

GUIDELINES FOR THE IMPLEMENTATION OF THE CURRICULUM FOR ORDINARY LEVEL SECONDARY EDUCATION FOR DEAF AND HARD OF HEARING STUDENTS

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Curriculum for Ordinary Level Secondary Education.	
Curoa,	
Dr. Lyabwene M. Mtahabwa	
Commissioner for Education	

Tanzania Institute of Education

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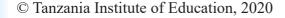
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PREFACE

These guidelines for implementing the curriculum for Ordinary Level (O-level) secondary education are lawfully issued under the Government authority pursuant to Sections 4 (d) and 21 (1) of the Tanzania Institute of Education Act (CAP 142 R. E. 2002), UN Convention on the Rights of Persons with Disabilities (UNCRPD) (2006), and National Strategy for Inclusive Education (2018–2021) of 2017. They set procedures and standards that must be adhered to in the process of teaching, learning and assessing the deaf and hard of hearing students. The guidelines are intended to be used in special and inclusive secondary schools for deaf and hard of hearing students and teacher training colleges in Mainland Tanzania and Zanzibar.

The guidelines have been prepared to address the challenges of enrolling, teaching, learning, and assessing deaf and hard of hearing students in O-level secondary schools. It is anticipated that the guidelines will help teachers of deaf and hard of hearing students in O-level secondary schools to effectively use the suggested methods to adapt to teaching and learning resources, teaching methodology, assessment tools, and relevant accommodations.

While efforts have been made to address the key components relating to procedures, standards, and checks on the quality of supplementary books, these guidelines may not necessarily be exhaustive. Should any circumstances arise, under which the guidelines prove to be inadequate, a proposal may be sent in writing to the Director General (DG) of the Tanzania Institute of Education detailing required improvements. After due consideration of the case, the Director General may initiate an amendment process pursuant to provisions of these guidelines. However, any such amendment shall not be authoritative unless it is passed by the Council of the Institute and endorsed by the Commissioner for Education.

Prof. Bernadeta Killian

Chairperson

Council of the Tanzania Institute of Education



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Likewise, TIE would like to express its appreciation to Palladium Group Tanzania through the I4ID programme and Cambridge Education through the Education Programme for Results (EPforR) for financing the development of these guidelines.

Dettille.

Dr Aneth A. Komba

Director General

Tanzania Institute of Education



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ABBREVIATIONS AND ACRONYMS

ALD Assistive Listening Device

CD Compact Disc
DVD Digital Video Disc
DG Director General
ENT Ear, Nose and Throat

EPforR Education Programme for Results

ESDP Education Sector Development Programme

FM Frequency Modulation

ICS Information and Computer Studies

ICT Information and Communication Technology

IEP Individualized Educational ProgrammeI4ID Institutions for Inclusive Development

IR Infrared Radiation

IT Information Technology

MoEST Ministry of Education, Science and Technology NECTA National Examinations Council of Tanzania

O-level Ordinary level

PO-RALG President's Office, Regional Administration and Local

Government

SQA School Quality Assurer

SDGs Sustainable Development Goals
SNEO Special Needs Education Officer
TIE Tanzania Institute of Education
TSL Tanzanian Sign Language

TV Television

TASLI Tanzania Association of Sign Language Interpreters

UN United Nations

UNCRPD United Nations Convention on the Rights of Persons

with Disabilities

VRI Video Remote Interpreting WEO Ward Education Officer



INTRODUCTION

1.1 About the Tanzania Institute of Education

- (a) The Tanzania Institute of Education (TIE) was established by the Tanzania Institute of Education Act No. 13 of 1975 (CAP 142 R.E.2002). It is a public institution under the Ministry of Education, Science and Technology. The main functions of the Institute are as follows:
 - (i) To assume responsibility for the development of educational programmes within the United Republic regarding the objectives specified by the Government and to evaluate the courses of study and practices based on such objectives;
 - (ii) To analyse, review, and revise curricula and syllabi;
 - (iii) To initiate, promote, and supervise any changes in syllabi and educational programmes as necessary for the implementation of the national policy on education;
 - (iv) To specify the standards of equipment, instruments, and other devices which may be used for educational purposes in schools, colleges, and other learning or training institutions;
 - (v) To provide facilities for and to undertake the production of equipment, instruments, and other devices for educational use;
 - (vi) To conduct training programmes in various subjects on the development of curricula and syllabi as the Council may decide from time to time;
 - (vii) To collect information on methods of teaching, content of courses of study, and current technological developments in education and make it available to the Government and other public authorities;



- (viii) To advise and recommend such matters relating to curriculum reform as the Minister for education may refer to the Institute;
- (ix) To sponsor, arrange and provide facilities for inservice training courses, conferences, workshops and seminars:
- (x) To manage the affairs of any institute, college, training establishment, or other educational institutions whose interests have been transferred to or otherwise acquired by the Institute; and
- (xi) To do anything or enter into any transaction which, in the opinion of the Council, is meant to facilitate the proper and efficient carrying of its activities and the proper performance of its functions, as specified under this section.
- (b) The mandate of the Institute covers pre-primary, primary, and secondary education as well as teacher education levels.

1.2 Citation and interpretation

- a) These guidelines shall be cited as Tanzania Institute of Education Guidelines for the Implementation of the Curriculum for Ordinary Level Secondary Education for Deaf and Hard of Hearing Students.
- b) In these guidelines, unless the content otherwise requires, the terms and words applied shall have the meaning as described hereunder:

"The Act" Refers to the Tanzania

Institute of Education Act No. 13 of 1975 (CAP 142 R.E.2002) as amended from

time to time.

"The Council" Refers to the Council of the Tanzania Institute of



Education established under the Act, and, in relation to its powers, includes such bodies and persons to whom such powers are delegated.

"The Director General"

Refers to the Director General of the Tanzania Institute of Education and includes a person or group of persons to whom the powers and responsibilities of the Director General have been delegated.

"Institute"

Refers to the Tanzania

Institute of Education.

"Deaf Education"

Refers to the education of the deaf or hard of hearing

students.

"Deaf student"

Refers to an ordinary level secondary school student who has a profound hearing loss.

"Hard of Hearing Student"

Refers to an ordinary level secondary school student who has residual hearing.

"Inclusive School"

Refers to an ordinary or technical secondary school in which deaf and hard of hearing students are educated together with hearing students, who have no any other sensory impairment.

"School"

Refers to a special and inclusive school educating

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deaf and hard of hearing and/ or hearing students.

"Sensory impairment" Refers to an impairment of

the senses which includes but not limited to sight, cognitive,

and hearing.

"Special School" Refers to a secondary school

enrolling deaf and hard of

hearing students only.

1.3 Methodology

The preparation of the Guidelines for the Implementation of the Curriculum for Ordinary Level Secondary Education for Deaf and Hard of Hearing Students followed the following stages:

- (a) Selecting qualified experts such as TIE curriculum coordinators, researchers, academics, and specialist teachers and tutors.
- (b) Collecting and reviewing relevant documents, such as international, regional and national policies, guidelines, statements of action, publications, journals, curriculum frameworks as well as international proclamations, and conventions on deaf education.
- (c) Reflectioning, consulting and discussing various materials and information gathered from deaf education stakeholders to make concerted decisions on how best to develop guidelines.
- (d) Drafting guidelines and referring them back to stakeholders for discussion and peer review.
- (e) Reviewing the guidelines, incorporating comments, testing the guidelines, editing them, and forwarding them for approval.



1.4 Effective date

The guidelines, including all the amendments thereto, shall become effective upon endorsement by the Commissioner for Education on such a date as may be chosen.

1.5 Structure of the guidelines

These guidelines are organised into preliminaries, seven parts of the main body, the bibliography, and a glossary. The preliminary sections include the title, copyright page, table of contents, preface, acknowledgements, abbreviations and acronyms. Part One introduces the guidelines. Part Two presents background and justification. Part Three presents the structure of deaf education, learning areas, and subjects. Part Four presents professionals and support services for deaf and hard of hearing students. Part Five highlights the facilitation of learning for deaf and hard of hearing students. Part Six presents the standards for resources required to implement the curriculum. Part Seven focuses on the assessment of deaf and hard of hearing students.

