similarly, this research notes that the Ministry of Education in Tanzania organised and implemented the curricula change process in schools and tertiary education. Implementation started in pre-primary and primary education in 2005; followed to ordinary level secondary education in 2005; was introduced to diploma teacher education programmes in 2007; high school level of secondary education in 2009; and to the certificate teacher education programmes in 2009 (URT, 2013). This trend suggests that the schools adopted the SCA before the teacher training colleges. Following this illogical sequence of introducing a change process, there are possibilities that at some point in time the graduates of the certificate course in teacher training were employed to teach in schools without having learned the pedagogical approaches underpinning the new curricula. This approach might have significantly contributed to present quality problems of teacher education programmes in Tanzania.

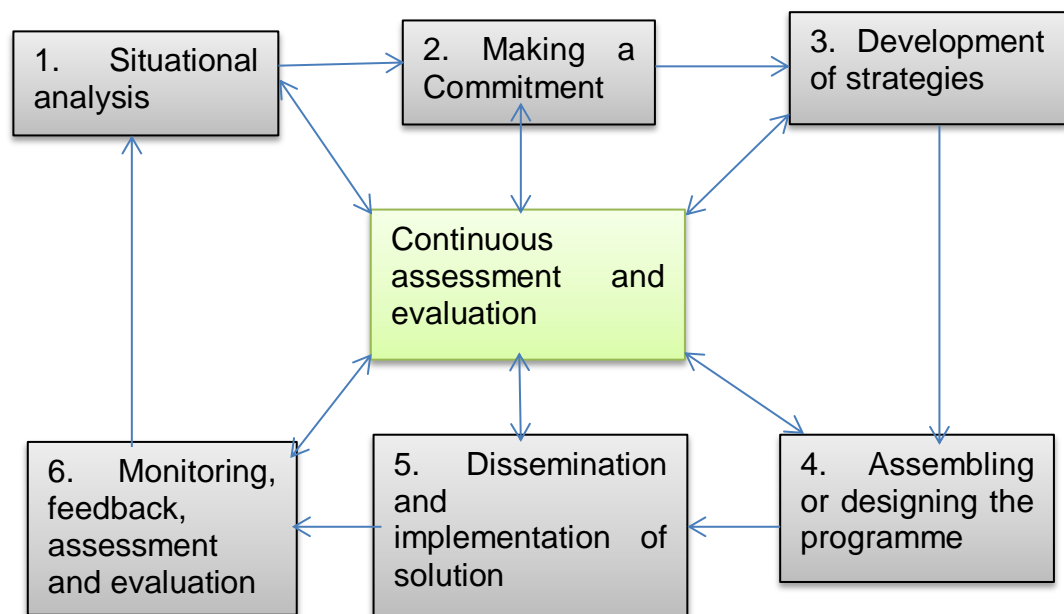
Another similar example is that the MoEVT organised a training programme specifically for newly employed tutors completing university education because they did not participate in the previous general training programme, which involved all on-job tutors in the colleges (Msonde, 2011). This scenario proposes that in practice there was not only a limited connection between university education and the colleges for certificate teacher training, but that the



recent education reform programme began at the school level and had recently begun being implemented in tertiary education and universities. The literature reports that some university education graduates not trained as tutors were employed to train student teachers, but they often lacked the pedagogical knowledge to do so; even those trained as tutors demonstrated limited pedagogical knowledge to implement the new curricula (Hardman et al., 2012; Kitta & Fussy, 2013; Vavrus et al., 2011). In other words, there is limited connection between theory and practice between teacher education colleges and universities. Accordingly, when Hynds and McDonald (2010) studied the factors that motivate schoolteachers' learning in culturally responsive environments, they concluded that establishing professional learning that connects universities and schools in consideration of inputs from stakeholders in the community are important in motivating tutors' transfer of training.

Arguably, the curriculum change should start with training of tutors in tertiary education and be followed by the training of schoolteachers to avoid malpractice in on-the-job training programmes. More importantly, participation of all educational stakeholders including tutors, teachers, pupils, and student teachers in launching education reform is essential to obtaining both support and realistic inputs necessary for the implementation of the training programme (Groff & Mouza, 2008; Punch & Bayona, 1990). The literature indicated that the speedy introduction of any educational reform into implementation might imply significant connections to the external policies and funding agencies interested in the reform process (Hardman et al., 2012; McDonald, 2012b; Schweisfurth, 2011; Verger et al., 2012). This view, reflected in both local and international literature relates to the influence of borrowed policies and educational change in another setting being difficult to achieve without critical examination of the setting and training transfer during planning (Hardman et al., 2012; McDonald, 2012b; McDonald & Tufue-Dolgoy, 2013; Schweisfurth, 2011; Stone, 2001; Vavrus et al., 2011; Verger et al., 2012 ). Ideal educational change should follow some stages as indicated by Fullan (2006a) that it starts from initiation, followed by implementation, and ends with institutionalisation. An illustrative model was developed by Punch and Bayona (1990), which involved many respondents (350 participants from 20 schools) and provided six stages of

participatory curriculum change, which is perhaps suitable for Tanzania's context. Figure 5.4 illustrates the six stages of participation in the curriculum development process: situational analysis, making a commitment, development of strategies, assembling the programme, dissemination and implementation of the solution, and monitoring and feedback provision.



**Figure 5.4:** Participatory curriculum development process. (Punch & Bayona, 1990, p. 261)

Fullan (2006a) and Punch and Bayona's (1990) models suggest the need for participation of all stakeholders in stages of curriculum development and implementation. This means that the omission of participants in any stage of the change process might lead to programme failure. In this study, there is evidence of failure in implementing the social constructivist approaches in teacher education programmes. For example, the research reveals that tutors need training in the basics of instructional language, they need changes to classroom structures, and they encounter cultural practices that are incompatible with implementing SCA. In Punch and Bayona's (1990) model, these practices would be examined critically by all stakeholders and included in the entire curricula design just from the onset of reform programme. In this case, the literature shows that such misrepresentation of stakeholders in the

process is likely to exacerbate the lack of supportive work environment and decrease the amount of learning transfer over time (Baldwin & Ford, 1988; Handal, 2004; Vavrus et al., 2011). There is evidence in this study that the policy environment could be supportive to implement the SCA, if that policy provides opportunities and assurance for environments conducive for work, good leadership, and continuous PLD for tutors on the job.

#### **5.4.4 Factors in maximising the transfer of PLD experiences**

This research reveals important factors for maximising the transfer PLD experiences. Findings reveal the factors that are helpful to the participants in the professional learning and transfer of training experiences in practice. In this case, the professional training programmes for tutors need to consider the following factors:

- The linking of a training experience from the PLD to job practices.
- The relevance of both tutors and student teachers' qualifications to the training programme.
- The test or trial of the educational reform programme with a small group before applying it to a large group.
- The setting of enough time for learning, supervision, and feedback.
- The manageability of the training programme design with the available resources.
- The placement of motivational strategies for the tutors and student teachers.

In consideration of these factors, they suggest that there was limited evidence in this context which explains how policy-makers were critically considering the importance of training transfer in PLD implementation in practice. A number of PLD were concerned with activities *before* and *during* the training programme, and there was no evidence (after) whether they ensured maintenance and retention of training experience to the job, as reflected in local literature (Kafyulilo, 2010; Kitta, 2004; Msonde, 2011). As noted in literature, Baldwin and Ford (1988) suggested that an effective training programme is a relative function of three factors, (1) training input, (2) training output, and (3) training

transfer conditions in relation to the characteristics of the work environments, design of the training programme, and behaviours of participants over time in the context. To emphasise this, Baldwin and Ford proposed consideration of the importance of supervision and quality of materials as well as sequencing of course content to have significant impact in the transfer of training process. In this situation, findings suggested that policy environments and supervisions are influencing the implementation of PLD. Hence, the implementation of SCA in teacher education colleges need follow up to ensure the tutors' experiences gained from the PLD are generalised and continued on the job setting.

Further, critical pedagogy suggests that tutors need to engage in developing critical understandings of the complexities of bureaucratic structures and challenges that affect social science teaching, and professional learning opportunities, and employ them to devise approaches of making change to the existing situations. Moreover, tutors are urged to develop critical literacy for problem solving and problem posing skills through dialogue.

## **5.5 Social constructivist approach versus teaching practices**

The results indicate how social constructivist approach relates to the teaching practices in teacher training programmes. In addressing this, three key findings proposing the tutors' practices on SCA, classroom management and social interactions, and designing lesson plans for teaching social constructivist curriculum are discussed.

### **5.5.1 Tutors' beliefs on SCA and practices**

It was revealed in this study that tutors were suggesting different conceptions or beliefs regarding social constructivist approaches in practice. For example, participants demonstrated a variation in the conceptions and understanding of social constructivist teaching and called it different names, such as a meaning making approach, the competence-based paradigm, a paradigm shift, a participatory approach, or a learner-centred approach. Similar evidence is discussed in the literature on social constructivist teaching, particularly the controversy over the applicability of the approach in practice due to differing conceptual understandings (Baviskar et al., 2009; Kanselaar, 2002; Karagiorgi

& Symeou, 2005; Mtitu, 2014; Windschitl, 2002). Similarly, findings from the interviews and classroom observations (summarised in section number 4.4.5) revealed that classroom teaching in Tanzanian teacher education colleges are shaped by differing views and practices of SCA among tutors, making it difficult to attain focus on knowledge construction. This evidence also resonated with existing literature (Msonde, 2011; Mtitu, 2014), specifically studies that involved PLD on collaborative learning strategies in mathematics and geography for secondary school teachers. However, regardless of differing conceptions of social constructivist teaching, this research uncovered social constructivist beliefs that were common in tutors' practice. Thus, findings proposed that the majority of tutors believed that social constructivist teaching:

- Considers learning to be a collective or social activity.
- Focuses on a student as central in developing her learning needs.
- Offers harmonious interactions between the tutor and student teachers or among student teachers themselves.
- Values the context of learning, the need for enough time and the teaching materials.
- Acknowledges the use of motivation and support for student teachers in the construction of knowledge in the classroom.
- Provides the basic pedagogical knowledge and skills for the student teachers to learn and teach crosscutting issues.

While these findings are supported by the literature (Adams, 2006; Kanselaar, 2002; Karagiorgi & Symeou, 2005; Windschitl, 2002) discussing social constructivist view and identifies other features such as (1) the need for creativity and reflectivity in the teaching and learning process, and (2) the emphasis on the use of multiple authentic assessment and feedback procedures regarding the evolution of ideas and thinking processes. The omission of these features in social constructivist teaching by many respondents in this study suggests that teaching practice is limited in critical thinking and feedback as well as feed-forward, which are significant for a successfully implementing the SCA.

In connection to list of beliefs above, the researcher discovered that the majority of the participants conceived social constructivist teaching as “participatory teaching methods”. Whereas the participatory methods involve active and interactive learning, for which the tutor has a facilitative role, non-participatory methods involve passive learning and the tutor’s role is to transmit content knowledge (Msonde, 2011; Mtitu, 2014). However, it was discovered in this research that some participants had little to argue about how to implement the social constructivist curriculum, even as they explained much about the challenges they faced in the implementation of participatory methods in the classroom. The most important feature noted from the majority of participants is the belief that a student teacher has experience to share in the learning process, and is *not a tabula rasa*. This echoed the literature (Baviskar et al., 2009; Dewey, 1950) concerning the importance of eliciting learners’ prior knowledge to understand the new situations. This situation indicates that the existing PLD experiences might not have addressed some important elements of SCA and that there are no established strategies for ensuring the sustainability of training experiences.

Therefore this research suggests that the implementation of social constructivist teaching in practice has adopted the concept of participatory methods of teaching. Tutors implement participatory rather than non-participatory teaching in a methodological orientation (Msonde, 2011). Ideally, social constructivist teaching acknowledges use of non-participatory techniques (such as storytelling, modelling, guest speakers, and indoctrination), because in social constructivist teaching all methods are collaborative and interactive, and include problem posing and problem solving to promote divergent thinking during knowledge construction (Adams, 2006; Jonassen, 1999; Karagirgi & Symeou, 2005; Khine, 2006; O’Neil & McMahon, 2005). The key distinction is the extent to which student teachers are engaged in more collaborative strategies; that is between high and low levels of collaboration. In literature, Vygotsky (1986) described interpersonal (mental cognition inside the individual being) and intrapersonal (outside social world) interactions for knowledge generation. Similarly, some participants in this study embraced both technical and peer coaching practices to implement some aspects of social constructivist teaching

they experienced from different PLD experiences. Such practices could not guarantee effectiveness in an actual teaching environment because the ways of knowing and doing things were somehow different and culturally responsive. Therefore, tutors need to learn more about social constructivist beliefs and applications to change their understanding and attitude towards the implementation of new approaches in teaching. In this sense, critical pedagogy embraces the idea that teaching need to be concerned with fostering cognition among participants in learning communities within the socio-cultural situation to promote respect and togetherness for collective change benefits.

Another aspect the findings indicate that many tutors differed in their understanding of what their roles were in social constructivist teaching. While some argued that their role was to guide and support student learning, others felt that their role was to demonstrate mastery of the subject matter in the classroom and to correct student teachers' mistakes. This confusion is clarified by studies on social constructivist teaching, which discusses tutors' roles in classrooms (Adams, 2006; Baviskar et al., 2009; Karagiorgi & Symeou, 2005). Literature implies that the tutor's roles are to:

- Create environments conducive for learning, which motivate free social interactions and knowledge co-construction process. The tutor should be aware of the procedures to guide the student teachers towards knowing and learning through social interactions. The procedures need to be grounded on scaffolding of the content knowledge and teaching materials, problem posing and solving problems.
- Facilitate by providing opportunities and support for student teachers to co-construct knowledge and develop an understanding of relevant concepts. Tutor's facilitative role should concentrate on identifying learning activities that stimulate student's thinking about realities. For instance, tutors can facilitate through communities of learning practices that engage student teachers case-based, place-based learning, and reflective thinking.
- Transfer their power gradually to the student teachers to ensure freedom and opportunities for a democratic learning environment, where student are

able to criticise, develop arguments and ask questions without trial or conviction.

- Play a role of an observer and a listener to the student teachers' learning process through providing them time to talk and opportunities to listen to others during co-construction of knowledge.
- Use collaborative learning and interactive strategies to correct and clarify "misunderstanding and inconsequential knowledge" (Adams, 2006, p. 250) so that student teachers' "prior correct concepts and errors or unanticipated responses" are regarded as "misconception" or 'misunderstanding" (Karagiorgi & Symeou, 2005, p. 19). In this situation, the tutor should make sure student teachers have the chance to talk and the opportunities for others to listen during co-construction of knowledge.
- Observe tolerance of student teachers in the confrontation of ideas and provide guidance on how to suspend their personal constructions of knowledge, while appreciating the socially constructed knowledge.

