



***Analysis on Recovery and Innovation of Education in Somalia:
Educational Programs, Pedagogy, and Teaching Tools***

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Abstract

This study spotlights the recovery and innovation in the Somali education system especially educational programs, pedagogy, and teaching tools. It focused on the elaboration of interactive educational programs and strategies, from the pre-primary level to the higher education. These programs also should be adapted to different contexts and numerous needs to be aligned with the fixed objectives to be accomplished. The recovery leads to the high mobility of education resources to demonstrate skills that are in keeping with those required by the Somali society. Globalization exposes education to free competition throughout the world. The new rules it has set in motion impose further difficulties for Somali education systems, which are and trying to adjust its education systems, and standards.

This study analyses the current educational programs, pedagogy, and teaching tools comparison in the internationally agreed definition as a reference classification for organizing educational programs and related qualifications by education levels and fields. There are substantial differences in educational programs, pedagogy and teaching tools and technology, and its modes of organization and functioning in Somalia.

The results of the study are presented in; to achieve the expected results, contents, and resources to meet certain criteria of quality of UNESCO, ISCED, 2011. This view requires the expansion of interactive educational programs and strategies, from the pre-primary level through higher education.

Keywords: Programs, Pedagogy, Standard, Teaching tools, Quality, Teaching

Introduction

State collapse fragility has badly affected the Somali education sector for decades. This has deeply wedged upon education standards and the quality of the education systems and programs. Evidence shows a clear correlation between strategies and quality control scheme, which embarked on the major components characterized as courses, units, or modules such as educational activities and practices and research projects. (MOEHE, 2012-2016)

The introduction covers two important topics: The first is the basic comprehensive framework for organizing education programs and

qualifications by applying uniform and internationally agreed definitions to facilitate comparisons of education systems in Somalia. The second deliberates on the quality of education, and the effects of the International Standard Classification of Education (ISCED) to Somali educational programs, pedagogy, and teaching tools.

The world's education systems vary widely in terms of structure and curricular content. Consequently, it can be difficult to compare national education systems with those of other countries or to benchmark progress towards national and international goals. To understand and properly interpret the inputs, processes, and outcomes of education systems from a global perspective, it is vital to ensure that data are comparable. Applying the International Standard Classification of Education (ISCED) and the standard framework used to categorize and report cross-nationally comparable education statistics. (ISCED; UNESCO, 2011)

Statement of the Problem

Until recently, quality and standard management of education programs, teaching, and learning have not been a paramount focus of policy-making in education service in Somalia. The oversight is now being addressed by the development of national and international quality assurance systems and standards in teaching and learning.

This is expected to strengthen mechanisms of implementing, enforcing and monitoring educational programs, pedagogy and teaching tools. The question focus on: What is the indication on the ineffective educational programs, pedagogy, and teaching materials in comparing with the International Standard Classification of Education (ISCED) levels? And

how the school curriculum and guidance materials are best support effective pedagogy in Somalia?

Objectives

The purpose of the study is to analyze the quality of education programs, pedagogy, and teaching tools, and the effects education systems in Somalia facilitating comparisons to apply uniform and internationally agreed on definitions especially to the International Standard Classification of Education (UNESCO, ISCED). The study aimed to review existing evidence on the related topic to inform program design and policymaking undertaken by the Ministry of Education, Culture and Higher Education (MECHE), private education sectors, international organizations; identifying analytical indications to guide the development of educational programs, pedagogy and teaching strategies in the education field in the country.

Methodology

The methodology of the study is based mainly on significant experiences observed in the Somali education system. The educational programs, pedagogy, and teaching experiences are analyzed and evaluated from the angle of the assessments drawn up by the leading federal Ministry of Education, Culture and Higher Education (MECHE), up to date documents, local education umbrellas, and international organizations working in the area of research study on education. The methodology used and adherence to international standards and guidelines, especially the International Standard Classification of

Education (ISCED) levels, 2011, to determining quality of education and functioning structure in Somalia.

Background of the Study

Somalia education system has difficulty in terms of governing and financing. There is limit public schools comparison with number of tremendous private education service delivery.