1.6 Procedures for the development and amendment of the guidelines

The development and amendment of these guidelines shall follow the following procedures:

- a) The Director General shall prepare an initial draft of the guidelines or amendments thereto and submit the draft to the Academic Affairs Committee of the Council for scrutiny, improvement, and onward transmission to the Council for further action.
- b) The chairperson of the Academic Affairs Committee shall table the said draft to the Council that may improve or vary the draft, as it may deem appropriate.
- c) The draft document shall be submitted to the Commissioner for Education for endorsement with or without alterations as he/she may deem fit.



BACKGROUND AND JUSTIFICATION

2.1 Overview of deafness

Deafness is a condition of total or partial hearing loss that prevents an individual from perceiving a sound signal in all or most of its forms. Levels of the condition differ from one person to another. As a result, a person fails to speak fluently because, in most cases, people develop speech from what they hear.

2.2 Types of deafness

Hearing loss is described based on various categories which include the part(s) of the ear(s) damaged, time of onset, language acquisition, and degree of hearing loss. A person affected in the outer ear, middle ear, or both experiences conductive hearing loss while the one affected in the inner ear experiences sensorineural hearing loss. Other deaf people have mixed hearing loss, which means they have both conductive and sensorineural hearing loss. Moreover, some deaf people have central hearing loss. These face challenges in the central auditory processing part of the brain that processes linguistic information. Besides, some people lose hearing in one ear, and they become unilaterally deaf. In contrast, those who lose hearing in both ears become bilaterally deaf.

There are two types of deafness based on the time of onset. The first type is congenital deafness, which occurs at birth. The second type is acquired deafness (adventicious) which occurs after birth. In the acquired deafness, there are two distinct types of deafness based on language acquisition, namely pre-lingual and post-lingual deafness. The pre-lingual deafness is acquired before the development of speech, while post-lingual deafness is acquired after the development of speech.

Moreover, there are four types of hearing loss based on the



degree of deafness, namely mild, moderate, severe, and profound; these depend on how well a person can hear the intensity of sound at different frequencies. A person with severe to profound hearing loss can only hear very loud sounds, such as a fire alarm or a bass drum with the aid of hearing devices. The deaf in this group primarily learn through sight because they cannot understand any speech. Hence, sign language is likely to be their first language and principal means of communication.

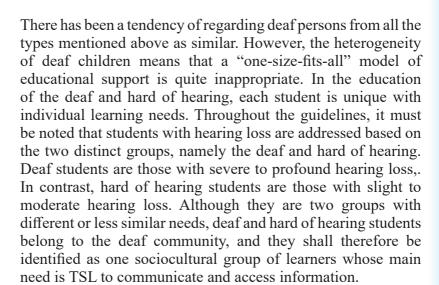
The congenitally and pre-lingually deaf face many challenges to learn spoken languages; those who manage to learn a spoken language may have poor pronunciation compared to their peers who can hear. Even some of the deaf who have passed through special schools end up producing unintelligible utterances. This poses a great challenge in communication between hearing people and the deaf, who find it difficult to communicate effectively in the educational setting.

The post-lingually deaf are less disadvantaged as they can at least express themselves orally, and they can be understood in the educational setting and the community. Each type of deafness has its specific needs in education. If the needs were met at early stages, the deaf students could utilize their potentials and meet thier aspirations.

2.3 Impact of deafness on an individual

Deafness blocks individuals from hearing their own voices and those of others around them. Consequently, they fail to get feedback via sounds, pitch, intonation and accent. Therefore, they fail to speak even if they are not dumb. This situation has been confusing the hearing community, making them fail to identify and understand the deaf and their challenges. Even the deaf who manage to learn spoken languages lack the correct pitch and accent in such languages because they do not get any feedback from the spoken languages.





Therefore, the guidelines emphasize that deaf students should be taught based on their individual learning needs, including a multimodal approach with the TSL and other spoken languages.

2.4 Background of secondary education for deaf and hard of hearing students

Secondary education is the post-primary formal education. It is offered to persons who have successfully completed the seven years of primary education, and met the admission requirements. These guidelines are meant to support education stakeholders to implement the secondary education curriculum among deaf and hard of hearing students. These students have the prerogative to participate in the knowledge economy society, which demands creativity, innovation and competence of science and technology, production and entrepreneurship. They will help to address the challenges emanating from the prevailing socio-economic situation of the country and cross-cutting issues. Likewise, the education provided should support building social cohesion and fostering local cultures to sustain a sense of national identity, belonging, and responsibility.



Deaf and hard of hearing students often have significant and unique educational needs. Although hearing loss does not affect an individual's intellectual ability, if early intervention is not effectively implemented, it can interrupt communication development and subsequently hinder one's intellectual development. This is the case in Tanzania; deaf and hard of hearing students do not perform well in secondary education examinations. Most of these students do not receive early interventions, a malpractice which negatively affects cognitive development, social development, and later educational progress. Hearing loss has a continual impact on daily learning experiences. Since the deaf or hard of hearing students miss out information in spoken discourse, they tend to experience gaps in written languages and general knowledge. Therefore, most of them need special services to receive appropriate education.

International and national documents guiding the provision of education indicate that deaf and hard of hearing students have the right to quality education. Tanzania is a signatory of international agreements focusing on education. These include the Universal Declaration of Human Rights (1948), the UN Convention on the Rights of the Child (1989), the Salamanca Statement and Framework for Action on Special Needs Education (1994), the African Charter on the Rights and Welfare of the Child (1990) which entered into force in 1999, the Dakar Framework of Action (2000), the Millennium Development Goals (2000), and the Sustainable Development Goals (SDGs) (2015). Moreover, Tanzania ratified the UN Convention on the Rights of Persons with Disabilities (UNCRPD) (2006) in 2009. At national level, Tanzania has an Education Act of 1978 and its amendment in 1995, the Education and Training Policy of 1995, the Tanzania Development Vision of 2025, the Education Sector Development Programme (ESDP) of 1999, the National Strategy for Growth and Reduction of Poverty of 2004, the Disability Policy of 2004, the National Strategy on Inclusive



Education (2009–2017) of 2009, the Disability Act Number 9 of 2010, and the National Strategy for Inclusive Education (2018–2021) of 2017. All these indicate that deaf and hard of hearing students have the right to quality education; therefore, education should enable citizens to participate in the knowledge society that capacitates them with skills in socio-economic development, including povery reduction. Like the hearing ones, deaf and hard of hearing students in secondary schools need to be taught by highly specialized and motivated teachers to enable them to discover their hidden abilities in learning to excel in education.

The challenges facing the provision of secondary education to students who are deaf and hard of hearing in Tanzania include limited chances to participate in pre-primary education, shortage of sign language interpreters, shortage of teachers with knowledge and skills in facilitating their learning. Other challenges include lack of relevant adaptive assessment, insufficient sign language training, and inadequate ICT and IT training opportunities. In addition, deaf and hard of hearing students face the shortage of adaptive teaching and learning materials, enabling physical facilities and inadequate early identification and intervention services. Again, inadequate skills of teachers in using special approaches to enable deaf and hard of hearing students acquire literacy skills, appreciation of Deaf culture, use of deaf role models, provision of guidance and counselling services, and opportunity for deaf students to participate in vocational and technical skills training. There is a negative perception towards the use of TSL by some teachers teaching deaf and hard of hearing students. Some of these teachers are not fluent in TSL, or their mastery of TSL is limited. Moreover, in certain situations, some deaf and/or hard of hearing students are neglected and remain desparate, which lower their self-esteem and confidence to engage with hearing students. Besides, there is a limited enabling environment to develop and strengthen the growth of TSL.







2.5 Justification for these guidelines

In response to the challenges facing deaf and hard of hearing students in secondary education, these guidelines have been prepared to ensure that teachers and other education stakeholders gain the needed competences and skills to facilitate teaching and learning to meet the objectives of ordinary level secondary education in Tanzania. These objectives are listed below.

- a. Consolidate, broaden and develop a deeper understanding of the ideas and concepts acquired at primary level;
- b. Enhance and further develop an appreciation for cultural values including national unity, identity, democracy, ethics, personal integrity, readiness to work, human rights, customs, traditions, civic responsibilities, and obligations;
- c. Develop linguistic ability and effective use of communication skills in Kiswahili, English, and at least one other foreign language;
- d. Develop readiness for tertiary and higher education, vocational, technical, and professional training;
- e. Inculcate a sense and ability for self-study, self-confidence and self-advancement in new frontiers of science and technology, academic and occupational knowledge and skills; and
- f. Develop readiness to join the world of work.

