

**A STUDY ON THE SOMALIAN SCIENCE TEACHERS INITIATIVES IN
COPING WITH THE ENGLISH LANGUAGE IN THE TEACHING AND
LEARNING PROCESS**

By

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List of Abbreviations

AET	African Education Trust
CHIG	Chinese High
CMID	Chinese Medium
CLOW	Chinese Low
CSEE	Certificate for Secondary Examinations
DARTS	Directed Activities Related to Text
EU	European Community
GPA	Grade Point Average
GER	Gross Enrolment Ratio
IGAD	Inter-governmental Authority on Development
L2	Second language
L1	First Language
LAD	Language Acquisition Device
LEP	Limited English Proficiency
MoE	Ministry of Education
MOI	Medium of Instruction
OECD	Organization for Economic Co-operation and Development
PISA	Program for International Student Assessment
PPEN	Puntland private education Network
PEPP	Puntland Education Policy Paper
SNU	Somali National University
SYL	Somali Youth League

TFG	Transitional Federal Government
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNESCO	United Nations Educational, Scientific, Cultural Organization
UPE	Universal Primary Education

Kajian Tentang Inisiatif Guru Sains Menghadapi Bahasa Inggeris Dalam Proses Pengajaran Dan Pembelajaran Di Somalia

Abstrak

Topik kajian ini adalah mengenai medium pengajaran di sekolah-sekolah menengah di Somalia. Kajian ini menyiasat sejauh mana masalah penguasaan bahasa Inggeris di kalangan guru-guru dan cara mereka menghadapi dilema penggunaan bahasa Inggeris dalam pengajaran sains. Satu persoalan yang penting dalam kajian ini adalah berkenaan dengan cara-cara guru-guru sekolah menengah sains di Somalia mengatasi masalah bahasa pengantar dan apakah inisiatif mereka ambil untuk menghadapi halangan bahasa demi memastikan pembelajaran berjalan dengan lebih berkesan dan seterusnya meningkatkan prestasi akademik pelajar. Kaedah penyelidikan yang digunakan adalah bersifat penterjemahan kualitatif dan data yang dikumpulkan melalui kaedah pendekatan bercampur di mana tiga kaedah utama pengumpulan data digunakan. Ini adalah (1) wawancara dengan guru-guru sains sekolah menengah yang terpilih (2) pemerhatian terhadap bukan peserta dan (3) kajian dokumen. Tiga buah sekolah menengah swasta di negeri Puntland, Somalia telah dipilih. Penemuan menunjukkan bahawa medium bahasa Inggeris adalah satu masalah bagi kebanyakan guru-guru dan pelajar, di mana majoritinya tidak dapat memahami dengan jelas kandungan utama pengajaran yang menggunakan bahasa Inggeris. Ini adalah kerana bahasa Inggeris bukan bahasa ibunda dan tidak digunakan secara meluas oleh warga Somalia. Kajian ini juga menunjukkan bahawa di dalam kelas aliran sains yang diajar dalam bahasa Inggeris, guru-guru menggunakan beberapa strategi yang berlainan sebagai satu usaha untuk mengatasi halangan bahasa. Strategi yang lebih kerap digunakan adalah pertukaran kod, penekanan positif seperti mencari cara yang lebih mudah untuk menerangkan konsep yang kompleks, perbualan selamat, dan akhir

sekali ialah dengan membangunkan perbendaharaan kata sains pelajar dalam kedua-dua bahasa ibunda dan bahasa Inggeris. Penemuan dari kajian ini menunjukkan bahawa pelajar mempunyai pemahaman yang lebih baik terhadap kandungan mata pelajaran Sains apabila menggunakan teknik pertukaran kod. Dari penemuan, kesimpulan telah dibuat bahawa penggunaan bahasa ibunda sebagai sebahagian medium pengajaran akan menggalakkan penyertaan semasa pelajaran dan meningkatkan prestasi dalam ujian dan meminimumkan perbezaan prestasi di kalangan pelajar. Secara keseluruhan, hasil daripada kajian ini boleh digunakan untuk guru-guru Somalia, perancang pendidikan dan pembuat dasar dalam menangani isu pilihan bahasa yang kompleks di dalam kelas di Somalia.