Public education schools still require intensive recovery to improve access to quality education. The ministry of education launched a national curriculum coupled with the development of learning resources. The MOECHE has developed the Education Sector Strategic Plan (ESSP) in 2018-2020, which is guided by the National Development Plan, The Education Act, and draft national policies. The ESSP focuses on seven subsectors such as Education in Emergency, Early Childhood Education, Primary Education, Secondary Education, Higher Education, TVET, and ABE. (MOECHE, School Mapping and Needs Assessment, July 2019).

In the recent past, the subject of education quality has been concerned due to the realization that the system quality as well as standards, management of teaching and learning has not been a paramount focus of policy-making in all education institutions in most countries. Consequently, tools have to be put in place to strengthen mechanisms of implementing, enforcing, and monitoring education quality in the systems. This includes review and enhancement of educational programs, pedagogy, and quality of teaching and learning facilities.

The current process of globalization has led to the internationalization of standard education, leading to competition not only for funding but also for quality students and staff. A reasonable quality assurance system in any education system, therefore, needs to incorporate indicators such as programmed objectives or the completion of a specified set of educational errands.

Successful completion of an education program is the achievement of the learning objectives of the program typically validated through the assessment of acquired knowledge, skills, and competencies. The award of an educational qualification usually documents the successful completion of a program. (ISCED 2011).

Sometimes the Somali schools are uses regularly intensive education programs due to education in emergence for the completion of a program level; therefore the responsibility rely on to avoid the education system fraud concerning to promoting students into qualification and certification without achievements of the related education level programs. This is one of constrains causes the real problem of high number graduate to be unemployment, which indicates an insufficient skill training regarding the acquisition of skills that is strongly aligned to the labor market needs.

Lack of strong quality control mechanisms caused by the untrustworthy in qualifications, programs studied quality, level of the teaching staff and teaching tools and reliable data in many education institutions in Somalia.

1. Educational Programs

An educational program is defined as a collection of educational activities, which are organized to accomplish a predetermined objective or the completion of a specified set of educational tasks. (OECD, 2017). Levels of education are an ordered set grouping education programs together in relation to gradations of learning experiences, as well as the knowledge, skills and competencies which each program is designed to impart (OECD, 2017). The ISCED level reflects the degree of complexity and specialization of the content of an education program, from foundational to complex. (UNESCO, ISCED, 2011).

Table 1, ISCED 2011 and ISCED-97 levels compared

ISCED 2011		Years ISCED		ISCED-97
01	Early childhood educational development	No duration Criteria	0	Pre-primary education
02	Pre-primary education	4 to 7 common is 6	1	Primary education or first stage of basic education
1	Primary education	2 to 5 common is 3	3	(Upper) secondary education
3	Upper secondary education	2 to 5 common is 3	2	Lower secondary education or second stage of basic Education
2	Lower secondary education	2 or 3	4	Post-secondary non-tertiary Education
4	Post-secondary non-tertiary education	3 to 4	5	First stage of tertiary education not leading directly

ISCED 2011		Years ISCED	ISCED-97	
5	Short-cycle tertiary education	2 to 3		to an advanced research qualification (5A, 5B)
6	Bachelor's or equivalent Level	3 to 4		
7	Master's or equivalent level	1 to 4	6	Second stage of tertiary education leading to an advanced research qualification
8	Doctoral or equivalent level	minimum of 3		

Source: ISCED 2011

Table 2, ISCED, UNESCO 2011 Description

Levels	Description
Early childhood education (level 0)	The level is a pre-primary, pre-school, provided programs in day-care centers, and nurseries. Programs at this level are designed with a holistic approach to support children's early cognitive, physical, social and emotional development.
Primary education (level 1)	Designed to provide fundamental skills in reading, writing and mathematics (i.e. literacy and numeracy) and establish a solid foundation for learning and understanding core areas of knowledge, personal and social development, in preparation for lower secondary education.
Lower secondary education (level 2)	Programs at this level are usually organized around a more subject-oriented curriculum, introducing theoretical concepts across a broad range of subjects. The aim is foundation for lifelong learning and human development upon which education systems may then expand further educational opportunities.

