

**MINISTRY OF EDUCATION AND VOCATIONAL TRAINING
TANZANIA INSTITUTE OF EDUCATION**



**CURRICULUM FOR ORDINARY LEVEL
SECONDARY EDUCATION IN TANZANIA**

2007

MINISTRY OF EDUCATION AND VOCATIONAL TRAINING

TANZANIA INSTITUTE OF EDUCATION

**CURRICULUM FOR ORDINARY LEVEL
SECONDARY EDUCATION IN TANZANIA**

© Tanzania Institute of Education, 2005

Edition of 2013

ISBN 978 - 9976 -61 - 357 - 5

Developed by:

Tanzania Institute of Education

P.O. Box 35094,

Dar Es Salaam, TANZANIA.

Tel: 255 – 22 – 2773005, 2771108

Fax: 255 – 22 – 2774420

Email: director.general@tie.go.tz

Website: www.tie.go.tz

Approved by:

The Commissioner for Education,

Ministry of Education and Vocational Training,

P.O. Box 9121,

Dar Es Salaam, TANZANIA.

Tel.: 255 - 22 - 2122373

Fax: 255 - 22 - 2113271

Email: ebhalalusesa@yahoo.co.uk

Website: www.moe.go.tz

If you have any comment(s) on this curriculum kindly send the same to the Commissioner of Education using the above address.

TABLE OF CONTENTS

ABBREVIATIONS.....	4
INTRODUCTION.....	5
1.0 CURRENT CONTEXT OF ORDINARY SECONDARY EDUCATION.....	7
1.1 Social Environment.....	7
1.2 Economic Environment.....	8
2.0 EDUCATIONAL POLICY STATEMENTS.....	8
2.1 National Demands.....	8
2.2 International Demands.....	10
3.0 STATEMENT OF BROAD LEARNING OBJECTIVES AND COMPETENCES.....	11
3.1 Aims and Objectives of Education in Tanzania.....	11
3.2 Aims and Objectives of Secondary Education.....	12
3.3 General Competences for Ordinary Secondary Education.....	13
4.0 STRUCTURE OF FORMAL EDUCATION SYSTEM.....	17
4.1 Ordinary Secondary Education.....	17
5.0 STRUCTURE OF CURRICULUM CONTENT, LEARNING AREAS AND SUBJECTS.....	17
5.2 Subjects Taught from Form I to Form IV.....	19
6.0 STANDARDS OF RESOURCES REQUIRED FOR IMPLEMENTATION OF THE CURRICULUM.....	22
6.1 Teachers' Requirements.....	22
6.2 School Leadership Qualities.....	23
6.3 School Facilities.....	24
7.0 TEACHING METHODOLOGY.....	29
7.1 Learner Centred Approach.....	29
7.2 Teaching/Learning Methods.....	29
8.0 ASSESSMENT OF STUDENTS ACHIEVEMENTS.....	30
8.1 Continuous Assessment.....	30
8.2 Examinations.....	31
8.3 Examination Structure.....	31
8.4 Assessment Methods.....	32
8.5 Weighting and Grading System.....	32
8.6 Accreditation and Certification.....	33
9.0 MONITORING AND EVALUATION OF CURRICULUM.....	33
9.1 Curriculum Monitoring.....	34
9.2 Curriculum Evaluation.....	34
10.0 CO-CURRICULAR ACTIVITIES.....	36
11.0 GUIDANCE AND COUNSELING SERVICES.....	37
BIBLIOGRAPHY.....	39

ABBREVIATIONS

CA	Continuous Assessment
CBO's	Community Based Organisations
CSEE	Certificate of Secondary Education Examination
EFA	Education For All
EMAC	Educational Materials Approval Committee
ESDP	Education Sector Development Programme
ESR	Education for Self Reliance
ETP	Education and Training Policy
HIV	Human Immune deficiency Virus
ICT	Information and Communication Technology
MoEC	Ministry of Education and Culture
MoEVT	Ministry of Education and Vocational Training
NECTA	National Examination Council of Tanzania
NGO's	Non Governmental Organisations
NSGRP	National Strategy for Growth and Reduction of Poverty
SEDP	Secondary Education Development Programme
SEMP	Secondary Education Master Plan
TIE	Tanzania Institute of Education
UNESCO	United Nations Educational, Scientific and Cultural Organization

INTRODUCTION

Curriculum is generally prescribed as a set of standards that guides the delivery of education by considering the following areas: competence to be developed and acquired by learners (knowledge, skills and attitudes) in the teaching and learning process; the pedagogical approaches to be used in the course of curriculum implementation; educational materials to facilitate teaching and learning; professional and academic qualification of the curriculum implementers; enabling infrastructure for effective delivery of curriculum; the instructional time required to complete the intended learning outcomes and monitoring and evaluation of the curriculum.

Therefore, curriculum in the contemporary outlook is viewed as a mirror reflecting the society's philosophy and culture, but also including the sources of knowledge and the nation's education goals. Further, the curriculum should explain the meaning of knowledge, skills and attitudes that a learner is expected to acquire after successfully completion of a prescribed learning cycle. The curriculum will also spell out modalities for assessment, monitoring and evaluation of the teaching and learning process.

The review of Ordinary Secondary Education curriculum has been made inevitable to meet the requirements of Education and Training Policy (1995), Tanzania Development Vision 2025, National Science and Technology Policy, Education Sector Development Programme (ESDP) and Secondary Education Development Programme, National Strategy for Growth and Reduction of Poverty (2004), recommendations from educational researches such as the research report on Secondary Education curriculum review prepared by TIE (2004). The research findings and recommendations from the stakeholders necessitated the review of 1997 Secondary Education curriculum.

The curriculum for Ordinary Secondary Education is among the six revised curriculum documents for schools and teachers Colleges which is another success in the professional and technical partnership existing between UNESCO and TIE under the Ministry of Education and Vocational Training(MoEVT).

TIE appreciates the continued partnership that has enhanced the quality of six curriculum documents and anticipates much more achievement in enhancing quality education in Tanzania.

