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**Promoting critical knowledge, skills and qualifications for sustainable development in Africa: How to design and implement an effective response by education and training systems**

**Sub-theme 1**

**Common core skills for lifelong learning and sustainable development in Africa**

## A Case Study of Learning Materials Used to Deliver Knowledge and Skills– or Competency–Based Curricula (in Tanzania)

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**Working Document**

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# List of Abbreviations

| | | |
|---|---|---|
| ADEA | - | Association of Development of Education in Africa |
| AKF | - | The Aga Khan Foundation |
| CBC | - | Competency-Based Curriculum |
| CBE | - | Competency-Based Education |
| CD | - | Capital Development |
| CPI | - | Consumer Price Index |
| CSE | | Certificate of Secondary Education |
| DCIS | - | District Chief Inspector of Schools |
| DEO | - | District Education Officer |
| DSEP | - | Dar es Salaam Schools Education Project |
| EFA | | Education for All |
| EMAC | - | Education Materials Acquisition Committee |
| ESDP | - | Education Sector Development Programme |
| ETP | - | Education and Training Policy |
| FGD | - | Focus Group Discussion |
| GER | - | Gross Enrolment Ratio |
| GDP | - | Gross Domestic Product |
| HESLB | - | Higher Education Students' Loan Board |
| ICT | - | Information and Communication Technology |
| INSET | | In-Service Education for Teachers |
| LGA | - | Local Government Authorities |
| MoEVT | - | Ministry of Education and Vocational Training |
| MoF | | Ministry of Finance |
| MoFEA | - | Ministry of Finance and Economic Affairs |
| MOHEST | - | Ministry of Higher Education Science and Technology |

| | | |
|---|---|---|
| NER | - | Net Enrolment Ratio |
| NECTA | - | National Examinations Council of Tanzania |
| NSGRP | - | National Strategy for Growth and Reduction of Poverty |
| OC | - | Other Charges |
| PEDP | - | Primary Education Development Programme |
| PRESET | | Pre-Service Teachers Education |
| PRS | - | Poverty Reduction Strategy |
| PSLE | - | Primary School Leaving Examinations |
| REO | - | Regional Education Officer |
| SBAS | - | Sector Based Accounting Systems |
| SMEs | - | Subject Matter Experts |
| SOEs | - | State Owned Enterprises |
| STD | - | Standard |
| SWAP | - | Sector-Wide Approach |
| TANU | - | Tanganyika African National Union |
| TIE | - | Tanzania Institute of Education |
| TRCs | - | Teachers Resource Centres |
| TTCs | - | Teacher Training Colleges |
| UDSE | - | University of Dar es Salaam School of Education |
| UN | - | United Nations |
| UNICEF | - | United Nations Children's Education Fund |
| UPE | - | Universal Primary Education |
| URT | - | United Republic of Tanzania |
| WEO | - | Ward Education Officer |

# 1. ABSTRACT

The extent to which skills or the competency-based ethos of the curriculum are communicated in the books and learning materials used to deliver it in year 4 and 7 of schooling in Tanzania was the major theme of this study. Officials from MoEVT, TIE, NECTA, Kisarawe, Kinondoni, Moshi Municipal and Moshi Rural districts as well as teachers were involved in this study. Documentary review, focus group discussions, classroom observations and photographs from visited schools were used to collect data from schools.

The findings revealed that the curriculum has been changed from content-based to competency-based although there are mismatches between the design and its implementation. Most of the books do not convey the competence ethos of the curriculum. The implementation of the competency-based curriculum in the classroom was difficult as many schools lacked space, facilities and equipment while teachers received little or no trainings on the new curriculum. Monitoring by inspectors was rarely done due to inadequate funds and some inspectors not commanding respect of some classroom teachers. In-school supervision by heads of schools and heads of departments was weak. As NECTA rarely evaluated what was going on in the classrooms before setting the PSLE, it was difficult to match exams with what students had learnt and how they had learnt it. Exams ought to test what students have done and learnt it in school.

The analysis and discussion of the research findings revealed that during the colonial era the curriculum was competence/skills-based, as it emphasized the step-by-step learning of concepts, skills or tasks thoroughly first in the classroom before their practical application in the field. So when the curriculum was revised in 1967, it was like throwing out the baby with the bath water. The situation became worse in 1974 following the introduction of UPE where a number of militant political strategies, instead of systematic, scientific and strategic planning strategies were used. A new brand of Grade C/B teachers were trained in a rush and licensed to teach. So when CBC was reintroduced in 2005, this occurred without teachers with the requisite competencies. Teachers' guides and basic textbooks had not been developed, while learning environment in most schools was appalling. Therefore, one should not expect miracles in effective implementation of CBC in Tanzania primary schools before the important pre-conditions are met.

# 2. EXECUTIVE SUMMARY

This was an assignment for ADEA's Working Group on Books and Learning Materials. The study was conducted in Tanzania, as a contribution to ADEA's 2011 Triennial preparation process. The theme of the Triennial was promoting critical knowledge, skills and qualifications for sustainable development in Africa: how to design and implement an effective response through education and training systems.

The case study of learning materials used to deliver knowledge and skills or competency-based curricula was expected to uncover the critical skills for lifelong learning that are covered in the curriculum package, as well as textbooks and other teaching and learning materials currently used in Grades IV and VII. Assessment of practises related to implementation of a competency-based curriculum was also done. From the findings it was expected that recommendations would be made on desirable curricula reforms and methodologies that need to be introduced to facilitate acquisition of critical skills for lifelong learning. Similarly, suggestions would be made on what ought to be done to improve effectiveness and relevance of learning.

The objective of the assignment was to answer the following key question – to what extent are the skills or competency-based ethos of the curriculum communicated in the books and learning materials used to deliver the curriculum in year 4 and 7 of schooling in Tanzania?

The setting of the study was the Ministry headquarters, TIE and NECTA. The researcher selected four districts - Kisarawe, Kinondoni, Moshi Municipal and Moshi Rural - in order to gather first-hand information on realities on the ground. Kinondoni was selected due to its proximity to the headquarters - MoEVT. It was assumed that being closest to MoEVT, TIE and NECTA, it would have been faster in institutionalising the innovation - CBC. Kisarawe District, although just adjacent to Dar es Salaam, has all the features of a typical rural environment, found in many schools in Tanzania. The two Districts of Kilimanjaro Region - Moshi Urban and Moshi Rural - were selected because the region is known for having people who value education and were ready to support the acquisition of textbooks and other teaching and learning materials, as well as contributing towards the improvement of the teaching and learning environment. Data collected from such diverse districts, therefore, was likely to provide one with a realistic picture of the status of implementing CBC.

From each of the selected districts, purposive sampling was used to obtain two high performing schools and two low performing schools in each district for inclusion in the study sample. In each district the district education officers, district inspector of schools, head of schools and eight teachers were included in the study sample. Four teachers were from Standard IV and four from Standard VII.

In this study three main data collection techniques were employed. These were documentary review, focus group discussions with district education officers, district inspectors of schools and subject teachers as well as classroom observations. Photographs were taken to show real situation in some schools.

The findings revealed that the entire primary school curricula were changed from the traditional content-based curriculum to competency-based curriculum in order to make it more relevant and market oriented. The new curricula were overloaded and, in some subjects, above the level of the learners. A critical review of the listing of competences contained in various syllabi booklets revealed that some lacked specificity (e.g. ICT, Mathematics and English in Std IV). Similarly, many of the syllabi reviewed did not contain outcome statements with measurable definitions of knowledge, skills and behaviour. Therefore, in order to avoid mismatches between designing and effective implementation of a revised curriculum, involving a major paradigm shift from content-based to competency-based, MoEVT needs to follow systematic procedures – research to establish needs, design, writing textbooks and procuring

needed materials, training/retraining of teachers, managers and inspectors, before implementation, evaluation and feedback. Additionally, a strong link needs to be forged between MoEVT and its institutions responsible for teacher education and teacher development and deployment – TIE, EMAC, local authorities and NECTA, so that there is synchronisation of their roles as individuals and as a 'collective' to ensure the innovation is successfully implemented.

Regarding the competency-based ethos of the curriculum communicated in the books and other learning materials used to deliver the curriculum in year 4 and 7 of schooling in Tanzania, it was revealed that book writers were not well versed in the paradigm of competency-based curriculum, hence, their ability to write relevant books was limited, and many had not received any training. There was a gap between the curriculum package and content in the textbooks as well as other teaching and learning materials. Teachers were also reluctant to use competency-based textbooks and associated materials as they required long periods of lesson preparation. There was an acute shortage of textbooks in schools due to inadequate funds for procuring them from suppliers. On top of that, EMAC was cited to be one of the most corrupt organs in the country, as it was authorising poor textbooks for primary schools consumption. In this regard the MoEVT should acknowledge that CBC is an innovation that is not yet familiar to many traditional book writers who were more used to writing books from a content-based perspective. EMAC should therefore be overhauled to portray high levels of integrity in fulfilling its duties of textbooks' scrutiny and approval.

Concerning the implementation of CBC in the classroom it was revealed that most teachers were still using the traditional teaching methods to deliver the content. Most teachers implementing the curriculum, from planning the lesson and instruction to assessing the students, had not changed at all. Teachers were unable to select experiences that were student-centered and that were appropriate to specific lesson objectives, and the mental ability or/and age of the learners. Similarly, although education officials claimed that training was provided to certain teachers, teachers themselves did not agree with this. Those few who acknowledge receiving training disclosed that either the training was short or its content did not reflect the need for improvement in order to implement CBC effectively. In general, poor teacher preparation at college level and poor induction or no induction seminars at all, have deprived most teachers in primary schools of the opportunity to acquire basic competencies for teaching the CBC effectively. Therefore, to ensure smooth implementation of the new paradigm, the MoEVT and other stakeholders ought to ensure that teachers acquire the appropriate skills and knowledge for carrying out a learner-centred approach. In addition, successful implementation of the competence-based curriculum will depend very much on the type of assessment and evaluation that is in place.