Levels	Description
Upper secondary education (level 3)	Is designed to complete secondary education in preparation for tertiary education or provide skills relevant to employment, or both. Programs at this level offer students more varied, specialized and in-depth instruction than programs at Lower secondary education.
Post- secondary non-tertiary education (level 4)	Provides learning experiences building on secondary education, preparing for labor market entry as well as tertiary education. It aims at the individual acquisition of knowledge, skills and competencies lower than the level of complexity characteristic of tertiary education. Programs are typically designed to provide a non-tertiary vocational qualification; or graduates from upper secondary vocational programs may choose to increase their level of qualifications or specialize further.
Tertiary education (levels 5-8)	Builds on secondary education, providing learning activities in specialized fields of education. It aims at learning at a high level of complexity and specialization. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education. It comprises: Bachelor's or equivalent level, Master's or equivalent level, and doctoral or equivalent level, respectively.

Source: (ISCED; UNESCO, 2011)

In Somalia, the education system levels consist: 2 years of early child development (ECD), 4 years lower primary education, 4 years upper primary education level, 4 years secondary and 4 years university

education. Early child development (ECD) and Non-formal Education (NFE) are the basic education. (Education Law, JUL 30, 2017)

Table 3, Summarizes the Levels of Programs in Somalia

Education	School/Level	Grades	Age	Years
Primary	Primary Education- Elementary Cycle	1–4	6–10	4
Middle	Primary Education- Intermediate Cycle	5–8	11–14	4
Secondary	Secondary School	9–12	15–18	4
Vocational	Technical and Vocational		15–18	4
Tertiary	Bachelor			4
Tertiary	Post-Graduate			?

Source: Education Law, JUL 30, 2017

Table 4, Description of Somalia Education Levels 2021

Level	Description
Early child development (ECD)	Quranic and Kindergartens Schools. Designed to teach children the Holy Qur'an and learn Arabic spelling, and prepare them learn to read and write letters and numbers.
Primary (Level 1)	Provide the student with fundamental skills, reading, writing, learning and understanding areas of knowledge, personal and social development.
Secondary (Level 2)	Provides a variety of knowledge, built on the foundations of science, technology, introducing theoretical concepts, competent knowledge improving the quality of his life and that of his community. Secondary education is divided into: Normal secondary school with a study period 4 years. Islamic institutes with a study period of 3 years to four years. Technical secondary schools with a study

Level	Description
	period of 3-4 years. And vocational secondary schools with a study period of 2-3 years.
Tertiary (Level 3)	The level consists: universities or other institutions, Educational institutions and educational organizations and research centers. It provides academic knowledge, research development and quality education.

Source: MOECHE, Education Law, July 30, 2017

The level of an educational program should be determined by its educational content. It is very difficult, however, to directly assess and compare the content of the educational programs in a way that is internationally comparative. (ISCED; UNESCO, 2011)

2. Curricula Centered on Educational Programs

The curriculum is part of a long-term approach that is closely connected with the choice of educational policies and governmental strategies on education. Among the aspects that distinguish curricula from study programs, focusing on the outcomes of education occupies a determining position. Thus, in a curriculum, efforts will be made to express the goals of the education system in reference to what is expected from learners, whereas in a study program, the interest will center more on what the teacher should do to obtain these results. (Depover, C. (2006).

Curricula are too diverse, multi-faceted, and complex to allow for clear judgments that one curriculum for students of given age or grade belongs to a higher level of education than another. (ISCED; UNESCO,

2011) The curriculum concentrates exclusively on what the students will be capable of achieving on the basis of those subjects. In this case, is to set up a permanent observatory on education that could eventually contribute to programs designed to evaluate the skills appropriated by students.

Educational programs in Somalia reflect the general objectives of the curriculum specifically units and their results, teaching and learning methods, learning materials, assessment process, and curriculum implementation, and student progress. (MECHE, Education Law, July 30, 2017). But must take into account the major political decisions and system quality. Although many schools and skills training centers have been established in Somalia, teachers and instructors have been trained, curricula developed and textbooks provided somehow, but the demand for quality education is far outstripping its availability (MOECHE, 2019).