A Study on the Somalian Science Teachers Initiatives in Coping with the English Language in the Teaching and Learning Process

Abstract

The topic of this study is the medium of instruction in secondary schools in Somalia. The study investigated the extent of the problem of English proficiency among teachers and the way they cope with the English medium dilemma during science lessons. An important question this study was concerned with the ways Somali secondary school science teachers surmount the problem of medium of instruction and what initiatives they take to cope with the linguistic barrier so as to make learning more effective and hence improve academic performance. The research methodology used is of the qualitative interpretative and data was collected through a mixed methods approach whereby three main methods of data collection were used. These were (1) Interviews with selected secondary school science teachers with open-ended items (2) Non-participant observation and (3) Document review. Three private secondary schools in Puntland State of Somalia were selected. Findings showed that English medium is a problem for the majority of teachers and students, majority of whom could not clearly understand the subject content in English. This is mainly because English is neither mother tongue nor it is widely spoken by the Somali people. The study also showed that in science classes taught in English, teachers used a number of coping strategies as an attempt to surmount the language barrier. Those which were more frequently used were Code switching, early-Exit transitional approach, visualization, cooperative learning and Group projects, Relate to prior knowledge, using safe-talk and positive reinforcement coping strategy, explaining complex concepts in easier ways using of physical world around them, and finally developing students' science vocabulary in both the mother tongue and in

English. The findings of the study reveal that students performed better understanding of science subject content when used code switching. From the findings, it was concluded that that the use of mother tongue partially as Medium of instruction would promote participation during lessons and improves performance in tests and minimize the differences in performance among students. Overall, the results from this study can be of use to Somali teachers, educational planners and policy makers as they address the complex issue of language choice in Somali classrooms.

CHAPTER 1 - INTRODUCTION

1.1 Introduction

Somalia's formal education system has been in profound crisis for long. The unexpected and violent collapse of the military government in January 1991, and the protracted and bloody civil war that followed, plunged the country into political turmoil and economic ruin. The chaos caused the State system to disintegrate. It quickly led to the de facto dismantling of the structure and institutions of governance. The disappearance of the State inevitably led to the destruction of public institutions, among them the state-run formal education system. During this long and bitter civil war, most of the school-age children have been denied access to educational opportunities, a basic right of each child. More than 18 years has now passed and one of the greatest challenges facing the people of Somalia is that of providing basic education that is relevant to their needs, and of a quality, which assures effective learning. Historically, modern formal education in Somalia has always been associated with the State. Implanted during the colonial period, its development and maintenance has been the responsibility of the State. The breakdown of the State therefore reduced the education sector to the status of an "orphan". It was devastated by years of conflict, under-funding and neglect. Currently, only 35, 9% of primary school age children (6-13 years old) have access to formal education. This means that almost seven of every ten children are out of school (UNICEF, 2007/2008). The Gross Enrolment Ratio (GER) is among the lowest in the world and most schools are concentrated in and around urban areas, effectively excluding children in remote locations. Enrolment rates for girls lag

significantly behind those for boys. The civil war and its aftermath have created serious educational problems, ranging from limited and unequal access to education, skewed heavily against the rural poor and girls, to lack of proper educational infrastructure and coordinated management. On the whole, education in Somalia is characterized by poor quality with unresponsive school curriculum, absence of standards and controls, inadequate management and planning capacity, a weak financial base, as well as the existence of numerous and poorly coordinated educational provisions throughout the country (UNICEF, 2007/2008).

1.2 Somalia: An Overview

Somalia is a country located in the Horn of Africa, with a population of around 10 million (estimated in 2000). Somalia is now a nation devastated by a destructive civil war. Almost three decades of dictatorial rule followed by another decade of civil war has put the country into shambles. The country came to occupy the centre stage of global attention as a precipitate of a very unfortunate development in its political history. The land has served the interests of both the former eastern block and the Western alliance very well. Unfortunately, the country did not benefit from its spasms of allegiance to either block at the end of the cold war. The territory known as Somalia today was colonized from 1884-1960 by the British, French, and Italians (Afrax, 1994). As part of the policies of divide and rule, the colonial powers did everything possible to play one clan against the other sowing seeds of discord and conflicts. In July 1960, the independent State emerged from the union of Italian and British land. This left millions of Somalis outside the new state, in Djibouti, the Ogaden, presently under Ethiopian rule, and the Northern Frontier Districts, presently under Kenyan rule. In the first nine years of political independence, the

country enjoyed relative peace and some form of democracy. It gained strength from its cultural, racial and religious homogeneity. The country shares cultural beliefs and norms, language, religion, and sometimes the claim of common ancestry (Afrax, 1994).

In 1969, General Mohamed Siad Barre and his Socialist Revolutionary Council exploited the overall state of confusion to impose his military regime and to put an end to democracy in post-independence. Towards the 1980s, Barre's regime drew to an end, and finally collapsed in early 1991. A state of political anarchy ensued and a situation of a deadly civil war developed throughout a, with nomadic clan based militias fighting each other continuously for local supremacy. According to Afrax (1994) during the civil war, the entire fabric of the Somali society was damaged and the whole nation has sunk into a deep, dark sea of unimaginable human and material disaster, and the communal mind of the people has since been in coma. As a consequence of the above described situation, once united powerful a disintegrated politically and territorially and there has been no fully functioning government since 1991. Moreover, warfare and displacement have taken a heavy toll. But with the collapse of state institutions, including essential social services such as health and basic education, the society has developed along a downward spiral. Since the collapse of the nation state, there had been 13 peace efforts and two transitional national governments had been formed, but never managed to take effective control over most of the country. Against the situation described above, the once united Somalia disintegrated politically and territorially. It is however worth noting that in early 2002, a reconciliation effort under the East African Inter-governmental Authority on Development (IGAD) auspices was organized in Kenya and a Transitional Federal Government (TFG) was finally formed. The new government

however, still faces the daunting task of establishing order in a country with no revenue or infrastructure after almost two decades of bitter civil war that had degenerated into clan warfare (Warsame, 2001).