Therefore, tutor's teaching and learning activities should be directed towards facilitating student teachers "to become aware of the realities of others and their relationships with and to one's own" (Baviskar et al., 2009, p. 246). With this view, tutors should help student teachers learn to be accountable and responsible for their own learning while tutors take a facilitation and guidance role. Tutor/student teacher power relations are paramount in that the tutor has pedagogical knowledge and content knowledge in teaching and the student teacher is learning to gain the content and pedagogical knowledge of teaching. This gap requires support from a significant other for the student teacher to complete it under the tutor's guidance and experience. In a social constructivist view, the significant other could be a fellow student teacher in the classroom or a tutor who supports and guides the student teacher to learn issues that cannot be tackled by the student teacher alone.



## **5.5.2 Designing lesson plans for teaching a SCC**

The study reports findings about designing lesson plans for teaching the social constructivist curriculum in teacher education programmes with emphasis to issues of lesson planning and preparations, assessments and evaluation, learning activities, teaching aids and the positioning of computer and internet services in teaching. These issues are discussed in the following paragraphs in detail.

### ***5.5.2.1 Lesson planning and preparations***

This research shows findings that lessons were designed cognisant of the social constructivist views, with influences of the transmission teaching approach and cultural context. The planning and preparation of the lessons were sensitive to college culture and context of teaching. The lessons were organised based on the analysis of the social science syllabi through which tutors developed the learning objectives, identified the time required for learning, the class size, the learner's ability, and the teaching techniques and resources. This situation was proposing a pre-deterministic approach (a preconceived instruction) in lesson planning and preparation for teaching. For example, findings presented in sections 4.3 and 4.5 indicate that tutors' planning and preparation of lessons were influenced by contextual influences such as resource constraints, curricula discrepancies, and large classes, for which survival strategies were devised in the context of implementing SCA. Lesson planning featuring social constructivist beliefs is one of the topics of scholarly debates in the contemporary literature (Banks, 1995; O'Neil & McMahon, 2005). For instance, Karagiorgi and Symeou (2005) discussed the challenges of implementing SCA, one being the top-down instruction design. The scholars note that instructional designers face the challenge that learners in some circumstances construct "wrong knowledge" and sometimes need to be provided with a package of issues to teach (Adams, 2006). On one hand, it is important to note that instructional designers sometimes consider the knowledge constructed by student teachers as *wrong*, a typical traditional view that overlooks the role played by the socio-cultural milieu in shaping the student teachers' constructs in knowledge building (Adams, 2006). This is social

knowledge that is important for a student teacher to learn, but is often not considered in the syllabi. In the context investigated by this research, tutors were faced by contingent teaching challenges of whether to consider teaching issues raised by student teachers to embrace social constructivist teaching or to compromise social constructivist teaching by ignoring issues constructed by student teachers (because the issues are not in the syllabi). For example, tutors considered that the knowledge organised in syllabi by experts may not always reflect the relevant needs for student teacher learning. In this way, the student teachers' constructed knowledge is ignored due to the belief that student teachers must be measured on the knowledge deemed relevant by experts such as tutors, curriculum developers, policy-makers, and researchers. In the same vein, this study shows that the directives from the policy and national curricula shaped tutors' instructional designs. Tutors designed lesson plans and schemes of work based on the social science syllabi, meaning that the following aspects were considered in developing lesson plans:

- The main and specific learning objectives focused on student teachers.
- Teaching techniques and teaching aids that were sensitive to the class size and cultural context.
- The integration of controversial issues (gender, HIV AIDS, gender, human rights).
- The individual student and the size of the class to teach.
- The selection of appropriate time to teach the lesson to learners.
- The time available to enable the student to learn.
- Designing assessment cognisant of the pre-scribed specific learning objectives.

These findings echoed the literature (Hunt et al., 2009) about how to design lesson plans. However, authors appeared to have overlooked the importance of the learning context, the teaching and learning resources, and the place of the learners in learning, and cultural and controversial issues, which influence teaching. This means that they did not consider situations which may cause a tutor to relapse into the traditional behaviourist view. In this regard, the findings suggest that tutors should be trained to be as considerate and sensitive as

possible to student teachers' needs and cultural contexts when integrating SCA in teaching. Tutors surveyed in this research structured learning objectives in social constructivist ways in a manner identical to O'Neil and McMahon's (2005) argument that the attention should be to develop student teachers' abilities rather than content coverage, that is, it important to change their attitude to ensure effective learning. O'Neil and McMahon highlighted that student teachers should be involved in the selection of learning activities situated in problem posing, problem solving, resource rich environments, relevant learners' needs, and experiential approaches. Findings in this research report that participants organised lesson plans and learning objectives on cognitive, motor, and attitude aspects of learning needs development. As Vavrus et al. (2011) indicated, student teachers were assessed by tutors based on "the extent to which their lesson plans, methods and techniques demonstrated technical skills" (p. 6). This technical rationality model in social science curricula partly influenced tutors who demonstrated their understanding and willingness to adopt the social constructivist approaches in teaching.

However, findings revealed that tutors are not often involving student teachers in lesson preparation activities. This practice made tutors' lesson planning incongruent with O'Neil and McMahon's (2005) view that student teachers should be involved in selection of what to learn, how to learn and why, so as to emphasise the student teachers' responsibility and accountability of their own learning. Additionally, the literature shows that tutors' teaching practices regarding the implementation of new approaches, demonstrated limited knowledge of the approach because tutors appeared to face problems to establish the connection between classroom culture and the social constructivist beliefs, and did not always know how to avoid the long-lived beliefs of traditional teaching approach that they had been schooled in (Vavrus et al., 2011; Windschitl, 2002). Likewise, student teachers appeared to bring in their cultural beliefs and practices from home that needed tutors' pedagogical experiences to mediate during the knowledge construction process, because those beliefs are part of the realities constructed in their communities. Participation of student teachers in lesson planning process could partly solve some of the challenges that face tutors in social constructivist teaching. O'Neil and McMahon (2005)

described the importance of involving the student teachers in social constructivist ways of lesson planning, stating that:

It allows the ... [student teachers] to set of their own learning objectives/outcomes, dependent on prior knowledge. ... through the use of problems/issues/triggers, encourages the ... [student teachers] to develop their own learning goals, thereby filling the gaps in their knowledge or understanding. (p. 30)

Based on this assertion, the participation of student teachers in lesson planning depicted a continuum of power imbalance between a tutor and student teachers whereby the tutor should continue to command power over pedagogical knowledge, content knowledge and psychological knowledge, and the student teachers should continue to seek support in learning. This view reflects Vygotsky's (1986) notion of the *zone of proximal development* in social constructivist beliefs, which described the tutors' role as one directed towards filling gaps between what the student teachers can learn without support and issues and those for which they need support to be able learn. However, it is a possible to maintain a balance between the knowledge student teachers already have (from their home environment), and what they learn in the teaching profession at the college: this notion mirrors Piaget's principle of equilibration (Piaget, 1977; Windschitl, 2002). Therefore, to improve the process of knowledge construction tutors are urged to provide opportunities for student teachers to plan their own learning activities and assess them critically when comparing the knowledge learned in the classrooms and that acquired from their family or community.

#### **5.5.2.2 Planning assessment and evaluations**

Findings in this study reveal that tutors dominated processes of designing assessment and evaluation procedures, with little involvement from student teachers. Also the study reveals that formative and summative assessments were designed cognisant of the mental, physical, and affective abilities of student teachers. Tutors seemed to be influenced by a mechanistic view of designing assessments, for both summative assessments (tests) and formative assessment administered by colleges and the national examination council

procedures (Adams, 2006; Ferdinand, 2011). Despite the fact that formative assessment was organised in various forms (oral and written) to measure the ability of student teachers during classroom learning process, the intention of summative assessment was to measure student teachers' achievement of a particular standard of mastery regarding a piece of content or the whole range of content in the subject matter (Ferdinand, 2011). In this situation, the formative assessments were designed with regard to the prescribed learning objectives in the social science syllabi, a situation that made the assessment pre-deterministic.

However, although tutors appeared to be dominating the selection and preparation of assessment procedures for the college exams, the formative assessments of learning activities and their reflection in the classroom learning process suggested the application of social constructivist views. Still this was not wide-ranging or consistent: Summative evaluation in the context of teacher education colleges in Tanzania constitutes the college's continuous assessments and examinations at the end of semester or end of the year (Ferdinand, 2011; JMT, 2009a; URT, 2013). The summative assessments are used to measure the mastery of content knowledge in a manner other than promoting learning and understanding congruent with the social constructivist beliefs. The literature corroborates to these findings that examinations and tests are designed based on traditional beliefs concerning teacher-centred paradigm, meaning they hinder the implementation of newer approaches (Meena, 2010; Tilya & Mafumiko, 2010). This literature shows that tutors' teaching practices are focused on completing the content in syllabi to meet examination requirements for the student teachers. Tutor's performances at work were judged in relation to the numbers of student teachers who passed the course. Indeed, even though tutors have the knowledge and ability to employ social constructivist teaching, they are likely not be effective in the environment with controlled procedures for teaching and learning measured by assessments.

In teaching and learning environments shaped by social constructivist beliefs, assessments are interwoven with teaching and learning activities. According to the social constructivist beliefs, assessments should be designed to assist tutors to identify how and why student teachers' views in classroom are

incongruent with the existing social realities. Hence, assessments should be used as a tool to gain insight into what student teachers know and what they need to learn. The literature discusses similar findings and suggests designing assessments that conform to the social constructivist beliefs (Adams, 2006; Ferdinand, 2011; Karagiorgi & Symeou, 2005). From these insights into designing assessments, social constructivist teaching models recommend the use of divergent forms of assessments to explore individual and group understandings via cooperative and collaborative teaching and learning approaches (Adams, 2006; Karagiorgi & Symeou, 2005). In addition, assessments should be designed to motivate student teachers in learning, and to predict further actions in learning, an essential factor for tutors to consider during lesson planning. In this situation, tutors need to engage student teachers in lesson preparation by choosing types of assessments and to be able to (1) utilise these assessment tools, (2) identify issues they have learned, (3) identify the ways they used to learn the issue, and (4) identify the ways they used to establish connections of these issues to their prior understandings and the constructed knowledge in practice. As reflected in literature (Adams, 2006; Karagiorgi & Symeou, 2005), assessments and evaluation procedures should be corresponding to the social and cultural values and norms within which knowledge is constructed. Tutors should teach student teachers to be able to design their own learning objectives by which they can be assessed through portfolios, diaries, practical tasks, journals, performance assessment, product assessment, peer assessments, and self-assessments situated within the collaborative learning and teaching approaches – in written, oral, or performance observations (Adams, 2006; Karagiorgi & Symeou, 2005; Kitta & Tilya 2010; O’Neil & McMahon, 2005).

### ***5.5.2.3 Designing learning activities***

Another aspect emerging from the findings is that tutors designed teaching and learning activities based on a collaborative learning environment. The data indicated that tutors preferred to organise learning activities for student teachers based on group discussions, interactive lectures, group presentations, illustrations, and whole class discussions as well as question and answer. Other techniques were jigsaw puzzles, peer group discussions, and brainstorming.

Tutors who designed lessons based on these teaching techniques considered themselves to be implementing social constructivist approaches. The findings reflect the ideas from literature that classroom learning activities should be “student-centred, student-directed, collaborative, and supported with tutor scaffolding and authentic tasks and based on ideas of situated cognition, cognitive apprenticeship, anchored instruction and cooperative learning” (Karagiorgi & Symeou, 2005, p. 19). Karagiorgi and Symeou also reported that these learning activities, when enriched with teaching resources could enhance the processes of bridging gaps between the student teachers’ perspectives (brought with them from their home families) and classroom learning experiences.

In the same vein, the research reports tutors’ challenges in selecting and designing their teaching techniques to suit large classes in which monitoring and classroom management became difficult, often hindering the knowledge construction process. The researcher notes that when the learning environments were organised around group discussions, presentations, and jigsaw techniques, student teachers were not provided with enough time for learning because of the large amount of content planned per period. For example, in many cases, tutors arranged groups to discuss for 2 to 7 minutes and to present for 2 minutes. This arrangement was aimed at providing each student teacher a chance to present issues discussed in the group, but the time allowed was necessarily short with so many student teachers to accommodate. In the same vein, tutors organised groups of 10 to 15 student teachers to discuss a task in the classroom. Tutors desired to ensure each group obtained a chance to present the work within the time for the lesson, they intended to complete the syllabus within the required time, and to allow the student teachers to answer the final examinations and pass for grading and certification. This situation perpetuated hegemonic structural conditions that constrained the integration of SCA which focuses on designing learning activities (e.g. assessments and evaluations) which motivate student teachers in the learning process. Similarly, Tilya and Mafumiko (2010) conducted a study in Tanzania regarding social constructivist teaching and noted that the approach had been “invariably reduced to putting learners into groups of often more than 5 to

discuss something as vague as how democracy is practiced or find the mean of a data set or to discuss the source of lighting” (p. 38). Based on such evidence, some of the literature (for example, Baviskar et al., 2009) report that the over-emphasis on group discussion alone does not guarantee the effective implementation of SCA. Moreover, literature indicates that different communicative approaches are required to enhance social interactions and provide student teachers the opportunities for scaffolding their learning experiences through instant interrogation with peers and the tutor (Adams, 2006).

Moreover, the results reveal that tutors’ decisions to organise teaching using interactive lectures, jigsaw, group discussions, question and answer techniques were viable decisions in the context of large classes and limited resources. These techniques enhanced the opportunity for self-reflection, and co-construction of knowledge relevant to the context. Adams argues that such communicative competences are essential for both tutors and student teachers to effectively debate subject issues while maintaining a high level of tolerance to ambiguities, criticism from peers, and acceptance of other people’s divergent ideas. Habermas (1984) noted that:

In communicative action participants are not only primarily oriented to their own success; they pursue their individual goal under the condition that they can harmonise their plans of action on the basis of common situation definitions. In this respect the negations of definitions of situation is an essential element of interpretive accomplishment required for communicative action. (p. 286)

It is implied by Habermas that the tutors’ pedagogical experiences need to inform their teaching practices in the classroom and help them foster social interactions between student teachers. Effective classroom interactions are based on appropriate use of communicative reasoning and thinking competencies and should bring about consensual agreements between participants in the learning process (Habermas, 1984). In enhancing interpersonal relations situated within a social constructivist view of learning context, “a key element is an ability to decode attendant language to be able mediate and negotiate individual constructs to the social constructs” (Adams,



2006, p. 246). Thus, tutors are urged to plan lessons which could engage the student teachers in an interaction process that responds to various communicative competences, resource-rich environments, and cultural-context sensitivity as well as designing assessments conducive to a successful implementation of SCA. To be effective in achieving this interaction process, tutors should learn critical literacy on pedagogical knowledge to be able to design lessons that engage student teachers in critical dialogue that considers:

- The key communicative elements of the language of teaching.
- The different specific communicative competences on what a teaching technique is intended to achieve.
- The appropriate procedures to use teaching techniques in different learning environments.
- The reasons for the appropriateness of the technique in teaching a particular level of student teachers in the selected programme learning objectives (Adams, 2006; Habermas, 1984).