It is very important to state the links between the curriculum and educational policy in order to understand clearly the reason of the curriculum. The fundamental principles of the curricula approach in Somalia needs to address the demands for lifelong quality education for all and the introduction of the skills that are necessary for the personal development of individuals in their environment; and the languages of instruction and teaching. (MOEHC, Curriculum Framework, Mogadishu, 2017)

Lifelong quality education for all, it is necessary to draw up curricula based on educational measures and a stronger interrelationship between theories, practices and experiments. The educational programs in Somalia

should be designed for all levels of education and teaching, taking into consideration of the demands of inclusive and quality persists in long life education. (MECHE, Education Law, July 30, 2017) Ambitions for education are essentially captured in (SDG 4) of the 2030 Agenda, which aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030. The roadmap to achieve the education goal, adopted in November 2015, provides guidance to governments and partners on how to turn commitments into action. (<https://en.unesco.org>)

The lasting acquisition of skills needed for personal development throughout a lifetime require an evaluation of the teaching programs and activities applied at different levels of education and training, from early childhood to higher education. For this purpose, every country will equip itself with structures for evaluating and managing its education system, or will reinforce already existing ones. Based on a systemic approach, the priority of periodic assessments will be to define the quality and relevance of the education offered. (UNU, 2009)

Skills development, the accomplishment of the skills needed for personal development throughout a lifetime in teaching programs and activities and applied at different levels of education and training from early childhood to tertiary education. “Personal skills development is an acquisition or modification of information, knowledge, understanding, attitudes, values, skills, competencies or behaviors through experience, practice, study or instruction”. (ISCED- 2011). Skills required for employment can be divided into: Basic and foundation skills, transferable

skills, technical and vocational skills, professional and personal skills, including individual attributes relevant to work such as honesty, integrity, reliability, work ethic, and judgment. (<https://cdn.sida.se>)

Languages of instruction and teaching: Languages of instruction and teaching in Somalia are trilingual: Somali language, Arabic and English. “the objective of this policy depended on that the language is a fundamental factor in the interaction between education, culture and participation in society while the languages in education influence language status, and language structures. According Somali federal education law, languages of instruction, and teaching in the different levels of the schools in detail are:” (MOECHE, Education Law, 2017)/

1. Primary education (1-8) is taught by Somali language. But improved English language as a subject begins in 3rd grade.
2. Primary education (1-8) Levels in the country can be taught by other languages if there are authorized mandate from the Ministry of Education with accordance of the curriculum policy approved by the Ministry. Teaching Somali language, Arabic and Islamic education as a subject will be compulsory.
3. Somali language, Arabic language or English are used as instruction languages in upper secondary education.
4. Quality Arabic language and Islamic studies that are taught in Arabic are mandatory for all classes; which begins in the Kindergarten.
5. Social studies subject is a requirement subject in all the classes; it is taught by Somali language.

Technical and Vocational educational programs in Somalia now is based on a short-term approach programs, now, the training programs are not sufficiently turned into the planned occupation quality. (MOECHE, ESA 2021). In Technical and vocational programs, some programs devoted to subsidiary subjects than the main subject matter of the projected occupation. According ISCED criteria such a programs and their resulting qualifications should be classified in the vocational field associated with the intended occupation or class of occupations. This is an exception to the rule on the classification according to the majority or predominant subject as it is important to be able to identify separately target occupations of vocational programs and qualifications. (UNESCO, ISCED, 2013).

In 2018, labor market needs survey, funded by the EU, indicated the persistent mismatch between skills and education programs acquired by trainees and the expectations from the market (MOECHE, SHEDS, 2018).

The tertiary education in Somalia is a part of the world; it needs to develop the international standards, principles and requirements. The widespread privatization of higher education in the country obligates them to adopt vital strategic management practices to boost up their performance, innovation and quality.

On a different level of tertiary education level, the higher education institutions have challenges to face. These challenges concern the relevance of the courses available, the research undertaken and international visibility. Students attending in the humanities programs are

outstripping the programs of science. The balance enrolment basic on the programs offered in the universities is dichotomy, 46% having been enrolled in humanity based faculties, while 54% enrolled in science-based faculties. (MOECHE, EMIS, 2020).