Organization of Ordinary Secondary Education Curriculum

This curriculum document comprises of eleven elements. These include, Current context; Educational Policy Statements; Statement of Broad Learning Objectives and Competences; Structure of Education System; Structure of Curriculum Content, Learning Areas and Subjects; Standard Resources required for Curriculum Implementation; Teaching Methodology and Assessment of Student Achievement, Monitoring and Evaluation of the Curriculum; Co- curricular Activities and Guidance and Counselling Services.

Users of Ordinary Secondary Education Curriculum Document

The main users of this curriculum document include senior officials, university lectures, Education officials from the Ministry of Education and Vocational Training (MoEVT), Ministry of Regional Administration and Local Government (MORALG), Regional and District education officers, Regional and District academic officers, Examiners, School and College Inspectors, School and College Directors and Managers and Curriculum Developers. However, other stakeholders such as teachers, tutors, parents, donor agencies, Government and non-government Organizations dealing with educational issues may use this curriculum document.

1.0 CURRENT CONTEXT OF ORDINARY SECONDARY EDUCATION

The provision of any education programme reflects the existing local, regional and international situations. This indicates situations that can be contextually scanned from social and economic environment in which the intended education is supposed to take place. It is, therefore, imperative for a developing country like Tanzania to have a curriculum which embraces quality education as vital and inevitable for accelerating its socio-economic development.

Currently, the Curriculum for Ordinary level Secondary education in Tanzania has taken into consideration aspects of social, political, and economic environment in order to prepare students who can fit in the society; and compete in the global economy.

1.1 Social Environment

Tanzania built nationalism from different cultural heritages of different tribes. Kiswahili is one among the tools used in the cultural linkage to enhance development and appreciation of national unity, preserve identity, ethic, and personal integrity. In addition, Kiswahili promotes the respect for and readiness to work in different locations of the country. More importantly, it is used as a unifying factor in a country which cares about human rights, cultural and moral values, customs, traditions and civic responsibilities and obligations. Kiswahili remains to be the national language and English an official language. Hence, the medium of instruction in Ordinary level Secondary Education shall be English and Kiswahili will be taught as a subject.

Emerging social issues such as cross-cutting issues; Social cultural diversities; career and life skills have been reflected in the curriculum. The Secondary education shall support the building of social cohesion and foster local cultures to sustain a sense of national identity and belonging.

1.2 Economic Environment

The Tanzania economy demands for the curriculum which shall focus on quality education which is the major determinant factor of economic growth. In the competitive global economy, the curriculum shall be geared towards developing skills essential for the workforce with emphasis on the use of science and technology. Science and technology are essential in the social and economic development at national and global levels. Therefore, the secondary education to be provided should prepare the learners to be creative and innovative, competent in the areas of science and technology, productive and entrepreneurial, but also be able to address challenges emanating from the prevailing socio-economic situation of the country and the evolving cross-cutting issues. As such, the country is facing a lot of challenges that require development in problem solving techniques in order to boost production that can result in a sustainable economic growth.

The current trend in the global socio-cultural-economic relations is pushing the whole world including Tanzania towards the so called knowledge based society which is built on creativity, knowhow and innovation.

2.0 EDUCATIONAL POLICY STATEMENTS

On the course of designing of the Ordinary Level Secondary Education Curriculum, various national and international policy statements and agreements have been effectively considered so as to comply with both global and national educational demands and cater for the diversities on the needs of the learners and the society in the fast changing and growing world.

2.1 National Demands

a) Education Sector Development Programme (ESDP)

In the mid-1990s the government of Tanzania initiated various social sector reforms including those in the education sector. In the education sector the reform is taking place under the Education Sector Development Programme

(ESDP). Among its objectives is to ensure equity in access to quality formal education. In the execution of the programme the Secondary Education Master Plan (SEMP) was developed specifically to systematize the reform process at secondary school level SEMP is operationalized through the Secondary Education Development Programme. One among the achievements of SEDP is the review of the Ordinary level Secondary Education Curriculum.

b) Tanzania Development Vision 2025

The vision 2025 focuses on building a nation with high quality of education at all levels; a nation which produces the quantity and quality of educated people sufficiently equipped with the requisite knowledge to solve the societal problems, meet the challenges of development and attain competitiveness at regional and global levels.

It underscores the importance of curriculum transformation with a focus on promoting creativity and problem solving as a means towards the utilisation of science and technology in all life of work. In order to attain that vision the emphasize was to equip schools with adequate teaching aids including making ICT accessible to all students in all levels of education so as to have a well educated and learning society (URT, 1999).

c) Education and Training Policy (ETP)

ETP (MOEC, 1995) is probably the first comprehensive education policy ever developed in Tanzania. The policy emphasizes inter alia, the provision of quality education through curriculum review, use of appropriate assessment procedures, improve teacher management and motivation. The policy also focuses on ensuring the existence of adequate skilled technical workforce of all categories through increased availability of opportunities for vocational education and training. This endeavour is geared towards contributing in job creation and self-employment. The Education and Training Policy (ETP) of 1995 describes the main purpose of secondary education as to provide

opportunities for learners to acquire essential knowledge, skills and attitudes so that graduates can have sufficient qualities to join professional training and institutions of higher education. In this policy, the guiding philosophy is education for self reliance. Education for self reliance emphasizes meaningful learning in which three major aspects are underlined: cognition, psychomotor (skills), and attitudes. This type of learning is identified by the following indicators: participation, involvement of theory and practice, integrity, confidence, self-development, acquiring Life Skills, appreciation of equity, developing entrepreneurship skills, creativity, curiosity, initiative/discovery, and the ability to analyze and make assessments.

a) National Strategy for Growth and Reduction of Poverty (NSGRP)

The National Strategy for Growth and Reduction of Poverty (NSGRP) initiative, popular known as MKUKUTA underscores the importance of education as an effective tool for poverty reduction and improving the quality of life (URT, 2004).

Goal 1: Ensuring equitable access to quality primary and secondary education for boys and girls, universal literacy among women and men and expansion of higher, technical and vocational education.