About monitoring and evaluation in a competency-based era, it was revealed that the role of monitoring is done by the inspectorate unit which has not been able to perform its duties due to lack of funds. Evaluation, on the other hand, was done by NECTA which set examinations for the whole country. Unfortunately, these examinations were set without having knowledge of what had actually been taught in schools. The teachers insisted that summative assessment carried out by NECTA should focus on questions that foster thinking skills rather than memorisation, as was the case. It is suggested that NECTA should be aware of what has been taught in the classroom before setting examinations questions. Similarly, heads of schools should ensure regular monitoring and evaluation of classroom instruction to ensure the CBC is being effectively implemented. On top of that, EMAC should be closely monitored in order to eliminate the poor quality of textbooks being authorised by that crucial organ.

The pre-conditions for successful implementation of CBC should include: adequate, qualified and motivated teachers, systematic and scientific planning of reforms, supportive teaching and learning environment in schools, teachers' mentoring and induction programmes, as well as changes to the

examination system. Similarly, generic competencies that cut across discipline and subject lines should be identified and developed for the betterment of the implementation of CBC.

It is recommended that for skills or competences to be acquired by students there must be a well designed curriculum package that takes on the broad needs of stakeholders. It must also be accompanied with enough and well-trained, mentored and constantly developed teachers; as well as adequate resources, facilities and equipments in schools. Partners responsible for designing and implementation the curriculum must work as a team to ensure its effective implementation.

# BIOGRAPHICAL NOTE

Herme Joseph Mosha, BA ED (Hons), MA, PhD and Doctor Honoris Causa is currently a Professor Emeritus at the School of Education, University of Dar es Salaam. He was the first and foundation Principal of the Dar es Salaam University College of Education (2005-2008) and the first and foundation Dean of the Faculty of Education, University of Dar es Salaam (1989-1994); as well as the Chairman of the National Task Force responsible for preparing a report on the desirable education system for the 21$^{st}$ century. He was also the architect of University of Dar es Salaam Institutional Transformation Programme, one of the most successful indigenous designed and home grown programmes in African universities and the Lead Planning Consultant during the development of the Education Sector Development Programme (ESDP). Among the most reputed strategic planning, programme design and evaluation specialists in Tanzania, he has authored six books and published over fifty papers in his area of specialisation.

# 3. INTRODUCTION

This is an assignment for ADEA's Working Group on Books and Learning Materials. The study was conducted in Tanzania, as a contribution to ADEA's 2011 Triennial preparation process. The theme of the Triennial is promoting critical knowledge, skills and qualifications for sustainable development in Africa: how to design and implement an effective response through education and training systems.

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## 3.1 Objectives and Terms of Reference

The assignment addressed the following key question – to what extent are the skills- or competency-based ethos of the curriculum communicated in the books and learning materials used to deliver the curriculum in year 4 and 7 of schooling in Tanzania?

## 3.2 The Social Political and Economic Context

Tanzania mainland has an area of 945,000 sq. km. (378,000 sq. mi.), while Zanzibar has an area of 1,658 sq. km. (640 sq. mi.). The capital city is Dar es Salaam (executive), while Dodoma is the legislative capital and Stone Town is the capital of Zanzibar. The climate varies from tropical to arid to temperate.

According to 2010 estimates, Tanzania has a population of 41.8 million in the mainland and 1.3 million in Zanzibar. The infant mortality rate is 68/1,000. Life expectancy is 52.4 years. Eighty per cent of the work force is engaged in agriculture while 20 per cent is engaged in industry, commerce, and government. The official languages are Kiswahili and English, while Kiswahili is the national language.

Tanganyika became independent in 1961 and Zanzibar in 1963. A Union was formed in April 1964, hence the birth of Tanzania. Tanzania is a multiparty democracy. It has eighteen political parties, the main ones, which have members of parliament, are Chama cha Mapinduzi (CCM), The Civic United Front (CUF), Chama cha Demokrasia na Maendeleo (CHADEMA), Tanzania Labour Party (TLP), and United Democratic Party (UDP). By 2010 Tanzania had 30 administrative regions – 25 on the mainland, 3 on Zanzibar, and 2 on Pemba.

**3.2.1 The economy.** Tanzania has had three major economic epochs – the capitalist epoch (1961-1967), the socialist epoch (1967 – 1985) and the 1980s-to-date epoch of a capitalist economy which is free-market oriented. Ngowi (2009) maintains that the first epoch was characterised by private ownership of the major means of production and market-oriented economic practices. The political decision to embrace capitalism after independence led to a number of market failures as the state did not intervene in the economy.

Hence, during the second epoch, Tanzania declared it would be following *Ujamaa* (a kind of African socialism) policy. Levin (2001) contends that the Arusha Declaration changed Tanzania's policy

environment dramatically.  The Declaration ushered in a new policy direction for the country, a break from the fairly orthodox economic policies followed during the first years after independence.

The *Ujamaa* policy, however, did not give any incentive to the private sector enterprises.  Private sector entrepreneurs were looked upon as exploiters and "enemies of the state" (Ngowi, 2009).  Given the acknowledged roles of the private as opposed to public sector in economic development processes, this epoch can be said to have been a lost period in Tanzania's economic development process.

During the third epoch, the relatively free interplay of the market forces of supply and demand is now the major defining characteristic of the country's economic development and change (Ngowi, 2009).  The epoch is characterised by major reforms that include privatisation of the SOE that were nationalised in the aftermath of the 1967 Arusha Declaration; relaxation of entry restrictions in virtually all economic sectors; deregulation of various industries; abolition of price controls; independence of the Central Bank; elimination of import licensing; removal of foreign exchange-rate and interest rate controls; easing of controls over mergers and acquisitions (M&As); public sector service reform; and political reforms in the form of allowing multiparty democracy.

The political decisions of the mid-1980s did have some negative impacts on economic development and change in Tanzania.  These include the introduction of cost-sharing in key social services - education, health and water.  With 36% of the country's population below the poverty line (URT, 2010), investment in human capital in the form of education may be threatened. In the long run, therefore, demands for adequate human resources needed for economic development and change may be in short supply.

According to 2010 on-line data, Tanzania's estimated GDP was $23.2 billion and the real GDP growth annual percentage estimate was 6.4%.  The GDP per capita (2009) was $509. Natural resources and hydroelectric potential included coal, iron, gemstones, gold, natural gas, nickel, diamonds, crude oil potential, forest products, wildlife and fisheries.

Tanzanians are proud of their strong sense of national identity and commitment to Swahili as the national language.  There are roughly 120 ethnic communities in the country representing several of Africa's main socio-linguistic groups.  The Olduvai Gorge in Northern Tanzania has provided rich evidence of the remains of some of humanity's earliest ancestors.

The recent global financial crisis significantly affected the tourism industry, one of Tanzania's top foreign-exchange earners; however, Tanzania was able to maintain relatively strong growth in 2010.  Continued high food prices since a spike in 2008 have contributed to a rise in inflation to over 10 percent, but this had declined to 8 percent in April 2011(*www.tradingeconomics.com tanzania/inflation-cpi*).

# 3.3 Tanzania's Development Vision 2025

The Tanzania Development Vision 2025 accords high priority to the education sector, which is considered to be pivotal in bringing about social and economic transformation, as described in the following statement:

> Education should be treated as a strategic agent for mind-set transformation and for the creation of a well-educated nation, sufficiently equipped with the knowledge needed to competently and competitively solve the development challenges which face the nation. In this light, the education system should be restructured and transformed qualitatively with a focus on promoting creativity and problem solving (URT 2000:19).

# 3.4 Education Vision

In response to the Development Vision 2025, the education vision is to create "well-educated, knowledgeable and skilled Tanzanians, able to competently and competitively cope with political, social,

cultural, economical and technological development challenges at national and international levels". The Government seeks to provide equitable, quality basic education and vocational skills to all. This is to ensure, among other factors, adequate provision of quality teachers, a conducive environment for stakeholders willing to participate in providing education and vocational skills, efficient management of education delivery and a conducive learning/teaching environment for students and teachers at all levels.

## 3.5 National Strategy for Growth and Reduction of Poverty (NSGRP)

The initial Poverty Reduction Strategy (PRS) was a medium-term strategy (2000/01-2002/03) which focused on:
- reducing income poverty;
- improving human capabilities, survival and social well being;
- containing extreme vulnerability among the poor.

The following are some of the **NSGRP** targets that are related to primary education:
- increase number of pre-primary children;
- increase NER from 90.5% in 2004 to 99% in 2010;
- increase percentage of children with disabilities in schools from 0.1% in 2004 to 20% in 2010;
- ensure that at least 75% of boys and girls pass Primary School Leaving Examinations (PSLE) by 2010;
- achieve average daily attendance of at least 85%;
- improve learning environment of all children in schools and all educational institutions; safe, violence free, child friendly and gender sensitivity;
- implement effective HIV and AIDS education, environment and life skills programmes offered in primary; secondary schools and teachers' colleges.

## 3.6 Tanzania's Commitment to International Education Goals and Targets

Tanzania is committed to Education for All (EFA) targets set by the 1990 Jomtien World Conference on Education for All. In its review of education progress since Jomtien, the 2000 World Forum in Dakar developed the Dakar Framework for Action with six specific targets, the most relevant to this study being:
-
- ensure that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free compulsory primary education of good quality;
- *ensure that the learning needs of young people and adults are met through equitable access to appropriate learning and life skills programmes;*
- improve all aspects of the quality of education and ensure excellence.

Tanzania's commitment to EFA targets is reflected in its status as a signatory to the United Nations Convention on the Rights of the Child, one of which is access to quality basic education.

## 3.7 Education and Training Policy (ETP 1995)

ETP was formulated in 1995 with a desire to improve the provision, quality and relevance of education and training delivered in the country. The major objective of this policy was to achieve increased enrolment, *equitable access, quality improvement*, expansion and optimum utilisation of facilities, and operational efficiency throughout the education system, through enhanced partnership in the delivery of education, broadening the financial base and enhancing the cost effectiveness of education, and

streamlining education management structures through the devolution of authority to LGAs, communities and schools.