Owing to the needs of deaf and hard of hearing students in secondary education, soon after the inception of these guidelines, objective (c) of the O-Level Secondary Education in the curriculum shall be amended to state as follows:

"Develop linguistic ability and effective use of communication skills in Kiswahili, English, TSL and at least one other foreign language to enable the nation to effectively compete in the global arena."





2.6 Competences of secondary education

The guidelines shall be implemented in line with the competences of the O-level secondary education stipulated in the curriculum. The O-level Secondary Education competences are as follows:

- a. critical and creative thinking, and problem solving;
- b. decision making, and leadership;
- c. communication, and oracy;
- d. literacy, and numeracy;
- e. personal and social values, and personal well-being;
- f. independent learning; and
- g. digital literacy, and online safety.

The needs of deaf and hard of hearing students in secondary education led to the preparation of these guidelines. Soon after their inception, competence (c) of the O-level secondary education in the curriculum shall be amended to state as communication, oracy and signacy.

2.7 Objectives of the guidelines

The guidelines have been prepared to enable a teacher of deaf and hard of hearing students in a special and inclusive school to interpret and implement the curriculum for O-level secondary education. The guidelines are essential for the implementation of the curriculum for O-level secondary education among deaf and hard of hearing students. Therefore, they will help the teachers and other deaf education stakeholders to do the following:

- a. understand the structure and organization of the curriculum for ordinary level secondary education in relation to the learning needs of deaf and hard of hearing students;
- b. promote the acquisition and appreciation of Deaf culture as part of Tanzania's culture;



- c. inculcate and develop vocational and technical skills into deaf and hard of hearing students;
- d. use special approaches to enable deaf and hard of hearing students acquire literacy skills;
- e. create a friendly school learning environment, leadership, and administration to foster the teaching and learning of deaf and hard of hearing students;
- f. foster the mastery of TSL and other modes of communication in the teaching and learning process for deaf and hard of hearing students;
- g. provide guidance and counselling services to deaf and hard of hearing students, teachers and parents or caregivers;
- h. use adapted teaching and learning strategies to meet the diverse learning needs of deaf and hard of hearing students;
- i. identify and support deaf and hard of hearing students in special and inclusive secondary schools;
- j. determine the learning needs of deaf and hard of hearing students in special and inclusive secondary schools;
- k. equip teachers, and deaf and hard of hearing students with ICT skills to facilitate the teaching and learning process;
- 1. equip teachers of deaf and hard of hearing students with the skills in adaptive assessment procedures; and
- m. motivate teachers and other educational stakeholders to facilitate the teaching and learning process of deaf and hard of hearing students.

2.8 Importance of the guidelines

The guidelines will benefit all target groups as they set benchmarks for the identification, learning needs, teaching process, placement, assessment and evaluation, and transition to adult life of deaf and hard of hearing students. Therefore,



these guidelines will be of great importance in the following ways:

- a. guide specialist teachers, non-specialist teachers, non-teaching staff, parents or guardians and other professionals through helping deaf and hard of hearing students in their placement and learning processes;
- b. guide teachers in preparing, delivering, and assessing the teaching and learning process for deaf and hard of hearing students;
- c. help in giving feedback to educational administrators, and making them accountable to improve the quality for education of deaf and hard of hearing students;
- d. help in facilitating in-service training programmes for teachers and other stakeholders providing services to deaf and hard of hearing students;
- e. guiding through reviewing, adapting, and adopting secondary educational materials to meet the needs of deaf and hard of hearing students; and
- f. acting as a roadmap to effectively implement the curriculum for ordinary secondary education to cater for the learning needs of deaf and hard of hearing students.

2.9 The target groups of the guidelines

The target groups shall include but not limited to the following:

- a. teachers, caregivers, parents or guardians, community and professionals that facilitate secondary education for the deaf and hard of hearing students;
- b. School Quality Assurers (SQA), Special Needs Education Officers (SNEO), and Ward Education Officers (WEO) who support the teaching and learning process for the deaf and hard of hearing students;
- c. higher learning institutions and teachers' colleges that train tutors and teachers for deaf and hard of hearing students;



- d. school counsellors who facilitate guidance and counselling services to deaf and hard of hearing students, teachers and parents or caregivers;
- e. curriculum co-ordinators who design, develop, and review secondary school educational materials for the deaf and hard of hearing students;
- f. The National Examinations Council of Tanzania (NECTA) in setting, invigilating, marking, and grading national assessments and examinations;
- g. educational researchers and other stakeholders interested in education for the deaf and hard of hearing students;
- h. deaf, hard of hearing, and/ or hearing students in learning process; and
- i. educational development partners and other stakeholders who are interested in financing educational programmes.

2.10 Uses of the guidelines

Each part in the guidelines provides detailed information on how to implement the curriculum for O-level Secondary Education for deaf and hard of hearing students. These guidelines shall be used in bi-modal ordinary and technical inclusive secondary schools for deaf and hard of hearing students. Moreover, the guidelines shall be used together with the curriculum for O-level Secondary Education. In any area where this document is silent, reference shall be made to the curriculum for O-level Secondary Education. The guidelines will help teachers and other educational stakeholders to

- a. understand roles and responsibilities of different stakeholders in secondary education for deaf and hard of hearing students;
- b. identify, select and place deaf and hard of hearing students in adaptable schools that are special, inclusive or that



- may subsequently become inclusive once a deaf/hard of hearing student is admitted;
- c. prepare teaching and learning materials for deaf and hard of hearing students;
- d. choose appropriate teaching and learning methods and techniques for deaf and hard of hearing students;
- e. support deaf and hard of hearing students in developing expected competences; and
- f. plan and use adapted assessment and evaluation tools of learning for deaf and hard of hearing students.





STRUCTURE OF DEAF EDUCATION, LEARNING AREAS AND SUBJECTS

3.1 Structure of deaf education

The system of formal education in Tanzania has a structure of 2-7-4-2-3+. This means 2 years of pre-primary education, 7 years of primary education, 4 years of ordinary level secondary education, 2 years of advanced level secondary education, and 3+ years of tertiary and university education.

There has been a tendency of retaining deaf and hard of hearing students for 10 years in special primary schools in Tanzania. This poses a great challenge since some students join Form One at the age of 14 years, which is above average. Based on these guidelines, deaf education shall follow the national structure of 2-7-4-2-3+ in Mainland Tanzania while, in Zanzibar, the system shall follow the structure of 2-6-4-2-3+. The two years of pre-primary education shall be mandatory for deaf and hard of hearing children. Primary education shall be completed in only seven years of school in Mainland Tanzania and six years of school in Zanzibar. Besides, there shall be two categories of ordinary level secondary education for deaf and hard of hearing students as indicated below:

(a) Technical secondary schools

There shall be two sub-categories of technical secondary schools for deaf and hard of hearing students. The first sub-category shall constitute special technical secondary schools for deaf and hard of hearing students. The second sub-category shall constitute inclusive technical secondary schools that shall include deaf and hard of hearing students as well as hearing students; the non-deaf or hard of hearing students in this category shall not include those with severe to profound intellectual and or visual impairment.



(b) Ordinary secondary schools (non-technical secondary schools)

There shall be two sub-categories of non-technical ordinary secondary schools for deaf and hard of hearing students. The first sub-category shall constitute special ordinary secondary schools for deaf and hard of hearing students. The second sub-category shall be inclusive ordinary secondary schools for deaf and hard of hearing students, involving hearing students without severe to profound intellectual and/ or visual impairment with hearing impaired students in one classroom.

Moreover, in ordinary special and inclusive secondary schools, the Home Economics subject shall be taught in Form I-IV, and students shall be advised to opt for the subject as it may equip them with important home-based skills.

Such inclusive secondary schools for deaf and hard of hearing students in Tanzania shall be bi-modal. This is because accommodating the learning needs of students with visual impairment and the deaf/hard of hearing in one classroom is difficult, owing to the current level of the readily available technology. Henceforth, it may only be possible to have an inclusive secondary school with deaf and blind students separated during class.