2.2 International Demands

a) The 1990 Joemtien World Conference on Education For All (EFA)

This world conference set up broad global guidelines, goals and targets for the expansion and improvement of Basic Education to cover all people; children, the youth and adults without any form of discrimination. The target period for these achievements was the decade between 1990 and the year 2000. EFA singled out the basic learning needs to be prioritized by all countries, which include: literacy, oral expression, numeracy and the ability to solve problems. These basic learning needs were supposed to go along with knowledge, skills, values and attitudes, all of which would enable the

target group to live and work with dignity as fully empowered human beings.

b) The 2000 Millennium Development Goals (MDGs)

One of the millennium development goals is the provision of quality education to all. Much global pressure is exerted on developing countries to ensure that the Millennium Development Goals are met by 2015. Out of the eight Millennium Development Goals, one is directly relevant to secondary education which is *Goal number 3: Promotion of gender equality and empowering women by eliminating gender disparity in primary and secondary education by 2005, and at all levels by 2015 (UNESCO, 2000).*

3.0 STATEMENT OF BROAD LEARNING OBJECTIVES AND COMPETENCES

The learning Competences for Ordinary level Secondary Education are determined by the goals and objectives of the curriculum. The curriculum goals and objectives are formal stipulations which will guide the teaching and learning process and define the expected educational achievement for learners.

Vision

To have a competent secondary school learner who is a responsible member of the society with broad knowledge and skills, able to appreciate national unity, moral values and respect for human rights.

Mission

To nurture the intellectual, scientific, aesthetic, social, moral and technological growth of the learners so that they can fit in their society and ever changing world.

3.1 Aims and Objectives of Education in Tanzania

The general aims and objectives of education in Tanzania are:

- a) To guide and promote the development and improvement of the personalities of the citizens of Tanzania, their human resources and effective utilization of

those resources in bringing about individual and national development;

- b) To promote the acquisition and appreciation of culture, customs and traditions of the peoples of Tanzania;
- c) To promote the acquisition and appropriate use of literacy, social, scientific, vocational, technological, professional and other forms of knowledge, skills and understanding for the development and improvement of the condition of man and society;
- d) To develop and promote self-confidence and an inquiring mind, an understanding and respect for human dignity and human rights and a readiness to work hard for self advancement and national improvement;
- e) To enable and to expand the scope of acquisition, improvement and upgrading of mental, practical, productive and other life skills needed to meet the changing needs of industry and the economy;
- f) To enable every citizen to understand and uphold the fundamentals of the National Constitution as well as the enshrined human and civil rights, obligations and responsibilities;
- g) To promote the love for work, self and wage employment and improved performance in the production and service sectors;
- h) To inculcate principles of the national ethic, integrity, national and international cooperation, peace and justice through the study, understanding and adherence to the provisions of the National constitutions and other international basic charters; and
- i) To enable a rational use, management and conservation of the environment.

3.2 Aims and Objectives of Secondary Education

Aims and objectives of secondary education are:

- a) To consolidate and broaden the scope of baseline ideas, knowledge, skills and principles acquired and developed at the primary education level;
- b) To enhance further development and appreciation of national unity, identity and ethic, personal integrity, respect for and readiness to work, human

rights, cultural and moral values, customs, traditions and civic responsibilities and obligations;

- c) To promote the development of competency in linguistic ability and effective use of communication skills in Kiswahili and in at least one foreign language.
- d) To provide opportunities for the acquisition of knowledge, skills, attitudes and understanding in prescribed or selected fields of study.
- e) To prepare students for tertiary and higher education, vocational, technical and professional training;
- f) To 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;
- g) To prepare students to join the world of work.

3.3 General Competences for Ordinary Secondary Education

In this document, competences describe what a secondary school learner should be able to do as the outcome of teaching and learning. Competences shall be developed over the student's entire life of learning and cut across all subject areas. The effective acquisition and promotion of learning competencies should enable an individual to participate effectively in multiple contexts or social fields that contribute to the overall successful life of an individual and a well-functioning society. The key general competences shall include:-

3.3.1 Critical and Creative Thinking

Critical and creative thinking encompasses the creation or generation of ideas, processes, experiences or objects and their evaluation. The two terms are interrelated and complementary aspects of thinking. These thinking processes are combinations of abilities, knowledge, values, attitudes and skills that are useful for the individual and societal progress. The acquisition/promotion of this competence shall help students to:

- a) Think reflectively and logically
- b) Think for themselves, recognize the limits of individual reflections and the need to contribute to and build upon mutual understanding.
- c) Develop an understanding of how knowledge is created, evaluated, refined and changed within subject areas.
- d) Promote intuitive and imaginative thinking and ability to evaluate ideas, processes and experiences in meaningful contexts.
- e) Act on things learnt to perform practical tasks, use tools and equipment to measure things, see what actions should be taken on the basis of knowledge and experience.

3.3.2 Communication

This competence is essential to enable learners improve their ability to communicate with others, both orally and in writing. It focuses on improving learners' understanding of the language demands in the required areas of learning based on the recognition that language proficiency is central to learning in all subject areas. In this competence, students shall be able to:

- a) Use a range of language experiences for developing knowledge of a subject area.
- b) Demonstrate competences in linguistic ability and effective use of communication skills in English, Kiswahili and in at least one other foreign language.
- c) Convey and receive information, instruction, ideas and feelings appropriately and effectively in a range of different social and cultural contexts.
- d) Use language for different audiences and purposes relevant to oneself and the subject area.
- e) Understand and use the vocabulary, structures and forms of expression which characterize each area of study.

3.3.3 Numeracy

This competence is intended to strengthen learning in all school subjects through providing learners with basic understanding of the quantitative and logical aspects as applied in different fields. Through this competence, students shall have the ability to:-

- a) Organize information to support logic reasoning.
- b) Recognize and use numerical patterns and relationships confidently and competently.
- c) Recognize, understand, analyze and respond to information which is presented in numerical and mathematical forms such as statistics, graphs, tables and charts as applied within the subject area.
- d) Use a range of mathematical instruments, including electronics, confidently and competently.
- e) Provide basic estimates and calculations accurately and proficiently.

3.3.4 Independent Learning

This competence focuses on enabling learners to become capable, self-reliant, self motivated and life-long learners. Independent learning enables learners to develop values, attitudes, knowledge and skills needed to make responsible decisions and take actions in dealing with their own learning. Through this competence, students shall have the ability to:

- a) Take responsibility of their own learning and tasks.
- b) Work effectively, independently and cooperatively.
- c) Develop the desire and interest for life-long learning and personal growth.
- d) Take appropriate roles as responsible citizens in the society.
- e) Participate actively in meaningful learning activities.
- f) Access knowledge from different sources.