## 3.8 Education Sector Development Programme (ESDP 1997)

Following the ETP (URT, 1995), the Education and Training Sector Development Programme (ESDP) as a strategy towards a Sector-Wide Approach (SWAp) to education development was initiated in 1997 and revised in 2001. The main goal of SWAP was to *achieve the long-term human development and poverty reduction targets* and to redress the problems of fragmented interventions through projects so as to promote the collaboration and partnership among all stakeholders, using pooled human, financial and material resources. This collaboration hinged on planning, implementing, monitoring and evaluation of education delivery.

ESDP objectives on the pre-primary and primary education sub-sectors are derived from the major objectives of ETP on improving the quality of the education process; increasing and improving access and equity for all children; decentralising the management of pre-primary and primary schools; devolving authority to local levels; and broadening the financial base for supporting education.

### 3.8.1 Levels of financing the education sector.

Statistics show that Tanzania spends only 2.1 per cent of her GDP on education compared to 6.8 in Kenya, 13.3 in Lesotho, 3.8 in Uganda, 2.8 in Rwanda and 2.2 in Botswana [WB indices, 200/2010 cited on the internet]. Similarly, allocations within the sub-sector are also lopsided. For instance, out of the Budget of Tshs 666 billion for the education sector for 2010/2011 (Table 1a&b), and of almost Tshs 2.2 trillion, 36% was to be spent by the HESLB on students' loans.

**Table 1a: Trends of Budgetary Funding of Education Sector by Level in Millions**

| Sub sector | 2007/08 | 2008/09 | Revised 2008/09 | 2009/10 | 2010/11 |
|---|---|---|---|---|---|
| Primary Education | 544,220 | 638,035 | 666,419 | 830,702 | 968,729 |
| Secondary Education | 174,227 | 133,058 | 140,196 | 197,483 | 414,704 |
| Vocational Training | 18,978 | 8,007 | 8,007 | 8,370 | 8,692 |
| Other Basic Education | 49,661 | 69,630 | 69,630 | 829 | 983 |
| Teacher Education – MoEVT | 19,257 | 25,250 | 25,250 | 47,053 | 28,895 |
| Inspectorate – MoEVT | 4,800 | 5,901 | 5,900 | 12,096 | 11,969 |
| Chief Education Officer - MoEVT | 6,651 | 5,703 | 5,702 | 7,235 | 8,785 |
| Administration – MoEVT | 14,673 | 28,592 | 26,867 | 38,752 | 40,177 |
| Culture & Nat. Languages - MoEVT | 0 | 0 | | | |
| UNESCO Commission - MoEVT | 0 | 381 | 381 | 968 | 931 |
| Public Serv. Comm.(Teachers Service) | 4,281 | 3,804 | 3,700 | 4,281 | 4,405 |
| Folk Development | 3,132 | 5,386 | 5,386 | 5,133 | 10,043 |
| **Total Basic and Folk Education** | **790,219** | **854,116** | **957,438** | **1,152,902** | **1,498,313** |
| University Education | 264,343 | 335,635 | 335,746 | 413,771 | 525,464 |
| Technical Education | 14,289 | 14,796 | *14,796* | 16,888 | 17,309 |
| Other Higher Education | 38,586 | 69,342 | 69,342 | | |
| *Other Tertiary* | *29,343* | *69,342* | 53,050 | *62,803* | *154,872* |
| *UNESCO Commission - MoHEST* | *381* | *0* | | | |
| *Science & Technology - MoHEST* | *5,134* | *0* | | | |
| *Administration – MoHEST* | *3,729* | *0* | | | |
| **Total Higher Education** | **317,218** | **419,773** | **472,934** | **493,462** | **697,646** |
| **Development Fund to Local Government** | | | | **97,516** | |

| Total Education | 1,107,437 | 1,273,889 | 1,430,372 | 1,743,880 | 2,195,960 |
|---|---|---|---|---|---|
| Total Govt. Budget | 6,066,800 | 7,215,631 | 7,215,631 | 9,513,685 | 11,609,557 |
| Education to Total Govt. Budget | 18.3% | 17.7% | 19.8% | 18.3% | 18.9% |

**Table 1b: Trends of Budget Allocation by Sub-sector**

| | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|---|---|---|---|---|
| Primary Education | 53.9% | 49.1% | 46.6% | 47.6% | 47.4% |
| Secondary Education | 13.2% | 15.7% | 9.8% | 11.3% | 20.3% |
| Vocational Training | 1.2% | 1.7% | 0.6% | 0.5% | 0.4% |
| Teacher Education - MoEVT | 1.1% | 1.7% | 1.8% | 2.7% | 1.4% |
| Administration | 5.0% | 2.7% | 1.9% | 2.2% | |
| Folk Development | 0.3% | 0.3% | 0.4% | 0.3% | 0.5% |
| University Education | 19.9% | 23.9% | 23.5% | 23.7% | 27.5% |
| Technical Education | 1.6% | 1.3% | 1.0% | 1.0% | 0.8% |
| Other Tertiary | 2.4% | 2.6% | 3.7% | 3.6% | 7.6% |
| UNESCO Commission - MoHEST | 0.0% | 0.0% | % | % | |
| Science & Technology - MoHEST | 0.6% | 0.5% | % | % | |
| Administration – MoHEST | 0.8% | 0.3% | % | % | |
| **Percent of Total Govt. Budget** | **18.8%** | **18.3%** | **19.8%** | **18.3%** | |

**Source:** MoFEA budget speech education, sectors budgets books and LGA –SBAS

This arrangement starves the sector of capital development and OC to support the provision of high-quality education.

# 3.9 PEDP I and II

The Primary Education Development Programme I & II is an attempt to realise the objectives of Education Sector policies. It was formulated to address critical issues and problems facing the education and training sector in general. The programme is a comprehensive and complex undertaking entailing many fundamental changes including Information and Communication Technology (ICT) as well as the participation of many and varied actors in education and training. *These interventions are focused primarily on the learner, the teacher and the teaching/learning environment, ultimately intending to improve the academic achievements and competences of the learner.*

The main programme thrust was to:
- Provide enough and qualified teachers.
- Train specialist teachers for Kiswahili and English.
- Upgrade professional and academic qualifications of serving teachers.
- Construction of adequate number of classrooms, utilities, staff houses and energy sources.
- Increase enrolment of school age children.
- Provide appropriate and adequate teaching–learning materials.
- Provide incentive packages to teachers.
- ***Review and revise the school Curriculum to make it more relevant and market demand oriented.***
- Revive extra-curricular activities such as games and sports, music, physical education etc.

Hence CBE in Tanzania is enshrined in the Education and Training Policy, ESDP and PEDP.

When PEDP I was introduced in 2001 a total of 4,875,764 students were enrolled in primary education (84% GER and 66.0% NER). Currently, students' enrolment in primary education is 106.4**%** GER and 95.4% NER. Despite these achievements, primary education is yet to reach goals set in the Education for All document by 2015.

Although there had been a tremendous increase in enrolment, many of the other problems remained unresolved, as overall performance in the Primary School Leaving Examination (PSLE) has been declining (see Table 2).

**Table 2. Number of Students Sitting for PSLE, Passing and Selected for Secondary Education**

| YEAR | NO. SAT FOR EXAMS | | | PASSED | | | | SELECTED | | | |
|------|-------|-------|---------|--------|--------|--------|-------|--------|--------|--------|-------|
| | BOYS | GIRLS | TOTAL | BOYS | GIRLS | TOTAL | PR % | BOYS | GIRLS | TOTAL | SR % |
| **2005** | 253361 | 240585 | 493946 | 173645 | 132291 | 204936 | 61.7 | 103334 | 93057 | 196391 | 64.4 |
| **2006** | 337271 | 326992 | 664263 | 257334 | 210945 | 468279 | 70.5 | 212 | 188846 | 401011 | 85.6 |
| **2007** | 396944 | 376699 | 773643 | 248215 | 170921 | 419136 | 54.2 | 231241 | 164689 | 395930 | 94.5 |
| **2008** | 514167 | 504200 | 1017967 | 307196 | 229476 | 536672 | 52.7 | 244800 | 188460 | 433260 | 80.7 |
| **2009** | 449446 | 502624 | 999070 | 276083 | 217250 | 493333 | 49.38 | 247232 | 198722 | 445954 | 90.4 |
| **2010** | 435124 | 459889 | 895013 | 256817 | 222095 | 478912 | 53.51 | 244644 | 211696 | 456350 | 95.27 |

Source: MoEVT, Primary Education Directorate

Effective implementation of CBC is therefore predicated on these factors.

# 4. COMPETENCY BASED CURRICULUM (and why)

## 4.1  A Competency

According to Jallow (2011) a competency is a statement of learning outcomes for a skill or body of knowledge.  He adds that when students demonstrate a competency, they are demonstrating their ability to do something (showing the outcome of the learning process).

Sulivan (2005) views competency as a set of skills, knowledge and behaviours someone needs to have achieved in order to perform tasks, or activities at school and in the world of work.  Kouwenhoven, (2003:126) adds, "… it is the capability to choose and use (apply) an integrated combination of knowledge, skills and attitudes with the intention to realize a task in a certain context, while personal characteristics such as motivation, self-confidence, and willpower are part of that context."

The Online Dictionary defines competency as a skill, an ability or technique that has been developed through training or experience.  The ability to communicate effectively demonstrates competency in that skill.

Competencies can be **domain-specific**, relating to clusters of knowledge, skills and attitudes within one specific content domain – e.g. Mathematics.  Another group of competencies is **'generic'** because they are needed in all content domains – numerical, thinking and reasoning, interpersonal and effective communication skills (Vars and Beane, 2000) and can be transferred to real life situations.  Spencer and Spencer (1993) maintain that whereas skills and knowledge are 'discussable' and observable, the self-concept - attitudes, values and personality traits - are latent, not directly observable but part of the factors that drive learning behaviour among students.  Successful behaviour or accomplishment of learning tasks is, therefore, the resultant of competencies and personal traits.

In other words competency, therefore, refers to an integrated set of skills, knowledge, and attitudes that enable one to effectively perform the activities of a given occupation or function to standards expected at school and later in public, in the private sector or for self-employment.