In the Northern part of the country (Puntland and Somaliland) situation is somewhat different. The Authorities there have succeeded to create their own regional administrations with relative peace and stability. However, in the central and southern regions, disunity is extant, with fighting still continuing between the Somalia's Transitional Government forces supported by peace keeping forces from a number of African countries and radical Al-Shabab Islamist movement affiliated to Al-Qaeda. In short, Somalia remains volatile, beset by internal political crises and conflicts, a country severely affected by the repercussions of over decades of civil war, economic decline and destruction Already one of the poorest countries in the world at the onset of the decade of the 1990s, conditions of extreme poverty now largely prevail.

1.3 Somalia Education System and History

Education in contemporary Somalia exists against the country's socio-political background. Education in present times couldn't be understood without at least some reference to the past, particularly the colonial education and post-colonial education.

1.3.1 Colonial Education

The first general account of history of education in colonial Africa is that found in the writings of foreign missionaries from Great Britain, France and later, Americas.

The missionaries with their interest in the continent pioneered and dominated the educational sector for many years (Brock-Utne, 2000). The Italian and British colonial powers were the first who brought with them the introduction of social institutions that were foreign to the people. Schooling in the western sense was one such institution that made its appearance in the former British and Italian colonies. The school system that was established was limited in scope and outreach, serving only a small number of pupils, which was in line with the basic purpose of the school. This schooling system was, as elsewhere in Africa designed and pragmatically implemented for the administrative and low level technical needs of the imperial powers. The colonial school system was to train Africans to help man the local administration at the lowest ranks, and to staff the private capitalist firms, which meant the participation of a few Africans in the domination and exploitation of the continent as a whole. Colonial education in Somalia demonstrates a systematic conformity to the general colonial education system with imperialist governments training low-level administrative personnel helping them to administer the colonial territory effectively. As the social forces that surround it shape education, colonial education then signifies the type of learning that is conducive to the general themes of subordination, exploitation and inverse development relationship of the colonizer and colonized(Keynan, 1993).

In Somalia, the Italian and British colonial powers pursued different educational policies. The Italians sought to train pupils to become farmers or unskilled workers in order to minimize the number of Italians needed for these purposes. The British established an elementary education system to fit certain military administrative posts and for positions not previously open to Somalia. They set up a training school for the police and one for medical orderlies (Abdi, 1998).

According to Keynan (1993) Somalia's colonial powers did very little as far as education was concerned. For the colonial powers, providing basic education to Somali children was of low priority section in their administration. They were slow and reluctant to even formulate an education policy. In 1891 the British had permitted a French Roman Mission to open a school at Berbera in the north a, while in the south, the Italian Dante Aligheiri Society opened the first of formal colonial schools at Mogadishu in 1907. This was to teach children the Italian language, but the school did not last long This period was followed by a wave of missionary schools run by the Roman Catholic Church, especially in the southern part of the country (Robinson, 1971).

Abdi (1998) notes that between 1920-1930; twelve Catholic mission elementary schools were established in larger southern towns. More colonial schools were later opened with the number of pupils reaching 1265, but with Somalis not going beyond grade 7 Italians as well as some Somalis attended these schools; however, most Somalis rejected most of the missionary schools, because of their suspicion of non-Islamic teaching (Castagno, 1975). In the northern regions of the country, opposition to Western education was stronger than the opposition in the Italian colony. The first school, a French Catholic mission school was forced to close because of resistance from Muslim leaders (Hannemann, 1999). The colonial powers concentrated their efforts on the children of those who demanded colonial education, mainly those who lived in major urban centers. The problem was that those who were then excluded constituted an overwhelming majority. They also formed the socio-economic and cultural base of society (Robinson, 1971). The colonial powers knew that their policy was seriously flawed, but they went ahead with it, because their primary concern was that the colonial era was soon to end, and they wanted to do something before their

departure, that could be achieved quickly and without much expense. It was only after in 1943 when few private schools in Arabic language run by the Somali Youth League (SYL) the nationalist independent party were opened in the South of the country (Keynan, 1993). In the former Italian colony, there were only two secondary schools. One of these schools was for the Italians and the other one for sons and daughters of the rich and influential. In the northern regions of the country, there was only one secondary school in Sheikh, which had an intake capacity of 18-20 students each year. These were the only secondary schools in Somalia at the time of the unification of the two parts of Somalia in 1960 (Sällnas, 1975). On the eve of Independence, the total primary and secondary school enrolment in the so-called British land was 3925, with only 361 being female students. The corresponding figure for the south under Italian colonial rule was a little better because of the involvement of the UN and the policies of the Trusteeship administration, which governed the territory between 1950 -1959. Although they did not do much, the colonial powers left behind a legacy that would influence the future of education in Somalia for a long time (Keynan, 1993).