3.3.5 Personal and Social Values

This is a crucial competence in enabling learners to develop an increased understanding of how culture shapes our thinking and understanding. Learners are

expected to be self-reliant and willing to work harmoniously in groups. This competence will enable learners to develop the ability to:-

- a) respect one self, others and the environment.
- b) relate and apply learnt knowledge and skills to personal, moral and socio-cultural context.
- c) cultivate compassionate, empathetic and fair-minded attitudes which will make positive contribution to society.
- d) understand all forms of inequality and exploitation (prejudice, discrimination, racism, harassments) and develop the desire to contribute to their elimination.
- e) take responsibility as a member of a group for jointly decided actions and decisions.
- f) acknowledge individual differences and demonstrate respect for the rights of all people.
- g) participate effectively as responsible citizens and develop positive attitude towards different types of work.

3.3.6 Technological Literacy

This is an essential competence in enabling students to appreciate the value and limitation of technology in the society and participate in the shaping of public policies related to technological change. Students will also develop knowledge about the types of technology available, the ways in which they operate and the uses to which they can be put. This competence will enable learners to demonstrate the ability to:-

- a) realize their roles and responsibilities related to technological changes.
- b) develop a modern view of technology and appreciate its value and limitations in the society.
- c) make decisions related to technological developments for positive development of the individual and the society.
- d) participate appropriately in harnessing resources and energy for mutual benefit.

- e) make appropriate use of technology in solving problems at the individual and community level.

4.0 STRUCTURE OF FORMAL EDUCATION SYSTEM

The structure of formal education system shall be 2-7-4-2-3+ that is, 2 years of pre- primary education, 7 years of primary education, 4 years of Ordinary Secondary Education (O –level), 2 years of Advanced Secondary Education (A-level) and a minimum of 3 years of tertiary education.

4.1 Ordinary Secondary Education

This is the third level of education in which the students are enrolled after successful completion of seven years of Primary Education. Students shall spend four years of studies in Ordinary Secondary Education.

4.1.1 Time for Teaching and Learning

The school calendar for Ordinary Level Secondary Education shall have 194 days of teaching and learning in schools per year. There shall also be two school terms in a year, each with 21 weeks. A week of teaching shall have a minimum of 40 periods and each period have duration of 40 minutes. The daily total instructional time shall be 5:20 hours.

5.0 STRUCTURE OF CURRICULUM CONTENT, LEARNING AREAS AND SUBJECTS

The Ordinary level Secondary education Curriculum is organised into key learning areas from which the teaching subjects are generated.

5.1 Key Learning Areas

The Ordinary Level Secondary Education curriculum is broad based to allow the gathering of knowledge and practical skills from a great variety of diverse subjects, hence improve students’ ability to take options in pursuit of higher education and carrier.

There shall be five main learning areas that are: Languages, Natural Sciences and Technology, Social Sciences, Business and Aesthetics.

5.1.1 Languages

Language is a tool that enables learners to communicate effectively orally and in writing. The language subjects that shall be taught under this learning area are:

- a) Kiswahili
- b) English
- c) French
- d) Arabic

5.1.2 Natural Sciences and Technologies

Human beings have to interact with the environment in order to survive. This could be done through the application of science and technology. The study of basic sciences and mathematics and exposure to relevant scientific and technological products shall be achieved through the secondary education curriculum. The following subjects shall be studied under this learning area:

- a) Biology
- b) Chemistry
- c) Physics
- d) Mathematics
- e) Information and Computer Studies
- f) Technical Education
- g) Agriculture
- h) Home Economics.

5.1.3 Social Sciences

Social sciences enable learners to develop an understanding of their rights and responsibilities, create self awareness, and cope with social, economic, political, cultural and technological changes taking place within and outside the society.

Subjects under this area of learning shall be:

- a) History
- b) Geography
- c) Civics

5.1.4 Business Studies

This learning area focuses on demonstration of knowledge and understanding of management of financial resources, entrepreneurial skills and attitudes. Business studies promote the development of a wide range of basic skills in financial management, planning, marketing, purchasing, public relations and entrepreneurship. Subjects under this learning area shall be:

- a) Commerce
- b) Book-Keeping

5.1.5 Aesthetics

The area has a contribution to the personal development of the learner. It provides essential learning for living and develops a wide range of both general and specific skills which are important in many aspects of life. It encourages learners to demonstrate their own talents and values and to recognize the aesthetic and spiritual dimensions of their lives. Aesthetics are also important for recreation, entertainment, health and leisure. The subjects under this learning area shall be:

- a) Fine Arts
- b) Theatre Arts
- c) Physical Education and
- d) Music

5.2 Subjects Taught from Form I to Form IV

Form I and Form II's students shall study 10 subjects as shown in **Table 1**. These shall include 7 core subjects, two elective subjects and religion as a compulsory subject. The core subjects shall be Mathematics, English, Kiswahili, Biology, Civics, Geography and History. Elective subjects shall be Physics, Chemistry or

Bookkeeping and Commerce, Home Economics or Technical subjects. In addition, the student shall be required to take one optional subject as shown in **Table 2**.

Table 1: Subjects to be Taught from Form I to Form IV with their corresponding number of Periods per week.

Form I and Form II			Form III and Form IV		
S/No	Subject	Number of periods per week	S/No	Subject	Number of periods per week
1.	Mathematics	6	1.	Mathematics	6
2.	English	5	2.	English	5
3.	Kiswahili	3	3.	Kiswahili	3
4.	Biology	3	4.	Biology	3
5.	Civics	2	5.	Civics	2
6.	Physics	3	6.	Physics	4
7.	Chemistry	3	7.	Chemistry	4
8.	Geography	3	8.	Geography	3
9.	Commerce	3	9.	Commerce	3
10.	History	2	10.	History	3
11.	Religion	2	11.	Religion	2
12.	Bookkeeping	3	12.	Bookkeeping	3
13.	Agriculture Science	6	13.	Agriculture Science	6
14.	Engineering Science	3	14.	Engineering Science	3

N.B: i) Engineering Science shall be taught in Technical schools instead of Physics.

ii) History shall not be taught in Technical schools.