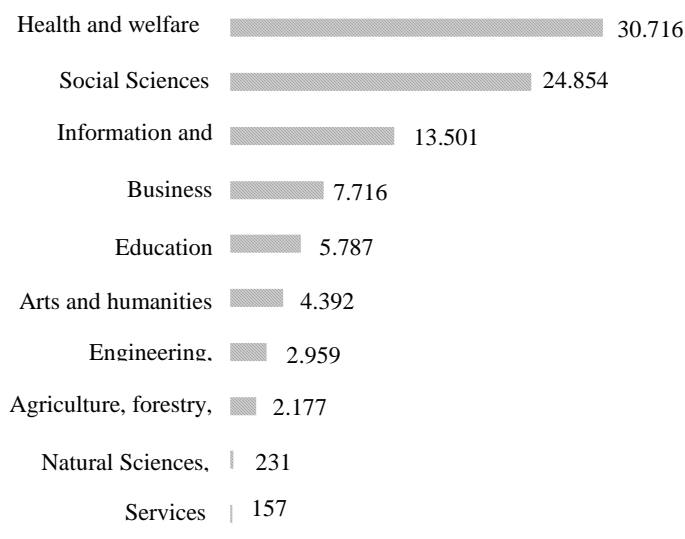


Figure 1. Somalia student enrolment on the programs 2019/2020

Source: MOECHE, EMIS, 2020

ISCED fields of Education and Training (UNESCO, 2013) define ten fields of training, which the various faculties have been merged. In 2020, the population estimates show that there were more than 2 million youth aged 18-24. (UNPD, 2019) They can be considered to have been eligible for technical, vocational and university or tertiary education. (ISCED-2011)

Available data shows that only 103,400 trainees and students were enrolled in accessible institutions, this enrolment representing only 5

percent of the eligible population youth aged 18-24. This result demonstrates the large number of eligible youth who are not reached by the post-secondary programs. (MOECHE, EMIS, 2020).

Table 5: Participation Rates in Higher Education

	Male	Female	Total
Enrolment in TVET	5,129	5,747	10,876
Enrolment in Universities	-	-	92,490
Total enrolment (2019/20)	5,129	5,747	103,366
UNFPA 2014 (ESA 2016)	-	-	145,309
Population (18-24)	1,077,946	1,074,243	2,152,189
Tertiary GER			4.8%

Source: MOECHE, EMIS, 2020

This means, Somalia reveal low access rates in tertiary education, especially in the context of SDG4 which contemplates that countries will create opportunities for all eligible youth by 2030.

Table 6: The Total Number of Students Graduating from Universities in 2019-2020

<i>Total</i>	<i>Boys</i>	<i>%</i>	<i>Girls</i>	<i>%</i>
17,548	12,196	(69.5%)	5,352	(30.5%)

<i>The four section with the highest number graduate of students</i>		
<i>Section</i>	<i>Number of students</i>	<i>%</i>
Accounting, Human Resource and Banking and Finance	2,644	(15.10%)
Public administration	2,571	(14.65%)
Nursing and Midwifery	2,270	(12.94%)
Computer Science and IT	1,772	(10.10%)
<i>The four section with the low number graduate of students</i>		
Dentist	4	(0.02%)
Pharmacy	14	(0.08%)
Journalism	17	(0.10%)
Statistics	27	(0.15%)

Source: (Iftin Foundation, Sahanka Qalinjebiyaasha dalka, 2020)

Somalia, only two sources of data on learning outcomes originated from national exams and school-level assessments are exist. Both sets of exam data were limited with grade eight national exam data only available for the 2019/2020 school year while grade 12 exam data is available from its inception in 2015 to the present. The recentness of these learning assessments has affected their levels of uptake, limiting the comparability of trends over time. As such, it is more pertinent to consider results as a snapshot of current learning trends than as comprehensive indicators of the quality or evolution of the system. Furthermore, still, the management of the majority of education functions

sits with state-level governments; while evaluation at both the primary and secondary level is responsible for of the FGS (MOECHE, ESA 2021).

3. Pedagogical Innovation and Teaching Practices

In terms to understand the extent to which curriculum and teacher education are enabling factors in the most effective pedagogies identified, it must be recognized that the curriculum is the reference point for the pedagogical strategies and practices used by teachers, and that teacher education formally introduces teachers to the curriculum and its pedagogy and the teaching profession. Successful pedagogies focus on more concrete pedagogical strategies and practices to understand what worked and what did not. The related pedagogy questions are: How teachers are teaching? Where pedagogies are identified as successful? and what reasons are put forward to success in their context?