1.3.2 Post- Independence Education

When Somalia achieved independence in 1960, the educational problems to be tackled were immense. The infant nation faced two choices, both of which were enormously difficult. The first was to continue and consolidate the system of education established by the colonial administration. The second concerned the foundation of an entirely new system of education that suited the country's peculiar condition. The government opted for the former and immediately began

administering the system that was already in place. It concentrated its efforts on the unification of the two systems of education inherited from the colonial era. The British followed a 3-3-4 system (3 years lower primary+ 4 years upper primary + 4 years secondary), with two languages, Arabic and English, used as the mediums of instruction. The Italian-colonization authority followed a 5-3-4 system (5 years lower primary+3 years upper primary+4 years secondary) with Arabic and Italian as the languages of instruction. The government did succeed in creating an integrated system. It established a 4-4-4-system nationwide adopted Arabic and English as languages of instruction and eliminated Italian and developed a unified curriculum. The new system took effect in 1965, and was completed 1969. What this means is that the first nine years of the independence were spent in fixing the structural, curricular, and linguistic deficiencies of the narrow, unjust and largely irrelevant system during the final years of colonialism (Keynan, 1993). In this period, the future of education looked promising. However, the most serious shortcoming then, was the lack of an agreed written form of Somali language, the national language of the country. Since independence, Italian and English had served as languages of administration and instruction in schools. Arabic had also been widely used in cultural and commercial settings, as well as schools (Abdi, 1998).

A few months after independence, the Somali Language Committee was appointed to investigate the best means of writing. The committee considered nine scripts, including Latin script, various indigenous scripts such as *Cismaaniya* and also Arabic script, which religious leaders and supporters of Somalia's integration into the Arab world had advocated to be adopted (Laitin, 1977). In its report, issued in 1962, the Committee favored the Latin script. However, no decision was made at the time concerning the use of a particular script, because of intense disagreement among

opposing factions. On October 1969, the seizure of power by the military brought about drastic changes. From the outset, the new administration indicated that it was determined to jettison the system that had been inherited from the colonial era and replace it with a broad-based relevant system. The new rulers made their intention very clear, and campaigned hard to have people support their initiative. To achieve this, the government adopted a policy to democratize and expand educational opportunities in the country (UNESCO, 1997). The centerpiece of the expansion of educational opportunities was the introduction of compulsory primary education in 1975. Law No.25 of 22 June 1976 made primary education compulsory to all Somali children between six and 14 years. Democratization meant that education would be provided free of charge, and that it would be available to all parts of the country. Private schools were nationalized and integrated into the public system. Law No. 61 of 23 July 1972 was enacted to achieve this objective. Somali as a medium of instruction was introduced into elementary education in 1972 and to intermediate phase between 1973 and 1975. In 1977, it was introduced in the first year of secondary education. Because of these radical policies, Somalia's educational landscape underwent dramatic changes. In 1969, only 227 primary schools existed, with 37,971 students and 1135 teachers. In just seven years, following the writing of the Somali language in 1972 and the introduction of the compulsory education, there were 1002 primary schools with 229,030 students, and a teaching force comprising 6540 teachers (Ministry of Education, 1987). By 1980, the number of schools rose to 1407, enrolling 271,704 students and employing 8122 teachers. Official documents from the Ministry of Education (Ministry of Education, 1987) reveal that expansion of secondary education was equally impressive. The country had only 10 secondary schools, involving 53,927 students and 2,845 teachers. With regard to technical and

vocational schools, the same environment prevailed. In 1969, only six schools existed, with total enrolment of 580 students. By 1981, the number of schools rose to 26 schools, enrolling 12,870. Accompanying these burgeoning statistics was raising educational budgets. The government's annual allocation to education rose from 6.8 percent of the budget of the central government in 1969 to 11.3 percent eight years later (Ministry of Education, 1987).