Table 2: Optional Subjects for Form I to Form II

S/N	Subject	Number of Periods per Week
1.	Additional Mathematics	2
2.	Information and Computer Studies	2
3.	Music	2
4.	Fine Art	2
5.	French	2
6.	Arabic	2
7.	Bible knowledge	2
8.	Islamic Studies	2
9.	Home Economics	3
10.	Theatre Arts	2

In Form III and Form IV, students shall take six core subjects namely; Mathematics, English, Kiswahili, Biology, Civics and Geography. They shall also include in their study programmes one or more elective subjects; which shall be selected among: Chemistry, Physics, Bookkeeping, Commerce and History. These subjects shall fall under the following categories; **Sciences, Social Sciences, and Commercial subjects**. They shall also be required to study one optional subject among the ones shown in **Table 2**. Students shall, therefore, take the subject combinations as shown in **Table 3**.

Table 3: Science, Social Science and Commercial Subject Combinations

Subjects for the Science Group	Subjects for the Social Science Group	Subjects for the Commercial Group
Mathematics	Mathematics	Mathematics
English	English	English
Kiswahili	Kiswahili	Kiswahili
Biology	Biology	Biology
Civics	Civics	Civics
Physics	Geography	Geography
Chemistry	History	Book-keeping
Geography	Bias subject (s)	Commerce
Bias subject (s)	Religion	Religion
Religion		

6.0 STANDARDS OF RESOURCES REQUIRED FOR IMPLEMENTATION OF THE CURRICULUM

The government and local authorities shall ensure that appropriate infrastructure, facilities, equipments, instructional materials and teachers needed for optimum and effective implementation of the curriculum are available by:

- a) Setting standards
- b) Providing the funds

Design of the standards for proper and effective implementation of the Ordinary Secondary education curriculum shall be guided by the list of indicators described in the following paragraphs:

6.1 Teachers' Requirements

For effective implementation of the Ordinary level Secondary education curriculum, there shall be enough number of qualified teachers for all subjects. The government through the ministry responsible for education shall recruit and retain by offering incentives, the best available trained secondary school teachers.

a) Teachers' Qualifications

The minimum academic qualifications for a secondary school teacher shall be a valid Diploma in Education obtained from a recognized institution. Where necessary, graduates without teacher training may be employed to teach but they must possess a teaching license issued by the ministry responsible for education.

In addition to the academic qualifications, a teacher implementing the curriculum shall have the following professional competences:

Able to apply multiple teaching methods in a lesson

Able to diagnose pupils' learning needs, assess their academic progress and assist them to develop requisite skills.

Able to design and improvise teaching and learning materials from local available resources.

Able to apply appropriate mechanisms for testing learning competences.

b) Teaching Load

The optimum teaching load for Ordinary secondary school teacher shall be a maximum of 30 periods per week which is an average of 6 periods a day or 4 contact hours. Apart from teaching, the teacher shall participate in supervising other extra curriculum activities.

c) Teacher Student Ratio

The maximum number of students per class shall be 40 and therefore the teacher-student ratio shall be 1:40.

6.2 School Leadership Qualities

The Education Sector Development Programme (ESDP) has put it clearly that school managers shall be judged on the basis of school performance and sustained performance (in skills, altitude and knowledge). To promote this objective, capacity building courses shall be organized for the school heads and managers. Specific qualities of the heads and managers shall include the following:-

- a) At least a Bachelor's degree in Education. Specialization in Education management shall be an added advantage.
- b) A working experience in a secondary school of at least 3 years.

- c) Other attributes include: commitment; dynamism; caring; responsible and accountable; confidence; commands of good public relations and pro-team work.

6.3 School Facilities

For smooth implementation of the secondary education curriculum, the availability of adequate, standard physical resources and facilities is considered critical. The required facilities shall be provided by the central government, local authorities and owners of privately owned secondary schools. The responsibility of proper use and maintenance of the resources shall be under the school administration. The school facilities shall include: physical resources, sports and recreational facilities, healthy and safety, teaching and learning materials and facilities for students with special needs.

6.3.1 Physical Resources

These shall include construction of classrooms, laboratories, libraries, ICT facilities, dormitories, health and kitchen facilities, as well as facilities for students with disabilities. Elaboration of these facilities is made here under:

a) Classrooms and Administration Offices

Sufficient and well furnished classrooms and administration offices shall be required for every secondary school. The classrooms shall be affixed with teaching and learning facilities such as writing boards, overhead projectors, flip charts, rulers and screens while the administration offices shall be well furnished. In addition to that, they shall be well ventilated and lighted and friendly to students with special learning needs. On the overall, the classrooms shall not promote overcrowding in view of available tables, chairs and desks.

b) Laboratories

Secondary schools shall be equipped with modern laboratories to cater for natural science, languages and geography subjects. Audio-visual materials, Braille equipment, special looking lenses for the visually impaired, white

canes for the blind and hearing inherent gadgets shall also be availed in the laboratory premises. These shall ensure the development of competences as emphasised in the curriculum.

c) Libraries

Libraries are not only critical for facilitating the teaching and learning process, but they also enhance self-learning. Owners and managers of secondary schools shall ensure that their schools have standard libraries which are well stocked with relevant and up to date reading materials and made easily accessible to students of different abilities. The buildings shall be spacious; ventilated and equipped with relevant literature.

d) Dormitories and Staff Houses

It is a mandatory for Boarding schools to have dormitories to facilitate students' accommodation. Schools shall adhere to set standard, which include fair population per dormitory, adequate beds; lightings, adequate and clean toilets; exits for safety fire extinguishers; dustbins and window mosquito nets. Standard and full furnished staff houses shall be made available for teachers at the school.

e) Multipurpose Halls

Each secondary school should have a multipurpose hall with enough space to accommodate all students and teachers. Additional qualities for a multipurpose hall shall be:

- i) Good ventilation.
- ii) Appropriate toilets including those suitable for student and teachers with disabilities.
- iii) Offices.
- iv) Sports and games rooms or halls which can accommodate indoor sport games.
- v) Adequate chairs.

f) ICT Facilities

ICT facilities are more important in this science and technological era. The ICT facilities shall include: computers, printing and photocopying machines, scanners and internet connectivity.