3.2 Learning areas and subjects

The structure of ordinary level secondary education outlines five key learning areas, namely languages, natural sciences and technologies, social sciences, business studies, and aesthetics. The guidelines indicate some changes to be made in learning and subject areas to accommodate the learning needs of deaf and hard of hearing students. Teaching the subjects mentioned in this document shall involve adaptation of teaching and learning methods to suit the needs of deaf and hard of hearing students. This will allow them to acquire the required skills as their hearing counterparts.



3.2.1 Languages

Language is a tool for students to communicate effectively using speech, signs, and writing. The curriculum for ordinary secondary education proposes four (4) language subjects to be taught, namely Kiswahili, English, French, and Arabic. In addition, Tanzanian Sign Language (TSL), which is the first language of the majority of the deaf, shall be taught as a language subject in every special and inclusive primary and secondary school for deaf and hard of hearing students as well as in public teachers' colleges and universities as a professional course.

3.2.2 Natural sciences and technologies

All special and inclusive secondary schools for deaf and hard of hearing students shall have natural sciences, vocational subjects, and technical education as stipulated in the curriculum for ordinary level secondary education in Tanzania. In other words, when deaf and hard of hearing students enter Form Three, they may have an option of joining a stream or study a subject of vocational and technical education as well as science and art. This is because the majority of deaf and hard of hearing students do better in practice-based than in theory-based learning activities.

Moreover, for such deaf and hard of hearing students to achieve the stated learning outcomes, Information and Computer Studies (ICS) shall be taught as a compulsory subject in all inclusive and special secondary schools.

3.2.3 Social sciences

In this part, deaf and hard of hearing students shall be taught a total of four (4) subjects: History, Geography, Home Economics, and Civics as stipulated in the curriculum for ordinary level secondary education.



3.2.4 Business studies

In this part, deaf and hard of hearing students shall be taught two (2) subjects. These are Bookkeeping and Commerce as stipulated in the curriculum for ordinary level secondary education.

3.2.5 Aesthetics

In this part deaf and hard of hearing students shall be taught four (4) subjects. These are Fine Arts, Theatre Arts, Physical Education and Music as stipulated in the curriculum for ordinary level secondary education.

3.3 Subjects to be taught from Form I to Form IV

Deaf and hard of hearing students in ordinary level secondary education shall study all core subjects as prescribed in the curriculum for ordinary level secondary education. Besides, they shall study TSL and ICS as core subjects in 3 and 2 periods per week, respectively. Moreover, the students may take one optional subject as listed in the curriculum for ordinary level secondary education.

Deaf and hard of hearing students in technical ordinary level secondary education shall study all core subjects as prescribed in the Framework for Implementation of Technical Secondary Schools Education of 2019. Besides, they shall study TSL and ICS as core subjects in 3 and 2 periods per week, respectively. Additionally, they may take one optional subject as listed in the curriculum for ordinary level secondary education. The number of days, weeks and periods shall apply as per the curriculum for ordinary level secondary education.



PROFESSIONALS AND SUPPORT SERVICES

4.1 Professionals working with deaf and hard of hearing students

Deaf and hard of hearing students may have varied social, emotional, academic, communication and language needs. There shall be a multidisciplinary team that would offer support services to them depending on an individual student's needs. Members of the team shall include but not limited to the following experts: teachers, itinerant teachers, TSL interpreters, educational audiologists, educational psychologists, social workers, counsellors, educational speech-language therapists, educational administrators, curriculum developers, health specialists, educational quality assurers, examination specialists, educational researchers, and practitioners. These members shall be required to have practical skills in TSL as the medium of communication for deaf and hard of hearing students. The professionals are described below, with their qualifications and roles.

4.1.1 Teachers

Deaf and hard of hearing students in special schools shall be taught by specialist teachers in deaf education who must be fluent in TSL. In inclusive secondary schools, deaf and hard of hearing students may be taught by specialist teachers and/or non-specialist teachers. Non-specialist teachers, however, shall be given special training on how to accommodate deaf and hard of hearing students in the school setting.

Qualifications of teachers and their ability to perform well in the classroom is critical to improving the quality of education for these students. A teacher of deaf and hard of hearing students shall have the following qualities:

- a. pedagogical expertise in how deaf and hard of hearing students learn:
- b. deep understanding of the teaching and learning needs of deaf students;



- c. comprehensive and analytical awareness of the social and linguistic needs of deaf and hard of hearing students;
- d. commitment to work with deaf and hard of hearing students:
- e. caring;
- f. flexibility in teaching and learning methods and technology; and
- g. competence in TSL.

Roles of teachers in inclusive and special schools shall include but not limited to the following:

- a. identifying and monitoring students who show signs of developing impairments;
- b. monitoring TSL interpreters;
- c. coordinating routine checking and regular maintenance of assistive listening devices (ALD);
- d. monitoring and evaluation of students' achievements;
- e. facilitating and supporting communication among deaf and hard of hearing students, hearing students, and teachers;
- f. mediating deaf and hard of hearing students with parents or caregivers, family, and community members;
- g. supporting students to develop TSL skills; and
- h. assisting the coordination of TSL clubs.

4.1.2 Itinerant teachers

There shall be an itinerant teacher to ensure that deaf and hard of hearing students have access to all education components offered in the school system.

The roles of the itinerant teacher shall include the following:

- providing routine in-service training and technical support to the general education administration, staff, and students in communication and education needs for deaf and hard of hearing students;
- b. orienting new deaf and hard of hearing students on the Deaf culture, use of assistive listening devices, and communication modes;



- c. discussing with interpreters and teachers of deaf and hard of hearing students the challenges they face in teaching and learning and suggesting possible solutions; and
- d. ensuring that any assessment tool administered, such as a test and an examination, is adapted and accessible to deaf and hard of hearing students.

4.1.3 TSL interpreters

There shall be a sign language interpreter who is competent in TSL to facilitate communication with teachers, students and other education stakeholders in and outside the classroom. The sign language interpreter shall be

- a. competent in the relevant field of education;
- b. conversant in TSL;
- c. conversant in Deaf culture and the communication needs of the deaf and hard of hearing students;
- d. adherent of ethics and code of conduct for interpreters;
- e. committed to working with deaf and hard of hearing students:
- f. competent in spoken and written Kiswahili and English;
- g. audible, with adept visual acuity and good sound projection; and
- h. caring, flexible, and ready to learn new ideas.

The roles of the sign language interpreter shall include the following:

- a. to facilitate communication between teachers, hearing students, deaf and hard of hearing students, and community members;
- b. to assist in identifying students who need support in TSL and communication in general; and
- c. to make sure that interpretation settings and platforms are in place.

The Government shall establish a board for certifying TSL interpreters. This board shall be responsible for establishing the code of conduct and licensing TSL interpreters who meet required professional and academic standards of sign language interpretation.



4.1.4 Educational audiologists

Each school shall have an educational audiologist who shall be capable of doing routine audiometric assessment for deaf and hard of hearing students.

The educational audiologist shall

- a. identify and rehabilitate students with hearing loss or hard of hearing;
- b. perform comprehensive hearing assessment and evaluation;
- c. keep records of audiograms and health records of students with hearing challenges;
- d. provide recommendations for assistive listening devices;
- e. train parents/caregivers in maintaining assistive listening devices;
- f. plan and fit in appropriate classroom hearing technologies such as microphones, transmitters, acoustic and FM systems;
- g. perform auditory habilitation and rehabilitation for students using assistive listening devices;
- h. consult teachers and parents/caregivers about students' hearing loss; and
- i. effect referrals of students with complicated hearing loss issues.

4.1.5 Educational psychologists

There shall be competent educational psychologists in special and inclusive schools for deaf and hard of hearing students. These shall administer cognitive and behavioural assessment and present test results to teachers and parents/caregivers. The educational psychologist shall perform, among other roles, psycho-educational assessment, consultation, interventions, research and evaluation, in-service education, and administration.

4.1.6 Social workers

There shall be at least one social worker in each school for deaf and hard of hearing students. These shall help students



to develop a sense of self-confidence, self-efficacy, high self-esteem, readiness to learn and adaptability skills. The social worker shall also help students to develop non-academic skills like family cohesion, interpersonal relationship, and cultural influences. Lack of these skills is likely to hinder their ability to learn. A social worker shall be encouraged to learn TSL to promote effective communication with deaf and hard of hearing students.