As previously mentioned, writing the Somali language and liquidation of illiteracy was one of the main objectives of the new regime's domestic policy scheme outlined in the first charter of the Revolution. For the first time the Somali language was written and made the medium of instruction in all schools. After having accomplished the writing of the language, the government began what was to become the biggest and most published project namely the three literacy campaigns (urban and rural), which took place in 1973/74 and 1974/75 respectively. Three literacy campaigns popularized the use of the script. The first was for the Government employees and the urban population and it took 6 months each to read and write. The second campaign was for the rural population, and there was almost a year of intensive teaching participated by all school children from intermediate to secondary and the majority of the state's civil servants as well as teachers and inspectors. These campaigns culminated with more than 60% literacy rate of the population and Somalia winning the UNESCO Nadezhda K. Krupskaya international literacy prize in 1975. Other sources estimate that the country's adult literacy rate grew from 5 percent to around 80 percent (Keynan, 1993).

According to World Bank (1990) the educational crisis in Somalia started even before the collapse of Siad Barre's regime in 1991. The emergency situation sharply accelerated the collapse. Prior to the collapse, the bulk of recurrent government

expenditures were absorbed by security needs. As a result, economic and social sectors were severely under-funded. Perhaps the most important indicator of the crisis of the system was the fact that Somalia had by 1987 one of the highest teacher attrition rates in the world. The crisis in the field of education was related to a general crisis in the social and economic structure of the country.

Keynan (1993) notes that the development of Somali language had gone through three developmental stages namely: (1) Soon after the script was approved, Somali was adopted as an official language (2) Somali language was made the medium of instruction for primary and secondary schools two years after the adoption of Somali as official language (3) Somali was made the medium of instruction in minor area of study in the Somali National University. The dramatic education gains of the military regime in Somalia began to evaporate as quickly as they came. In early 1980s, the education system of the country began to gradually sink into deep crisis, particularly with regard to enrolment and finance. The worsening status of education was caused by the general decline of the social and economical structure of the country. One main factor was said to be the increasing militarization of former Mohamed Siad Barre's regime, which diverted most resources to military uses, thereby bringing about the final decline of educational services in the country. The civil war dealt another devastating blow to the formal education system, which completely collapsed in 1991(Keynan, 1993). By 1990, the primary enrolments had fallen more than 60% as compared with 1982. Moreover, the Somali educational system reached its nadir because of the lack of access to textbooks and teaching resources and its basic financial incapacity to keep teachers in schools and upgrade their professional qualifications (World Bank, 1990).

1.3.3 Education in State of Civil War

During the early stages of the civil war, formal education in Somalia almost completely ceased. Students and teachers escaped for their lives, and many of them have become displaced persons and forced to seek security in their clan areas of the country or flee to refugee camps in neighboring countries and beyond. Moreover, many children and youths were forced by their clans to join armed movements. Secondly, almost all higher education institutions are almost non-existing in Somalia. This means no-counter experts, no curriculum development centers in the country. According to Hannemann (1999) about 90% of school buildings were either completely or partially destroyed. In addition many were occupied by internally displaced persons, mostly nomads. Science equipment books for schools, libraries, and computers for the university, the Ministry of Education, and other centers were looted, and all school records were lost.

1.3.4 Slow Recovery

No formal education took place after the outbreak of the civil war and most of children had no schools to attend. Adult education programmes also ceased to function. Due to the civil war, the fragmentation of the country and continuing localized conflicts, Somalia has no nation-wide national education system today, but disparate elements of what existed previously and what was introduced during the civil war. However, the 4 years (lower primary) +4years (upper primary) + 4years (secondary) of the former Somali State remains still the underlying framework for formal schooling in most regions of the country. There are some externally sponsored initiatives that have introduced new systems; for example the 6-3-2 in

Arabic medium private schools, which are similar to secular systems in the Arab world (Warsame, 2001).

By and large, the collapse of the state has allowed varied educational initiatives by all zones and regions. Initiatives by local authorities, local NGOs, international donors, and private entrepreneurs in some cases have resulted in the establishment of institutions (varying in quality in relation to facilities, materials and human resource) offering learning at the kindergarten, primary, secondary, vocational and technical levels. These initiatives are expanding educational opportunities; some have however, the effect of compounding the orderly curriculum materials and medium of instruction that are geared to serving the needs of the majority of the Somali children. Discordant curriculum development is illustrated by external curricula that have adopted learning schedules that are different from those used in schools before the collapse of the state. Another aspect is effect of placing a premium on the mastery of foreign languages (such as Arabic, Italian or English) with very little or no concern of adaptation to the Somali language and thus the underlying the positive features of the society's rich culture. In practice, every private school selects its own curricula and programme of education, and many schools had no central authority to refer to (Farah, 2000).

As per writing of this thesis, education in Somalia still faces serious problems relating to medium of instruction, enrolment, retention/drop-out, pupil's performances, teacher/head teacher qualifications and proficiency, learning and teaching environment, inadequate physical facilities, cost and sustainability of education, management and supervision. On the whole, education in Somalia is characterized by poor quality with unresponsive school curriculum with varieties of medium of instruction, absence of standards and controls, inadequate management

and planning capacity, unequal access to education, skewed heavily against the rural poor and girls, a weak financial base, as well as the existence of numerous and poorly coordinated educational provisions throughout the country (Warsame, 2001).