ICT facilities shall:

- i) Simplify the teaching and learning process.
- ii) Facilitate communication and information linkages in the school.
- iii) Give learners the real world experience in learning.
- iv) Develop students' ability to collect, process, share and present information through words, sounds and images.

6.3.2 Health and Safety

The health of the students is crucial if effective teaching and learning is to take place. Boarding schools shall as a mandatory have dispensaries while day schools shall have rooms allocated and equipped with first aid facilities. Standard kitchens shall be built according to specified standards and serve lunch for day scholars and all meals for those who are in boarding schools. Other health facilities that each secondary school shall have include:

- a) Toilets including those suitable for people with special needs.
- b) Good and reliable drainage system.
- c) Fire extinguishers and detectors.
- d) Fire exits in buildings.
- e) Clean and safe water.
- f) Dispensary facilities and services.

6.3.3 Sports and Recreational Facilities

- a) Playgrounds

Adequate playgrounds for different indoor and outdoor games and sports with appropriate facilities for people with special needs shall be available at the schools.

- b) Facilities and equipment for sports, games and recreational activities

There should be enough facilities and equipment for sports, games and recreational activities for different groups of learners.

- c) Special pitches.

Adequate and appropriate special pitches shall be available for learners with disabilities.

6.3.4 Facilities for Learners with Disability

- a) Braille, white cane, lenses for visually impaired
- b) Wheel chairs for physically handicapped.
- c) U- shaped class- loss of hearing and deaf
- d) Wide doors for those with low vision
- e) Pavements friendly to disabled
- f) Resource rooms
- g) Special toilets
- h) Sound proof rooms.
- i) Buildings with escalator

6.3.5 Teaching and Learning Materials

Apart from teachers, teaching/learning materials are the most important resources needed at classroom level. If the curriculum is to succeed, the preparation and production of teaching/learning materials must be handled with utmost care. The

Ministry of Education and Vocational Training shall be responsible for putting in place criteria for evaluating and ensuring that only quality teaching and learning materials will be selected to support the teaching and learning in the classroom. It is expected that quality teaching/learning materials shall:

- i. Correspond to the curricula and syllabi.
- ii. Be piloted or tried out in pilot schools.
- iii. Promote competences intended for the learners.
- iv. Be enough, adequate interesting and learner friendly especially for the learners with special needs.
- v. Stimulate the learners' cognitive, affective and psychomotor domains during teaching/learning.
- iv. The materials shall also address requirements of learners with special needs including the hearing and the visually impaired and physical handicapped.

Both the ESDP and SEDP state clearly that materials provision shall be a responsibility of the parents, communities, local and central governments as well as schools themselves. While the central government shall provide capitation grants to schools, the other key players shall top up on such costs for the provision of necessary school materials. Schools shall use criteria and guidelines set by the MOEVT when procuring both textual and non-textual materials.

There are basically two types of teaching/learning materials, namely; textual and non-textual.

a) Textual Materials

These shall include printed materials such as: textbooks; syllabi; modules and manuals; reference books; charts and maps; newspapers, journals and encyclopaedias; texts in Braille; posters, fliers, photographs, booklets and brochures.

b) Non-textual Materials

These shall include materials such as: Laboratory apparatus; prototypes; Braille machines; writing boards; weather stations; samples of actual materials; planateria and ICT resources such as computers, internet connectivity, photocopying machines printers and scanners.

7.0 TEACHING METHODOLOGY

7.1 Learner Centred Approach

The implementation of Ordinary Level Secondary Education curriculum shall emphasize learner centred approach. That is the learner shall be placed at the focus of all the decisions that are made about the curriculum and how it will be delivered. This approach shall promote learning-through-doing where both the teacher and the student are active participants in the process. The teacher shall become a facilitator, motivator and a promoter of learning during the classroom interactions. Therefore, learning shall be rooted in the conception of constructivism where the student gets opportunities to interact with environment through well organized tasks, dialogue and reflections on learners' conceptions and eventually arriving at agreed solutions through use of various senses and in built multiple-intelligences. Teachers shall be required to plan and design relevant tasks that will let students question; critically think; form new ideas; create artifacts and therefore bring sense in the learning process. This is the type of learning that makes sense in the life of the students. This methodology automatically promotes the acquisition of intended skills and competences stipulated by the ordinary secondary education curriculum. Teachers shall therefore use the teaching techniques which enhance the learner-centred approach.

7.2 Teaching/Learning Methods

The secondary education curriculum shall identify many teaching/learning methods/techniques to be used by teachers and learners. These shall include:

- i) Classroom based problem solving and enquiry.
- ii) Demonstrations.
- iii) Conducting searches for relevant materials in the library and on line.
- iv) Summarizing readings.
- v) Posing problems as well as solving those set by the teacher.
- vi) Practice of technical or laboratory skills.
- vii) Debates, group discussions.
- viii) Group work to co-produce reports and presentations.
- ix) Analysing case studies.

8.0 ASSESSMENT OF STUDENTS ACHIEVEMENTS

The Ordinary Level Secondary Education curriculum shall provide information essential for assessing students' competencies and must cover a range of dimensions of student learning including mastery of content, cognitive development, social and psychological development and changes in terms of humanistic spiritual values. The main purpose shall be to guide and improve the process of teaching and learning. Effectively planned assessment can promote learning, build confidence and develop students understanding of themselves as learners. There shall be two main components of assessment; Continuous Assessment and Final Examination.

8.1 Continuous Assessment

This shall be of a formative in nature. It shall have diagnostic value in helping the learner develop a realistic self image and inform the teacher on how the teaching and learning process can be developed. It shall determine the progress of the learner and monitor the learning process occur throughout the four years cycle. The assessment tools which shall be used are assignments, tests, projects and terminal examinations. The scores for continuous assessments shall constitute a part of the final assessment of the student. Terminal test scores and project scores shall be sent to NECTA as CA of the student.

8.2 Examinations

In the Ordinary Level Secondary Education cycle, there shall be two official examinations conducted on a national scale at Form two and Form four.

8.2.1 Form Two examination

This shall be taken at the end of Form Two. The students shall pass this examination for promotion to Form Three. The results of this examination shall be used as part of continuous assessment in the form four examinations. No certificate shall be awarded for the student who sits for this examination.

