

Innovation paradigm: A model of in-service primary teacher training in Somalia

Abdirahman Sheikhdon Ali

The Principal of Garowe Teachers Education College (GTEC) is based in Garowe, Somalia.

Email: abdirahman.sh.ali@gmail.com

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ABSTRACT: The quality of education in Somalia is deficient, and the limited number of trained teachers is the leading cause of the poor quality of primary schools. In Somalia, the landscape of teacher training has various challenges that demand restructuring of the existing in-service teacher training programs to enhance the competence of teachers and contribute to the effectiveness of learning outcomes. In-service teacher training is vital for the quality of education, particularly in Somalia, where most teachers lack basic competence for being teachers at primary schools. It will result in eliminating untrained teachers from schools in a cost-effective and approachable way. It is globally accepted that in-service primary teacher training promotes continuous professional development and enables teachers to create a conducive learning environment. In this contribution this paper aims to critically analyze the existing in-service teacher training program at the Federal Government of Somalia to propose an innovative model that is applicable nationwide. The paper used a document analysis research approach to collect and analyze secondary data. The paper was guided by the demand and supply theory for teacher training. The paper found that the current teacher training institutes use an unstandardized traditional curriculum that is inadequate to equip teachers with the required competence. The research findings contributed to understanding insights about in-service primary teacher training in Somalia. The paper proposed an innovative model for in-service teacher training that motivates teachers to enroll in in-service teacher training and enables them to improve their knowledge and skills through online and face-to-face training modalities with specialized subjects and mentoring support. Therefore, the paper recommends that teachers should frequently attend training programs through an innovative model for teacher training to enhance pedagogy skills and subject knowledge and boost pre-service teacher training. Further studies are also recommended to assess and improve the effectiveness of the proposed innovative model for in-service primary teacher training.

Keywords: Innovative, paradigm, model, competence, in-service, teacher training.

INTRODUCTION

Teachers are vital for the quality of education in any educational institution and a key factor in the quality of learning. The Ministry of Education, Culture, and Higher Education (2020) points out that teachers are central to the delivery of quality and equitable education. It is advised that teachers be equipped with the knowledge and skills required to support all the children in the schools. In Somalia, teacher training programs emerged in the colonial era. Sheikh Teachers Training in the north of

Somalia and Magistrale in the south of Somalia started pre-service teacher training in 1946, and the duration of their program was one and two years, respectively (El-Shibiny, 1970). As a reflection of the Addis Ababa Conference (26-30 April 1962, as cited in Ali, 2016), which was about improving and expanding teacher training, the Somali government established the National Teacher Education College (NTEC) in 1963 to train elementary school teachers within three years. In 1966, other teacher

training centers in Somalia were closed and were only allowed to offer in-service teacher training (El-Shibiny, 1970; Hafez, 1973; Metwally, 1967; Osman, 1986). According to Osman (1986), the NTEC was upgraded to a College of Education to offer four-year teacher education to teach secondary schools. It served as a College of Education until early 1991. Besides this, in 1975, the Somali government established the Halane Teacher Training to train primary teachers (Heinemann, 1999, cited by Ali, 2016).

For the last three decades, several teachers' training institutes were established, and mainly they work as state teachers' training. Garowe Teachers Education College (GTEC) started its service in 2005 (Ali, 2016). This was followed by Somaliland National College of Education (SNCE), which was established in early 2019, and Jubaland Teacher Training College in 2019. Gahayr Teacher Training was recently established and it operates in Mogadishu and offers in-service teacher training. Other teacher training institutes currently operate in Banadir, Galmudug, Southwest, and Hirshabele.

In the present context, the teacher training institutions in Somalia lack a curriculum framework that explicitly describes learning outcomes, standards, core competencies, teaching, and assessment approaches. MOECHE (2022d) revealed that one of the main constraints remains the lack of a standardized teacher training curriculum. Thus, teacher training needs a comprehensive curriculum outlining learning outcomes, standards, and core competencies that teachers must possess before teaching. In addition, most teacher training institutes provide only in-service training due to the limits of their capacity to train teachers through pre-service. However, the existing teacher training institutes are not equipped to address the demands for access to quality education in Somalia. This study proposed a model for in-service training that is appropriate for producing competent teachers who possess subject knowledge, pedagogy skills, and the teaching profession. Therefore, the study examines the current curriculum of teacher training in Somalia, answering the research question: Is the current teacher training curriculum adequate to produce qualified teachers in terms of subject knowledge and pedagogy skills?