#### ***5.5.2.4 Designing teaching aids***

It was discovered in the findings of this research that tutors' preparation for teaching was influenced by the limited variety of teaching materials such as maps, globes, books, flip charts, photographs, and pamphlets. Tilya and Mafumiko's (2010) study shows that support materials and training for tutors are "essential to ensure the new curriculum is well implemented" to be able to teach and transfer the needed experience on the job (p. 52). However, ready-made teaching materials were not available enough in the context of Tanzanian teacher education colleges to cope with the shortage of teaching aids; tutors often improvised teaching aids using locally available materials. Hence, tutors recognised that teaching materials are an effective means to communicate the new curricula to student teachers. These results resonated with the literature (Khine, 2006; Meena, 2010). For example, Khine (2006) urges the use of technological materials obtained within the social and cultural context to promote social constructivist teaching, arguing, "meaning making and thinking are distributed throughout our tools, culture, and community" (p. 26). The data of this study revealed that teaching materials are of low quality and tutors have

limited understanding of how to assess the materials. This is in accordance with Meena's (2010) study which shows that there is a need for tutors to be trained on how to assess the quality of teaching materials, and whether or not they are relevant to the subject and student teachers' learning needs. Meena reports that tutors used many books from writers in Western countries which had irrelevant content to the cultural context of Tanzania and Africa in general. Similarly, the findings in this research shows that tutors' preparations of lesson plans relied on modules (pamphlets published in Kiswahili), and translated some books written in English into Kiswahili to gain knowledge of teaching the new curricula. One tutor explained:

We do not have books written in Kiswahili language. We are forced to read various books from different sources, but they are in English. We need to translate them, yet sometimes you may make incorrect meaning of the required information.

This situation implies that tutors' teaching and learning activities were confined to the use of modules and primary school textbooks as the main reading materials from which the examination questions were constructed, because they were written in Kiswahili. It was notable in the findings of this research that these modules, textbooks, and other teaching materials lacked content details, and often included out-dated information, as well as promoting content-centred teaching techniques. In this sense, teaching depended more on ready-made teaching materials to implement the new curricula. Moreover, to cope with the scarcity of resources, tutors improvised teaching aids that were bound to the cultural context. They used local materials (for example, banana plants, wood charcoal, college surroundings) to design teaching aids, yet they were of poor quality in terms of size, composition and durability. Consequently, in such situations the teaching and learning activities involved sharing of ideas grounded on imagination and common sense. Exploring imagination and common sense is central to critical pedagogy beliefs, which are against positivist view. In this sense, imagination and common sense seem to engage people's lived beliefs and practices drawn from their own realities in the context, which are more crucial to understanding than authoritarian knowledge (McLaren & Kincheloe, 2007). The understanding of imagination via social interaction

results in self-realisation of individuals that brings social transformation. Thus, for the traditional model, this type of knowledge is “immaterial” and therefore tutors should not teach it. The only risk the tutors and the student teachers are taking when they depend on imagination and common sense is to fail themselves in the final examinations. This is because such knowledge is not part of centralised curricula and the National Examination Council of Tanzania (NECTA) cannot evaluate it. In consequence, this research suggests that Tanzanian tutors are facing situational challenges of teaching in which they are required to compromise social constructivist teaching and traditional behaviourist approaches.

On one hand, findings show that tutors’ teaching involved a limited variety of teaching aids in practice. In other words, teaching and learning activities were conducted in the environments with poor teaching aids that militated against the demands of SCA. Social constructivist teaching demands an environment which is rich in teaching resources and space, two things that were in short supply for teacher education colleges in Tanzania. In addition, tutors’ freedom and professionalism in employing different sources of teaching materials were limited by cultural factors of both the college and student teachers. These situational teaching challenges tend to confront the transfer of training experiences obtained from different PLD opportunities to the job.

#### ***5.5.2.5 Positioning computer and Internet services in teaching***

The research reports the limited supply and access of computer and internet services in teacher education colleges, including unreliable electricity, often meant that they could not operate the computers. It was notable in the findings of this research that tutors needed internet services to search teaching and learning materials. For example, one college situated in the interior part of the country is not connected with electricity from hydro energy, which is more reliable, but was reliant on solar energy to produce electricity. This college faces serious problems in accessing electricity and internet services for teaching and learning purposes, problems that colleges connected to the hydroelectric power system do not face. This research suggests that teacher education colleges should be supplied with reliable sources of power.

Similarly, this study reports that there was a high ratio of student teachers to the number of computers available in each college. Commonly, there were 25 computers in each college with a minimum of 300 student teachers on campus, excluding tutors and other staff members. Furthermore, the research reveals that regardless of these problems, tutors had more access to the computers than student teachers did. Tutors seemed to have the authority to use and manage the computer labs and student teachers entered labs only when they were guided to do so. There was a belief that student teachers had limited knowledge of using computers and if allowed to use them they might cause damage, which cost the college. In such a situation, it was difficult to implement SCA. The literature shows that tutors are expected to design lessons with student teachers and cognisance to the technological and non-technological resources to enhance a collaborative and interactive learning environment, which stimulates creative and critical thinking (Harris et al., 2009; Khine, 2009; Koehler & Mishra, 2009; Vavrus et al., 2011). Although the literature (Harris et al., 2009; Khine, 2009; Koehler & Mishra, 2009) indicates the significance of using technology in teaching and learning in embracing social constructivist views, this was not happening in the context of this research. There is need for ensuring reliable power supply in each college to enable tutors and student teachers use the computer services for effective teaching and learning commensurate with social constructivist beliefs.

Further, the research suggests that to be able to design a learning environment that suits social constructivist beliefs, tutors need to experience well-planned continuous PLDs. Such PLD programmes could develop tutors understanding of the existing pedagogical, psychological, and epistemological beliefs and improve their teaching practices (Kanselaar, 2002). In this situation, critical pedagogy holds that any education has a political bias in which tutors should engage student teachers in analysing the hegemonic structures that influence their social science curricula and use that experience to create social awareness in the society for a change (McLaren & Kincheloe, 2007; Rossatto, 2005).

### **5.5 3 Classroom management and social interactions**

This study reveals findings related to the classroom management and social interactions focusing on six issues: ensuring free learning atmosphere, cultural influences in teaching, time management problems, specific proceedings in the knowledge construction, tutors and student teacher relations, and the motivational strategies. These issues are discussed below in detail.

#### ***5.5.3.1 Ensuring free learning atmosphere***

Contemporary studies and academics debate the appropriate procedures in promoting social interactions and behaviour management of learners for knowledge construction (Adams, 2006; Baviskar et al., 2009; McCombs & Whisler, 1997). Additionally, Loughran (2006) notes that tutors' teaching practices regarding the new teaching approaches engaged them in complexities "around recognising, responding and managing the dual roles of teaching and teaching about teaching concurrently" (p. 11). Similarly, it was discovered in this research that tutors assured a free learning environments and encouraged participation of student teachers by engaging them in different learning communities and providing them opportunities to ask questions with peers and of tutors. According to Adams (2006, p. 250), such engagement practices helped tutors to identify the student teachers' "misunderstanding and inconsequential knowledge" to be able to guide and correct them effectively. Many tutors engaged student teachers in a dialogue: Discussing a problem, solving a problem, presenting the discussed problem individually or in team. Findings in this research show that sometimes student teachers got chances to lead discussions about solving a particular problem in the class. More importantly, tutors provided chances for the student teachers to ask questions of their fellows, creating arguments based on experience and resources they have read, and seeking clarification from the fellows' arguments or comments. Subsequently, the classroom atmosphere appeared to be live and stimulated student teachers' freedom and participation in the learning process. In such situations, the tutors' pedagogical knowledge and content knowledge ensured a focused, smooth learning progress and classroom atmosphere.

### **5.5.3.2 Cultural influences in teaching**

Results from this research reveal that cultural issues were influencing teaching of controversial (crosscutting) issues in Tanzania. Tutors' teaching practices considered some controversial issues, such as gender representations, HIV AIDs, and traditions (Banks, 1995). Banks (1995) notes in literature the teaching of social science need to consider the new global demands of knowledge relevant for learners' learning. Tutors organised student teachers in different learning communities in which the issues of gender balance were observed. For instance, they formed groups of student teachers that constituted males and females to participate in dialogue, making presentations, and asking and answering questions. Despite these tutors' pedagogical approaches, some student teachers seemed to be new to using collaborative and interactive approaches and this required tutors to provide many instructions to support them in the learning process. In this sense, the instructions interrupted the attention and concentration of other student teachers who were familiar with the teaching strategies. As result of this, tutors appeared to be spending more time dealing with unexpected issues in the classroom that interfered with the transfer of learned experience in practice.

Similarly, it was evident in this research that different cultural aspects of student teachers and the college influenced teaching of controversial issues. In this case, issues of college rules and regulations, and codes of social conduct (greetings, respect, caring, and obligations, traditions, and taboos) influenced the teaching of issues such as sex related education, HIV related education, and culture. It was noted by some tutors that there was poor participation from female student teachers in dialogue of some topics. Hence, classroom interactions and behaviour management considered issues of culture and these challenged tutors to correspond with social constructivist teaching beliefs in the context. These findings reflected assertions made in the literature (Adams, 2006; Meena, 2010) that the socio-cultural context shapes classroom learning activities and therefore the cultural context should partly inform tutors' decisions in teaching and learning approaches. Since the imposition of new teaching approaches in Tanzania followed the top-down approach, it is difficult for tutors to harmonise the pedagogical directives of the two cultural contexts (the authors

of the innovation and Tanzania's contexts). Therefore, the reform process lacks representation and ownership of the context. In this situation, a bottom-up imposition of new teaching approaches would be significant for changing the attitudes of tutors and student teachers, as well as of parents, from out-dated teacher-centred learning to the more current emphasis on social constructivist teaching.

### ***5.5.3.3 Time management problems***

The research shows that tutors in teacher education colleges had problems managing time in the classroom. Some of tutors spent more time than expected and some spent less. The main reasons were either that they chose teaching techniques that needed time, or they had much content to cover in one lesson. Consequently, some tutors reported that they spent more time because of their limited knowledge of using the techniques, which made it difficult to balance time with learning activities. The research indicates that although many tutors were aware of a paradigm change in teaching, they needed more support and PLD on how to mediate classroom management challenges. The researcher notes that this situation was triggered by:

- a) The social science syllabi content overload and poor organisations, which made it difficult for tutors to plan lessons and affected the completion of the syllabi. They planned either too much or few learning activities per lesson. Teaching was rushed to be able to complete syllabi in two years' time as well as to enable the student teachers to pass the final examination. For example, it was noted the time of social science teaching per week is indicated as three hours in the syllabi and four hours in the national curriculum, so creating confusion and difficulties for tutors in teaching the subjects.
- b) The limited teaching resources which could facilitate communication of subject content and simplify the knowledge construction process.
- c) The large classes made it difficult for tutors to manage the student teacher's behaviour and their learning activities that took much time for teaching. For example, when the tutor chose group discussion it took an

average of 3 to 5 minutes to organise/arrange the groups before the discussion started.

- d) The uses of Kiswahili as the medium of classroom teaching enhanced classroom interactions whereby many student teachers had more chances to ask questions, to comment and to raise arguments with peers and the tutors. In this case, student teacher and tutors are intrinsically motivated in knowledge construction based on common sense and in the lack of tutors' control of the learning activities meant that they exceeded the allocated time for that particular lesson.

Therefore, the time allowed for learning is an important factor in a successful teaching based on social constructivist beliefs. In this case, it can be argued that the more time allocated for teaching the more the tutors' transfer of training experiences to engage student teachers in an authentic environment for knowledge construction (Bransford et al., 2000). There is a need to balance the identified learning needs of student teachers and the amount of time required to accomplish them in teaching.

#### ***5.5.3.4 Specific proceedings in the knowledge construction***

This study indicates that the use of lesson development frameworks based on SCA guided tutors towards specific activities enabling knowledge construction. In this case, the framework for construction of knowledge involved five stages, namely: the introduction, the development of new knowledge, the application of constructed knowledge, the reflection on the knowledge construction process, and the closure. These findings aligned with literature on knowledge construction (Baviskar et al., 2009; Vavrus et al., 2011). First, tutors used a variety of pedagogical experiences to *elicit student teachers' prior experiences*. For example, they used gimmicks, maps, brainstorming, and questions to obtain answers from individuals or groups to probe prior information of student teachers. According to Baviskar et al. (2009), the use of formal pre-tests and interviews and arranging activities such as concept mapping engages learners in previewing their experiences. Thus, many participants demonstrated a high level of connecting student teachers' prior experience to the new process of knowledge construction.



In the second stage, the research indicates that different teaching strategies and techniques were employed to engage student teachers in the *development of new knowledge*. For example of the 9 participants, 7 of them utilised interactive lectures and collaborative learning approaches, and the other 2 had difficulties communicating the subject content, which reflected their limited knowledge of subject matter. Many tutors appeared to engage student teachers in knowledge construction through jigsaws, think-pair-share exercises, group discussions, and team/individual presentations, as well as scaffolding. During the knowledge development activities, tutors were expected to enable the student teachers to disentangle the new knowledge from the previous learned knowledge (Baviskar et al., 2009), otherwise the teaching and learning would be considered deterministic and content focused (Adams, 2006). In this study, though tutors employed collaborative learning strategies, the interactions needed to be supported with resources of which they could not access enough in their college campus.