8.2.2 Form Four examination

For a secondary school student to complete his or her ordinary secondary education, he/she shall sit for this examination at the end of Form Four. This examination shall be taken after the candidate has passed the Form Two national Examination. The candidate will be awarded a Certificate of Secondary Education Examinations (CSEE) to mark the completion of ordinary level secondary education. This examination will be used for selection of students for further education, training and direct employment.

8.3 Examination Structure

The examination shall have questions which measure all levels of the learning domains. Each examination paper shall consist of not less than three sections in which section one shall test all levels of domains but the main focus shall be on cognitive domain, while sections two and three shall focus more on the affective and psychomotor domains.

Science and technology subjects shall be examined in two papers which are theory and practical whereby each paper shall carry a weight of 50% of the total marks of the respective final examination for the subject.

Language subjects shall be examined in both written and oral.

8.4 Assessment Methods

Assessment methods for the Secondary Education Curriculum shall emphasize the competence based teaching and learning. These methods shall probe students' understanding, reasoning and critical thinking rather than their ability to return memorized facts. The methods shall include:

- a) Portfolios.
- b) Rating scales and rubrics
- c) Checklists
- d) Oral presentations
- e) Project work
- f) Practical tasks to demonstrate performance skills.
- g) Written essays or reports.
- h) Analysis, for example of texts.

8.5 Weighting and Grading System

The structure for ordinary secondary school assessments shall consist of two components:

- a) Academic component comprising of continuous assessment weighting 50% and the final examination weighting 50%.
- b) The character and attitudes towards work assessment (weighting 100%).

In this component, seven character attributes are assessed. These are diligence, valuing work, caring for property, sociability, obedience, honesty and cleanliness. Each of these character attributes shall be assigned a percentage weighting according to its importance, all of which add up to 100%. Teachers shall assess and send the marks to NECTA for compilation in accordance to agreed percentage as follows:

- i) 100-80% signifying **very good** (1 point)
- ii) 79%-40% signifying **good** (2 points)
- iii) 39%-0% signifying **poor** (3 points)

The CSEE examination has a five (5) point grading scale. Grade A, B, C, D and F. Grade A indicates the highest level of achievement (1 point), Grade B indicates

very good principal pass (2 points), Grade C indicates good principal pass (3 points), Grade D indicates satisfactory (4 points) and F indicates failure (5 points).

8.6 Accreditation and Certification

According to the Education and Training Policy (ETP) of 1995, National Examination Council of Tanzania (NECTA) shall be responsible for setting, administration, marking, publishing and certification of Form Four National Examination while the Form Two national Examinations shall be administered by the School Inspectorate Department.

In order to achieve this NECTA shall:

- i) Establish a strong system for school assessment and examinations.
- ii) Provide training and support for those responsible for examinations.
- iii) Distribute information on students' performance to teachers, curriculum developers, heads of schools, school inspectors, parents, education researchers and other practitioners.

The Certificate of Secondary Education is awarded in four divisions. The divisions shall be computed basing on the best 7 subjects as shown below:

- | | |
|------|-------------------------------|
| i) | Division I: 7 to 17 points |
| ii) | Division II: 18 to 21 points |
| iii) | Division III: 22 to 25 points |
| iv) | Division IV: 26 to 34 points |

9.0 MONITORING AND EVALUATION OF CURRICULUM

Monitoring and evaluation consist of systematic information gathering and making some kind of judgment on the basis of the information. Monitoring and evaluation structures set up within schools as well as nationally will enable all teachers to participate in these processes and contribute to the continuous improvement of the national curriculum.

9.1 Curriculum Monitoring

Schools need to determine how effective the programme and the methods of instructions are. The implementation of the curriculum shall be monitored nationally to track performance continuously against what was planned by collecting and analyzing data on the established indicators. Therefore, education stakeholders shall establish appropriate system for curriculum monitoring and evaluation. Monitoring should be done regularly in a year and gaps identified should be addressed. Different monitoring agencies will have different roles:

- a) School Inspectorate – monitoring of the curriculum implementation
- b) NECTA – Assessment
- c) TIE – designing, developing, monitoring and evaluation of the curriculum and curriculum support materials
- d) MOEVT – administration and overall education management
- e) Subjects Associations – Make an impact on their respective subjects by setting standards to be met.
- f) School Boards – ensure smooth running of the schools.

9.2 Curriculum Evaluation

The evaluation of the Ordinary Level Secondary Education curriculum shall be done by MOEVT in collaboration with TIE and other stakeholders. Other educational institutions, NGOs, individuals and external agencies can also conduct curriculum evaluation after being granted permission by the government.

Depending on availability of resources there shall be two types of curriculum evaluation. These are Formative Evaluation and Summative Evaluation.

a) Formative Evaluation

Formative evaluation shall be done while the curriculum is being implemented. The aim is to identify prevalent successes, problems and weaknesses so that interventions can be made. Formative evaluation shall be done at different levels as shown in the table below

Level	Main Actor
School	Teachers and Heads of Schools
District/Region/Zone	Education officers in Districts/ Regions/Zones, School Inspectors, NGOs, Individuals experts
National	Inspectors, NGOs, CBOs, TIE, Internal and External agencies

TIE shall make follow up of implementation of the curriculum in order to identify problems which teachers face while implementing it. The data obtained during the follow up will help in future revisions of the curriculum.

b) Summative Evaluation

Summative evaluation shall be conducted at the end of the curriculum review cycle. The review cycle is expressed in the number of years expected to elapse before an existing curriculum is reviewed. The minimum review cycle period is equal to the maximum period allocated for a given level of education. Therefore the review cycle for Ordinary level secondary education shall be four years. In this regard, summative evaluation shall be done after 4 years for the Ordinary level secondary education programme.

However, summative evaluation shall at times be conducted before completion of the curriculum review cycle for the following reasons:

- i) When there is a serious outcry from the public concerning a decline in the quality of education.

- ii) When the government and other stakeholders raise concern that the curriculum needs revision in order to accommodate current changes such as scientific and technological innovations, globalization and cross-cutting issues; omitting out of date and irrelevant topics, adding new topics, rearranging the sequence of topics from one class to another.
- iii) When there is a need for improvements to be made in the existing teaching and learning methodologies, assessment methods and quality control mechanisms.
- iv) When there are changes in the country's education and training policy.