## 4.2 Competency-Based Curriculum

Jallow (2011) postulates that **a competency-based curriculum** seeks to develop in learners the ability to know, to learn and learn how to learn; to do things; and the ability to be, to live and work with other people.  Sullivan (2005) suggests that the selection of the competencies for the curriculum requires interaction and collaborative work between the subject matter experts (SMEs) – curriculum developers, the learners/students, and members of the community/employers.  This is to allow choice of the right competencies that are needed by the student to be successful in life during and after (s) he leaves the school.  By so doing, employers and other community members will be able to identify what it is they want the children to be able to do, the SMEs will understand what competencies can be attained within the confines of the content, and the teachers will know how to teach the content so that the competencies are attainable.

A curriculum that is competency based therefore contains very specific outcome statements that contain the competencies to be attained.  These outcome statements can also be thought of as learner goals and are measurable.  A student in a competency-based programme will continue in the class until he demonstrates a level of competency that shows mastery.

## 4.3 Competency-Based Education

This is focused on what students can do, rather than what they can learn about. It is focused on learning outcomes with specific, measurable definitions of knowledge, skills and learner behaviour.

The focus of a competency-based programme is not on learning theory, but is more on the needs of the learner. Those needs are generally basic skills, the application of those skills and the attainment of higher skills. Competency-based instruction generally provides the learner with immediate feedback and is paced to the needs of the learner.

Where competency based curriculum is not effectively being implemented there is often the danger of sliding back into traditional teaching methods if there is not enough follow-up and training for the facilitators. Similarly, if the competencies and accompanying rubrics are not carefully chosen and planned to ensure successful implementation, the curriculum will not be strong enough to support a true competency-based learning experience.

*In the CBE curriculum, development is based on the elaboration of profiles and identification of competencies.* Domain-specific knowledge and skills ought to be determined by the competencies that are needed by the consumers of school products and not by the disciplinary 'body of knowledge' – English, Science or Civics.

# 5. THE SETTING OF THE STUDY

The setting of the present study was the Ministry headquarters, TIE, NECTA, Kisarawe, Kinondoni, Moshi Municipal and Moshi Rural districts (Figure 1). Kinondoni was selected due to its proximity to the headquarters - MoEVT.  It was assumed that being closest to MoEVT, TIE and NECTA; it would have been faster in institutionalising the innovation - CBC.  Kisarawe District, although just adjacent to Dar es Salaam, has all the features of a typical rural environment, found in many schools in Tanzania.  The two districts of Kilimanjaro Region – Moshi Urban and Moshi Rural were selected because the region is known for having people who value education and were ready to support the acquisition of textbook and other teaching and learning materials, as well as contributing towards the improvement of the teaching and learning environment.  Data collected from such diverse schools, therefore, was likely to provide one with a realistic picture of the status of implementing CBC.

**Source: www.foreign.go.tz/images/uploads/tanzania_map.gif**

Key:

# 5.1 Research Sites

Purposive sampling was used to obtain two high performing schools and two low performing schools in each district for inclusion in the study sample. Table 1.1 shows the schools that were selected for the study.

**Table 3: Selected Districts and Schools**

| Region | District | School |
|---|---|---|
| **Dar es Salaam** | Kinondoni | Kawe 'A' Primary |
| | | Mwenge Primary |
| | | Mlimani Primary |
| | | Gilman Rutihinda Primary |
| **Coast** | Kisarawe | Mloganzila Primary |
| | | Visegese Primary |
| | | Kibasila Primary |
| | | Sanze Primary |
| **Kilimanjaro** | Moshi Municipal | Muungano Primary |
| | | Mwalimu J.K. Nyerere Primary |
| | | Sokoine Primary |
| | | Pasua Primary |
| | Moshi Rural | Marangu Mazoezi Primary |
| | | Kilema Kubwa Primary |
| | | Mkyashi Primary |

In each district the District Education Officers, District Inspector of Schools, Heads of Schools and eight teachers were included in the study sample. Four teachers were from Standard IV and the other four from Standard VII (Table 4.)

**Table 4: Number and Groups of Respondents**

| District | Teachers | District Inspectors of Schools | District Primary Education Officers |
|---|---|---|---|
| Kinondoni | 32 | 4 | 2 |
| Kisarawe | 32 | 5 | 4 |
| Moshi Municipal | 32 | 8 | 6 |
| Moshi Rural | 24 | 4 | 3 |
| **Total** | **120** | **21** | **15** |

In this study three main data collection techniques were employed. These were documentary review, focus group discussions with District Education Officers, District Inspectors of Schools and subject teachers as well as classroom observations. Photographs were taken to show the real situation in some schools.

# 6. COMPETENCY BASED OR SKILLS IN STANDARD IV AND VII EDUCATION CURRICULUM

In a competency-based system the syllabi and the teacher guides should define the competencies to be achieved, i.e. the results one want the students to achieve by the end of the course, or education at that level. Jallow (2011) adds that the teacher should elaborate a problem situation, making it as close to real life as possible, with the intention of providing students with the opportunity to acquire the defined competencies. Also, the desired learning outcomes should be clearly defined and stated up front. Students should know at beginning of the programme what the expected learning outcomes are, and **each student** is **expected** to **fully demonstrate** them **all**.

Jallow (2011) further advocates that in a competency-based curriculum framework, **objectives** consist of fourparts:
➢        «who»? meaning the class
➢        «will do»? meaning will be able to do
➢        «what»? meaning to do what action/operation
➢        «type of assessment» meaning how to check for competency-acquisition.

Focus Group Discussion (FGD) with staff of the Tanzania Institute of Education (TIE) and key staff in the Directorate of Primary Education, MoEVT, revealed that the entire primary school curricula were changed from the traditional content based curriculum to a skills/competency based curriculum. This was in fulfilment of the PEDP I and II objective of reviewing the curriculum and making it more relevant and market driven. Review of syllabi collected from TIE revealed the following to be the competences that were emphasised in the various subjects taught in Grades IV and VII.

**Table 5: Basic Competences in Primary Education Syllabus**

| SBJ | COMPETENCES - STANDARD IV | COMPETENCES  - STANDARD VII |
|---|---|---|
| **G E O G R A P H Y** | • Identify the essentials of a map and use them in map reading and interpretation.<br>• Draw, design mould and construct maps using the map essentials.<br>• Recognise boundaries, physical features, vegetation and animals, in her/his division, district and the country.<br>• Demonstrate understanding of different methods of utilising and conserving the environment of her/his division, district and the country.<br>• Measure, record, interpret weather data and make use of it. | • Draw, read and interpret photographs and maps.<br>• Measure and record weather and use the data to explain the effects of weather change to human activities.<br>• Harvest rainwater and use it appropriately/sustainably.<br>• Identify and explain the sources of waste and their effects on the environment.<br>• Auditing the types of waste, effect to the environment and control measures against negative effects.<br>• Realise negative effects caused by waste and practice proper waste disposal.<br>• Relate population dynamics and settlements, economic and social developments and sustainable use of the environment. |
| **C I V I C S** | • Search, analyse and interpret correctly, information related to village leadership and government.<br>• Interpret correctly, appreciate and show respect to our national symbols.<br>• Effectively participate in the process of promoting democratic governance at village level. | • Search for, analyse, interpret and use different information to explain political, social and economic issues.<br>• Use statistics and information to develop and defend issues related to politics, society and economy.<br>• Respect and participate effectively in promoting the principles of democracy. |

| | | |
|---|---|---|
| | | • Understand, use and safeguard the constitution of the United Republic of Tanzania.<br>• Examine and interpret political, social and economic events and draw conclusions. |
| **V O C S K I L L S** | • Drawing from real objects.<br>• Painting using water colours.<br>• Modelling using clay soil.<br>• Sewing hats and baskets.<br>• Sewing embroidery stitches.<br>• Bragging.<br>• Playing dance music instruments skilfully.<br>• Composing and reciting dramatic poems.<br>• Delivering the required message during singing and playing musical instruments.<br>• Applying improved principles of sustainable agriculture and livestock keeping.<br>• Growing vegetable crops using improved methods.<br>• Applying basic principles in keeping ducks.<br>• Applying cookery principles in cooking.<br>• Washing and ironing clothes. | • Printing using a screen.<br>• Carving.<br>• Composing and singing poems.<br>• Singing songs using solfas in a four-voice choir.<br>• Applying principles of sustainable crop farming, livestock keeping and fishing.<br>• Applying principles of cookery in cooking different types of food. |
| **M A T H E M A T I C S** | • Identifying and performing mathematical operations.<br>• Identifying and solving by measuring and constructing.<br>• Solving problems by expanding relating and simplifying.<br>• Drawing and interpreting data and graphs.<br>• Performing mathematical operations, solving problems, calculating arranging and simplifying.<br>• Arranging and solving problems invoice. | • Identifying and doing basic mathematical operations.<br>• Identifying and performing mathematical operations.<br>• Identifying and solving problems.<br>• Recognising and solving problems.<br>• Solving problems drawing and measuring.<br>• Applying mathematical skills for personal and social development.<br>• Drawing, presenting and interpreting statistical data and graphs.<br>• Applying mathematical skills for personal and social development. |
| **P E R S D E V & S P O R T S** | • Play for entertainment, cooperation and building the body, love talents, confidence and skills.<br>• Observing norms and values of the society.<br>• Using language properly, listening and respecting fellow's thoughts, as well as strengthening relationship and cooperation in the society.<br>• Caring for mental, physical and social health.<br>• Building attitude for respect and fulfilling responsibilities.<br>• Understanding risky behaviours and how to solve problems related to such behaviours.<br>• Making good plans.<br>• Inventing new ideas and ways of promoting performance of good leadership as well as using natural resources to maintaining productivity. | • Playing for entertainment, building, talents and self confidence.<br>• Observing norms and values of society as well as living in harmony with others.<br>• Using language properly, listening and respecting other people's ideas as well as strengthening relationship and co-operation in the society.<br>• Recognising actions that develop and maintain mental, physical and social health.<br>• Building attitude for respect and responsibilities.<br>• Recognising oneself, hazardous actions and using proper skills to face them.<br>• Making rational decisions, counselling and effective plans.<br>• Inventing new ideas and methods of promoting performance leadership and using natural resources in maintaining entrepreneurship.<br>• Being able to persuade and accomplish issues of business friendship, politics, and leadership and |