The teacher training policy introduced in 2020, the policy outlines that to be considered a qualified teacher in Somalia at the primary level, individuals must have completed at least secondary education as well as have taken an eighteen-month to a two-year primary teacher training course, complete mandatory practical teaching, and pass a requisite examination (MOECHE, 2020). Secondary school teachers are required to undertake a degree course that may take up to four years, resulting in either a Bachelor of Education or a postgraduate Diploma in Education, with the latter requiring additional practical training before qualification (MOECHE, 2020). However, this includes only those that have trained specifically in education, while others who have achieved higher studies

in other subjects are “under-qualified,” indicating teachers who have achieved higher studies, whether it be a bachelor's or master's degree, without a specialization in education. (MOECHE, 2020). Thus, this is comparable with the ISCED's standards.

The teacher training in Somalia currently has no unified training curriculum. The MOECHE is attempting to change this through its new policies for teachers introduced in 2020, which promises the development of a detailed teacher training syllabus to be used in approved teacher training institutions. (MOECHE, 2020) However, the quality of education provided at existing training institutions is widely variable, often resulting in a lack of pedagogical skills and subject knowledge.

Pedagogy is seen to be the weakest area of knowledge for both primary and secondary teachers. Teachers have greater subject-level knowledge specifically in Islamic Studies and the Somali language, rather than practical teaching skills, limiting their ability to deliver content to students in an effective manner. (MOECHE, 2020). The curricula adopted seem to be relevant to the presented, anticipated future needs of the learners, and thus correlate with needs information due to circumstances changed such as life skills, civic education, and the environment.

4. Class Size and Pupil Teacher Ratios (PTR)

A class with large numbers of students led to an increased number of academic and pedagogical issues, which in turn, lead to increased administration and management responsibilities. The large-sized classes yield reduced student levels of active involvement in the learning

process, reduced frequency and quality of instructor interaction with and feedback to students, reduced student motivation, and reduced development of cognitive skills inside the classroom (TEDI, 2003).

The size of classes and their effectiveness depend directly on the number of schools and classrooms available, as well as the number of pupils and teachers. “Somali education is characterized by the low pupil to teacher ratio (PTR) in some area probably due to the low enrolment of pupils in schools and the high number of teachers that are placed in those schools”. (MOECHE, ESA, 2021).

Unqualified teachers with some form of educational qualification including degree level are in some cases recruited as teachers affecting the PTR of a class. In an ideal situation, a low PTR is regarded as a situation where teachers give targeted individual attention to each learner (MOECHE, School Mapping, July 2019). The pedagogical methods practiced by teachers depend largely on the class size. The advantage of direct participation by pupils in the learning process has been proved since the introduction of active methods based on established psychological and organizational knowledge. (UNU, 2009)

The results are mixed when examining the number of pupils per classroom, with a large range and the lowest ratios seen in some schools, to the high student’s ratios per classroom in other area schools. Classroom ratios are seen to be similar to PTRs, suggesting the use of single classrooms per grade, when accommodating the prevalence of the double-shift system. (MOECHE, ESA, 2021).

5. Textbooks and Teaching Aids

Textbooks are under-supply in some schools in government schools and private schools (MOECHE, ESSP 2017). Its short supply with the lowest ratios is in early grades, but textbooks provision consistently increasing each year, leading to highest ratios in form four due to particular concerns given as secondary terminal year in which students require learning materials to succeed in examinations. (MOECHE, ESA, 2021).

The government has been unable to reach its target in the former Education Sector Strategic Plan (ESSP) in 2018-2020 for the distributing textbooks to 100% of schools by the end of 2020. (MOECHE, 2017). Therefore, a shortage of learning materials indicates that the quality of education to below as well.

6. ICT and Education in Somalia

ICT Sector Support in Somalia contributes to an enabling environment and encourages efficiency and equity in access to connectivity. This includes supporting legislation and connectivity for higher education institutions. (World Bank, Multi-Partner Fund, 2017).

ICT has drastically changed how people work, communicate, learn and live. The United Nations considers one of its Sustainable Development Goals (SDG) to "significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in the least developed countries by 2020." (UN.org).

Somalis education system has benefited greatly from ICT to manage COVID-19 frequent lockdowns. “Somalia had a population of 16.12 million in January 2021. There were 1.95 million internet users in January 2021. The number of internet users increased by 329 thousand (+20%) between 2020-2021. Internet penetration in Somalia stood at 12.1% in January 2021. (Datareportal.com).