Sometimes summative evaluation can be done before completing the curriculum cycle. This is because of the following reasons:

- a) The quality of education becomes low and the society complains about it.
- b) A need to improve teaching and learning methods
- c) Changes in education and training policy.
- d) A need to make changes in contents.
- e) A need to incorporate into the curriculum new knowledge and skills for instance changes in science and technology, globalization, ICT, Cross-cutting issues like environmental education, HIV and AIDS.

10.0 CO-CURRICULAR ACTIVITIES

As the term curriculum generally refers to the academic program of a school, or the work done within the classroom, in contrast, the co-curriculum encompasses all activities that are held outside the regular curriculum. In some cases, in conjunction with the normal academic timetable of scheduled classes, the school to enable students to develop further all aspects of their character provides these.

The co-curriculum plays a vital role in providing a variety of options within the school environment so that all students can find educational pathways that match their individual preferences and abilities. Through participating in the co-curriculum, students shall be able to learn to live together and contribute to academic development and expand their interests, and skills beyond the norm,

giving them the course work opportunity to enrich their lives by experiencing activities which otherwise might have passed them by.

Time should be made available in the school timetable for co-curricular activities for all students. Schools shall organize co-curricular activities taking into consideration locally available resources. Co-curricular activities shall include:

Games and Sports: Each student shall be encouraged to participate in at least one game/sport

Subject Clubs/Associations: Each subject shall have a subject club/association with a patron/patroness. Each student shall belong to at least one subject club out of the subjects of his/her combination.

Cultural activities: The school administration shall encourage students to participate in cultural activities organized at school level, community and national levels, as occasions may warrant.

Other extra-curricular activities such as peer education programme, environmental education, gender, life skills and HIV/ AIDS Clubs.

11.0 GUIDANCE AND COUNSELING SERVICES

Effective social and moral education appropriate to the age level of learners shall be ensured in order to address the whole range of problems/challenges of youths such as drug abuse, HIV and other sexually transmitted infections, teenage pregnancies, induced abortions and unemployment. These and other adverse emerging issues in the society shall be addressed across the curriculum and through extra-curricular activities.

Guidance and counselling services shall be established in schools to help students to face the life challenges and become responsible and committed members of the community. Learners need guidance in selecting appropriate carriers upon completion of their studies. They also need counselling services that will help them to cope with the prevailing situations in the community and addressing various

problems and challenges. Guidance and counselling skills provided in schools shall help learners to develop abilities such as negotiation, assertiveness, communication, decision making, coping with peer pressure and development of attitudes such as compassion, self-esteem, tolerance and role-modelling.

There shall be school counsellors/Guardians who are well abreast with the current life challenges and capable of designing appropriate programme to address such challenges. Issues of HIV/AIDS, gender relations, sexual and reproductive health and related problems need to be addressed strategically depending on the needs of the community.

In addition, there should be strengthened peer education programme in the school where there shall be two peer educators elected in each stream basing on gender in co-education schools. Peer educators will be guided by school counsellors/guardians in their day-to-day activities. Relevant documents shall be consulted to support the establishment of effective guidance and counselling services in schools such as MOEVT strategic plan for HIV/AIDS and Guidelines for Implementing HIV/AIDS and Life-Skills Education Programme in Schools, (2004).

BIBLIOGRAPHY

Bajumuzi.J. (2002). Performance of the Visually Impaired Pupils in Tanzania. Dar Es Salaam.(Unpublished Document)

Barnes, D (1982). *Practical Curriculum Study*. Routledge and Kegan Paul: London.
Institute of Curriculum Development (ICD): (1990). A Summary Report on Baseline Survey on Primary, Secondary and Teacher Education Curriculum Reform in Tanzania Mainland. Dar Es Salaam. (Unpublished Document)

Kirk. S.A et.al. (2003). *Educating Exceptional Children*, 10th Edition. Houghton Mifflin Co. Boston.

Ministry of Education and Culture (MOEC). (1995) *Education and Training Policy*. MOEC – Dar Es Salaam.

MOEC. (2001). *A Baseline Survey on Knowledge, Attitudes and Practices (KAP) in Tanzania Mainland*. UNFPA: Dar Es Salaam.

Morsh. C. J (1977). *Planning Management and Ideology: Key Concepts for Understanding Curriculum*. Falmer Press. UK.

Njabili. F.A. (1993). *Practical Guide for Classroom Measurement and Testing*.

Osaki, K.M. (2006). Science and Mathematics Teacher preparations in Tanzania: Lesson from Teacher Improvement Projects in Tanzania: 1965-2006. *A paper presented to the expert meeting on education held in Naruto University of Education 25th November 2006.*

Scheerens, J. et al (2003) *Education Evaluation, Assessment and Monitoring: A Systematic Approach*. Taylor & Francis Publishers. (www.books.google).

Tanner, D. and Tanner, L. (2007). Curriculum Development: Theory into Practice. Fourth Edition. Pearson Ed. Inc

Taasisi ya Elimu Tanzania (TET). (2003). Ripoti ya Warsha ya Kudurusu Mada za Elimu Dhidiya Ukimwi katika Masomo Chukuzi kwa Shule za Msingi na Sekondari. TET. Dar Es Salaam.

Tanzania Institute of Education(TIE). (2004). National Curriculum Development Framework (NCDF): Core Document. Dar es Salaam.(Unpublished Document)

UNICEF. (2003) *The State of the World's Children*. Division of Communication, New York.

UNESCO. (1990). Joemtien World Conference on EFA. Paris: UNESCO

UNESCO. (2000). The 2000 Millennium Development Goals (MDGs). Paris: UNESCO

URT. (1999). Tanzania Development Vision 2025. DSM: Tanzania Government

URT(2004).Education Sector Development Programme: *Mechanism for Posting Teachers to Government Secondary Schools for Secondary Education Development Plan 2004-2009*,Basic Education Development Committee(BEDC),July 2004

United Republic of Tanzania (1999).Secondary Education Master Plan (SEMP). Ministry of Education and Culture: DSM

United Republic of Tanzania (2004). Secondary Education Development Plan (SEDP). Ministry of Education and Culture: DSM

United Republic of Tanzania (2004).Education Sector Development Programme (ESDP). Ministry of Education and Culture: DSM