1.4 Language Policy in Somalia; a Historical Setting

The heart of all education is language policy (Phillipson, 1999). For that reason the question of the language to be used as a medium of instruction in Somali schools was a factor that presented problems for both colonial administrations and for the rulers of post-independence era in Somalia. Since there was no widely accepted form of writing, Somali language could not be used until a decision had been made on the type of script to be employed (Robinson, 1971). On the other hand Arabic was made the official language of instruction in the elementary grades and the first year of intermediate school by the British colonial rule. English as a subject was introduced in the second grade, and it became the teaching medium in the second year of intermediate school. For the Italian colonial authority in southern a, there were fewer reasons to use Arabic, however the pressures to do so were real. The strong cultural identification with Islam and the presence of Qur'anic schools forced the choice of Arabic as early medium for classroom work. In the first two years Italian was introduced as an oral subject, and beginning in the third year of elementary school Italian became the medium of instruction with Arabic continuing as one of the main subjects studied (Triennial Survey, 1955-1957). The process of reading and writing as well as speaking two foreign languages with different scripts, and without first learning to read and write one's own mother tongue was a challenge meaningless proportion for the Somali kids. Therefore there was no wonder that the dropouts in

primary schools under colonial powers were very high. The question of Somali language as a medium of instruction had two dimensions:

(1) The script to be used to put oral into written form

(2) Choosing it as the language which was to serve as a vehicle for instruction in the classroom. Prior to independence, about 50 percent of the time allotment of classroom learning at the primary level was given over to foreign language teaching. At the intermediate level, this was 42 percent and 36 percent in the north and south, respectively. The inordinate amount of time spent on colonial languages in both regions meant that other subjects, social studies in particular, were shown a proportionate neglect (Robinson, 1971).

With the advent of Somalia political independence in 1960 the question of curriculum and language of instruction in Somalia took on a new dimension. The Somali leaders soon after independence declared their intention to solve the language problem, which had plagued the country seriously. In a policy address to the National Assembly in November, 1961 the Minister of Education stated that the top priority was to be given to curriculum reform and revision of the school curricula (Robinson, 1971). However during the first nine years of independence little progress was made apart from the unification of educational systems of the two former colonies under a 4-4-4-structure in 1967.

According to Robinson (1971) the curriculum was heavily influenced by the language of instruction being used and the textbooks used to teach the subjects. For instance, from the years 1967 to 1972, the Arabic language was the medium of instruction at the elementary school level in grades 1-4. The English language was used as a medium of instruction at subsequent levels in both intermediate and secondary school (Ministry of Education, 1990). The socialist military regime, which

came to power in 1969, managed to solve satisfactorily the language problem. In 1972 the Somali language was written and at same time introduced into elementary education (grades 1-4) and into intermediate school (grades 5-8). The period 1977-1979, the Somali language as the medium of instruction was introduced into the first year of secondary education and English was subsequently a subject from grade 8th onward (Ministry of Education, 1990). Right after the introduction of Somali as a medium of instruction, the government adopted the principals of vocationalisation and the somalisation scheme.

The vocationalisation scheme called for a new practically oriented curriculum, with less emphasis on theory. The objective was that education could give the students practical and relevant skills required for a productive and meaningful life for both the individual and society as a whole. This scheme also meant a substantial increase in the number of vocational schools, with a view to producing highly-skilled technicians placing 56 percent of primary school graduates in technical and vocational secondary schools (Ministry of Education, 1987).

The principle of Somalisation was by far the most ambitious, and arguably the most successful policy initiative. The main objective of Somalisation was to make Somali language the centre of entire school curricula, with strong emphasis on the national culture and tradition. As Somali replaced foreign languages as the medium of instruction, so were new syllabuses and textbooks written by s to replace the foreign ones. In 1974, the Ministry of Education had appointed 15 author committees consisting of 268 teachers and curriculum development officers. The Somali language continued to be the sole medium through which other subjects were taught as well as a subject throughout both the primary and secondary education until the outbreak of the civil war in 1991. Somali as medium of education was also used in

tertiary level, particularly in the Faculty of Political Science and Faculty of the Law of former Somali National University (SNU). The last National curriculum in operation before the collapse of the state was the 1986 National curriculum prepared by the then Curriculum Development Centre, Ministry of Education. This document clearly states that the Somali language is the foundation of the curriculum, as it is the medium of instruction throughout the primary circle and functions in the curriculum in two major roles:

(a) Somali as a subject

(b) Somali as the medium through which other subjects are taught.

Furthermore, this document describes the general objective of the curriculum for primary cycle education (Grades 1-8) and sets out in detail the content of instruction for each subject at each grade level. The document expresses also that the language embodies national identity of the Somali people. It states that the greater the knowledge of the Somali language, the stronger the sense of being Somali, while a nation without its own language is a nation without a soul (Ministry of Education, 1987).