In the third stage, findings indicated that many tutors demonstrated they had the understanding and ability to engage the student teachers in the *application of knowledge constructed* in practice. Both tutors and student teachers were collectively engaged in figuring out the connections between knowledge constructed and real lived experiences using “common sense” and citing vivid examples from the society instead of school-based ones. This experience was useful to both the tutors and student teachers to bridge the gap between knowledge learned at home and in the college environment (Adams, 2006; Hardman et al., 2012). According to Adams (2006), professional learning grounded in social cultural phenomena embraces common sense and suggests social constructivist beliefs. Hence, the social cultural phenomena represent the existing realities (of both student teachers and tutors) and are subjected to scrutiny through co-construction of knowledge. This means that, tutors should engage student teachers in context based learning environments to gain ownership of knowledge constructed. This research reveals that tutors used a variety of procedures to engage student teachers in integrating knowledge acquired into real life experiences such as providing quizzes, individual and team/peer presentations, scaffolding, group discussions, sharing feedback and

comparing their constructs with peers and the tutors. These procedures promoted authentic argument construction situations (Jonassen & Kim, 2010). In a critical pedagogical view, tutors' are expected to use multiple ways of checking the validity of constructs and application of knowledge in order to enhance opportunities for the student teachers to sustainably establish the connection of the new knowledge to different situations.

In the fourth stage, it was reported in this study that many tutors indicated limited knowledge regarding *reflection on the knowledge generation*. A few questions were asked of a few student teachers, and tutors had difficulty asking many questions because of large classes. This pattern of large amounts of knowledge construction and limited knowledge of setting or asking reflective questions corroborated the literature (Jonassen & Kim, 2010; Vavrus et al., 2011) as did the reported and observed pressure regarding the time allowable for completing the syllabi (Tilya & Mafumiko, 2010).

Further, as findings here indicate, some tutors demonstrated limited knowledge and skills when it came to using a specific teaching technique in the classroom setting. For example, some tutors who opted to use group discussions demonstrated limited procedural knowledge in that (1) the groups were organised but each group was lacking a leader, (2) the groups' sizes were not uniform, and (3) sometimes student teachers were seated in groups without knowing what they were going to pursue in the group (Mtitu, 2014). Ideally, reflection in the learning process aims to help both tutors and student teachers to figure out knowledge construction and to express the knowledge learned through higher-order cognition activities such as journal writing, self-assessment, portfolios, exhibitions, and explaining concepts to peers (Baviskar et al., 2009; Khine, 2006).

Finally, the study reports that different ways of *closure of lessons* were employed in teaching. Many participants used this opportunity to provide assignments, to make formal and informal announcements, to explain the next learning objectives, and sometimes made serendipitous conclusions (Nzilano, 2013). For instance, some tutors, when they had finished the reflections stage

of the lesson, stopped teaching and left the student teachers to think by themselves about the conclusions of the lesson. Similarly, some tutors asked student teachers to briefly describe the issues they had learned during the lesson. On the other hand, student teachers used this stage to express their queries about the difficulties in learning the subject. These practices embraced a social constructivist view in that tutors provided opportunities for the student teachers to comment and contribute to their learning process. With regard to serendipitous ending of the lesson, it might mean tutors were not prepared to provide the required conclusion. Unless, tutors use serendipitous ending of lessons cautiously to help student teachers to identify or to learn a particular aspect that the student teachers should figure out that something is not learned in that aspect which the tutor wants them to learn. This is in line with McLaren and Kincheloe's (2007) view that "instead of giving closure by emphasising the perspective of critical pedagogy, the tutor gave the student teachers the impression that 'anything' goes" (p. 252).

Furthermore, it is evident from the findings of this study that tutors allocated more time to the development of new knowledge stage than reflection to the closure stage. In the literature, Hunt et al. (2009) argue that the closure stage is specifically for making summaries and conclusions that offer scenarios for a better understanding of the knowledge constructed and a place for building the next lesson. Hence, for effective closure of the lesson, tutors are urged to use multiple ways of generating summaries and conclusions. Tutors could provide activities to student teachers; for example, writing or oral questions for individuals or the whole class to answer. However, throughout the lesson development activities tutors developed social relations with student teachers in classroom and this is a core aspect in social constructivist view and is worth discussing tutor/student relationship.

#### ***5.5.3.5 Tutor and student relationship***

Another classroom practice reported in this study related to the forms of relationship that existed between a tutor and student teacher during the teaching and learning activities. In this case, tutors developed different forms of relationships with student teachers according to the level of student teacher's

participation and to the authority vested in the tutor (Vavrus et al., 2011). The centralised policy, and curricula and the persistence of cultural respect that requires tutors to be honoured by student teachers made it difficult to create a completely democratic learning environment in the classroom. Both student teachers and tutors tended to conform to the existing cultural values and norms in which tutors appeared to modify creatively the teaching approaches and negotiating a balance between the social constructivist beliefs and their home beliefs to survive and fulfil knowledge construction missions.

The literature (Adams, 2006; Schweisfurth, 2011) indicates the influence of culture on classroom teaching and learning. Scholars consistently indicate that knowledge is constructed with reference to the culture that surrounds it, and in Tanzania, this is a context in which there is a developed habit of respect to authority and elders (Adeyemi & Adeyinka, 2003). For instance, whereas the tutors respected external authority, student teachers were obliged to respect their tutors (Rossatto, 2005). The social distances that exist between people are part of the culture that tutors and student teachers bring with them into the classrooms and which influence participants' learning activities and relations. Hence, tutors exhibited multiple powers, as an elder person in the community and via authority vested by the college culture, as well a person possessing professional experience.

In this situation, to attain a complete balance of power between the tutor and student teachers in the classroom is somewhat difficult, particularly in developing countries (periphery) such as Tanzania but even in some developed countries. Studies by Hasan and Hynds (2014) reveal that respect, relationship, and belongingness in "periphery countries" are culturally and socially responsive motivational factors that determined tutors' teaching practices and their sustainability in the teaching career. Thus, it was noted in this situation that the student teachers were able to share the power of the tutors/lecturers.

Furthermore, the relationship between the tutor/teacher and student teacher determined tutors' decisions about what to teach, how to teach, and why to teach that particular topic. As a result, a tutor-centred decision-making

exacerbated student teachers' dependence on the tutors' decisions about the limits to student teachers' learning autonomy. Similarly, tutors decided on assessment procedures, administered assessments to student teachers, marked work, and provided feedback with little involvement from student teachers. However, tutors seemed to not only encouraging student teachers to make their own lesson notes, but also to participate actively in dialoguing. Some student teachers seemed to be comfortable when they were provided the chance to engage in collaborative learning activities, but others showed resistance.

The findings revealed that the majority of student teachers demanded to be provided with lesson notes from tutors, even when the tutors employed collaborative approaches appropriately. Some student teachers often appeared to show resistance to collaborating by not responding to questions or participating in dialogue as noted by Karagiorgi and Symeou (2005) in literature. This research suggests that even though collaborative learning strategies were employed, student teachers seemed to prefer "spoon feeding" or to be provided with lesson notes at the end of the lesson because of (1) the trust they develop towards tutors, (2) the shortage of teaching materials, and (3) the limited access to internet services. Stated somewhat differently, the resistance and the reluctance of student teachers in learning may imply their satisfaction with the traditional teaching approach and that they are not ready for change because they have not been made sufficiently aware of the need for it. Perhaps, if teaching materials are improved in teacher education colleges, then student teachers could develop own lesson notes. This situation suggests that tutors might not continue to implement the SCA effectively because it requires many teaching resources, teaching techniques, and motivating environments.

#### ***5.5.3.6 Motivational strategies***

It was found that tutors used a variety of motivational strategies such as persuasion, encouragement, recognition, appreciation, and providing advices to increase participation of student teachers and the transfer of learning (Bransford et al., 2000). Additionally, the use of tests, the use of different teaching techniques to teach one lesson, and the use of quizzes helped to improve

collaborative and interactive approaches in the learning process. Another form was a collective performance-based reward, – known locally as *pasha*, which was provided to student teachers when someone demonstrated high ability in problem solving and argument-making – to augment student teachers' interaction and sense-making in classroom. This form of reward is effective in that it involves all members of the group or class, uses encouraging words, and it involves some fun physical actions that generate laughter and pleasure among student teachers and the tutors. In this way, these rewards help to develop warm relationships, harmony, and free learning environments. This is a recommendable form of reward to promote social constructivist teaching environments.

However, this form of reward is not effective when applied many times. Adams (2006) argues that reward has nothing to do with linking learning and understanding how to do better instead, “rewards in the social constructivist teaching enhance the occurrence and shaping of attitude as well as the behaviour of pupils in learning” (p. 251). He further notes that external motivation in SCA is used to stimulate intrinsic motivation, but also to ensure persistence of the triggered behaviours. This idea is congruent with literature (Baldwin & Ford, 1998; Bransford et al., 2000) on the role of motivation in assuring maintenance of the learned experience in the job setting. For that reason, motivational factors such as authentic assessments, encouragement, and advice are significant in social constructivist teaching and they should not only be used to enhance student behaviour and attitude but also to help them sustain knowledge construction situations (Bransford et al., 2000). In this sense, tutors are urged to use these motivational factors in promoting SCA and in ensuring transfer of learning among the student teachers.

## **5.6 Education policy malpractices and improvements**

Results reveal that the issues related to education policy malpractices and improvement process shaped tutors' teaching practices in the implementation of SCA. Specifically, the issues include the current position of social science education, the high ratio between student teachers to tutors, improving

classroom infrastructure and learning environment and the social science curricula irrelevance and contested solutions. These issues are discussed in detail below.

### **5.6.1 Education policy malpractices overview**

The prevalence of malpractice in the implementation of educational policies and social science teaching was reported. Findings indicate need for improvement and maintenance of the lower levels of the education system, general professional training policies, social science teaching, the learning environment, and the quality of social science education. Malpractice in the implementation of education policies generated malpractices related to bilingual instructional languages and conceptual misconnection between primary education and secondary education that are significantly influencing the future learning opportunities in the teacher training programmes (Kitta & Fussy, 2013; Nzilano, 2013; Vuzo, 2010).

According to Vuzo (2010), there was no connection between the language used in schools and the home language in Tanzania. It was noted in this study that there was an inconsistency in the educational policies, which resulted in (1) the increase in the ratio between student teachers and tutors, (2) the increase in shortage of teaching and learning resources, (3) limited physical space in the classroom, and (4) limited on-the-job PLD opportunities. This situation is incongruent with social constructivist beliefs, which require environments conducive for learning, enriched with teaching resources, and encouraging collaborative and cooperative teaching strategies. Hence, the situation seemed to put a lot of demands for tutors to prepare for teaching and to effectively transfer the training experience acquired from PLD to the real environments.

### **5.6.2 The current position of social science education**

Another finding reported is that the position of social science teaching has been compromised due to low interest and emphasis from educational leaders and the public. It was discovered that educational leaders and practitioners have been over-emphasising and promoting science education and consequently, appearing to change the parents' beliefs towards social science education and

the children's future choices of professional learning opportunities. In this case, parents whose children performed poorly in secondary education often encouraged their children to study teacher education as the last resort (Kitta & Fussy, 2013; Msonde, 2011). Ideally, the efforts of Government are expected to improve the teaching environment for primary and secondary education, or to abide with the existing education policy regardless of the severe shortage of tutors and without compromising the quality of education in practice.

Participants criticised Government educational leaders (officials) who provided new directives that contradicted with existing professional training policies and consequently, jeopardise the quality of education and teacher training programmes. For instance, findings indicated that the qualification for student teachers to be enrolled in teacher training programme was a minimum Division III pass in secondary education but that Government educational leaders were recruiting student teachers with Division IV, the student teachers who received low grades in secondary education as the findings corroborated in literature (Hardman et al., 2012; Kitta & Fussy, 2013). Therefore, the situation not only complicated tutors' implementation of SCA, but also appeared to influence the present quality of PLD programmes and the future performance of student teachers in practice.

### **5.6.3 High ratio between student teachers to tutors**

There was a high ratio of student teachers to the teachers training colleges in Tanzania, which made it difficult for tutors to apply SCA to teaching social sciences. The high ratio appeared to relate to the problem of shortage of tutors due to increased student teacher enrolments. The implication of high ratio were (1) the difficulty to use collaborative and interactive approaches, (2) the difficulty to assess the large classes using new approaches, (3) the scarcity of teaching and learning researches, and (4) overcrowded classrooms. These findings are supported by the literature (Mtitu, 2014; Vavrus et al., 2011) regarding problems of teaching in Tanzanian schools and colleges. Vavrus et al. studies in Tanzania note that policy decisions about the funding of teacher training colleges contribute to the existence of large classes and hiring of contract tutors to mentor the student teachers during practicum. In this situation, Hardman et



al. (2012) reported that during the practicum, student teachers were scattered across a wide geographical area and tutors' visits to schools were ill timed, rushed, and focused on summative assessment and scoring. This research indicates the need to reduce the class size (say, to a ratio of 1:35), to change the classroom structure to allow for different seating arrangements, and to employ more tutors. However, employing more tutors in teaching has implication for the Government budget spending in the education sector. In this case, URT (2008) reports that the Government has been investing more in education to implement the new teaching approaches, but there more demands were emerging that needed attention to.

In line with these findings, Nakabugo, Opolot-Okurut, Ssebbunga, Maani and Byamugisha's (2008) study on large class teaching in constrained contexts in Ugandan primary schools concluded that a reduction of class size would not solve the problems. Although their study involved participants from primary schools, the conclusions were applicable for teacher training. They concluded that the solution to large classes should be to allow more than one tutor to teach the same class, to ensure sufficient furniture and relevant teaching resources, and to provide PLD to improve tutors' confidence and skills for handling large classes. Nakabugo et al. urged for supportive educational policy environments and institutional cultures to improve teaching in large class contexts.

This being the situation, teaching resources, both books and internet services are important for enhancing tutors' knowledge of teaching large classes. Different learning situations based on multimedia software presentations that provide opportunities for both online and physical classroom learning environments could be employed (Khine, 2006). Whatever the exact solution, however, findings indicated that large classes required improvements through ensuring sufficient furniture and teaching materials, supported by educational policies, good college leadership, and continuous PLD in integrating the SCA to teaching.

#### **5.6.4 Improving classroom infrastructure and learning environment**

Another important issue raised from the findings related to the need for improvement of classroom infrastructure and learning environment that were

adversely affecting tutors' teaching in the classroom. It was found in this study that classroom physical structure was unfavourable for the application of new approaches, which was a reflection of the policy-makers and educational leaders in setting educational policy priorities that influence the present reform implementation. In this sense, leaders' decisions and priorities play significant roles in influencing the implementation of teacher training programmes (Broad & Newstrom, 1992). This suggests that there was a need to change the configuration of classrooms to provide opportunities for accommodating arrangements of different learning communities, or teaching strategies to improve the social science teaching in accordance to social constructivist views.