LITERATURE REVIEW

Importance and modality of teacher training

In this study, the literature review focuses on the importance of teachers and in-service teacher training to the quality of education and the shortage of trained teachers in Somalia. It was generally accepted that teachers are vital to delivering quality education. Teachers remain one of the core inputs of the education system, and

they determine the quality of education (Barasa, 2023; Ministry of Education, 2010; MOECHE, 2022a; Pradhan, 2016). In this regard, teacher training is necessary to equip teachers with pedagogy skills and subject knowledge to enable teachers to fulfil their tasks effectively. Additionally, competence, for creating a conducive learning environment, and commitment are required for trained teachers.

Generally, training is vital for employees in every organisation to upskill their capacity to actively contribute to realising the objectives of the organisation. Okumbe (2007) argues that training provides specific knowledge and skills to employees to enable them to perform specific tasks. In Somalia, teacher education offers only a two-year diploma for primary teachers and a four-year bachelor's degree for secondary teachers that are provided by the teacher education colleges and universities, respectively (MOECHE, 2020).

In Somalia, there are pre-service and in-service teacher training approaches to train teachers in primary and secondary schools. In-service education can be defined as the relevant courses and activities in which a serving teacher may participate to upgrade their professional knowledge, skills, and competence in the teaching profession. It also refers to continuing education, which is designed for retraining, re-skilling, and updating the knowledge of manpower (Bambang *et al.*, 2020). According to Shah *et al.* (2016), in-service teacher training enables teachers to actively participate in the curriculum development process, implementation of curricula, and updating approaches to teaching. It encourages teachers to refine their abilities, competencies, and responsibilities. In-service teacher training is globally practised with the belief that it fosters the professional development of teachers. It aims to promote continuous improvement of teaching staff and eliminate differences in background preparation of teachers, keep the teaching profession abreast of new knowledge, enable the realization of creative innovations, and facilitate teachers to tackle responsibilities associated with the changing learning environment (Osamwonyi, 2016). The researcher added that in-service is intended to upgrade the professional skills, knowledge, and interests of teachers. Organization for Economic Co-operation and Development (2005) found that students whose teachers received on-the-job education in laboratory skills also outperformed their peers.

In contrast, some studies revealed that in-service teachers do not contribute to the capacity of the teachers. Huhtala and Vesalainen (2017) found that teachers need and request more training, and most of the in-service training organized in Sweden are irrelevant to the needs of teachers. In addition, Popova *et al.* (2016) mentioned that many in-service teacher training programs are ineffective. This limitation may result from poor planning and/or resources and poor implementation. However, the main

purpose of in-service teacher training is to address gaps in qualifications and competence.

On the other hand, pre-service teacher training is the first step, and full-time training is needed to become a qualified teacher based on the country's formal policy (OECD, 2003). This means that the pre-service teacher training is done before teaching schools, and it has enough time to equip student-teachers with the knowledge, skills, and attitudes required to become a qualified teacher. Pre-service teacher education programs prepare future teachers to become competent and effective educators, and they equip student-teachers with a strong foundation of pedagogical knowledge and skills (Roy and Dhar, 2023). The lack of pre-service training reduces the quality of elementary and intermediate education in Somalia (IBRD, 1971). This is evidence that pre-service teacher training is more significant than in-service teacher training, while currently, Somalia lacks effective pre-service training that can pool qualified teachers who can boost access to quality education. An example of how the pre-service teachers contribute to the increase of enrollment: in Somalia, in 1973/74, primary enrollment increased from 33,000 in 1973/74 to 219,520 due to an extensive school building program and recruitment of primary teachers done by the government (IEES, 1985).

Normally, teacher training follows two main models: (i) the concurrent model, which provides student teachers with subject knowledge and educational/professional studies within the duration of the course, and it allows a more integrated learning experience. For instance, in the Bachelor of Education program in Somalia, trainees take both subject knowledge and pedagogy, and (ii) the consecutive model is where students first complete a subject taught in school and then receive pedagogy training. Both models have advantages and limitations, but this paper intends only to highlight teacher education models worldwide.

Shortage of qualified teachers in Somalia

Somalia currently has a shortage of qualified teachers, particularly in rural areas. MOECHE (2022b) stated that many teachers lack the necessary training and support to deliver the curriculum effectively. The overall ratio of students per qualified teacher is 61.42, which means that every 61 pupils have only one qualified teacher (MOECHE, 2022b). Ali (2023) found that most primary teachers in Somalia are unqualified and lack pedagogy skills, content knowledge, class management, support for disabled students, exam-setting techniques, and the ability to develop schemes of work and lesson plans. Similarly, MOECHE (2022a) indicates that only 36% of teachers are qualified in public schools, and 35% are qualified in community and private schools. Similarly, MOECHE

(2022b) stated that primary curriculum implementation was poor because most primary school teachers are unqualified and cannot meet the basic teaching requirements. Despite unqualified teachers, the qualified teachers lack adequate pedagogical skills and deep content knowledge. According to a professional test conducted by the MoECHE (2022d), which shows low pedagogical skills for primary and secondary teachers. This is due to inadequate training in initiating training and the limited support duration of their service as school teachers. It was also noted that many institutes provide teacher training only on the weekend or only one day, which limits the grasp of more skills and knowledge required in the teaching profession.