| | | compromising with others. |
|---|---|---|
| **S C I E N C E** | • Identify and applying scientific principles and technology in everyday life.<br>• Appreciating and applying scientific principles and technology in solving social problems.<br>• Applying scientific principles and technology in solving social problems.<br>• Recognising the process of scientific investigation.<br>• Appreciating and using scientific principles and technology in daily life.<br>• Using scientific findings in a sustainable manner.<br>• Using scientific information in a sustainable way. | • Identifying and applying scientific principles and technology in everyday life.<br>• Identifying and applying scientific principle and technology in everyday life.<br>• Recognising the process of scientific investigation.<br>• Appreciating and using scientific principles and technology in everyday life.<br>• Using scientific information in a sustainable way. |
| **I C T** | • Using library.<br>• Using information centres.<br>• Using information and news media.<br>• Using computer as a communication tool. | • Using computer networks. |
| **E N G L I S H** | • Understand and use frequently used expressions in the family, school and local environment settings and situations.<br>• Communicate in simple routine tasks requiring simple exchange of information using all the four language skills. | • Understand the main points of information encountered at school, home, workplace, leisure etc.<br>• Deal will different situations while at school, home, local and neighbouring environment.<br>• Produce simple connected texts on topics, which are familiar and of personal interest. |
| **K I S W** | • Kuelewa, kuzungumza na kuandika ili kukidhi mahitaji yake naya jamii<br>• Kuwasiliana kwa Kiswahili katika shughuli za kila siku katika miktadha mbalimbali<br>• Kusoma kwa ufahamu na kwa burudani | • Kusoma kwa ufahamu na kwa burudani<br>• Kuelewa na kutumia lugha ya kisanii katika mawasiliano<br>• Kuwasiliana kwa Kiswahili fasaha katika miktadha mbalimbali |

Key: Kisw = Kiswahili, Pers Dev + Personality Development, Voc = Vocational, and ICT = Information Communication Technology.

FGD with curriculum experts at TIE revealed that competencies are skills or performance abilities. Such skills range from critical thinking, communication skills, numeracy skills, technological skills, independent learning skills and intra-personal skills, often demonstrated when one is given chance to show what he/she knows, to inter personal and social skills, demonstrated through confidence when one is given chance to identify the skills in public.

They added that some skills are covert – e.g. listening skills - while others are overt – kinaesthetic skills – e.g. gardening, physical exercise and pottery. For many overt skills, language of the subject can only be demonstrated through careful analysis of the teaching learning strategies. They are competency based because they allow the learner to practise what they know.

Focus Group Discussion with the Acting Director of Primary Education and two other senior officials in the department revealed the acknowledgement that MoEVT had embarked on a major paradigm shift from the traditional content-based curriculum to a competency or skills-based curriculum. They maintained that competency-based curriculum is student centred. Hence in, say, a reading lesson,

competencies of writing, effective communication, listening and understanding could be developed and demonstrated.

Similarly, what they read could also be related to what is taking place in the environment – reading about sanitation and applying the knowledge to tidying surroundings or nursing tree seedlings. Similarly, with numeracy they need to be able to recognise numbers as well as count.

Interviews with district education officers and school inspectors at Kisarawe revealed that the curriculum had competencies based on behavioural objectives, but there was no evidence of an emphasis on step-by-step learning of one concept, skill or task thoroughly first, and assessing its mastery, before moving on to more difficult ones. They mentioned that some of the competencies in the revised curriculum were reading, writing, counting correctly, appreciating our culture, use of basic expression to satisfy one's basic needs, communicating effectively by using appropriate language in different contexts and using appropriate technology to find, analyse and interpret our environment for social and economic advancement. They also involved being able to analyse cross-cutting issues in the curriculum as well as in society and opt for the right way to accommodate them, gathering, presenting and analysing data, statistics and graph work and use mathematics skills to achieve social development.

In Kinondoni, Moshi Municipal and Rural districts, the education officers were of the opinion that the curriculum aims at building skills/competencies for students although they could not mention the competencies at that particular time of our discussion.

On the other hand, teachers in Kisarawe District seemed to know little about competencies in the curriculum. They just outlined writing, reading and counting as the general competencies stipulated in the curriculum. As one of them commented, "I think the curriculum requires pupils to be able to write, read and count, and if there is more, it should be mastery of the English language." Similarly, teachers related competency-based education with vocational skills (Stadi za Kazi), rather than other subjects like Kiswahili and English. They mentioned that many skills were only clearly stipulated in the Vocational Skills Syllabus rather than other subjects' syllabi. One teacher said, "Competencies and skills are in the vocation skills syllabus". She added, "Unfortunately the subject does not receive its due weight that is why there is no examination to evaluate students' ability. As a result, pupils and teachers neglect this subject." Supporting this notion another teacher commented, "No teacher will spend time on something which will not eventually contribute to success in the final examination."

In Kinondoni teachers viewed subjects like vocational skills and Information and Communication Technology (ICT) as the ones where one is able to say there are skills. Most of them were of the opinion that the curriculum is still the same (content based) but a few topics have been added or removed, and then it is called competence based.

Teachers at Moshi Municipal and Rural were not afraid to express their ignorance of what competencies or skills are as indicated in one of their statements "skills are not well known to teachers. Teachers guess as we do not understand what is a skill!"

A critical review of the listing of competences contained in the various subject syllabi booklets available to the researcher reveals that some lacked specificity – in ICT using information and news media – the skills were overt. Similarly for Mathematics Standard IV – identifying and performing mathematical operations – the 'what' question, is not addressed. Similar comments can also be made regarding communicating simply; an English skill demanded in Std IV. The essence of 'effective' communication is not captured in this competency statement. In short, many of the syllabi that I reviewed did not contain outcome statements with measurable definitions of knowledge, skills and learner behaviour.

All school heads disclosed that curriculum at those grades was competency based, but they lamented that the curriculum at Standard IV was above the level of the learners at that stage. One teacher asserted, "It is unfair and irrelevant to teach a child of nine to ten years about the Human Reproduction System. We are misleading them. Indeed it is a sin." He insisted that the curriculum was still content driven, and that there was too much to teach in the short time given. This statement, however, is debatable as it depends on exposure and relations children at this age may have had. Another teacher commented:

> Knowledge is growing so rapidly that it is impossible to teach it all within the short time period we have in school. Students can access some of that information on their own, which means that they need information management skills. The content is important but information management skills as well as information acquisition skills are even more important. The content can be reduced but students can still learn more.

Similarly, they revealed that overloaded curriculum content, especially in Standard IV, was another big problem, and was an obstacle to participatory teaching. One of them said, "Selecting the content that will give pupils the knowledge and skills that are essential for future personal development is still a challenge, hence usually, it is not easy to decide what to add or remove from the existing syllabi."

In contrast, teachers from Kinondoni district viewed the curriculum for Standard IV and VII as being competence based to a larger extent though they also acknowledged some weaknesses. Teachers from one school commented "there are a lot of activities …that are also related to real life and can be utilised in society, especially in mathematics where students are taught about currencies, a skill that can be used when they go to the shops to purchase merchandise".

Teachers from Moshi Municipal and Rural District were of the same view as Kisarawe teachers that skills are not well communicated in syllabi and teachers find it hard to identify and deliver them to students. They further added "many topics are above the students' age and capability - map reading in geography where students have to read the map without first knowing their surroundings. The curriculum also has too many subjects that a student has to study".

The TIE panel recommended that in order to avoid mismatches between designing and effective implementation of a new curriculum, involving a major paradigm shift from content based to competency based, MoEVT need to follow required procedures. The systematic processes involve research to establish needs, actual design, writing textbooks and procuring needed materials, training/retraining teachers, managers and inspectors, implantation, evaluation and feedback.

They added that a strong link needed to be forged between MoEVT and its institutions responsible for teacher education and teacher development - TIE, EMAC and NECTA - so that there is synchronisation of their roles as individuals and as a "collective", to ensure the innovation is successful. Such a forum was yet to be established since the introduction of CBC in Primary Schools in Tanzania.

The study found that the entire primary school curricula were changed from the traditional content-based curriculum to skills/competency-based curriculum to make it more relevant and market oriented. It was also revealed that the curriculum content was overloaded and in some subjects – above the level of the learners. A critical review of the listing of competences contained in the various syllabi booklets revealed that some lacked specificity (e.g. ICT, Mathematics and English in Std IV). Generally many of the syllabi reviewed did not contain outcome statements with measurable definitions of knowledge, skills and learner behaviour.

Therefore it is concluded that in order to avoid mismatches between designing and effective implementation of a revised curriculum, involving a major paradigm shift from content based to

competency based, MoEVT needs to follow the systematic procedures - research to establish needs, actual design, writing text books and procuring needed materials, training/retraining teachers, managers and inspectors, implementation, evaluation and feedback.  Similarly, a strong link needs to be forged between MoEVT and its institutions responsible for teacher education and teacher development – University Colleges, Schools and Faculties of Education; TIE, EMAC and NECTA, so that there is synchronisation of their roles as individuals and as a "collective" to ensure the innovation is successful.

# 7. COMPETENCY-BASED ETHOS COMMUNICATED IN THE BOOKS AND LEARNING MATERIALS

The Education Materials Acquisition Committee (EMAC) was responsible for textbook scrutiny and approval and districts and schools then procured approved books from suppliers.

TIE experts maintained that writers were not well versed in the paradigm of competence-based curriculum, hence their ability to write relevant books was limited, and many had not received any training. Many therefore lacked skills to write relevant textbooks that were competence based.

The curriculum developers also doubted parents' ability to buy several textbooks, as previously recommended under the multiple textbooks policy of 2001, instead of one or two textbooks per subject, as suggested in the MoEVT 2010 circular that directs use of one or two textbooks per subject, as Tanzania's per capita income is around $503 per year. They were also suspicious of EMAC's objectivity in recommending textbooks, as some were shallow and sometimes full of grammatical errors, as elaborated in a subsequent section. Textbooks for Standard VII were yet to reach most schools, six years after the new curriculum was introduced.