This means “School closures offer a powerful moment for reorienting education from school attendance to learning”. (UNICEF, 2020) for example, online ZOOM applications became popular in daily distance learning in Somalia.

Education can harness three key opportunities: (UNICEF, 2020)

- a. **Digital learning.** Governments have widely expanded their use of technology to support distance and home learning, including online learning, and via radio, television, SMS and interactive voice response media. These expansions represent an opportunity for enhancing quality education provision for in- and out-of-school children through digital technologies, including those most hard to reach.
- b. **System-wide focuses on learning.** For example, the Research on Improving Systems of Education (RISE) program promotes evidence-based knowledge sharing on subjects such as incentivizing teachers in remote areas, and how to improve teaching practice.
- c. **Life-wide learning.** “Life-wide” learning is a term to capture the learning that takes place across a child’s life experiences, not just in school. Parents and primary caregivers play a leading role in how learning and intellectual stimulation in and around the home can be

structured. The COVID-19 response has seen a massive scale-up of learning in the home and offers opportunities to further capacitate parents, caregivers and communities as facilitators and supporters of learning, and to reinforce life-wide learning as a critical component of a quality education.

Analysis and Discussion

What is the indication on the ineffective educational programs, pedagogy, and teaching materials in comparing with the International Standard Classification of Education (ISCED) levels? And how the school curriculum and guidance materials are best support effective pedagogy in Somalia?

It is clear that education recovery in Somalia generally is bearing in the right direction. Some education infrastructures are restored. Government develops some strategies through the education system improvement plans such as curriculum reform, teacher training and recruitment, improving policies and strategies towards education, but still a lot have to be done to fill education gap indicators, facilitating education program standard, foundations for the structured pedagogy framework and teaching materials enhancement.

The literature and ministry of education document review show that 2016-2020 education policies and strategies not fully implemented specially transformation of good quality education service bases and standards. There are some education gaps related to monitoring, oversight, and quality assurance of what is going in the classrooms. Limited inputs of quality in terms of infrastructure and associated facilities are a major

concern in the education system. There is no reliable updated data confirming the present situation, especially in the educational programs, pedagogy, and teaching tools. There is a weak transition to the labor market, with a persistent mismatch between training and skills demanded by the market, whose root cause is the lack of a harmonized curriculum and teaching tools.

Despite most schools in Somalia are run by private umbrellas, the government made it compulsory to take centralized final exams in leaving certificates in the secondary and intermediate schools. The federal ministry of education and the state governments can't reach many schools in the country due to insecurity. The argument is, who knows what sort of education programs implementing in those schools? And how teaching and learning materials could be accurately match the education objectives?

The above indicator proved practically, in 2019/2020 Ministry of Education announced the results of the secondary school certificate final examination. The examination was covered by four regional states in Banadir region. The results showed that the number of students in the Banadir region who failed the final exams was estimated (30.94%); it means the total of 25,449 students from Banadir region failed 7,873 students. (MECHE, 6 September 2020). The consequence created a big question that needed to address scientifically and technically. However, some research findings occluded: (AbdiShakur, 2020):

- a. Students in Banadir region did not get enough opportunity to study due to COVID-19 early lockdowns. All the education classrooms are suspended randomly without alternatives.

- b. Some schools in Banadir region were suspected to include their lists some students who did not complete the required education level for the sake of profit.
- c. The exam questions in previous years was consist only the form four curriculum, but this year the questions were expended and was taken from the whole four years of the secondary program course units, so many students weren't prepare themselves for it.
- d. The exam has a lot of essay questions, so it may be difficult for many students, while answer of the students were not being corrected properly by skilled teachers and financial problem.

In terms of the teachers, the under-qualification and non-qualification of teachers are predominant across the country and even when teachers are trained, they lack pedagogical skills. This places a constraint on the quality of education that can be provided in the education systems. The focus needs to be placed on addressing the currently under and unqualified teachers, as well as ensuring future recruitment contains more qualified teachers.