### **5.6.5 Social science curricula irrelevances and contested solutions**

Findings reveal the irrelevance of social science curricula and the contested solutions for effective implementation of SCA in teacher training. The details of the findings are discussed in two sub-themes; the inconsistencies in social science curricula and the contested areas for improving social science education.

#### ***5.6.5.1 Inconsistencies in social science curricula***

This study reports the inconsistencies in social science curricula and the need for immediate review to improve teaching. In this sense, some topics contained more details than others did or some subjects contained more topics than other subjects did. In addition, it reports that there were differences in time allocated to learn subjects, and some subjects were allocated more time for learning than others did (JMT, 2009a, 2009b, 2009c; URT, 2013). For example, it was notable from the findings that the geography syllabus has few topics, but was allowed more time for learning than history and civics. In addition, the national curriculum indicates four hours for teaching each subject per week, except civics that is given three hour less (URT, 2013). In other words, social science curriculum did not match with the syllabi in terms of time allocation and content taught to student teachers (JMT, 2009a, 2009c; URT, 2013).

Moreover, the study reports on the irrelevance of social science curricula which need replacing with new topics relevant to the context of student teachers. The findings reveals that the social science curricula were overloaded with content

that is taught in schools and repeated in the certificate course in teacher education programmes (JMT, 2009b, 2009c; URT, 2013). Thus, student teachers seemed to continue to learn what they learned in secondary schools, by using a different language of classroom teaching. As noted, in secondary schools student teachers learned social science subjects in English language, and in the teacher-learning course they learn in Kiswahili. The reason for this repeating was to enable the student teachers to master both the content knowledge of social science and professional subjects (JMT, 2009a, 2009b, 2009c; URT, 2013). Logically, student teachers should be taught a professional knowledge course because they are not taught in schools, and the content knowledge should not be replicated in teacher training programmes. This not only wastes Government resources but also is wasteful of time for student teachers' learning. In this case, the reason provided to justify the repeating of same content knowledge disqualifies the purpose of secondary education, which aims to prepare competent candidates for secondary school to join future learning opportunities. According to the survey reports from teacher training colleges, student teachers were reported to face classroom teaching communication problems in both English and Kiswahili languages (Brock-Utne & Holmarsdottir, 2004; Nzilano, 2013; URT, 2001b). This suggests that many problems influencing student teachers' learning – including barriers of instructional languages – need immediate solutions to promote the current educational reforms related to SCA implementation in Tanzania's teacher education programmes.

It was evident from the findings that social science teaching was departmentalised into disciplines: history, geography, and civics (Meena, 2010; Mtitu, 2014). The departmentalisation of subjects resulted in the repetition of some content across the social science subjects. Referring to the literature, Aitken and Sinnema (2008) found that social science subjects could bring remarkable results when they are taught as an integrated discipline. With regard to the importance of teaching social science subjects Dewey (1950) argued that:

Unless they are taught for external reasons or mere modes of skills their chief educational values is that they provide the most direct and

interesting roads out into the larger world of meanings stated in history and geography. While history makes human implications explicit and geography natural connections, these subjects are two phases of the same living whole. (p. 255)

Despite the importance of social science teaching, there have been several curricula changes in Tanzania between 2000 and 2009. As JMT (2009a, p. iv) notes:

Until 2000 teacher education colleges were teaching the social studies in three disciplines (history, geography and civics) and methods of teaching the content. Thereafter, this curriculum was revised to focus on teaching 'methods of teaching' the content only. It was noted in the implementation of revised curriculum that tutors and student teachers needed to learn the content knowledge. In 2009, social studies subject was separated into three disciplines focused on the three social studies disciplines and methods of teaching the content knowledge. The purpose of this change was to enable the teacher to master the content knowledge and its methods parts.

Therefore, before the year 2000, the social science curriculum was discipline-based and thereafter the curriculum was integrated into one discipline (social studies). Nine years later, the integrated social studies curriculum was revised into three disciplines, with the intention of building the capacity of tutors and student teachers to master content and the pedagogy of teaching. Indeed, the idea of an integrated curriculum embraced the current teaching paradigm, but the results indicated that social science subjects were still taught separately (JMT, 2009a, 2009b, 2009c; URT, 2013). Thus, this inconsistency in the policies and curriculum change appeared to bring problems in the implementation of SCA for tutors and student teachers. Moreover, the curriculum made contradictory demands of tutors who were implementing the SCA in practice because it advocated a discipline-based approach, and tutors were required to implement this in a social constructivist manner. This was considered to be a barrier for tutors' ability to transfer the learned experience on the job. The findings indicated that the social science curricula needed immediate review by not repeating the content learned in schools, and creating

an integrated curriculum commensurate with social constructivist beliefs for the Tanzanian context.

#### **5.6.5.2 Contested areas for social science education**

It was revealed in this study that there was a need to revise the current social science curriculum by replacing topics relevant to teacher education programmes for student teachers' learning and in embracing social constructivist beliefs.

The research suggests issues of economy and entrepreneurship in social science education were significant in improving the student teachers' beliefs and the application of the subject to life experiences. Lackeus (2013) defined entrepreneurship as the practice of setting out a venture and getting self-employed. In this case, tutors should teach student teachers the basics of economy – about types of economies, and inculcate enterprising tendencies into social science to increase their performance and creativity on the job. For example, findings indicated that student teachers should be taught how to explore employment opportunities in history subjects (museums, cultural heritage, archive, tourism), and the type of professional competence needed in those jobs applicable in life practice. Lackeus (2013) viewed that the “pedagogy of entrepreneurship education focused on job development of skills, knowledge and attitude” (p. 5). Lackeus further argued that professional learning programmes that have used this approach yielded outstanding results in terms of both learner-driven ventures and creativity. In this case, tutors should involve the student teachers in the outreach learning programmes, assisting nearby entrepreneurs, interacting with student teachers in social science clubs, inviting social science alumni and experts, visiting network events, conducting student teachers consultations and involving student teachers in subject business schedules. However, teaching of entrepreneurship in social science should not mean commercialising social science; rather the focus should be on establishing a connection between social science teaching and real life experiences – praxis.

This research indicates significant involvement of student teachers in extracurricular activities such as gardening, crop production, livestock keeping,

subject clubs, and sports that promoted basic entrepreneurship literacy in social science teaching. These findings corroborate Jimmie's (2013) study on cultural capital and student teachers engagement in extracurricular activities in Malaysia. Jimmie indicates that extra curricula activities motivated student teachers' engagement in academic and non-academic issues. Jimmie notes that student teachers perceived extracurricular activities as helping them develop friendship, a sense of belonging, social relations, communication skills, leadership practices, and character. Employers needed these aspects from potential employees. Furthermore, Jimmie (2013) argues that extracurricular activities were one means for student teachers to market themselves to employers; therefore, student teachers were attracted to participate in community clubs and club activities. Entrepreneurship education is an occupation-oriented, hands-on, active learning approach, meaning it can be for significant part of improving social science teaching grounded in a social constructivist view in Tanzania.

The critical pedagogy view has roots in social sciences and emphasises that student teachers are also part of large society, and need to be engaged in understanding critical issues in social science, including the difficulties and opportunities in changing the society. The student teachers' understanding of entrepreneurship education as part of social science might change their life experience and their relationship to their society for the better.

Another result from this research is concerned with the need for tutors to teach the basics of legal skills of law in social science education. As Table 4.12 shows in Chapter Four, the legal skills would include learning about (1) the court (how cases are conducted and reaching judgement), (2) the processes of forming national constitutions, (3) the roles of parliament and its leaders, (4) Government rulings, and (5) the roles and responsibilities of citizens. These topics seem to subscribe to the values and traditions governing human ethics. By teaching these basics of law in social sciences, the student teachers learn and develop understanding of their roles, responsibilities, and rights as citizens. These issues seemed to influence both tutors and student teachers' beliefs and practices as members of the cultural context (socially, economically, politically,

and culturally) inside and outside classroom (Baviskar et al., 2009). Currently, the basic legal issues are not taught in schools, except for those specialising in law in the tertiary education programmes. In this research, findings indicated that these topics were missing in teacher education programmes, particularly in social science teaching. One of the participants appeared to commend that the situation have caused some graduates of teacher education programmes to commit crimes on the job due to ignorance of legal issues. Consequently, by teaching these issues, the student teachers could develop a sense of belonging, confidence, national patriotism and good citizenship, and improve their commitment and performance on the job (Banks, 1995). Therefore, the new topics are considered essential to the current needs of social science teaching and they should be examined critically prior to the adoption into the curricula.

On the other hand, this research suggests removing some topics that the student teachers have already learned in their previous education and not allowing them to be repeated at this level of teacher training. For example, findings generated in this study suggest omission of the “colonial invasion” topic, replacing it with relevant topics more suited to addressing student teachers’ present learning needs. Similarly, Broad and Newstrom (1992) note that “... [student teachers should be] seduced into unquestioning acceptance of the training content” so that they are not bored in the knowledge construction process (p. 23). Although some tutors considered this topic is irrelevant at this level of teacher training, the topic might hold relevance in social science teaching to some student teachers who have not experienced the topic in previous education levels. Dewey (1950, p. 186) cautions, “no one could construct a house on ground cluttered with miscellaneous junk” to emphasise the significance of understanding history in connection with nature. Therefore, the new social science topics could not only contribute to broaden the understanding of both tutors and student teachers, but also they are likely to improve the integration of SCA in teacher education programmes.

However, to identify the sensitivity and importance of the topics to the cultural context, there is a need to use a critical approach to investigate the relevance of

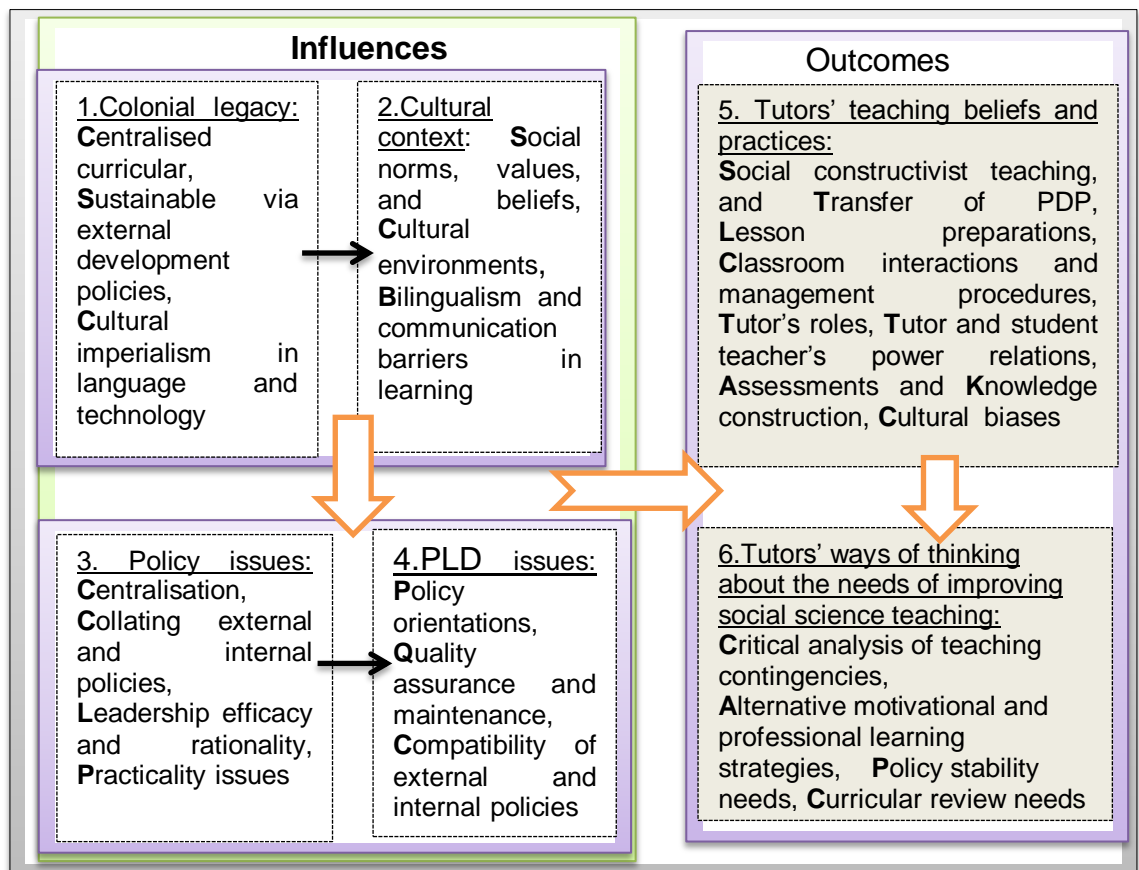
new themes for social science teaching prior to integration stage (Schweisfurth, 2011; Vavrus, 2009). For example, issues related to national security, Government decree, and terrorism are politically sensitive and they might need intensive investigations to decide the content and pedagogical approaches that respond to cultural milieu for successful teaching. In addition, inconsistencies in the implementation of social science curricula are proposing the leadership practices that have significantly influenced the process of integrating SCA in the Tanzanian context.

### **5.6.6 Summary**

Overall, educational policy practices and the directives of political leaders, along with societal pressure with regard to national and international policy interests are suggesting the existence of frequent changes to the curricula and violation of the educational policies in Tanzania (Dale, 1999; Robertson, 2005; Verger et al., 2012). This view is supported by Freire (1972, p. 31) that, “never in history has violence been initiated by the oppressed” and reflected in the literature (Hardman et al., 2012; Schweisfurth, 2011; Vavrus, 2009; Vavrus et al., 2011). In any case, there is a need to address policy issues related to tutors’ PLD programmes, the high ratio of student teachers to tutors, the classroom learning environments, and the bilingual nature of language of instruction, as well as the social science curriculum itself to situate the integration of SCA in teaching context. The results of this study are suggesting trends of influences and outcomes of the SCA implementation on tutors’ teaching practices and beliefs in teacher education colleges. Figure 5.5 shows the flow of influences through to outcomes in five sentences:

- Colonial legacy influences the cultural context.
- Policy issues influences the PLD issues.
- Influences of (1) colonial legacy and (2) cultural context invariably affect the (3) education policy and (4) PLD issues.
- All variables 1 to 4 are relatively influencing the outcome factors, 5 and 6;
- Within the outcome factors (5 and 6): The tutors’ teaching practices seemed to affect their ways of thinking about the needs of improving social science teaching.