4.1.7 Educational counsellors

There shall be at least one school educational counsellor in every special and inclusive school for deaf and hard of hearing students. These shall provide counselling services to students, teachers, and family members. The educational counsellor shall be encouraged to learn TSL to promote communication with deaf and hard of hearing students.

The school educational counsellor shall be to

- a. address the needs of all students through prevention and intervention programmes as a part of a comprehensive school counselling programme;
- b. provide individualized counselling about students' personal/social, academic challenges and provide career guidance;
- c. collaborate with other stakeholders to promote academic, career and personal/social development of such students;
- d. implement a comprehensive school counselling programme that promotes and enhances students' social and academic achievement;
- e. incorporate leadership, advocacy, and collaboration in maximizing students' achievement to promote equity and access to opportunities and rigorous educational experiences for all students;
- f. support a safe learning and working environment to safeguard human rights for all members of the school community;
- g. counsel teachers and parents about helping their children to cope with various challenges in the learning process;



and

h. uphold ethical and professional standards of the counselling profession.

4.1.8 Educational speech/language therapists

Each special and inclusive school shall have an educational speech/language therapist who shall play an important role in the teaching and learning process of deaf and hard of hearing students. The therapists' qualification and ability to perform well in the school setting is critical to improving the quality of education for deaf students.

The roles of the educational speech/language therapists shall be to

- a. assess speaking (receptive and expressive spoken language skills), listening, speech-reading, and social interaction skills:
- b. identify, plan, and implement strategies for developing communication and language skills in collaboration with teachers of deaf and hard of hearing students;
- c. assist in auditory speech training of deaf and hard of hearing students; and
- d. assist parents/caregivers to enhance communication skills among deaf and hard of hearing students.

4.1.9 Educational administrators

Each head of a special and/ or inclusive school for deaf and hard of hearing students shall have knowledge of the characteristics and needs of deaf and hard of hearing students.

The school administration shall ensure that the culture of the deaf is well understood and accommodated in the school community. They should thus promote the establishement and coordination of TSL clubs. The inclusion of Deaf culture shall be done as part of the national culture through various activities and programmes. Good examples are sport and games and outreach to encourage deaf, hard of hearing, and hearing students to be aware of their national culture. This will help the hearing community to identify deaf and hard of hearing



students as bi-cultural members of the community. Deaf culture shall include their language, beliefs, arts, behaviour, history, and values. Each special and inclusive school shall have a special education department. Tanzanian Sign Language interpreters shall be employed according to the needs of the school to cater for the communication needs of deaf and hard of hearing students.

Moreover, educational administrators shall be required to encourage teachers and non-teaching staffs to learn Tanzanian Sign Language for effective communication with deaf and hard of hearing students.

4.1.10 Curriculum co-ordinators

The Institute shall ensure that competent curriculum coordinators are involved in planning, designing, reviewing, developing, and adapting the educational materials for deaf and hard of hearing students. The Institute shall prepare a TSL syllabus, textbooks, teachers' guides, and other teaching and learning materials for TSL subjects. Moreover, the curriculum co-ordinators shall train in-service teachers and other educational stakeholders to use the reviewed, newly designed, developed, and adapted educational materials for deaf and hard of hearing students.

4.1.11 Health specialists

There shall be health specialists to ensure that ear hygiene and the general health of deaf and hard of hearing students is maintained. Health specialists shall comprise Ear, Nose and Throat (ENT) specialists, nurses, clinical audiologists and general physicians. These specialists shall work with students referred from special and inclusive schools on health and safety issues, medical diagnosis, and treatment.

4.1.12 School quality assurers

There shall be school quality assurers who shall oversee the provision of quality education to the deaf and hard of hearing



students.

The roles of the school quality assurers shall include the following:

- a. To ensure compliance to policies, legislation, standards, and guidelines related to the delivery of secondary education among deaf and hard of hearing students;
- b. To carry out school physical condition surveys and recommend remedial measures to continuously improve the quality of secondary education for deaf and hard of hearing students; and
- c. To advise the Commissioner for Education on matters arising from the quality assurance experience pertaining to secondary education for deaf and hard of hearing students.

4.1.13 Examination Specialists

The NECTA and educational administrators shall involve specialists, who are experts in deaf education, in performing different roles related to assessments and final examinations for deaf and hard of hearing students. Their roles shall include registering candidates, setting examinations, and moderating them. Besides, they shall be responsible for supervising, invigilating, packing, marking, and evaluating such assessments and examinations.

4.1.14 Educational researchers and practitioners

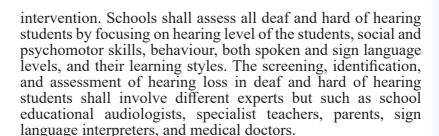
Colleges and universities have a major role to play in the education of deaf and hard of hearing students. Universities and colleges shall conduct research on special education and curriculum issues to reflect the pedagogy and assessment of deaf and hard of hearing students. They shall also train special needs education teachers and sign language interpreters who shall teach and facilitate communication among deaf and hard of hearing students.

4.2 Identification and functional assessment

4.2.1 Screening and identification procedures

There shall be early screening and identification for deaf and hard of hearing students upon joining Form One for appropriate





4.2.2 Functional assessment

There shall be holistic functional assessment for a deaf and hard of hearing student. This assessment shall be conducted in all areas, namely hearing, spoken and sign language competences, behaviour, social, and motor as well as academic skills of deaf and hard of hearing students.

4.2.3 Functional assessment procedures

Each special and inclusive school for deaf and hard of hearing students shall observe the following procedures:

(a) Reviewing reports of deaf and hard of hearing students There shall be reviewing of various reports from previous primary schools. This process may include old audiograms of deaf and hard of hearing students and other necessary reports such as health reports. The process will help teachers and schools to identify the specific learning needs of their students.

(b) Parents/caregivers consultation

The teachers shall consult parents to get information on the preferred mode of communication, students' personal behaviour, onset of deafness, causes of deafness and measures taken, if any. This process will help teachers to understand deaf and hard of hearing students who join their schools; hence, they can develop important learning intervention strategies.



(c) Audiometric testing

There shall be audiometric testing, at least twice a year, to determine the hearing health and any changes in the degree of hearing loss among the students to review intervention plans. The reviewed plans may help to determine the kind of hearing aid and assistive listening devices that the students may require.

(d) Observation

Teachers shall conduct observation to identify skills of deaf and hard of hearing students. The observation conducted, both spontaneous and structured, will help to determine specific skills demonstrated by such students.

4.3 Educational intervention and placement

There shall be educational intervention and placement in secondary schools for deaf and hard of hearing students. This shall be done soon after functional assessments. It will be used to improve learning abilities of the students by utilizing their identified strengths. The students shall be placed in the least restrictive environment to facilitate their learning.

4.4 Referral services

There shall be educational and pathological or medical referral services for deaf and hard of hearing students. The educational referral shall be done only when unique educational needs of such students are not met. The subject teacher shall be required to refer or consult another teacher to help the student in such an area of difficulty. Moreover, the school shall ensure that cases of complicated medical and/ or audiometric assessments of students are referred to other experts.

4.5 Motivation

Motivation is important in facilitating the teaching and learning process. Motivation shall be provided to both teachers and students to encourage their performance.



4.5.1 Deaf and hard of hearing Students

Deaf and hard of hearing students need to be motivated to reveal their hidden abilities in learning. Hence, they may excel in education. Motivation in special and inclusive schools for students shall be provided in the form of a friendly teaching and learning environment, appraisals, study tours, and deaf role models.

4.5.2 Teachers

Deaf and hard of hearing students need to be taught by motivated teachers. Motivation will encourage such teachers to be committed and to use their extra time in teaching. The Government shall motivate teachers through the following ways:

- a. Special education in-service training;
- b. Improving the working environment; and
- c. Providing monetary incentives for the teachers teaching in special schools and inclusive classrooms. The incentives shall include teachers who use their extra time in their responsibilities for specialized instructions.

4.6 Guidance and Counselling services

There shall be guidance and counselling services to deaf and hard of hearing students, parents, and teachers. The need for guidance and counselling is greatly important because students face various challenges in their school life. They need a special person to advise and assist them in coping with their situation. Likewise, teachers face challenges in teaching and interacting with deaf and hard of hearing students. The challenges stem from some of their fellow teachers, education administrators, and other community members. Moreover, parents/caregivers are often discriminated against by their family and some other community members for having deaf children.