Focus group discussion with a panel of experts from the Tanzania Institute of Education (TIE) revealed there was a gap between the curriculum and textbooks as well as other teaching/learning materials. They maintained that competence-based curriculum is an innovation that was not yet familiar to many traditional book writers who were more used to writing books from a content-based perspective. Teachers were also reluctant to use competency-based textbooks and materials, as they required long periods of lesson preparation. They also claimed that there was confusion between a competence and how it is developed.

Regarding textbooks supply, staff in the Directorate of Primary Education maintained that the 2008 and 2010 PEDP monitoring reports showed there was an acute shortage in schools. This contention is illustrated in a subsequent section where data from the surveyed schools is presented. Many of the stipulated titles were not yet in schools, and where they had been acquired, they had not yet been distributed.

Members of the TIE panel recommended that the following needs to be done to improve the supply of relevant textbooks to primary schools. TIE, through enhanced representation in EMAC, should supervise the process of identifying titles that deal with the new curriculum. Each title should cover over half the syllabus content for each level. It should be noted that the multiple textbook policies advocated by many partners in education development had proved a failure, as the ability of poor parents to purchase multiple titles was limited. Hence, the recommended 2 – 3 core textbooks for each syllabus, a recommendation that has been adopted by MoEVT, through circular No 2 of 2010.

Interviews with district education officers and district school inspectors in Kisarawe District revealed that some text books were mismatching the revised curriculum content and most of them lacked competencies and skills. They added that some text books lacked attractive pictures and diagrams, while others contained false information. In this regard the DCIS commented, "Teacher-support materials are essential to ensure the new curriculum is well implemented. Competency-based education is a new idea for most teachers. Without materials giving concrete examples of how to prepare and teach the curriculum, teachers will implement it differently. Consequently, the expected results will never be achieved."

The Kinondoni district education officers were of the view that, to a large extent, books do communicate skills and competencies, but the issue of having a number of different books for every class is confusing teachers as they are required to use several books to extract the information required. Furthermore, they pointed that there are other subjects like social studies where a teacher has to teach topics that are not relevant to their environment, for example, banana cultivation in Dar es Salaam where there is no banana growing culture.

The education officers and school inspectors in Moshi Rural and Municipal revealed that books are not well prepared and their contents do not satisfy the needs of the syllabi. They further pointed out that books published by Macmillan Aidan were complicated for students to follow while Ben and Company books are so shallow that one cannot rely on them.

On top of that, teachers in the Kisarawe during focus group discussions commented that EMAC was one of the most corrupt organs in the country, as it was authorising poor textbooks for primary schools' consumption. Teachers from Kibasila Primary School, for instance, showed three text books of the same subject (History STD IV) from different publishers, portraying different stages of the 'Evolution of Man'. While Macmillan Aidan showed 5 stages, Oxford University Press showed 6 stages and Educational Book Publisher showed 7 stages. Teachers disclosed that Oxford publisher's products were the best compared to products from other publishers. Teachers also complained about lack of funds to buy teaching and learning materials related to the revised curriculum. They said the revised curriculum disturbed the Pupil-Book-Ratio (PBR) in their schools, as they had to buy new text books as stipulated in Educational Circular no. 2 of 2010. Teachers from one school said, "There are no funds to buy new books, so we are still using the old ones."

Kinondoni district teachers expressed their frustration with the suggested books for the new syllabi as indicated in their statement "we still use books that were bought by schools before the circular came into force. We do not follow what the circular prescribes because we do not have funds to buy the new books. The multi-textbooks policy of having different books for every class level confuses students because writers write differently and there is no continuity from one level to the other." Furthermore, they asserted that books do not portray the required competencies as some of the books are so shallow that they are compelled to use books from even higher levels to get what is required at that level. For example, in Kiswahili they are forced to use secondary school books because the standard of the books do not match the syllabus requirements. The standard is low, and when examinations come they ask questions demanding a high level of knowledge and skills, which are not often explained in the books.

Findings from teachers of Moshi Municipal and Rural Districts also revealed that it is only to a small extent that books communicate the skills and competency ethos of the curriculum. They pointed out that "nowadays books have become a business where different writers write contents which do not match the syllabus". They were of the view that either EMAC does not do its job properly or they are corrupt in certifying the types of books recommended for use in schools.

It is worth noting that although the new curricula were issued in 2005, the accompanying teacher's guides were not written until 2007. Similarly textbooks for use in tandem with the new curriculum were issued gradually from Std I. Although the new curriculum is supposed to be in use at all Grades – Std I to VII – textbooks for Standard VII were yet to reach schools. Yet a circular issued by NECTA in January 2011 on PSLE format indicates that the exams will be set using the new CBC. Many schools had bare walls and grounds and teachers rarely prepared and used other teaching and learning materials during classroom instruction. This point is further clarified and illustrated in the next section.

It was established that writers were not well versed in the paradigm of competence-based curriculum, hence, their ability to write relevant books was limited and many had not received any training. It was further revealed that there was a gap between the curriculum and textbooks as well as other teaching/learning materials. Teachers were also reluctant to use competency-based textbooks and materials as they required long periods of lesson preparation. Worse still, there was an acute shortage of textbooks in schools due to inadequate funds for procuring them from suppliers.

EMAC was cited as one of the most corrupt organs in the country, as it was authorising poor textbooks for primary school consumption. Therefore, it is concluded that CBC is an innovation that is not yet familiar to many traditional book writers who were more used to writing books from a content-based perspective. EMAC should therefore be overhauled to portray high levels of integrity in fulfilling its duties of textbooks' scrutiny and approval.

# 8. IMPLEMENTATION OF CBC IN THE CLASSROOM

Focus group discussions with curriculum experts at TIE disclosed that orientation of teachers to the new curriculum was done through a system of training of trainers (ToTs) at zonal level. These were in turn supposed to train those at district level, who in turn train those at ward level, who subsequently would train those at school level. As training duration at any level was short – a maximum of two weeks – and the subjects involved were many (up to ten), coverage was superficial, and there was a greatly reduced effect of training skills as the ToTs trained those at lower levels – District, Ward and subsequently at the school level. So those who received training at a lower level received less of the intended skills.

A number of factors accounted for this state of affairs. The first was limited funds allocated for training. The second was the poor choice of trainers, with some not trusted by colleagues, who doubted their abilities. The third was the lack of frequent inspection of schools to ensure that the new paradigm of CBC was well understood and effectively implemented by teachers at classroom level.

Field & Drysdale, (1991) assert that *CBE is learner-centred and the learning process is central.* The individual learner is central and it is based on individual learner's 'competence status' (already acquired competencies). Furthermore, competencies are defined that still have to be acquired and developed. Teachers need to use individualised materials, flexible learning time and give continuous feedback to the learner.

*CBE adopts a constructivist approach* to "…develop competence, not knowledge, as in cognitivism, or achievement as in behaviourism (Motschnig-Pitrik & Holzinger, 2002:163)". They add that, those statements aside, it is known that the quality of the acquired knowledge through active construction is better than passively gained knowledge.

*In CBE the role of the teacher is that of a 'cognitive guide'* – to encourage students to engage in active inquiry and make explicit their tacit assumptions. Kerka, (1997:1) maintains, "A constructivist teacher is more interested in uncovering meanings than in covering prescribed material."

*CBE has learning environments focused on the development of competencies* that need to have been acquired and developed by the end of the education programme (Kirschner *et al*., 1997). In this sense the curriculum development process needs to have an outcome focus, then be worked 'backwards', because the knowledge and skills are determined by the competencies that are needed for life in the community and future employment both in the public and private sector; and not by the disciplinary 'body of knowledge'.

*CBE includes the development of generic competencies* that are integrated throughout the whole curriculum - effective communication or computation skills in science, life skills and the like. It also stimulates the transfer capacity; focus on innovations and solving real life problems and the explication (definition) of problems; self-reflection and self-assessment play a fundamental role.

Visits to schools in the three districts were an eye opener. Whereas in most community-owned and run primary schools, shortages were the order of the day, in contrast, the situation was quite different in many English medium/international schools. Staff/student ratio in classes was 1:20; the pupil/textbook ratio for most subjects was 1:1. Teachers were well qualified academically and competent, and benefited from regular staff development programmes. Classroom walls were decorated with charts and the products of student's work developed during classroom instruction. Each student maintained a diary of homework assignments done throughout the year.

Interviews with education officers and school inspectors at Kisarawe revealed that no training was provided initially for teachers to use the new curriculum effectively. In 2007, UNICEF conducted a training of five days for three teachers from every school in the district. Two years later in 2009 Plan International conducted an in-service training for teachers from five wards - Kisarawe, Kiluvya, Msimbu, Masaki and Kibuta - out of twenty wards of the district. Two teachers from every school in those wards learned how to prepare a scheme of works and lesson plans under the revised curriculum for two days. Therefore, according to the DEO and DICS, it was only 23 percent of teachers in the district who attended in-service training to advance their knowledge and promote the desired skills; hence the trainings were too short to equip a teacher for successful implementation of the revised curriculum.

In Kinondoni district, however, both the DEO and School Inspectorate office revealed that trainings were conducted for about 60 percent of teachers. TIE used to call them frequently to discuss difficult topics and even some of the trainings involved some students. They revealed that the problem was on the dissemination of the skills to other teachers as those in schools refused to be taught without being paid. The high incidence of training teachers in Kinondoni is understandable, for TIE was located in the same district.



**Plate I: Good Teaching and Learning Environment at East Africa International School – Mikocheni Dar es Salaam**

Moshi Rural and Municipal education officers disclosed that seminars were given to teachers in clusters, only once since the curriculum changed, where they were taught to identify skills in specific topics, but

these were not sufficient to satisfy the needs of the teachers. They further revealed that despite the training, teachers still had problems in identifying skills, thus most of the training is conducted by the school inspectors when they visit schools. Inspectors' visits to schools, however, were rarely done, due to shortage of funds. On average schools were visited for only one day in one or two years. Follow-up inspection was rarely done for similar reasons.