**Figure, 5.5:** Revealing impact of SCA implementation on tutors' teaching beliefs and practices in Tanzania

This research reveals that tutors appeared to transfer the experiences acquired from the PLD programmes by responding to the four influences (1, 2, 3 & 4). In this case, there were issues that some tutors were able to implement and others they could not, as highlighted:

- a) In the classroom environment the tutors were able to transfer their learned experience in the following ways:
- Tutors engaged the student teachers in the construction of knowledge and used that knowledge to modify their existing beliefs and practices through techniques such as quizzes, brainstorming, questions and answers, gimmicks and use of problem solving strategies.
  - Tutors engaged student teachers in collaborative and interactive learning environments during knowledge construction in the classroom. Approaches such as scaffolding, jigsaw, class or group

discussions, questions and answers, interactive lectures and presentations dominated learning activities. This situation was assured by creating free learning environments enhanced with the use of native Kiswahili language between student teachers and tutors in the communication process.

- Tutors engaged the student teachers in the tasks of applying the knowledge constructed in practice, via long-and short-term activities such as classroom presentations, teaching in nearby schools, extra-curricular activities, and subject clubs.
- Tutors' teaching and learning activities (knowledge construction process) ended in various ways such as asking student tutors to summarise the learned ideas orally or in writing.
- Tutors used a variety of motivational and caring strategies to enhance knowledge construction in the classroom.
- Tutors used the critical approach to learning situations that challenged teaching and devised alternative ways of dealing with situations.
- Tutors closed the lesson by identifying the knowledge constructed, the knowledge gaps, and the issues to consider in the future learning.

b) Likewise, results suggested that during lesson preparations, tutors employed a technical approach for designing lessons according to social constructivist approaches, in that:

- They designed lessons in consideration of collaborative and interactive strategies.
- They designed formative assessment procedures interwoven in the knowledge construction process.
- They designed knowledge construction activities in five stages: previewing previous understanding, development of knowledge, application of knowledge, reflection of the knowledge construction process, and closure.

- c) The study proposed the dominant conditions that facilitated the transfer of training from the PDP on the job. They include:
- Obeying the social and cultural values and norms such as using the local environment for knowledge construction and application activities, designing learning materials, respecting social norms and values (gender considerations, respect, and collegueship) promoted learning activities and transfer of knowledge.
  - Diversity and quality of tutors' professional learning avenues improved understanding of the new teaching approaches and sustainability of the knowledge in practices.
  - Policy environment that promoted the consideration of participatory and student centred teaching methods as well as the socio-cultural issues in teaching. Such social cultural issues include gender equity and equality in learning, drama, arts, Kiswahili language and dressing.
- d) Conversely, the results of this study proposed that tutors were limited in their knowledge of implementing the SCA in that:
- Tutors appeared to have limited opportunity to involve the student teachers to design learning objectives that are not prescribed in the centralised syllabi. Teaching and learning activities consider the syllabi, and the Government controls them via examination council, educational inspectors, and college principals. Due to these factors, tutors were not able to delegate full power to student teachers during planning of the lessons, assessments and in the knowledge construction process.
  - Tutors seemed to face situational teaching challenges about how to harmonise social constructivist beliefs with indigenous and social cultural values and norms. This is because the policy provides general procedures that are not applicable to topics related to culture, especially when the new culture (such as the social constructivist approach) is introduced into the indigenous culture in Tanzania.
  - Tutors appeared to demonstrate partial understanding of the concept of social constructivist teaching. Hence, when faced with a difficult

situation, they lacked confidence to deal with the situation by using social constructivist approach. In such circumstances, they resumed to the traditional approach to address the situation.

- Tutors seemed to demonstrate limited pedagogical knowledge to coordinate classroom learning activities, to follow time for learning, to conduct authentic assessments, and to apply reflective thinking approaches due to shortage of teaching resources, overcrowded and large class sizes, as well as the pressure of time of teaching to complete the overloaded content of the two year curriculum. The situation led to lack of confidence in teaching and to think of alternative solutions to the situations.
- Tutors appeared to improvise teaching materials using local resources to cope with the shortage of teaching materials, yet these resources were of poor standard and lacked the quality to enhance creative and reflective thinking.

With regard to the above challenges (d) to tutors' teaching beliefs and practices, the findings strongly proposed the needs for improving social science teaching in particular areas. These needs include:

- Ensuring policy stability in the adoption of educational changes and in educating the mind-set of the society and student teachers about the position of social science education in life.
- Revising the present curricula to create integrated social science curricula and to include topics relevant to the current life of the people (curricula that embrace the integration of theory with practice).
- Redesigning the present classroom structure and equipping it with teaching resources inherently sensitive to the context in promoting collaborative and interactive learning communities.
- Ensuring a balance between the tutor - student teacher ratio to increase the efficacy and quality of teaching in teacher education colleges.

- Ensuring a context-based continuum of PLD opportunities regarding the present and emerging issues of social science teaching in teacher training programmes.

### **5.7 Chapter summary**

The chapter discussed the results of the study with connection to the existing literature, and revealed five issues; influence of colonial legacy on current education; contingent challenges in education change process; social constructivist approach in practice; education policy malpractices and improvements; and towards tutor's PLD experiences. All of these issues are useful to the understanding of the present teaching situation of teacher training programmes in Tanzania.

The next chapter integrates the findings and discussion in a conclusion section with particular reference to limitations of the study, implications and recommendations for both policy actions and future research activities. It ends with outlines for the contribution of the study to the body of knowledge and chapter summary.

## **Chapter Six**

### **Conclusion**

#### **6.1 Introduction**

The preceding chapter discussed significant results from the study of influences and outcomes of the implementation of social constructivist curriculum on tutors' teaching beliefs and practices in social science for Tanzania's teacher training programmes. Specifically the study responded to the following sub-questions:

- a) What are tutors' understandings of the social constructivist approach in teaching?
- b) What are tutors' beliefs about the role of social constructivist approaches in teaching?
- c) Do tutors integrate social constructivist approaches in teaching? And if so, how this is achieved?
- d) What are tutors' suggestions for the future teaching of social science?

In this chapter, the main results of this study are summarised, and conclusions are drawn. The limitations of the research are noted, and the implications and recommendations for practice and further actions are presented. Lastly, contributions from this thesis to the body of knowledge in social science research are outlined.

#### **6.2 Key findings revisited**

Five key results were indicated:

- a) Tutors' conceptions and implementation of SCA were shaped by a variety of PLD experiences mostly organised by the government in collaboration with international aid institutions, and partly by individual tutors themselves. The national education policy appeared to be supporting and determining the type of PLD programmes and the subsequent implementation of the new curriculum in teacher education programmes.
- b) Tutors' practices about the role of SCA in teaching appeared to gain influence from the PLD experiences and contingent teaching challenges;

learning situations, student teachers' prior experiences, centralisation of education policy and curricular activities. In this sense, tutors' engagement in critical understanding of the job situation resulted in the creation of survival strategies towards the challenges of achieving the teaching missions.

- c) Tutors' utilised SCA in teaching and learning activities while embracing the socio-cultural context. This implies that the tutors' teaching freedom for and the use of PLD experiences in practice clashed with socio-cultural and political situations.
- d) Tutors' limited understanding of pedagogical experiences somehow seemed to influence their teaching beliefs and practices. In this situation, tutors followed a traditional approach (technical model) to be able to implement the SCA in practice.
- e) The findings proposed significant needs for improvements in social science teaching. These needs include (1) reviewing the curriculum to embrace demands of the student teachers and the majority of the community, (2) modifying class sizes and classroom structures, (3) eliminating leadership malpractices in the development and implementation of educational policies, (4) reviewing the basic education system (i.e. primary and secondary), and (5) ensuring the sustainability of the learned experiences in practice and future learning opportunities. It was believed that by addressing these needs, the number of contingent challenges of teaching could be minimised to manageable situations for improving the training transfer.

### **6.3 Limitations of the research**

The study explored mostly information based on the participants' perceptions, opinions, and beliefs that might not have revealed the truth to explain the magnitude of the research problem. Rather, it has provided an understanding and the existence of the research problem in practice as perceived by participants. Therefore, colleges by utilising same procedures for gaining insights of the studied phenomena, the results may be transferable within the studied settings of the respective teacher training (Huberman & Miles, 2002). For example, this research investigated tutors in social science subjects; the

results can also be applied to understand problems of science tutors in these colleges because they share similar attributes and job situations.

The researcher's beliefs, experiences (as a student, a tutor and a researcher), and biases about the topic may have influenced the research process. However, in qualitative research, it is difficult to produce findings and reports that are completely free of bias. In this case, the researcher's own words were inserted to parenthesis to separate them from the participants' views. Moreover, triangulation of data collection methods and the use of NVivo 10 for data analysis were considered to minimise the bias.

## **6.4 Implications and recommendations**

In this section, the implications, recommendations and the areas that require further investigation in relation to the results of this study are considered.

### **6.4.1 Implication for policy and practice**

The study has many implications that are discussed in line with the related recommendation (s). These are:

- a) The findings imply limited strategies for PLD opportunities to help tutors improve and maintain their training transfer in real teaching situations.

Recommendations:

- There is a need for a continuum of teacher PLD opportunities on the procedures and rationale of developing assessments that enhance the SCA and that are sensitive to the cultural context, to replace the current practice of relying solely on student teachers mastering the content. In this case, tutors' implementation of SCA was driven partly by assessment models that were conducted separately from the actual teaching and learning process (for instance, annual and national exams).
- There is a need for the MoEVT to ensure that all tutors irrespective of their specialisation are equipped with the relevant pedagogical and content knowledge to implement the social constructivist curriculum in teacher education colleges. This may help to move tutors from teaching in a technical-oriented way to adopting a more practical focussed approach (Ozga, 2004).



- b) The evidence implies that in practice there are contradictions between policies, which create many problems in teaching and learning, and in the supervision of the PLD opportunities.

Recommendations:

- The MoEVT is urged to develop education policies that consider the use of native language for teaching and learning and to be the baseline for bilingual learning for the Tanzania's citizens (Brock-Utne & Holmarsdottir, 2004; Vavrus et al., 2011; Vuzo, 2010).
  - There is a need for effective supervision of educational policy implementation through the assurance of high quality curriculum in teacher education, supportive teaching environments, and resources in practice. Thus, openness to change, learning from experiences, and readiness to change would enhance the effectiveness of knowledge transfer.
- c) The findings imply that the influence of the colonial legacy on education seem to be maintained through global policies, Government leadership, policy implementation practices, and situational challenges (Dale, 1999; Robertson, 2005; Verger et al., 2012), all of which make it difficult to implement change to teaching in practice. The results are suggesting that tutors experienced a clash between the SCA, the existing social science syllabi, and the local contexts, which complicated the transfer of training experience in practice. Although, the education policy states that the teaching of Tanzania's cultural values is important, it has not made it clear how diversity of content and pedagogical knowledge can be used to guide tutors in teaching such phenomena to embrace the social constructivist beliefs.

Recommendations:

- There is a need for the society, the Government, and educational stakeholders to think about how the system of education (Kitta & Fussy, 2013) could integrate the diversity of indigenous educational values, norms, and pedagogical approaches, as well as consideration of global

education values relevant to Tanzania's situations. This view may help to build people's creativity and curiosity (JMT, 2009a, 2009b, 2009c) in ways that reflect more on a Tanzanian perspective than Western thinking. In this case, tutors should teach the student teachers to engage in independent thinking and to live that thinking, that is shaped much by their context and thereby build self-reliant individuals in an independent society.

- The MoEVT is urged to design and implement a contingent SCA based on the indigenous socio-cultural diversities as well as the contextualisation of relevant global policies and innovations to effectively promote transfer of training programmes in practice.
- Tutors, student teachers, and the community need to enforce policy development and implementation (Ozga, 2004) instead of the Government relying heavily upon research-based decisions (URT, 2008). When the Government is charged with this enforcement, it is difficult to transfer knowledge from educational research into practice because of the different interpretations of the evidence-based results obtained from various contexts, which may lead to confusion in policy development and its implementation. Stated somewhat differently, differing foci of practitioners, policy makers, and researchers make it difficult to integrate policy and research into practice (Ozga, 2004). The Government is urged to adopt and implement global policies that influence the majority population with due consideration of the needs of key educational stakeholders such as tutors, student teachers and the community, in all aspects of change process, to promote transfer of knowledge.
- International donor countries and institutions are urged to refrain from creating conditions to implement policy and instead facilitate a local ownership of policies within the context of Tanzania. The recipient countries, such as Tanzania, need to be left to decide the appropriate procedures to adopt the new policies/changes in the country for their own development.

#### **6.4.2 Further research activities**

Further, there is a need for research in the following areas to complement the results of this study:

- a) Research is needed to explore student teachers' teaching and learning beliefs and practices with regard to the implementation of SCA in teacher education programmes in Tanzania.
- b) This study was qualitative and the sample cannot represent the whole population of teacher education in Tanzania. A quantitative research study could provide data with regard to exploring extensively the PLD experiences and a more detailed analysis of the impact of implementing SCA in teacher education programmes.
- c) Many studies have been conducted in Tanzania discussing the importance of adopting the native language in teaching (Brock-Utne & Holmarsdottir, 2004; URT, 2001b; Vavrus et al., 2011; Vuzo, 2010) to stimulate the transfer of learning for both tutors and student teachers in the classroom. Thus, to provide authentic solutions to the current problem in Tanzania, a research is needed to explore factors hindering the use of native language of Kiswahili in teaching.
- d) There is a need for research to investigate the appropriate model of SCA for Tanzania's situations. A model that could establish and make teacher education programmes more authentic and responsive to the school environment and community for effective knowledge transfer must be developed.
- e) Tanzania has 120 ethnic groups each with their own language and culture. A study that can explore the content and pedagogical approaches of teaching cultural aspects to the diversity of student teachers' needs in the classroom is required to embrace the SCA.
- f) There is a need to investigate the extent to which the colonial legacy influences the current educational policies, the peoples' beliefs and the Government leaders' practices regarding tutors in Tanzania and Africa in general. There is a need to identify what is valuable to retain and what needs to be modified/excluded from the present policies, people's ideologies and practices.

## **6.5 Thesis contributions to the body of knowledge**

The results of this study have contributed to the existing body of knowledge at both the local and international levels.

- a) The study has contributed to the existing literature at national and global levels providing an understanding of the implementation of SCA in the context of a non-Western country. It has indicated that the transfer of knowledge to any location needs to be regarded as relatively sensitive to the social, economic, cultural and political situations – an indication of a non-linear process of transfer of training.
- b) The study has suggested that in post-colonial contexts, such as Tanzania, the development and implementation of educational policies are influenced by global forces from former colonial masters, which maintain their territories through trust creation to the recipient society and investing in educational development projects to continue neo-colonial interests (Dale, 1999; Robertson, 2005; Schweisfurth, 2011; Verger et al., 2012). For instance, the research has succeeded in providing explanations about the causes of communication and cultural barriers created by the colonial formal education system, which influence the current policies on the implementation of SCA in context.
- c) The research has contributed significantly to an understanding of the opportunities and challenges regarding tutors' PLD experiences and their transfer to the job in a non-Western country.