"At the end of grade 8, pupils will have developed the specific language skills...the pupils will be familiar with literature in all its forms, and they will have gained pride in the beauty of language and they will understand the importance of language in National life(Ministry of Education, 1986, p. 10).

" Somali is the language which all s speak and through which they recognize each other; Arabic is the language which links the people with Arab nation, of whom they are an integral part, and the two languages shall continue to be the official languages of the Democratic Republic". Constitution as adopted on 23. September 1979. Article: 3.(Ministry of Education, 1986, p. 21)

Adam (1983) writes that the adoption of written Somali has permitted a vast expansion of schools. There were only 55,000 students enrolled in all Somali schools during 1969-1970. By 1980, school enrolment reached over half a million. Utilizing Somali in primary, intermediate and secondary schools has also necessitated the

preparation and printing of Somali books covering various school subjects. By 1976, 135 textbooks had been produced for various school subjects. In 1976 over six million copies of Somali textbooks for schools and for the general public use had been printed. In addition Somali literature had developed. New literary forms such as novels, short stories, written drama and poetry have emerged as a result of the introduction of a written form for Somali. Furthermore, Adam (1983) writes that when measures were taken to introduce Somali language as the language of administration in the country, it proved efficient in communication both within and between ministries and agencies. It has also helped to reduce the former gap between the state and the public. All this would have been an empty and futile exercise without the use of written Somali. Unfortunately, the language success of Somalia over the last thirty years seems to be losing its way.

1.4.1 The Current Status

The collapse of the state education system has allowed varied educational initiatives in all regions. Initiatives by local authorities, local Non-governmental organizations (NGOs), international donors, and private entrepreneurs have resulted in the establishment of education system varying in quality in relation to facilities, materials and human resource. These initiatives are expanding educational opportunities; some have however, the effect of compounding the orderly curriculum materials and medium of instruction that are geared to serving the needs of the majority of the Somali children. Foreign curricula were adopted and learning schedules that are different from those used in schools before the collapse of the state were introduced. In practice, every private school selects its own curricula and programme of education, and schools have no unified central authority to refer to as

the country is fragmented into regions and states and the role of the ministry of education is largely absent. Another aspect is the effect of placing a premium on the mastery of foreign languages and downgrading of the Somali language and thus the underlying the positive features of the society's rich culture. The Somali Language is now the medium of instruction in the primary schools and only taught as a subject in the secondary schools. Formerly, it was both a subject and a medium throughout the school system up to the time of Somalia's collapse. The cease of public education system in the country also symbolized that in many parts of the country's public education is being overtaken by private schools, both religious and secular. Some of the privately owned schools have a uniform curriculum to follow, while most of them use a wide variety of curricula with no common standards. On the other hand, the lack of an effective governing system in the country for more than two decades meant that there has been no common official language policy for the country to safeguard Somali language at least as medium of instruction in schools. As a result, the choice of the medium of instruction in schools was left to the schools. Throughout the period of civil conflict in Somalia, the adoption and use of English and Arabic as medium of instruction has been reinforced to become medium of instruction at all levels of Education in the country. The triumph of English and Arabic as media of instruction at primary education level has now become a real threat to displace the use of mother tongue in education system in the country. With regard to teaching science subjects with English or Arabic languages as medium of instruction, students generally hardly distinguish between the meaning of a term denoting a concept acquired through everyday experience and that denoting a scientific concept (Warsame, 2001).

1.5 Problem Statement

Somalia is linguistically homogeneous. It is blessed with a unifying neutral language –Somali –that is spoken by more than 95 percent of the population. In 1972 Somali was introduced and developed sufficiently as medium of instruction not only in primary schools but also in secondary schools and even some of the faculties of the former Somali National University as well. Since then Somalia was supposed to be a good example of a poor African country that formulated a policy of language planning and showed that, an African language could be modernized in a very short time. Indeed, the experience throughout all years, where Somali was used as medium of instruction has not only proved that the Somali language has the most propitious language situation for administrative efficiency in all of Africa (Brock-Utne, 2000). The situation remained so until the collapse of Somalia central government in 1991. Since then, all education matters at all levels has been by large in disorder. Of particular concern was the alarming decline in the level of use of Somali as a medium of instruction. The Somali language which in pre-civil war era was used as the medium of instruction throughout the primary circle as well as the secondary school levels of education has now been down-graded to function only in lower primary level meaning that after Primary (Grade 8th), students are streamed according to medium of instruction into two types of secondary schools, namely those with English as the medium of instruction and those with Arabic as the medium of instruction. One major problem with this mode of late immersion is that most students entering English-medium secondary schools are not equipped with an adequate level of English proficiency for them to learn content (non-language) subjects effectively in English. What is more is that, most of current Somali teachers

do not have adequate English skills and knowledge to teach their subjects and as a result, many teachers use a mixture of Somali and English or Arabic for instruction (Warsame, 2001).