During focus group discussions in Kisarawe district, teachers disclosed that those who were trained by the projects (UNICEF and Plan International) had gained more confidence and increased their subject matter knowledge and pedagogical content knowledge. But they explained that all these initiatives were mainly in the form of donor funded projects that addressed only a small group of teachers. One teacher commented:

> The projects run as long as there is money. But without plans for sustainability and no long-term plan to ensure that there are professional development programmes for teachers in Tanzania, reliability and sustainability was difficult. This suggests the need for MoEVT to establish a recognised and active unit that deals with teacher development, which includes In-Service Training and other important aspects of the teaching profession – management, supervision and evaluation.

In Kinondoni district, teachers were very articulate in expressing their lack of training contrary to what the district education officers and school inspectors had said. They pointed out that they had not been prepared at all for the changes in curriculum and that they lack skills for preparation of the scheme of works and lesson plans which they have come to learn. They also noted that even the school inspectors do not have the skills and so they have not been able to help them.

Only a few schools had benefitted from the STEPS teacher development project initiated by AKF. The Support to Education in Primary Schools *(STEPS)* was a five-year (2001 - 2005) '*School Improvement Programme'* that was implemented by the Aga Khan Foundation (AKF) Tanzania in the Kinondoni Municipality of Dar es Salaam Region and in Morogoro Rural District. STEPS' broad purpose was to develop human resource capacity and systems for the equitable, effective and sustainable delivery of professional, technical and material support to public sector primary schools to assist their transformation into providers of quality education. According to Mosha and Ojwang (2005) the project was very successful in the experimental schools, but was never replicated beyond another experimental District - Morogoro. It embraced strategies for strengthening linkages and co-ordination among local educational institutions, enhancing human capacity at district and local level for improved technical input to the supervision of primary education, and improving governance, management systems and practices in primary schools to enhance quality of education.

It also included assisting the districts to develop a network of cluster TRCs capable of delivering appropriate and effective professional development to teachers and school administrators/managers, improving approaches to teaching and learning in school classrooms, leading to enhanced performance in pupil achievement and performance across the range of curriculum subjects, as well as developing increased and more effective community participation and support to local educational institutions (schools and cluster TRCs).

Schools that were involved in the project are now relapsing to traditional teaching methodologies, e.g. Rutihinda Primary School, one of the former best performing schools. This was caused by the death of the patron and transfer of many of the teachers to other schools.

A few teachers pointed out that the only seminar they attended was for business purposes, as it involved Std 7 teachers of history and civics, and was conducted by an author of books who was mainly referring

to his book. In addition, teachers were required to contribute five thousand Tanzania shillings each for the two days of the seminar!

Some teachers from Moshi Rural and Municipal acknowledged that they had received seminars although the content of the seminar did not satisfy their requirements. However, there were teachers who said they had never heard or attended any seminars in competency-based curriculum, thus were unable to translate the syllabus into a scheme of works and lesson plans.

Furthermore, classroom observation revealed that teaching had generally remained traditional, which means teacher centred, but incorporating elements of what is dubbed participatory teaching methods. The traditional teaching approach referred to is the 'lecture method', which most of the time is 'teacher talk – chalk – and choke', while students listen and write.

In answering the question why teachers preferred the lecture method, during focus group discussion they revealed that they needed to cover the content of the curriculum within the time set by the school timetable; and that lecturing was the most efficient method to cover it. Similarly, there were too many students in some classes (see Plate II and IV) and that works in favour of lecturing as other methods would require a lot of time to attend to individual students' needs.



**Plate II: Class of Students Sitting on the Floor at Rutihinda Primary School**

**Plate III: Over Crowded Class at Marangu Mazoezi - Kilimanjaro Rural. All Students Have Desks**



**Plate IV: Over Crowded Class at Kawe Primary School**

It was interesting to note that all schools in Kilimanjaro had adequate desks although there was overcrowding in Std VII at Marangu Mazoezi Primary School. Unlike Dar es Salaam, a cosmopolitan city, many people in Kilimanjaro like education, hence were ready to supply timber or make contributions to ensure every child sat at a desk.

Again, teaching resources that support interactive and student-centred teaching methods were lacking, particularly in science subjects and languages. Nevertheless, teachers did not know a better way to teach as they had experienced nothing better as student teachers during their teacher training programmes in colleges and in their career. As one teacher commented:

> We need a proper mentoring system to ensure that new and long-servicing teachers acquire and are able to use effectively emerging professional skills. Remember, with the introduction of the revised curriculum, teaching in schools has continued to be appalling, as the new syllabi are more demanding, requiring a new set of skills; unfortunately we don't have them.

It was interesting to note that in a few schools in Kinondoni District, especially those that had participated in DSPE, there were learning corners containing materials, prepared by students and teachers (Plate V).



**Plate V: Illustration of Learning Corners at Mwenge Primary School**

Some schools visited during the current study had talking walls (Plate VI) and the grounds were effectively used as a learning environment (Plate VII). Learners are using a competency-based curriculum, therefore are able to build confidence as they move up in the level of competency attained. There is more time in a competency-based learning setting to provide individual attention and feedback, as well as time spent on actually practising and learning the skill rather than listening to a series of lectures about the skill.

**Plate VI:  An Example of a Talking Wall at Mwenge Primary School**



**Plate VII: Effective Use of the Environment as a Learning Tool at Mwenge Primary School**

In contrast, in some schools – e.g. Kawe in Kinondoni district - teachers found no motivation to prepare teaching and learning materials as they lacked office space, and were working under trees and moving from one place to another depending on the weather conditions (Plates VIII and IX).

**PLATE VIII: Unmotivated Teachers at Kawe Primary School**



**Plate IX: Teachers Working under Trees due to Shortage of Working Space at Kawe Primary School**

It was difficult to teach and attain a high mastery of some skills – such as handwriting or effective group work - when many students were concentrated at one desk while several were seated on the floor (refer to Plates II&IV).  Similarly, teaching without using appropriate facilities and equipment kills talents, as captured by this popular advert on teaching ICT from a local television station.

**Plate X: Teacher Teaching How to Operate a Computer without the Equipment as indicated in YOUTUBE News Media**

In general, classroom observation revealed that all teachers were still using the traditional teaching method to deliver the content. The researcher also found that most teachers implementing the curriculum, from planning the lesson and instruction to assessing the students, had not changed at all. Teachers were unable to select experiences that had a feature of student-centeredness and that were appropriate to specific lesson objectives, and the mental ability or/and age of the learners. As one respondent lamented "We should not be blamed, there is no support system in place to help teachers teach in a way directed or expected by the competence-based curriculum."

Teachers need to use individualised materials, flexible learning time and continuous feedback to the learner. To realise this end the teacher therefore ought to be a cognitive guide – engage in active inquiry. A constructivist teacher is therefore more interested in uncovering meaning than covering prescribed material. Hence, knowledge and skills are determined by competencies that are needed for life and employment.

It can be deduced from the afore-cited findings that poor teacher preparation at college level and poor induction or no induction seminars at all, have deprived most teachers in primary schools of the opportunity to acquire basic competencies for teaching the CBC effectively.

Where competency-based curriculum is not being effectively implemented, there is often a danger of sliding back into traditional teaching methods, if there is not enough follow-up and training for the facilitators.

From the findings it is clear that although district officials alluded that training was provided to teachers in certain numbers, teachers themselves did not agree with this. Those few who acknowledged receiving training disclosed that either the training was too short or the content of the training did not reflect the need for improvement in order to implement CBC effectively. It was also clear that most of the training

involved a small number of teachers, was of short duration and use of the cascade model led to some skills not being imparted at all at lower levels due to the crash-out effect. On the other hand, training required was not only for teaching methods but also on the subject matter of some subjects, like ICT, Vocational Studies and Music, which are new to teachers. It is also clear that even if teachers were to be trained without having basic facilities and equipment the implementation of CBC is next to impossible. Availability of such facilities as enough desks for students, classrooms, books, teachers' guides and equipment for science subjects contribute to the motivation of teachers to learn how to teach the new curriculum. Without such facilities it is very hard for teachers to implement what is required by the CBC and hence build skills for students.

# 9. MONITORING AND EVALUATION IN COMPETENCY-BASED EDUCATION

*In CBE, assessment is focused on competencies* rather than knowledge and skills; assessment is both formative and summative and ought to form an integral part of the process of the development of competencies.

FG discussions with selected experts from NECTA disclosed that they set examinations after MoEVT issued a circular directing schools to start implementing a new curriculum – the 2005/2006 series. Thereafter NECTA assumed the syllabus was indeed being implemented in schools w.e.f. the date of the circular. Thereafter an examination format was sent to schools through REO, DEO, WED and head teachers. After examinations, an examiner's report was sent to schools through the same channels. NECTA sets and conducts examinations without any proof of effective teaching of the new syllabus. They maintained that, if teaching had not been affected, it was the duty of inspectors to furnish them with such information. Hence, they suggest that, for the new curriculum to be effectively implemented and evaluated, there needs to be closer collaboration between MoEVT, TIE, NECTA and UDSE to ensure that the process of designing, implementing and evaluating a competency-based curriculum is effectively done.

Interviews with inspectors of the four districts revealed that the Inspectorate Department at the district level was forgotten by the MoEVT as it was not receiving funds to implement its duties effectively. They, however, maintained that they had been fulfilling their duty of quality maintenance, through inspecting teaching/learning materials, teaching and learning process, school climate and quality of teachers. They added that although NECTA had been setting examinations in accordance with the subject syllabi, EMAC was a big hurdle, as it was authorising poor teaching/learning materials to reach schools.

On NECTA, teachers from the four districts commented that it must focus on questions that foster thinking skills rather than memorisation. As one said, "What and how students learn depends to a major extent on how they think they will be assessed. The assessment practices must send out the right signals." Further, all respondents disagreed with NECTA's plan of using multiple-choice questions to assess Standard VII pupils in Mathematics and language skills that require self expression. As one stated, "This is against revised curriculum requirements. You can't foster competencies by reducing everything to thinking skills."