## **6.6 Chapter summary**

This chapter presented the conclusions drawn from the results of outlined research, and the implications and recommendations both for policy and practice, and for future research concerns. It presented the contributions of the research to the body of knowledge. The thesis has demonstrated the use of multiple lenses in understanding a phenomenon in the non-Western context and more importantly in the situation of the tutors' experiences of transfer in teacher education programmes. The study suggested an example about the application of different lenses, critical pedagogy, transfer of training, and social

constructivist approaches to investigate a phenomenon in the implementation of educational reforms.

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# Appendices

## Appendix I: Ethics application approval



FACULTY OF EDUCATION  
PO Box 17-310 Wellington 6012, New Zealand  
Website [www.victoria.ac.nz](http://www.victoria.ac.nz)

28 June 2013

Josta Nzilano  
PhD  
Victoria University of Wellington Faculty of Education  
C/- School of Educational Psychology and Pedagogy  
Donald Street  
Wellington

Dear Josta

**RE: Ethics application SEPP/2013/42 RM 19894**

I am pleased to advise you that your ethics application '**The impact of a social constructivist professional development programme on social science tutors' teaching beliefs and practices in teacher education colleges in Tanzania**', with the required changes, has been approved by the Victoria University of Wellington Faculty of Education Ethics Committee. Please note that the approval for your research to commence is from the date of this letter.

Best wishes for your research.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'J. A. Loveridge'.

Dr Judith Loveridge

Co-Convener  
Victoria University of Wellington Faculty of Education Ethics Committee




## Appendix II: Research clearance of the Ministry of Education and Vocational Training, Tanzania

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THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF EDUCATION AND VOCATIONAL TRAINING

Cable: "ELIMU" DAR ES SALAAM  
Telex: 41742 Elimu Tz.  
Telephone: 2121287, 2110146  
Fax: 2127763



Post Office Box 9121  
DAR ES SALAAM

In reply please quote:

Ref. ED/EP/ERC/VOLV/336

Date: Friday, July 12<sup>th</sup>, 2013

The Regional Administrative Secretary: **Njombe, Mbeya and Rukwa.**

**ATT. Regional Education Officers:**

**RE: RESEARCH CLEARANCE FOR MR. JOSTA NZILANO**

The captioned matter above refers. The mentioned is bonafide student of Victoria University of Wellington who is conducting research on the topic entitled "The Impact of a Social Constructivist Professional Development Program on Social Science Tutors' Teaching Beliefs and Practices in Teacher Education Colleges in Tanzania" as part of his Doctoral dissertation in PhD program. Specifically, his research explores about the tutors' teaching beliefs and practices concerning the social constructive in order to improve the training programs for tutors in teacher education colleges (Teacher Training College- Certificate level) in Tanzania

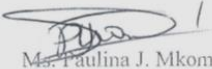
The researcher needs to collect data and necessary information from sampled Teachers Training Colleges and other education stakeholders in Njombe, Mbeya and Rukwa. For more details refer from the research ethics letter from Victoria University of Wellington and the researcher's letter to the Ministry of Education and Vocational Training.

In line with the above information you are being requested to provide the needed assistance that will enable him to complete the research successfully.

The period by which this permission has been granted is from **July, 2013 to January, 2014.**

By copy of this letter, **Mr. Josta Nzilano** is required to submit a copy of the report (or part of it) to the *Permanent Secretary, Ministry of Education and Vocational Training* for documentation and reference.

Yours truly,

  
Ms. Paulina J. Mkoma  
**For: PERMANENT SECRETARY**

CC: Mr. Josta Nzilano – Victoria University of Wellington

## Appendix III: An example of research information sheet for tutors

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI



**Research question: What is the influence and outcome of the implementation of social constructivist curriculum on social science teachers' teaching beliefs and practices in Tanzania?**

**Josta Nzilano**, the researcher is an employee of the Dar es Salaam University College of Education who is currently pursuing a PhD at the Victoria University of Wellington in New Zealand and would like to work with nine teachers in social science.

**Would you give your consent for:**

- The researcher to come at your college between June and December, 2013, and
- Talk with you about your perception about a social constructivist training programme.
- Observe your teaching practices in the classroom to see the way you teach students in social science.
- Talk with you about your classroom teaching practices after the observation session.
- Review your lesson plans and scheme of works to see how they reflect the actual classroom teaching practices.

**If you would give your consent for this, please read the following; then complete the consent form.**

**About the research:**

Social constructivist teaching, or learner-centred teaching, suggests that teaching is a cooperative activity between learners and the teacher in a particular learning context. In the learning context, the learners are pre-occupied with the construction of meaning about the subject matter and reflecting it with other disciplines of knowledge. The knowledge and skills of the teacher is needed to facilitate the process of learners' construction of meanings. Based on the Tanzania's decision to introduce the social constructivist teaching, necessitates the change of teacher's beliefs and practices of teaching. The present study intends to investigate the present practices of teachers' beliefs and practices of teaching concerning the training programme of social constructivist approaches to improve teachers' learning and teaching in teacher education programmes.

## **Methods of research**

The research intends to gather data about three tutors in social science (history, geography, and civics) in three teacher education colleges. Data will be collected via different methods. The *Faculty of Education Human Research Ethics Committee* at Victoria University of Wellington and the Director of the Ministry of Education and Vocational Training in Tanzania has approved this research.

## **Research question**

This study is guided by the following question: What is the influence and outcome of the implementation of social constructivist curriculum on social science teachers' teaching beliefs and practices in Tanzania? Specifically the study addressed the following research sub-questions.

1. What is the tutors' understanding of social constructivist approach to social science teaching?
2. What are the tutors' beliefs about the role of social constructivist approaches in social science teaching?
3. Do the tutors integrate social constructivist approaches in social science teaching? And if so, how this is achieved?
4. What are the tutors' suggestions for the future teaching of social science?

## **How to become a teacher participant in the study?**

Anyone who would like to volunteer to participate in the research, please complete the consent form attached to this sheet. The students from the classes you will select for this study will voluntarily be involved in the study during classroom observation. You have the chance to withdraw your participation prior to the data analysis.

## **What are roles of a teacher participant in the study?**

Between June and December 2013, the researcher will gather information about your perceptions on social constructivist approaches to teaching of social science subjects. The researcher will observe your teaching three times within a three weeks period. After each observation session, you will be interviewed in order to clarify for the researcher some actions observed during classroom teaching. With your consent, the researcher will take notes and voice record your teaching practices and take photographs of teaching aids and classroom environment during classroom teaching. You will have the chance not to be voice recorded and photographed. The voices, photographs, and researcher's notes will be transcribed and analysed based on social constructivist perspectives in teaching. No information will be presented in the final report that identifies or reveals anyone and any institution; the material will remain confidential and anonymous. You will be given the researcher's observation notes and transcripts to check for accuracy, to alter, or add any important

information you think is related to social constructivist teaching of social science subjects.

Finally, with your consent, the researcher will review your schemes of work and lessons plan to see how they align with the teaching practices. However, the researcher's review notes will be summarised and brought back to you to check for accuracy before they are analysed.

### **How to get the research results?**

The information gathered will be analysed and discussed to form the PhD thesis that will be accessible from the Victoria University of Wellington library. The findings will be communicated to educational experts and teacher education professionals through public conferences and journal articles. The summary of results will be sent to you on your request.

### **Confidentiality and anonymity**

The researcher will ensure that the data collected and the individual participants as well as the college identities remain confidential for the purpose of this research. The researcher's notes and field data will be destroyed two years after the completion of a PhD thesis.

### **For more information about this project contact:**

#### **Researcher:**

Mr. Josta Nzilano

Victoria University of Wellington,

Faculty of Education

E-mails:

[Josta.nzilano@vuw.ac.nz](mailto:Josta.nzilano@vuw.ac.nz)

#### **Supervisor**

**Primary supervisor:** Lex McDonald (PhD)

E-mail: [Lex.McDonald@vuw.ac.nz](mailto:Lex.McDonald@vuw.ac.nz)

**Secondary supervisor:** Liz Jones (PhD)

E-mail: [Liz.Jones@vuw.ac.nz](mailto:Liz.Jones@vuw.ac.nz)

## Appendix IV: Consent form for tutors



**Research question: What is the influence and outcome of the implementation of social constructivist curriculum on social science teachers' teaching beliefs and practices in Tanzania?**

I am a teacher and I would like to consent that;

- I have read the information sheet relating to the purpose and nature of this research, and I have understood this information.
- I understand that my participation in this study is voluntary and that my participation or non-participation in this study will have no effect on my career.
- I understand that I may ask questions about this study at any time during my participation
- I agree to keep this study confidential.
- I also understand that I will be observed, interviewed, audio-recorded, and my documents analysed. I will have the option to check the transcript for accuracy and make changes if I wish.
- I understand that the teaching aids and learning environment will be taken photos in the classroom.
- I understand that any information given by me will be kept confidential.
- I understand that I have a right to withdraw at any time prior to the data analysis, approximately 3<sup>rd</sup> July 2013.
- I understand that I will not be identified and the data will be destroyed in two years after the PhD thesis is completed.
- I understand that the research findings will be presented in the PhD thesis at the education conference and written in educational journal.

I am ready and I agree to participate in this research under the conditions set out in the information sheet and the conditions detailed above. Yes  No  (tick one).

Full name.....

Email address.....

Signature.....

Date.....

I wish to receive feedback of the study by being sent a summary after the study is completed. Yes  No  (tick one).

I would prefer to receive the summary by (write your: e-mail, Box number, e.t.c)  
.....



## Appendix V: An example of information sheet for student teachers



**Research question: What is the influence and outcome of the implementation of social constructivist curriculum on social science teachers' teaching beliefs and practices in Tanzania?**

**Josta Nzilano**, the researcher is an employee of the Dar es Salaam University College of Education who is currently pursuing a PhD at the Victoria University of Wellington in New Zealand and would like to work with nine teachers in social science.

You are a student in one of the selected classes, and the researcher is asking for your permission to include you in the research. This is to ask for your permission to sign the consent form if you would like to volunteer to participate in the study. The researcher will be observing your teacher teaching 3 times and the researcher will be voice-recording, taking observation notes and photographs of teaching aids of the lessons. No individual person will be photographed, but the photos may be included in the thesis. If you decide not to participate, the researcher will not include anything you say in any event you are observed in my research. Please feel assured that there would be no negative consequences if you decide not to participate.

Josta Nzilano, the researcher will soon be collecting information about teaching and learning practices in teacher education colleges. Between July and December 2013, the researcher will gather information about teachers perceptions and practices on social constructivist approaches to teaching social science subjects. The purpose of the classroom observation is to gather data about teachers' beliefs and practices concerning the impact of a social constructivist training programme. The researcher will take some notes and voice-record to obtain data about student participation, learning, assessment and evaluation, student-teacher interactions. Overall, the data will be concerned with the learning environment and teacher actions. The information collected will be transcribed and analysed based on the social constructivist teaching beliefs and they will be used for the purpose of the thesis production.

### **Procedures of research**

The researcher intends to work with three teachers in social science (history, geography and civics) in your college. The Faculty of Education Human Ethics Subcommittee has approved the research for the Victoria University Human Research Ethics Committee. In addition, the Director, Ministry of Education and Vocational Training in Tanzania, has provided the permission to undertake this research in teacher education colleges.

Your participation is voluntary in this study. If you would like to volunteer, complete the consent form attached to this information sheet. You have the option to be observed and voice-recorded or not to be observed and voice recorded during classroom observation sessions. Any decision you make concerning your participation in the study will not affect you in anyway. Your participation in this

research is important to help the researcher to collect data that will be analysed and discussed to form a PhD thesis. The thesis will be accessible from the Victoria University of Wellington library. Upon completion of the thesis or after data analysis, a summary report will be available for those needing it.

### **Confidentiality and anonymity**

Your identity and the College will remain anonymous and all data collected will be confidential. The researcher's notes and transcripts collected from the field will be destroyed two years after the completion of the thesis.

### **For more information regarding research ethics**

If you have any ethical concerns about this research, you should contact Dr Allison Kirkman, Chair of the Human Ethics Committee, Victoria University of Wellington (Allison.Kirkman@vuw.ac.nz).

### **For more information about this research project contact:**

#### **Researcher:**

Mr. Josta Nzilano  
Victoria University of Wellington,  
Faculty of Education  
E-mails: [Josta.Nzilano@vuw.ac.nz](mailto:Josta.Nzilano@vuw.ac.nz)

#### **Supervisor**

**Primary supervisor:** Lex McDonald (PhD)  
E-mail: [Lex.McDonald@vuw.ac.nz](mailto:Lex.McDonald@vuw.ac.nz)  
**Secondary supervisor:** Liz Jones (PhD)  
E-mail: [Liz.Jones@vuw.ac.nz](mailto:Liz.Jones@vuw.ac.nz)



## Appendix VI: Consent form for student teachers



**Research question: What is the influence and outcome of the implementation of social constructivist curriculum on social science teachers' teaching beliefs and practices in Tanzania?**

I am a student in the researched class and I consent that;

- I have read and understood the information about the research.
- I understand that my participation in this study will have no effect in my studies.
- I understand that I may ask questions about this study at any time during my participation.
- I agree to participate in this study under the conditions set out in the information sheet.
- I agree to keep any data about this study confidential.
- I also understand that I will be observed and audio-recorded when the teacher is teaching in my classroom.
- I understand that the teaching aids and learning environment will be photographed in the classroom.
- I understand that my participation in this study is voluntary, and I have a right to withdraw at any time prior to the data analysis, approximately 3<sup>rd</sup> July 2013.
- I understand that the data for this study will be kept confidential and will be destroyed in two years after a PhD thesis is completed.
- I understand that the research findings will be presented in a PhD thesis, at education conferences, and provide the basis for a number of journal articles.
- I understand that I will not be identified and the data will be destroyed in two years after a PhD thesis is completed.

I am ready and I agree to participate in this research under the conditions set out in the information sheet and the conditions detailed above. Yes  No  (tick one).

Full name.....

Address/ Email address.....

Signature.....

Date.....

I wish to receive feedback of the study by being sent a summary after the study is completed. Yes  No  (tick one).

I would prefer to receive the summary by (write your: e-mail, Box number, e.t.c)

.....