The cease of public education system in the country also symbolized that in many parts of the country, public education was being overtaken by private schools, both religious and secular. The bulk of these privately owned schools (secondary schools where the medium of instruction is English and Arabic) have neither uniform curriculum to follow, nor common standards. In practice, every private school selects its own curricula and programme of education, and schools have no central authority to refer to (UNICEF, 2007/2008). According to UNICEF (2006/2007) currently, 60 percent of primary schools are using foreign Languages (Arabic and English) languages as medium of instruction. What is more is that neither teachers nor students have proficiency on Arabic and English languages. English and Arabic are both languages of power because their proficiency confers advantages in securing well-paid posts in the local government and in the commercial sector. In addition, most instructional media and pedagogical materials available at this level are also written in English or Arabic languages. Regarding the secondary school level, the UNICEF report shows that none of Somali secondary both private and public is currently using Somali language as medium of instruction (UNICEF, 2007/2008).

Many secondary school students in Somalia encounter learning science and mathematics subjects through English medium for the first time in school and rarely use it in their everyday lives. The problem of learning science and mathematics through English is compounded by other factors contributing to disadvantage, such as teachers who are not proficient in English and the lack of good science textbooks.

What is more is that, students neither do well in English language nor in science and mathematics (Warsame, 2001).

Another problem relates to teaching science and mathematics concepts, formulas, principles and problem solving approaches at secondary school level. Broadly speaking teachers have limited English proficiency and therefore have difficulties teaching science and mathematics entirely through English. Moreover, students are expected to fully understand science concepts in and indeed teachers have to set all tests and examinations in English and students' answers have to be in English –from the same students who could not cope due to the English or Arabic language during lessons. Moreover, medium of instruction clearly influences students' thoughts, perceptions and structuring ideas and this often creates problems in learning these subjects. In the same vein, when teachers and students very often fail to interact and communicate effectively during lessons and as a result, conditions which impair teaching and learning often arise (Barcelos, 2000).

1.6 Purpose of the Study

The purpose of this study is to explore how science teachers in current private secondary schools in Somalia cope with the problem of the medium of instruction arising from poor mastery of English by teachers themselves.

1.7 Research Objectives

This study aims at attaining the following objectives:

1. To find out the extent of the problem of English proficiency in science teachers in Somalia secondary schools.

2. To investigate how science teachers cope and how they help students to cope with the medium of instruction problem during the teaching and learning of science.
3. To explore the extent to which the teachers are skilled enough to make use of science teaching methods to help students understand the lessons.

1.8 Research Questions

The prime question of this study is concerned with the ways Somali secondary school science teachers surmount the problem of medium of instruction and what initiatives they take to cope with the linguistic barrier so as to make learning more effective and hence improve academic performance. This concern is addressed by the following questions.

Q1. What problems do the science teachers in Somalia secondary school have with regard to English language proficiency?

Q2. What initiatives do the science teachers take to promote teaching and learning of science subjects?

Q3. How do Science teachers' initiatives in coping with the medium of instruction influence student performance in the learning of science?

Q4. How do Science teachers' initiatives in coping with the medium of instruction influence student participation in science?

1.9 Significance of the Study

It is widely believed that medium of Instruction in education has considerable impact not only on the students' school performance and the daily work of teachers, but also it generates various forms of social and economic inequality. In Somalia, research on the impacts of the language used as a medium of instruction in secondary school

education as well as academic performance of the students is scant. Thus, this study is significant in the sense that the findings are expected to make a useful contribution-both theoretically and practically-to the current medium of instruction in Somalia. The study throws further light on how teachers in secondary schools in Somalia cope with the use of foreign medium of instruction in the teaching and learning of science and that the insights gained is believed to be instrumental in the rethinking of the education language policy. Similarly, the findings of the study may also positively influence the existing practices and attitudes of contributors to rebuilding education in Somalia as well as the wider Somali society's position toward the use of mother tongue as language of instruction especially in basic education. Furthermore the outcome of the study (the findings of the study) may also be helpful to the ministry of education to look the effects of using English language to the performance of students in secondary schools specifically, as the language of instruction then how to solve such problem to ensure better performance and quality education. In addition it is believed that the study will contribute to helping teachers who are the main stakeholders to identify what kind of measures to be taken to help the students who joined their school to cope with the new environment of using a language which is not familiar enough to them, that is English language. The study findings also will help students to develop awareness of importance of using English proficiently in their academic performance, also how to cope with the new environment of secondary school education. On the other hand, the findings of the study will help the researchers in education in their further researches as the findings of this study obtained aimed at helping more research to be done in this area of study.