Currently, teacher training institutions in Somalia are far below the capacity to train enough teachers in terms of qualifications and numbers to address the demands of students and the community. MOECHE (2022a) pointed out the urgent need to address the shortage of qualified teachers in Somalia and provide adequate training and support to ensure all teachers have the necessary skills and knowledge to deliver quality education. Popova *et al.* (2021) stated that most current teacher education programs are outdated and over-theoretical. They added that many different in-service teacher training programs are running simultaneously and are likely ineffective. Similarly, MOECHE (2020) noted that strengthening the capacity of teacher training in primary and secondary schools (in-service program) is insufficient in addressing current needs, and no evident results show the success of the program.

It was noted that teacher education in Somalia lacks a curriculum framework that directs and guides all the activities related to teacher training matters. Faqih (2021) stated that the current teacher training in Somalia lacks a unified curriculum. MOECHE (2020) stated that the existing teacher training institutions are widely varied, often lacking pedagogical skills and subject knowledge. Thus, MOECHE (2022c) suggested that the Ministry of Education needs to revise teacher training programs to ensure they are comprehensive and up-to-date and to address the specific needs and challenges facing education in Somalia, such as the shortage of qualified teachers in rural areas. The Ministry of Education also developed the National Teachers Policy, which outlines various issues on teachers, including teacher preparation, a minimum requirement of teachers, teaching license, professional development of teachers, teacher management and deployment, salary scale, code of conduct, and others. However, this policy has not yet been implemented to address teacher education gaps. Similarly, Faqih (2021) said that much about policies and strategies has been improved, but still, more about education policies in Somalia must be done to fill the existing gaps in education.

Perspective theory

This study is guided by the demand and supply theory for teacher training. Demand for teachers refers to the need for qualified teachers in schools (Cobbold, 2015; Steiner and Schiller, 2003). Thus, the demand for teachers in this study relates to the need for qualified teachers in primary schools. On the other hand, in this study, the supply of teachers refers to the availability of teachers ... at any given availability of subject teachers... at any given time, to fill in the current and future gaps in schools (Lindsay *et al.*, 2009). In light of the above definitions, teacher demand and supply analysis are vital to balancing the shortage and oversupply regarding the number of teachers, subjects, and geographical areas. According to Owolabi (2006), human resource planning aims to match the forecast of demand for and supply of labour to pinpoint shortage, both in number and in kind, and to highlight areas where overstaffing may exist. In Somalia, there is a mismatch between the demand and supply of teachers because teacher training institutions produce few teachers compared to the demand for qualified teachers and an increase in enrollment. MOECHE (2022b) revealed that enrolment has increased from 399,738 in 2021 to 525,594 in 2022, which is a 24% increase. In addition, the ratio of pupils to qualified teachers is 61:1, which means that every 61 pupils has only one qualified teacher. This is strong evidence that supports the need for a supply of qualified teachers who replace unqualified teachers, reduce the workload of teachers, eliminate the deployment of unqualified teachers, and contribute to the retention of teachers in schools. The study on the effect of teacher demand factors on teacher understaffing in public secondary schools in Kenya found that the impact of student enrollment on teacher demand was in the positive direction (P -value = 0.001), that an increase in enrollment results in an increase in teacher demand (Wamukuru, 2016).

METHODOLOGY

This study employed a document analysis research method to evaluate the current status of the curriculum of primary teacher training in Somalia. According to Bowen (2009), a document review is a systematic procedure of reviewing or evaluating documents to develop empirical knowledge, elicit meaning, and gain understanding. As the researcher was interested in understanding the current position of primary teacher training, he employed the document review method, which captures the historical background and current settings of the training in Somalia. The paper is entirely based on secondary data, and it consulted various MOECHE documents, including policies, education sector analysis, statistical yearbooks, reports, and other relevant documents. The researcher

determined these documents to be the relevant sources for this study and its purpose. The study used qualitative analysis and discussed the gaps in primary school teacher training in Somalia, especially in teacher qualifications and the curriculum of primary teacher training in Somalia.