4.7 Parents, family and community involvement

Parents or caregivers, families and the community shall be involved in the learning of deaf and hard of hearing students. This shall help to improve students' performance, reduce absenteeism, and restore parents or caregivers' confidence in their children's education. Community involvement is of paramount importance since it makes the community change their negative attitudes, perceptions and beliefs towards deaf and hard of hearing students.

4.7.1 Awareness of parents, families and the community on deafness

School administrators and other stakeholders shall facilitate the dissemination of education to parents or caregivers of deaf and hard of hearing students on the importance of education to their children. Parents or caregivers, families, and the community shall participate in the education of their deaf and hard of hearing children. In this regard, their roles shall be to:

- a. provide support to learning at home;
- b. provide a stable and loving environment;
- c. provide a desired modal behaviour;
- d. require respect, responsibility, and values for their deaf and hard of hearing children;
- e. emphasize the importance of education;
- f. arrange for study time and space at home;
- g. regulate bedtimes, breakfast, clothing, and diet;
- h. coordinate routine health care;
- i. make routine trips to the public library;
- j. monitor their children's academic progress;
- k. teach skills of adult independence;
- 1. plan cultural opportunities such as performances and exhibition; and
- m. share own cultural heritage.



FACILITATING LEARNING AMONG DEAF AND HARD OF HEARING STUDENTS

5.1 Communication and language development

Language and communication are significant for the acquisition of knowledge and skills. Studying the severity of hearing loss before implementing any education approach is important. Traditionally, three primary communication methods were used in deaf and hard of hearing students education, namely oral or aural, total communication, and bilingual-bicultural. The guidelines shall emphasize the bilingual-bicultural approach, which recognises the authenticity and importance of both hearing and Deaf culture by employing both TSL and the spoken language Kiswahili and English to promote literacy, the ability to speak, and the ability to sign.

5.2 Literacy skills for deaf and hard of hearing students

Deaf and hard of hearing children face challenges in the acquisition of literacy skills because of their limited access to spoken languages. Therefore, understanding students' language, communication strengths and weaknesses, and their applicability to reading and writing is important. Teachers shall use different models to teach reading and writing. The models shall include, but not limited to, simple views of reading and bilingual-bicultural (bi-bi) models. Teachers shall make sure that the models facilitate the learning of reading and writing Kiswahili and English. Similarly, teachers shall employ appropriate strategies to promote literary skills through writing exerices, finger-spelling, written stories, manually coded expressions, graphics, and videos together with other educational media to strengthen their language abilities.

5.2.1 Approaches to enhancing reading and writing skills

Teachers shall facilitate decoding of written texts to deaf and hard of hearing students. Teachers shall use a multimodal approach to teach reading to deaf and hard of hearing students. In this approach, teachers shall use TSL, finger-spelling,



visualization, amplification, pronunciation, and speech-reading to help deaf and hard of hearing students to understand written texts.

5.2.2 Language fluency

On one hand, most deaf and hard of hearing students have limited language competance. On the other, the reader needs a base language to extract information from different angles of the world. Generally, to learn to read, they need to have appropriate language skills in Kiswahili, TSL, and English.

Teachers shall ensure that deaf and hard of hearing students have appropriate language skills in Kiswahili, TSL, and English to attain cognitive and academic advantages. Teachers shall employ language models that support or facilitate the development of student's respective ability in the relevant language skills: reading, writing, speaking, listening, and signing.

5.3 Pedagogy for deaf and hard of hearing students

Teachers shall adapt visual and practice based teaching approaches and the use of TSL. Teaching deaf and hard of hearing students shall involve visualization of concepts (use of pictures, charts, diagrams, drawings, realia, toolkits and models) and practice-based teaching, which involves effective classroom interaction to assess practice-based outcomes. Therefore, in teaching deaf and hard of hearing students, appropriate resources, setting and technology will be used to ensure that all subjects are taught and examined through theory-based and practice-based testing. The former shall account for 40% whereas the latter shall contribute 60%. However, topics and subtopics which need practical listening skills shall consider different teaching approaches and alternatives depending on the individual students' needs and ability.



5.3.1 Methods of teaching deaf and hard of hearing students

The methods of teaching shall be learner-centred, focusing on the learning needs of deaf and hard of hearing students. Teachers of the deaf and hard of hearing shall plan their lessons focusing on these learning needs.

Apart from the methods mentioned in the curriculum for ordinary level of secondary education, deaf and hard of hearing students shall be taught through other methods, such as team teaching, co-teaching, guest speaker, role play, simulation, preteaching, teaching and re-teaching, peer-teaching, discussions, as well as chain and sandwich.

In teaching deaf and hard of hearing students, the teacher needs more time. In this regard, the guidelines put more emphasis on pre-teaching, teaching, and re-teaching. School administrators shall liaise with subject teachers on the inclusion of pre-teaching, teaching and re-teaching in the school timetable. The pre-teaching, teaching, and re-teaching shall support deaf and hard of hearing students to be familiar with the content to be taught prior, during and after the actual classroom session, respectively. During pre-teaching, a specialist teacher of the deaf and hard of hearing students shall

- a. check students' prior knowledge about the content;
- b. introduce key words and vocabulary for the lesson;
- c. introduce the teaching methods or activities to be used for a particular lesson;
- d. check viability of teaching and learning materials (e.g. making changes and adaptation where necessary);
- e. introduce lesson notes and/or vocabulary to a TSL interpreter;
- f. familiarising the general content of the lesson to deaf and hard of hearing students.



During actual teaching, the teacher shall teach the lesson as planned, including all necessary changes that were made during the pre-teaching session. There shall be reinforcement of pre-taught content to enhance learning.

In the re-teaching session, the specialist teacher shall do the following:

- a. checking the effectiveness of the lesson;
- b. identifying the challenges encountered during the lesson; and
- c. re-teaching part of the lesson that was not understood by the students.

5.4 Individualized Educational Programme (IEP)

There shall be an Individualized Educational Programme (IEP) for deaf and hard of hearing students. In creating the IEP, schools shall involve a multidisciplinary team, including, but not limited, to medical doctors, school educational counsellors, specialist teachers, social workers, educational psychologists, educational audiologists, and speech and language therapists. Moreover, IEPs shall address learning needs of deaf and hard of hearing students with multiple disabilities. Parents, deaf and hard of hearing students shall be part of the team for developing the IEP, and they must be given opportunities to share their learning needs. The school head shall supervise the development and implementation of such IEPs.



RESOURCES AND STANDARDS FOR THE IMPLEMENTATION OF THE CURRICULUM

6.1 Education environments

Schools shall provide enabling learning environments with appropriate teaching and learning facilities for deaf and hard of hearing students. All special and inclusive secondary schools shall be built in an inclusive setting and fenced to reduce distractions during teaching and learning. The facilities shall include the following:

6.1.1 Physical facilities

Deaf and hard of hearing students shall be facilitated with enabling physical facilities so that they may learn effectively. These facilities shall include classrooms, resource rooms, laboratories, libraries, and ICT equipment.

(a) Classrooms

The physical environment of a classroom tends to influence students' behaviour and attitudes. Deaf and hard of hearing students depend on their sight to either speech-read the teacher or watch a TSL interpreter; thus, the classroom shall include the following special aspects, among others:

- i. proper sound amplification systems;
- ii. acoustically treated classrooms with all sound proof facilities;
- iii. assistive listening devices;
- iv. enough space to allow movements of students and teachers; The classrooms must have enough light, large windows and/ or electrical light;
- v. appropriate educational media and technology;
- vi. TSL interpreter's positioning, teacher's movements, and sitting arrangement that responds to the needs of deaf and hard of hearing students;
- vii. modern construction or modification of classrooms for deaf and hard of hearing students to visualize



- viii. TSL interpretation services for all subjects to make sure that deaf and hard of hearing students receive appropriate information; and
- ix. friendly and talking-classroom (with various posters, pictures and other visual learning-aids).

(b) Resource rooms

Every special and inclusive school shall have a wellequipped modern resource room served with trained personnel. Among others, the resource room shall be used to keep teaching and learning materials and visual educational resources and to offer specialized learning instructions, and to maintain and calibrate assistive listening devices. Also, it shall be used to conduct audiometric assessment services for deaf and hard of hearing students. The resource room shall be easily accessible to deaf, hard of hearing students, and teachers.