## Appendix VII: Consent form for student teachers

### Fomu ya idhini kwa ajili ya wanafunzi



**Swali la utafiti:** Je, kuna misukumo na hatima gani ya utekelezaji wa mtaala unaozingatia ujenzi wa maana katika fikra na matendo ya ufundishaji kwa walimu wa somo la maarifa ya jamii Tanzania?

Mimi ni mwanafunzi wa darasa linalochunguzwa na kushiriki kwangu katika kipindi cha uchunguzi naelewa kwamba:

- Nimesoma na kuelewa mada juu ya utafiti huu.
- Ushiriki wangu kwenye uchunguzi huu hautaathiri mafunzo yangu.
- Ninaruhusiwa kuuliza maswali kuhusu utafiti huu wakati wowote katika ushiriki wangu
- Ninapaswa kutunza siri ya taarifa ye yote ya uchunguzi juu ya utafiti huu.
- Nitachunguzwa na kurekodiwa sauti wakati mwalimu akinifundisha darasani kwangu.
- Zana za kufundishia na mazingira ya kujifunzia katika chumba cha darasa yatachukuliwa picha.
- Ushiriki wangu katika uchunguzi huu ni hiari na ninayoruhusa ya kujitoa wakati wowote kabla ya uchambuzi wa taarifa zitakazokusanywa, unaokadiriwa kuanza 3.7. 2014.
- Takwimu ghafi za uchunguzi huu zitabaki kuwa ni siri na zitaharibiwa ndani ya kipindi cha miaka miwili mara baada ya kukamilishwa kwa ripoti ya utafiti huu.
- Matokeo ya uchunguzi yatawasilishwa katika majumuisho ya ripoti ya utafiti, mihadhara ya kielimu, na kuwa msingi wa machapisho katika majarida anuai.
- Utambulisho wangu utabaki kuwa siri na takwimu ghafi zote zitaharibiwa ndani ya kipindi cha miaka miwili mara baada ya kukamilishwa kwa ripoti ya utafiti huu.

Mimi ninakubali kushiriki katika uchunguzi huu kwa kuzingatia maelezo niliyoyasoma katika fomu ya taarifa ya uchunguzi wa utafiti huu na miiko iliyoorodheshwa katika fomu hii hapo juu. Weka alama ya vema (✓) katika kisanduku kukubali au kutokubali. Nakubali  Sikubali .

Jina kamili: .....

Anuani au Barua pepe .....

Tarehe.....

Ningependa kutumiwa muhutasari wa utafiti huu utakapokuwa umekamilika. Weka alama ya vema (✓) katika kisanduku. Nakubali  Sikubali .

Ningependa kutumiwa muhtasari huo kwa njia ya (taja barua pepe au namba ya sanduku la posta) .....

**Kwa mawasiliano:**

<b>Mtafiti</b>	<b>Wasimamizi</b>
Mr. Josta Nzilano Barua pepe: <a href="mailto:Josta.nzilano@vuw.ac.nz">Josta.nzilano@vuw.ac.nz</a> ama Simu: +64 210 394 183	Msimamizi wa kwanza: Lex McDonald (PhD) Barua pepe: <a href="mailto:Lex.McDonald@vuw.ac.nz">Lex.McDonald@vuw.ac.nz</a> Msimamizi wa pili: Liz Jones (PhD) Barua pepe: <a href="mailto:Liz.Jones@vuw.ac.nz">Liz.Jones@vuw.ac.nz</a>

## Appendix VIII: Data gathering procedures



### Data gathering procedures

The data will be collected via semi-structure interviews (audio recording and note taking), document analysis, classroom observations (audio-recording, photographing learning environment, teaching aids, and note taking by filling in the observation form) and reflective journal.

#### **A. Semi-structured interviews**

The semi-structured interviews will be used to collect data related to the impact of a social constructivist training programme on tutors' beliefs and practices in social science (history, geography and civics) teaching. The semi-structured interviews will be administered to a tutor for up to 45 minutes period. There will be six key questions each with some follow up questions. The six semi-structured questions are with probe questions to follow up if necessary:

1. What do you understand about social constructivist teaching?

*Probe questions:*

- How do you define it?
- What do you think are some of its characteristics?
- What are the approaches do you use in teaching?
- How did you learn social constructivist teaching?

2. Do you plan your lessons to teach your students in social science? If so how?

*Probe questions:*

- What does the plan look like?
- What are the key issues do you consider when preparing a lesson to teach?
- How are the decisions made about the topic to teach?
- What is your role in the actual classroom teaching?

- What else can you tell me about planning and preparation of lessons?
3. How do you explain the situation of learning environment in teaching social science?

*Probe questions:*

- Do the students need support in classroom learning activities? And if so, how do you achieve it?
  - What helps the students to apply their learning in real life?
  - How are the students motivated to learn?
  - What else can you tell me about the learning environment?
4. How do the students participate in learning and teaching activities?

*Probe questions:*

- What techniques do you use to enhance participation of students in classroom learning activities?
  - What learning activities do the students engage in when your classroom?
  - What else can you tell me about students' participation in learning?
5. How is the assessment of students learning achieved?

*Probe questions:*

- What are the key issues you consider when planning assessment for student learning?
  - Do students have a role to play in assessing learning? Explain.
  - How do you know a student has learned?
  - What else can you tell me about the assessment of student learning?
6. What do you think are key issues to be undertaken in social science teaching?

*Probe questions:*

- Do you think the present social science teaching is adequate to meet the needs of student teaching? Explain.
- How do you think social science should be taught?
- What else can you tell me about the social science teaching?

## **B. Document analysis**

The education policy, syllabi, schemes of works, lessons plan and lesson notes will be analysed to generate data about the tutors' practices of social constructivist approaches in in teacher training colleges. In each of those documents, the researcher will observe and analyse aspects such as *the design or nature of the education policy, the duration and time of learning, the techniques or delivery modes, teaching aids, and the student assessment and evaluation modes*. Five questions will guide the researcher in analysing the documents.

1. What is the design (format) of a training policy environment for social science teaching in teacher education?

*The researcher will observe and review aspects such as:*

- The purpose of teacher training programme for this level of students
- The design of the teacher training programme

2. What is the design of teaching syllabi for social science (history, geography and civics) in teacher training colleges?

*The researcher will:*

- Analyse the purpose of the social science teaching in teacher training programme
- Analyse the duration required for the students to complete the course/syllabi
- Analyse the teaching approaches
- Analyse the nature and relevance of the proposed teaching aids
- Analyse the assessment and evaluation of students

3. How do tutors design schemes of work for social science teaching?

*The researcher will:*

- Analyse the organisation of contents of the schemes of work
- Analyse the nature of delivery approaches proposed per topic
- Analyse the nature of assessment and evaluation approaches
- Analyse the nature of teaching aids proposed in terms of their relevance and usefulness
- Analyse the time allocated for student learning a particular content knowledge
- Analyse the ways the student's participation are considered in the planning of schemes of work

4. How do tutors design a lesson plan to teach students in social science?

*The researcher will:*

- Analyse the organisation of lesson contents in terms of sequence the learning experiences with the time of learning, the methods of teaching and teaching aids.
- Analyse the proposed delivery approaches; the nature of teaching techniques for example if they are cooperative or transmissive in nature
- Analyse the nature and proposed ways of assessing student learning: for example, are the assessment embedded in the learning activity or are they made a separate entity of the classroom learning process.
- Analyse the nature of the proposed teaching aids to be use in teaching and their relevance to the context of student learning needs.
- Analyse the time allocated for students to learn a topic.
- Analyse the ways the students will be involved in planning for their classroom learning activities

5. How do tutors design lesson notes for social science students?

*The researcher will:*

- Analyse the format of lesson notes whether they are in a descriptive, outline or requires the students to generate knowledge by responding to specific questions based on the learning outcomes
- Analyse the relevance of lesson notes for student learning as per topic and life experiences.

### **C. Classroom observations and brief follow up interviews**

The classroom observation procedure will be to collect data for a single lesson (60 minutes) when the tutor is teaching social science students. Each tutor will be observed on 3 occasions in different days of classroom teaching. After each observation occasion there will be 10 minutes for discussion with the tutor to obtain details of some issues observed during interaction with students. Questions have been designed to help in collecting each data during observation. The key questions will be followed by “what” and “how” questions to obtain rich data. The data and guide questions will include:

1. Does a tutor use classroom interaction strategies in teaching? And if so, how?
  - What are the teaching techniques used by a tutor in teaching?
  - How tutor use classroom environment and norms to enhance teaching?
  - How a tutor facilitates the students to share experiences about the learning?
  - How a tutor facilitates the students to support each other in learning?
  - How a tutor facilitates the students to concentrate on a given work to achieve a task?
2. Does a tutor consider the diverse needs of student learning in the classroom? And if so, how?
  - How a tutor motivates student learning?
  - How a tutor uses time for student learning?
  - How a tutor deals with students' behaviours in learning?
  - How a tutor deals with students who have learning difficulties?
3. Does a tutor facilitate students in meaning making and use of that knowledge to deal with life problems? And if so, how?
  - How a tutor uses prior knowledge of the student learning to learn new lessons?
  - How a tutor facilitates students to make meaning of the content knowledge?
  - How a tutor facilitates students learning to develop arguments in social science learning?
  - How a tutor facilitates student to use the experience acquired in the lesson to solve problems of their life?

4. Does the teacher organise the lesson for student learning? And if so, how?
  - How a tutor organises to use techniques of teaching in classroom learning?
  - How a tutor facilitates assessment of student learning?
5. Does the tutor use teaching aids? And if so, how?
  - How a tutor uses teaching aids in social science studies teaching?
  - How are the teaching aids relevant for student learning activities?

**Classroom observation form**

<b>Stage</b>	<b>Time</b>	<b>Tutor's activities</b>	<b>Student's activities</b>
Introduction of the lesson [i.e. Orientation & elicitation of the idea]			
Knowledge and skills construction [i.e. Clarification and exchange of ideas, Construction of new ideas, evaluation new of ideas]			
Processing of knowledge and skills [Application of constructed knowledge to familiar & novel situation]			
Reflection [i.e. assessing the learned knowledge and skills to identify the new experiences]			
Closure [i.e. conclusion & way forward]			



## Appendix IX: Format of lesson plan and scheme of work

### The lesson plan

Date	Subject	Class	Period	Time	Number of student teachers					
					Registered			Present		
					Boys	Girls	Total	Boys	Girls	Total
16.09.2013	Geography	IE	7	12. 40 – 1.30	109	53	162	105	52	157

Competence: To employ investigations skill in studying, recording, analysing, and interpreting geographical issues.

Main objective: To recognise the importance of the earth planet in the maintenance of life.

Main Topic: The earth planet.

Subtopic: The earth as a planet.

Specific objectives: Within a period of 50 minutes, each student should be able:

- To explain the meaning of a planet,
- To explain different features of each planet (8 planets),
- To list the major differences of the planet.

Teaching aids: The globe, drawings on the blackboard, atlases.

References: Magessa, G. (2008). Geography for primary schools, standard V. Student book. Oxford University Press, Dar es Salaam.

## Lesson development activities

Stages	Teaching activities	Learning activities	Assessment activities
Introduction (03 minutes)	To ask questions to student teachers: To explain the meaning of a planet, To mention the 8 planets in the solar system	To explain the meaning of a planet To mention the 8 planets in the solar system	To listen from the student teachers if they have explained correctly the meaning of a planet.
Development of new knowledge (20 minutes)	To guide student teachers in groups to discuss the features of each planet in the solar system, and to present them in the class	To discuss the features of each planet in groups and present them in the class	To investigate and listen from student teachers if they are correct in discussions and presentations
Application of the knowledge <i>15 minutes</i>	To write an exercise on the blackboard for student teachers to write: To mention the differences of the present planets in the solar system	To write exercise in the note books: To mention the differences of the present planets in solar system	To check and mark the exercise provided if student teachers answered it correctly.
Reflection (5 minutes)	To choose 2 student teachers to explain the importance of learning the earth planet in their daily life	To explain the importance of the earth planet in their daily life	To listen carefully if the answers are correct.
Closure / Conclusion (5 minutes)	To choose two student teachers to explain briefly concerning the lesson they have just learned	To explain briefly concerning the lesson they have just learned	To listen from the student teachers to explore if they can explain it correctly

Student evaluation, Stream E: The student teachers have enjoyed discussing in groups (2minutes).

Tutor's evaluation, Stream E: About 160 of 160 student teachers understood the lesson because they have explained the meaning of a planet; mentioned 8 planets in the solar system; and mentioned the unique features of each planet.

Remarks: Since the lesson is understood, I will continue with another part of the topic.

## The scheme of work

Competence	Objective	Month	Week	Topic	Subtopic	Periods	Teaching activities	Learning activities	References	Evaluation	Remarks
To have the ability to apply the approaches of teaching that will enable the student to be employed and obtain self-employment	To categorise and analyse the basics of teaching and learning geography subject	April	2 <sup>nd</sup>	The fundamentals of teaching and learning geography subject	The investigation of reason, change, and results	4	Through group discussion, to guide the student teachers to discuss the meaning of investigation, reason, changes, and results. To explain the importance of investigation and to describe the stages of investigation	To discuss and explain the meaning of investigation, reasons, changes and results. To explain the importance of investigation and to describe the stages of investigation	Best, J.W (1992). Research in education, prentice-hill of India Ltd. New Delhi.  Peter, G. (1995). Introduction to geography techniques, Open University of Tanzania. Dar es Salaam.  Enon, J.C. (1998). Education research, statistics, and measurement, distance education. Uganda	To check group works.	The topic is taught and understood, I will continue with the next part
			3 <sup>rd</sup>		Record, drawing lesson notes, and documents keeping	4	Through project work, to guide the student teachers: To explain the meaning of lesson notes-record, drawing and storage of documents. To guide student teachers to discuss the importance of record, drawing, lesson notes, and documents keeping. To explain the techniques of gathering documents and their storage.	. To investigate and discuss the meaning of record lesson notes, drawing lesson notes, and documents storage. . To discuss the importance of record, drawing lesson notes, and documents keeping. . To explain the techniques of gathering and keeping documents.		To check project work  Exercises	
			4 <sup>th</sup>		Interpretations, translations, and application of various geographical data	4	To divide the student teachers in groups to discuss the meaning of interpretation, translation, and the application of geographical information. To explain and translate geographical data / information	To discuss the meaning of interpretation, translation, and the application of geographical information. To interpret and translate geographical information		To investigate student teachers' works Tests	
		May	1 <sup>st</sup>	Preparation of examinations							
			2 <sup>nd</sup> & 3 <sup>rd</sup>	National examinations							