RESULTS AND ANALYSIS

The researcher evaluated teacher training courses attached to the National Teacher Policy 2020. The researcher found that there is an ambiguous teacher training structure. This means that the teacher training courses are undermined, while most teachers are characterised as unqualified. According to MOECHE (2020), Table 1 was attached as an annexe to guide teacher training institutes to train primary school teachers.

Table 1 shows courses required for primary teachers to complete within 18 months. The table indicates courses as a broad name (e.g., Math, Science, English....), contact hours, and credit hours, which are not clearly illustrated. Generally, courses were divided into nine subject areas, seven professional studies, and teaching practice. In Table 1, there are courses (e.g. educational psychology, measurement, evaluation, foundations of education, and technology), which are not included in the table and were not allocated their credit hours. Shortfalls of primary teacher training include a lack of a curriculum framework that outlines course descriptions, the scope of the courses, intended learning outcomes that make explicit what to be taught, a sequence of courses on a semester basis, and teaching and assessment methods.

Table 1 further shows that every course will be taught as one, and no course has two parts: a basic or advanced level. The distribution of courses in the semester is also questioned regarding their weights and prerequisites. Regarding credit hours, all subject knowledge courses have 2 (two) credit hours, and all professional studies courses have 3 (three) credit hours, except educational administration. This shows that course weights and importance were not considered.

Some studies show that teachers who participate in in-service training improve students' learning results in all areas of their language skills (Hildén and Rautopuro, 2014, as cited by Huhtala and Vesalainen, 2017). Similarly, Ali (2021) found that teachers contributed to learning outcomes as a result of attending an in-service teacher training program at Puntland State of Somalia. This supports the idea that in-service teacher training has a greater impact on the competence of the teachers when the training focuses on the teaching subjects they have experienced. For instance, English teachers need to learn English courses as a specialized course, but Arabic teachers must learn English as a requirement course, and vice versa. Thus, all courses may not have the same fitness for all teachers. It implies that teachers need to

Table 1. Primary teacher training credits

Subject	Contact hours/week	Credit hours	Course type
Somali	2.5	2	Subject matter
Arabic	2.5	2	Subject matter
English	2	2	Subject matter
Mathematics	2.5	2	Subject matter
Science	2.5	2	Subject matter
Social Studies	2	2	Subject matter
Physical Education	2	2	Subject matter
Educational Administration	2.5	2	Professional
Islamic	2.5	2	Subject matter
Inclusive Education	3	3	Professional
Educational Research and Statistics	3	3	Professional
Educational	3	3	Professional
Educational Psychology	3	3	Professional
Educational Measurement and Evaluation	3	3	Professional
Education Foundation	3	3	Professional
ICT	2	2	Subject Matter

Source: Siyaasadda Dawlada ee Baraha, Wasaaradda Waxbarashada, 2024.

specialize in specific subject-knowledge courses to train them as subject teachers, making it easy for teachers to be competent in teaching specialised subjects. This also maximises time as teachers are required to take some courses. This idea aligns with the fact that long-term in-service training makes teachers change at least some aspects of their teaching (Boyle *et al.*, 2004, as cited by Huhtala and Vesalainen, 2017).

In the reviewed literature, it was found that most primary teachers are unqualified. Many documents at the MOECHE revealed a shortage of qualified teachers in primary schools (MOECHE, 2020; MOECHE, 2022a). Less than 40% of teachers are qualified, and there is variation in the states (MOECHE, 2022a). Apart from that, it was noted that qualified teachers also lack pedagogical skills and subject knowledge.

The above analysis reveals that Somalia has an outdated teacher education system that needs to be reviewed and revised to align with the implementation of the curriculum and be compatible with the teacher training in the region. MOECHE (2022a) reveals that the standardisation of the teacher-training curriculum is a process in which the government is currently involved.

DISCUSSION

The above analysis shows that the current teacher training program in Somalia lacks a comprehensive curriculum framework that is the foundation for developing course outlines, course materials, and other documents. MOECHE (2020) recognized the lack of a standardized

teacher training system. The current teacher training institutes in Somalia have not yet been assessed comprehensively and harmonised regarding curriculum, structure, duration, and other teacher training matters. This variability limits the competence of qualified teachers, as they need to improve their pedagogy skills and content knowledge. The existing teacher training institutes use traditional methods, and they offer short-term training with very little contribution to the competence of teachers and the learning outcomes of the students.