(c) ICT equipment

There shall be a provision of ICT equipment managed by an ICT expert to help deaf and hard of hearing students to access information and retrieve electronic visual content. ICT skills shall help deaf and hard of hearing students to benefit from the visual content presented to them through assistive technology. The pieces of equipment shall include DVDs, TVs, computers, power point projectors, electronic smart boards, and tablets. Furthermore, other specialized electronic devices, such as videos with subtitles and other information interpreted in TSL, shall be available.

(d) Laboratories

Inclusive and special schools for deaf and hard of hearing students shall be equipped with modern laboratories. These laboratories shall cater for science, languages, geography and ICS subjects. The laboratories shall



have TSL interpretation services, recorded practical procedures, enough space and light, as well as an FM system. Laboratory technicians shall be trained in assisting deaf and hard of hearing students to do various practical assignments, including preparing various illustrations and drawings on different practical procedures with the assistance of the subject teacher.

(e) Libraries

Every special and inclusive school for deaf and hard of hearing students shall have a well-equipped modern library. The library shall be carpeted to absorb unnecessary environmental sounds from footsteps and falling objects. They shall have TSL interpretation services, visual educational resources, and an appropriate light intesity.

6.1.2 Teaching load

The teaching load for teachers of the deaf and hard of hearing students shall be a minimum of 24 periods per week. This shall be put into practice with reservation that all non-specialist teachers in inclusive secondary schools for the deaf shall have received special in-service training teaching deaf and hard of hearing students.

6.1.3 Teacher-student ratio

Special schools for deaf and hard of hearing students shall have a teacher-student ratio of 1:10; while inclusive schools shall have a teacher-student ratio of 1:40. This means that 5 students out of 40 shall be deaf and hard of hearing.

6.2 Availability of textual and non-textual materials

Deaf and hard of hearing students shall be taught using both textual and non-textual materials. Teachers shall use textual teaching materials, which are not wordy, with appropriate text-labelled pictures, dictionaries, charts and drawings. Deaf students are visual learners; therefore, teachers shall also use non-textual materials such as visual educational resources, PowerPoint slides, online materials, training kits, weather



stations or centres, ecological or nature study sites, fliers, fact sheets, websites, and realia for effective learning.

6.3 Assistive technologies

School administrators shall provide a conducive learning environment for deaf and hard of hearing students to enhance their academic performance. The amplification of sound in the classroom setting is important for hard of hearing students. There shall be assistive listening devices to separate the sounds, particularly speech, that a hard of hearing student wants to hear from background noise. There shall be visual learning-aids to help deaf students access information in the classroom. Such devices and systems will include hearing aids, loop induction systems, FM systems, Infrared Systems (IR), interactive/smart boards, computers and tablets, projectors, chat-rooms, digital pen technology, closed captioning on movies and videos, computer assisted note taking, Video Remote Interpreting (VRI), TSL videos, visual systems and vibrating systems.

6.4 Support services

The Government shall provide ICT and accessories necessary for teaching, learning and assessing deaf and hard of hearing students. Moreover, the Government shall establish and enforce a national policy on assessment and examination of deaf and hard of hearing candidates in both special and inclusive secondary schools.

Special and inclusive schools for deaf and hard of hearing students shall provide the following support services among others:

- a. TSL interpretation;
- b. note taking;
- c. printing and photocopying;
- d. student buddy system (peer teaching);
- e. optional communication modes;
- f. guidance and counselling; and
- g. audio, visual, and audiovisual recording.



ASSESSMENT OF DEAF AND HARD OF HEARING STUDENTS

7.1 Learning assessment for deaf and hard of hearing students

Assessment is an integral part of the teaching and learning process. It is done to improve teaching and learning as a measure of learning achievements and outcomes. There shall be well planned, promptly prepared, swiftly adapted, effectively administered, carefully marked and evaluated assessment tools for deaf and hard of hearing students to promote learning and boost confidence as well as self-esteem.

7.1.1 Examination content and structure

The content of the examination shall reflects both national and the Deaf culture. Questions in the examinations for deaf and hard of hearing students shall be short and precise. The examination shall include objective questions, such as matching items, true and false, and multiple choice questions. It will also adapt essay questions which normally require a lot of explanation to short answer questions to assess ordinary level secondary education academic competences for deaf and hard of hearing students.

Given appropriate resources, setting, and technology, all subjects shall be examined through theory-based and practice- based testing, whereby 40% of the total questions of any test, mock, and final assessments and examinations shall be theory-based, while 60% of the total questions shall be practice-based. The theory-based assessment shall mean assessing the knowledge about abstract things for deaf and hard of hearing students who will be required to write essays and some explanations. Practice-based assessment shall assess the students by combining theory and work experience with a strategic, reflective process throughout the duration of their learning process. It shall include hands-on psychomotor activities. In



administering continuous assessment among deaf and hard of hearing students, teachers shall follow all the requirements for constructing/setting, invigilating and marking assignments, tests and examinations as outlined in this document.

Therefore, school, regional and zonal school administrators, and NECTA shall modify examinations to allow deaf and hard of hearing students to answer questions based on how they process written information.

7.1.2 Examination time

In any individual assessment, deaf and hard of hearing students shall have 10 additional minutes for every one hour. This will include tests, mock and national assessments and examinations. This is because deaf and hard of hearing students who use sign language interpreters receive information several seconds after the rest of the class. They also need more time to get information from the sign language interpreter before responding. Moreover, deaf and hard of hearing students think in sign language. Hence, they require more energy and time in manual linguistic processing and expression than the hearing peers.

Therefore, deaf and hard of hearing students shall be given more time when answering their examination questions. During tests, mock and national examinations, school, regional and zonal administrators as well as the NECTA shall make sure that deaf and hard of hearing students are given 10 more minutes for every hour. They shall also provide them with TSL interpretation services.

7.1.3 Assessment methods

Assessment methods for deaf and hard of hearing students shall focus on competence-based teaching and learning. These methods shall be adapted to measure deaf and hard of hearing students' understanding, reasoning and critical thinking rather than their ability to reproduce memorized facts. The methods shall include the following:

- a. portfolios;
- b. rating scales and rubrics;
- c. checklists;
- d. visual presentations (i.e. information via TSL, projectors, and cued speech) and oral presentations;
- e. project work;
- f. individual assignments;
- g. practical tasks to demonstrate performance skills;
- h. written essays or reports;
- i. analysis; and
- i. tests and test-retest.

7.2 Examination adaptation and alternative

All examinations shall be adapted to suit the learning needs of deaf and hard of hearing students. There shall be proper sitting arrangements for them in the examination rooms. Such arrangements shall consider the individual's needs. Deaf and hard of hearing students shall be given alternative questions that can be addressed in accordance with their mode of communication.

7.3 Setting, invigilating and marking examinations

There has been mass failure and dropout rates observed over the years among deaf and hard of hearing students in Tanzania. Parents or caregivers, teachers and administrators of deaf



students have questioned the relevance and validity of the national assessment procedures and standards for deaf and hard of hearing students. Therefore, there shall be adapted procedures for constructing, invigilating and marking examinations for these students in ordinary level secondary education.

7.3.1 Setting examinations

In examinations, deaf and hard of hearing students are subjected to the same educational milestones and examinations with their fellow hearing students. This practice weighs down their academic performance. The examination setting has to be flexible to accord an equal opportunity to each student to demonstrate individual achievements.

To address this challenge, school, regional and zonal school administrators as well as the NECTA shall

- a. modify assessment instruments for deaf and hard of hearing candidates;
- b. involve specialist teachers for the deaf and hard of hearing during the setting of examination questions from the initial stages so that the examinations meet their individual learning needs;
- c. moderate questions for deaf and hard of hearing candidates: This shall be done by special and competent teachers in designing assessment tools for these students;
- d. establish flexible formats for deaf and hard of hearing candidates to present their responses: These formats shall include examination questions prepared, signed, and stored videos on DVD/CD, signing and recorded on videos to be transliterated by a sign language transcriber or interpreter, as well as responding candidates in sign language to a transcriber. Deaf and hard of hearing candidates shall be allowed to choose the signing mode of answering examinations and to prepare some notes or hints to guide them through answering the question while signing; and



e. put separate packing envelopes for the question papers of deaf and hard of hearing students who need specific accommodation: This will help invigilators in distributing examination question papers to the candidates.