Ministry of education document review shows that textbooks are severely undersupplied across states levels and education authorities. The absence of a national textbook policy, which outlines all the responsibilities, is also a challenge, textbook acquisition constraints to implement improved or redistributive policies. (MOECHE, ESA, 2021)

Large proportions of schools in Somalia still lack access to key infrastructures such as electricity, water, and toilet facilities. There is also

a clear undersupply of desks to schools. Examining infrastructure at the many regions in Somalia shows a more targeted approach and view of potential areas for infrastructure upgrades. (MOECHE, ESA, 2021).

Exam results are relatively strong but highlight some subjects, which may require particular attention, such as Math, Biology and Chemistry at the form four levels. The newness of grade eight exams makes it difficult to provide concrete recommendations. (MOECHE, ESA, 2021). However, Attention should be given to maintaining the high proportions of enrolled students sitting these exams in the coming years.

The problem with higher education is that there are no evaluated educational programs and qualified teachers. All university education programs haven't had an accreditation assessment, the value of credit hours is not known, and many university teachers' qualification does not meet the standards of higher education programs they are working in it. Many private universities have opened for economic purposes; however, the ratio of the second graduate student's population is less than the number of universities in the country. The question is where do all universities get enrolled, students?

The ISCED standard comparison of education programs in Somalia needs to be addressed. ISCED defines educational program should be allocated to a particular level of education on the basis of its educational content, which in practice is determined by applying classification criteria such as typical starting ages, entrance qualifications, and type of qualification awarded. (ISCED, 2011) The educational program is the main building block for international statistical comparisons in education.

The higher education commission appointed in July 2019 is supposed to be a key driver of quality of education in the universities but apparent lack of political will and competence skills in support, and its functions will continue to keep the sector in reform mode for too long. (MOECHE, ESA, 2021)

Main Findings

1. Somalia education, having been in recovery through policy reforms, curriculum review, production of teaching and learning materials, education sector assessment, and certification of formal primary and secondary school and tertiary education. The need finds ways of innovating and improving the impact of its quality.
2. Teaching practices are not based on socio-constructivist theories, which became popular in educational philosophy. “Which supported by empirical research, the methods based on the ideas, for example, student-oriented practices and cognitive. (Vieluf S., et al., 2012) The majority of the teachers are using the teacher-centred approach. Therefore, focusing on one method in the classroom-teaching practices influenced by pedagogical backgrounds. Somalia needs more professional teachers in the field of teaching and learning.
3. Higher education constrains include to quality of teaching and learning facilities, faculty and other staff, development, review and enhancement of academic programs, monitoring of students assessments, student support services among others.
4. Most universities do not have good research mechanisms, because there is no national policy on research in placed. Research contributes

significantly to a university's professional profile as well as access to funding and quality human resources.

Recommendation

1. To escalate the quality of education, this needs to adopt a systemic approach, establishing reliable education policies; teacher training, research, and skill needed programs, teaching methods and pedagogical materials.
2. Giving more attention to the gaps usually observed between the prescribed programs, the programs planned by teachers for application in their class and the programs taught.
3. Enhancing processes of curriculum development, review, assessment of learning outcomes, staff and student evaluation, data collection and analysis, utilization of research findings for improvement;
4. The study suggests implementing pedagogical programs separately from policies and teacher training, to assist transform-targeting policies into real achievements.
5. To offer in-service teacher training to the large number of the teachers that are working within the system, alongside pedagogical training opportunities in order to provide teaching specific qualifications to those with non-education specialized types of higher education qualifications.
6. The language of instruction knowledge is a precondition for provision education of a high standard, facilitating understanding by the learners, and achieving the objectives fixed by the teaching of the education programs.

7. The study suggests that with the standardization of teacher training institutions and curriculums, investments need to be made in upgrading the skills of qualified teachers within the system as well, especially in pedagogy and teaching practices.
8. Greater emphasis is needed on school-based assessment for all grades, to provide a more comprehensive picture of learning programs, learning material, and learning outcomes, rather than only the terminal grades.
9. The university should have not-for-profit programs and activities to solve societal problems around them and beyond.
10. The research agenda should be addressed, therefore; tools ought to be put in place to measure research productivity and impact.
11. The study suggests giving more concern to education as a global system that gives meaning to the Somali systems comprising it, especially to meet certain criteria of quality of UNESCO, ISCED, 2011, to achieve the expected results, contents, and resources.

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