On the other hand, qualified teachers lack the competence required for teaching in primary schools. Similarly, the findings agree with Ali (2023) that primary teachers lack pedagogy skills and content knowledge. The reason for the large percentage of teachers being unqualified is that a few teacher-teaching institutes provide pre-service diplomas for primary teachers, which is essential for boosting primary teachers. In addition, the restricted capacity of the existing teacher training also contributed to a lack of effective implementation of teacher policy, especially recruitment, which directs the selection of teachers. It is difficult to control the qualifications of teachers unless the schools strictly follow a recruitment process for the teachers that is directed by the national teacher policy.

This study focused on in-service teacher training, which is relevant to education in Somalia, as most primary teachers are unqualified. The existing in-service teacher training programs need to shift from the traditional approach of delivering short content about all the subjects within a short time. Thus, the study proposes a model of two-year in-service teacher training that combines online

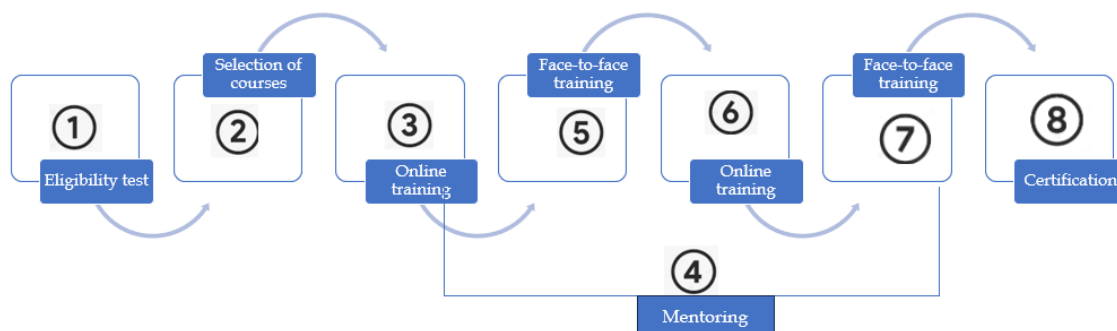


Figure 1. Innovative in-service teacher training model (Source: The researcher).

and face-to-face teaching and mentoring services. The following figure (Figure 1) illustrates the innovative in-service teacher training model.

Figure 1 depicts an eight-step in-service teacher training model. Step (1) focuses on conducting eligibility tests for untrained teachers currently in teaching service with secondary certificates and those having secondary certificates. Step (2) allows teachers to select specialised subjects in the training. It suggests that teachers specialise in only three courses, along with professional studies and core courses, and it maximises training duration and mastery of subjects. Steps (3 & 6) are the first and third phases of the training through an online approach, and step (4) is a continuous mentoring exercise through training that allows reflecting on their teaching practice and continuing their professional development. Steps (5 & 7) are the second and fourth phases of the face-to-face training that allow trainees to interact with the trainers, and Step (8) is about certifying teachers who fulfil all the requirements.

In a nutshell, this model focuses on subject teachers, and it is cost-effective as it reduces the number of trainers required to deliver the training and maximises the duration of the training. In the revolution of technology, it is essential to train teachers with an innovative model that enables them to incorporate technology and promote learning outcomes. It also boosts qualified teachers and inspires them to upgrade their qualifications to become competent teachers.

Conclusion and Recommendations

This study aimed to assess in-service teacher training, particularly the teacher training curriculum in Somalia. The study found that the existing in-service teacher training institutions lack a standardized curriculum, and most primary teachers are unqualified. Contrary to this, a teacher policy outlines much about teacher education and management, and teacher training institutes are in place. This opportunity allows the Ministry of Education, teacher training institutes, and curriculum developers to pay more

attention to teacher education to boost qualified teachers. The study proposed a model of in-service teacher training that enhances the quality of teacher training and teachers. Teacher training institutes need intensive training in different aspects related to the innovation model of in-service primary teacher training. The study recommends the following, based on the findings and analysis:

1. Reviewing the existing curriculum documents in the teacher training institutes in Somalia and revising the curriculum and structure of the teacher training institutions.
2. Piloting the proposed model to validate its strengths and weaknesses to enhance and make it a functional model of in-service teacher training in Somalia and elsewhere.
3. Increasing pre-service training alone on the side of the in-service training. This is the best way to eliminate untrained teachers from schools due to the available pool of qualified teachers.
4. Enhancing the capacity of the existing teacher training institutes to impart effective training that equips teachers with the required pedagogy and subject knowledge and increases the competence of teachers.
5. Initiating debates and forums to bring together experts to discuss challenges and opportunities in teacher training in Somalia.
6. Implementing the national teacher policy to address all issues about teachers that the policy outlines.
7. Establishing a regulatory body to oversee and ensure the quality of teacher training programs and institutes.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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