Moreover, suitable questions for deaf and hard of hearing candidates shall consider the following qualities:

- i. Conciseness and precision;
- ii. Free from contextual contention and psycho-social implications;
- iii. Avoiding long introductory statements;
- iv. Avoiding mentioning the obvious;
- v. Relevance to students' area of study; and
- vi. Avoiding complexity that involves several interrelated components.

7.3.2 Invigilating examinations

Invigilating examinations is an important stage in the assessment process for deaf and hard of hearing students. Therefore, examiners and invigilators, including the NECTA, shall:

- consider alternative formats to present question papers to deaf and hard of hearing candidates such as the use of videos, projectors and other relevant devices/ technology;
- b. establish, develop and/or use the approved guidelines governing TSL interpretation services during examinations and in the examination room; and
- c. put separate packing envelopes for the scripts of deaf and hard of hearing students, who need specific accommodation, to help markers when sorting the scripts for marking.

7.3.3 Marking scripts

Marking scripts is an important stage in the assessment process. NECTA shall, therefore

a. establish and develop guidelines that are specific to the



- scripts of deaf and hard of hearing candidates, considering or addressing the bilingual-bicultural model;
- b. ensure the recorded examination responses in TSL are marked by teachers who are competent in TSL; and
- c. train markers to improve their competence in marking scripts and signed responses by the deaf and hard of hearing candidates.

7.4 Final examination grades and awards

Ordinary level examinations shall be graded according to NECTA standards.

7.5 Selecting and posting deaf and hard of hearing students

The PO-RALG is responsible for selecting and posting students into post-ordinary level secondary and further education. In discharging its responsibilities, PO-RALG shall

- a. involve deaf education professionals in selecting and posting deaf and hard of hearing candidates to post-ordinary level secondary and further education.
- b. involve deaf education experts in the planning process of transition to independent adulthood life and employment of deaf and hard of hearing candidates. This shall be done by considering specific needs of the deaf and hard of hearing students in their transition to adult life.

7.6 New combinations

Besides the existing subject combinations, hearing, deaf and hard of hearing students in special and inclusive secondary schools shall be allowed to select and pursue a combination among the following additional combinations:

History, Tanzanian Sign Language, and English Language (HSL)

History, Kiswahili, and Tanzanian Sign Language (HKS) Kiswahili, English Language, and Tanzanian Sign Language



(KLS)

History, Geography, and Tanzanian Sign Language (HGS) Tanzanian Sign Language, English Language, and French

(SLF)

Kiswahili, Tanzanian Sign Language, and French (KSF)

History, Geography, and Textile Technology (HGT)

Physics, Chemistry, and Textile Technology (PCT)

Economics, Geography, and Textile Technology (EGT)



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GLOSSARY

Adapted teaching and

learning materials A method in education through which

specific teaching devices or instruments are employed in an effort to meet the specific learning needs of individuals

Adaptive assessment A type of assessment that is modified

specifically to each examinee, based on

their abilities

Assistive listening devices Any device that transmits, processes or

amplifies sounds to overcome hearing loss

Bilingual approach The use of two languages as the media

of instruction in schools

Cued speech A visual model of communication that

uses hand shapes and placements around the mouth to aid in the recognition of

spoken words

Deaf culture A set of social beliefs, behaviours, art,

literary traditions, history, values, and shared institutions of communities that are influenced by deafness and which use sign/signed languages as the main means

of communication

Deaf education The education of students with any

degree of hearing loss or deafness which addresses their differences and individual

learning needs

Deaf role model A deaf person whose behaviour, example,

and success can be emulated by others

especially younger people



d/Deaf student

- (i) A student in secondary school from Form One to Form Four whose hearing loss makes it impossible to hear or perceive sound waves
- (ii) A person who identifies oneself (or is identified) as being deaf and culturally belongs to the Deaf community (normally written with capital "D")

Decoding

A process of extracting meaning from spoken, signed or written languages

Educational audiologist

A hearing healthcare professional who assesses and evaluates hearing loss and related disorders and habilitate/ rehabilitates students with hearing loss in educational setting

Finger-spelling

A manual representation of letters and numbers using palm and fingers

FM system

This is a system that operates like a small radio station. It is a transmitter broadcasts the sound on frequencies designated for use primarily by assistive listening systems.

Habilitation

This refers to a process aimed at helping students with hearing loss attain, keep or improve skills and functioning for daily living. Its services include physical, occupational, and speech/language therapy, audiology and other services that are offered in both hospital and outpatient locations.



Hard of hearing student

A student with mild to moderate hearing loss who may communicate through sign language, spoken language, or both with or without amplification

Inclusive school

A school setting that brings students together in one classroom and community, regardless of their background, aptitude, strengths or weaknesses in any area, and seeks to maximize the potential of all students

Individualized education

programme/plan (IEP)

A written programme/plan developed by schools through a multidisciplinary team, to ensure that a child with hearing loss attending secondary school receives specialized instruction and related services

Infrared (IR) system

This is the use of invisible light on the infrared spectrum to transmit the sound signal to the receiver via radiator panels. The system is sometimes referred to as a "line of sight" system because the receiver must be in view of the radiator panel without any obstruction between them, since infrared waves will not go through solid objects.

Itinerant teacher

A teacher trained in special education who coordinates several special and inclusive schools or special education units and offer educational support to students with special educational needs and their teachers



Least restrictive environment

A setting most similar to general education classroom and also meets the students' special educational needs

Literacy

The ability to read and write.

Loop system

This is a system that broadcasts electromagnetic current within an area encompassed by a cable antenna. In order to receive the signal, an individual must be within a range of the magnetic field generated by the cable antenna, usually inside the looped area.

Psychomotor skills

This refers to a function, which involves the precise movement of muscles with the intent to perform a specific action. It involves both motor and psychological components.

Multidisciplinary team

A group of individuals from multiple disciplines who meet to pursue a common goal, such as evaluating a student for placement in special education or creating an individualized education programme (IEP) for a student

Multimodal approach

The approach used in teaching literacy to deaf and hard of hearing using: sign language, finger spelling, visualization, pronunciation and speech-reading

Non-specialist teacher

A teacher who is not a specialist in

special education

Pedagogy

The method and practice of teaching, especially as an academic subject

or theoretical concept.

Practice-based assessment

Apractical oriented type of assessment on the students' learning

Pre-teaching

A strategy that involves a few minutes of familiarising students with key concepts or skills before teaching the lesson

Re-teaching

A process of consolidating the content that students failed to understand during the lesson

Realia

Real objects or materials from everyday life used as teaching aids

Rehabilitation

The regaining of skills, abilities, or knowledge that may have been lost or compromised as a result of acquiring a hearing loss or due to a change in one's hearing loss

Resource room

A separate, remedial classroom in a school where students with educational needs are given specialized instructions and academic remediation

Sign language

A language that employs signs made with the hands and other body movements, including facial expressions and postures, used



primarily by people who are deaf

Sign language interpreter Someone who facilitates communication and conveys all

auditory and signed information so that both hearing and deaf individuals may fully interact

Sign language transcriber Someone who writes down what

is signed by a deaf person or interpreter

Specialist teacherAteacher with expertise in working with students with special educational

needs

Special school A school catering for learners with

special educational needs

Speech readingIt is a technique of understanding speech by visually interpreting the

movement of the lips, face and tongue when normal sound is not available or heard. It also relies on information provided by the context, knowledge of the language and any

residual hearing.

Speech/language therapist Sometimes referred to as speech-

language pathologist (SLP) is a highly-trained professional who evaluates and treats children and adults who have difficulty with

speech or language.

Tanzanian Sign Language The standardized language that employs signs made with the

hands and other body movements,

including facial expressions and postures, used primarily by Tanzania

postures, used primarily by Tanzani deaf community to communicate

Text-labelled picturesPictures with captions describing someone or something in a word

or short phrase

Theory-based assessment A theory-oriented type of assessment

on students' abstract learning which needs a lot of writings and

explanations

Total communication An approach to deaf education

that aims to make use of a number of modes of communication such as signed, oral, auditory, written and visual aids, depending on the particular needs and abilities of the

child

Visualization A teaching technique of creating images, diagrams, or animations

to communicate a message