It is important to note that the introduction and use of multiple-choice questions, which mainly test remembering, cannot test higher level skills – analytical and application. Hence many students will continue graduating without acquiring these skills, and become tutors at colleges that train teachers for primary schools; or be engaged as curriculum experts at TIE, examination officers at NECTA or school

inspectors, and system administrators deployed at various levels of the education sector; thus rendering attainment of excellence in implementing a CBC difficult. This vicious cycle has to be broken.

Responding to questions on the same issue, education officers explained that in a competence-based era assessment processes also need to change to make them more authentic. All forms of assessment – formative, summative and impact need to be emphasised. They added that currently, the processes were geared towards passing examinations and not towards assessing the level of competency attained by the pupil during primary education; including the ability to apply them in a real life situation. They insisted "If the goal of examinations and the curriculum are not clearly stated and linked, the curriculum remains the servant of examinations. Therefore examinations should reflect real life."

Basically the role of monitoring is done by the Inspectorate unit which has not been able to do its job as required due to lack of funds. Thus there are schools that do not see the school inspectors for years; hence their activities are not monitored. Evaluation, on the other hand, is done by NECTA which set examinations for the whole country. Findings have revealed that these examinations are set without knowledge of what has actually been taught in schools and whether the syllabi have been followed or not. From the teachers' point of view they do not support this system as in most cases they are given the format of the examinations which they use to drill students so that they will be able to pass while even the competences have not been considered in the examination questions. It is suggested that NECTA should be aware of what has been taught in schools before setting examination questions as this will help to ensure that they evaluate what has been taught. Similarly there was little evidence of heads of schools and heads of department ensuring regular monitoring and evaluation of classroom instruction to ensure the CBC is effectively being implemented.

The biggest challenge has been on who and how to monitor EMAC so that they authorise books with high quality for schools. Current experience has shown that most of the books authorised by EMAC have been found to be sub-standard hence contributing to the teachers' dilemma on which books to be used.

# 10. ANALYSIS AND DISCUSSION OF THE FINDINGS

This section contains the analysis and discussion of the research findings. The researcher in analysis and discussion tries to mesh together the TORs, the theoretical stances and findings from the field, with what is already known and done to promote CBE globally and in Tanzania, and provide specific answers to the following issues of concern.

## 10.1 Competence-Based Curriculum within the Context of Quality Deficit

CBC is not a new philosophy in the Tanzanian Primary Education System. It was implemented in schools during the colonial era up to 1967. Recapitulating from my middle school experience - 1958 to 1962 - the primary education curriculum at that time was competence/skills based. It involved exploration, experimentation, contextualisation, expression and drawing on life experiences. The only missing link was that it was not provided in a democratic manner, as students were not free to question certain distorted facts – e.g. Rebman discovered Mt. Kilimanjaro, as if the mountain was covered with a blanket until Rebman came.

The curriculum, at that time, emphasised step-by step learning of concept, skills or tasks thoroughly in the classroom before practical application in the field. Life/field experiences were used to enable students to gain knowledge through experiential learning. Teachers were therefore able to assess mastery of basic concepts and skills before moving on to more difficult ones. What was learnt in the classroom in

Geometry, for instance, was applied in the workshop during woodwork or masonry practicals. Similarly, what was learnt in Mathematics – weight/ measurement - was applied in weighing farm produce, spacing of plants and the like, or computing sales of produce from the 'shamba'.

The classrooms, workshops and domestic science rooms were well furnished and stocked with basic materials and equipment. Classroom walls were decorated with products of students' independent/group work. Playgrounds were available and well-maintained and used for physical education and sport. Subjects and other clubs were effectively functioning under the guidance of a patron. Communication skills were enhanced through regular practice. It was government policy that no teacher who was not competent enough in English was allowed to teach the subject. Similarly, no teacher who lacked good mastery of English was allowed to teach any subject in English. Numerical skills, as well as other important values and attitudes; and commitment to hard work, were developed through active participation in the aforementioned activities; an approach that allowed a natural integration into one's lifestyle. About 90 per cent of those who completed the upper primary education were selected for secondary education while the rest got direct employment or were self employed.

So when the curriculum was revised in 1967, it was like throwing out the baby with the bath water. Hence, on introducing the world acclaimed **education for self-reliance**, the emphasis was on menial manual work, lacking the knowledge and skills linkage. It defied all the principles of learner-centred teaching. As Weimer (2002) explains, teachers should focus attention on what the student is learning, whether the student is retaining and applying the learning, and how current learning positions the student for future learning.

The situation worsened in 1974 following the introduction of UPE, when the Government moved forward the date of attaining UPE from 1989 to 1978. A number of militant political strategies, instead of systematic, scientific and strategic planning strategies, were adopted. A mixed bag of candidates were admitted into teachers' colleges where they attended abridged programmes that did not allow enough time to level up subject matter content and gain the necessary professional skills. A new brand of Grade C/B teachers were trained in a rush and licensed to teach. By 1980, about 60 per cent of primary school teachers were of this category. Many had doubtful English language skills and subject matter content. Many classes were conducted under trees and there were very few textbooks to support teaching. This was the root cause of the poor language skills and low quality of primary school products that Tanzania is experiencing to-date. PEDP therefore had the objective of improving the quality of the under-qualified C/B teachers by upgrading them to Grade A. In addition, more Grade A teachers were trained.

When CBC was reintroduced in 2005, this occurred without teachers with the requisite competences, teachers' guides and basic textbooks had not been developed, the classroom teaching and learning environment in most schools was appalling, the quality of teachers' practice wanting and commitment lacking, the environment, teaching and learning facilities and equipment to support the new curriculum were non-existent. In such a context, when the important pre-conditions have not been met, only miracles will lead to effective implementation of CBC in Tanzania primary schools.

## 10.2 The Pre-Conditions for Successful Implementation of Competence-Based Curriculum

The first pre-condition is professionalism – the quality of practice by teachers. Socket (1993) identifies the four central categories of professionalism - quality practice, character of a particular group, clear skills and behaviour.

**10.2.1Quality of teachers**. This includes the quality of candidates selected for the teaching profession, which is poor. Most candidates selected for the teaching profession in Tanzania even after abolishing recruitment of C/B teachers (Ex Std VI and X) and setting a minimum of Grade A (Ex Form IV) have low pass marks (Division III and IV in CSE), compared to counterparts joining other professions – medicine, law, engineering – who require Division I – III passes.  As the findings clearly showed, a few private and international schools that were effectively implementing CBC had well-qualified teachers, mainly diploma and university graduates, who were regularly developed.  Similarly, the class size in these schools was about 20 students per classroom. They were also well furnished and equipped. The teachers demonstrated high pedagogical skills and standards in:

- designing and planning learning activities and/or programmes of study;
- teaching effectively and supporting student learning;
- assessing and giving feedback to learners;
- developing effective learning environments and student guidance and support systems;
- integrating scholarship, research and professional activities with teaching and supporting learning.

Bradbeer (2007) maintains that these are important pre-conditions for more successful implementation of CBC, attributes that were lacking in many public primary schools surveyed.

Mohamed (2011) adds that most professional bodies also require at least two of the following criteria:

- approved educational  experience
- practical experience
- successful examination performance – of fundamentals or discipline specific

Yet many in the education sector in Tanzania complain that there is little evidence that the teachers that NECTA certify, and MoEVT licenses, have many of these qualities of a good teacher.

Mohamed (2011) adds that programmes for teacher education to satisfy future needs of learners need to provide teachers with solid and current knowledge and essential skills as well as research-based methods to use data collected from the classroom to make informed instructional decisions.  It must also promote ethical responsibilities; including a professional code of conduct, to be held in common by its members; as well as nurture trust or confidence in the profession.  Similarly, a culture of adaptability, accountability, commitment and responsibility for students' moral and cognitive development has to be built.  Teachers need to have the skills to create and maintain a socially just, equitable and sustainable world.

Interviews with DEOs, district school inspectors and head teachers revealed complaints that the new generation teachers in schools today lacked commitment, were unethical as they spent an inordinate time moonlighting, and rarely took responsibility for poor performance.  Factors leading to variations between schools therefore need to be addressed for CBC to be effectively implemented in all public primary schools in Tanzania.

Furthermore, for teachers to perform well, they also need to have clear remuneration and promotion criteria.  Teachers' repeated complaints about delays in salaries and non-payment of benefits on time need to be addressed.

The Tanzanian education sector also lacks a system of recognised **master teachers -** those with educational and pedagogical leadership skills and ability to assist the assistant teachers as well as a proven track record in good practices.  One cannot have effective INSET, induction, or in-school cluster groups

for staff development; nor effective in-school supervisors, in the absence of master teachers. They need to be identified, developed and remunerated.

Master teachers are not self-developing. One also needs to have **chartered teachers** in the system to develop them. According to Mohamed (2011) these are teachers exerting a significant influence on their colleagues to improve the quality of teaching and learning in schools. They are the most competent, qualified, skilled and knowledgeable. They also show willingness to propagate professional standards and promote attitudes and attributes to pursue the highest level of excellence.

Such teachers are known, but are not recognised for their distinguished contribution, motivated nor rewarded. Similarly there is no system for effectively using them to develop more master teachers/facilitators, to cascade and saturate the entire primary education system with competent teachers. Hence, according to Tilya and Mafumiko (2010), some teachers are not implementing the new curriculum because of a lack of requisite knowledge, skill and curriculum materials.

**10.2.2** Second is the **continued tinkering with the curriculum** that is not preceded nor followed by systematic and scientific planning of reforms. CBC entails a major paradigm shift that requires systematic planning of change, as no curriculum is self-implementing. It requires re-professionalisation of curriculum developers, tutors, teachers, examiners, book writers, school heads and their deputies, heads of departments and teachers. It also requires having in place basic textbooks, materials and equipment to support effective implementation of the desirable ethos.**10.2.3** Third: there is **lack of a supportive teaching and learning environment in schools** - sufficient classrooms that are well furnished and equipped. There are also no workshops or sufficient space for **outdoor** learning activities. Large class sizes in some schools (sometimes over 90) where most or all students are sitting on the floor cannot provide an environment that is conducive to enhancing the ethos espoused in CBC.

**10.2.4**Fourth: the **rush during the design of the programme and implementation** stifled, and will continue to stifle effective implementation of the CBC in Tanzanian primary schools, unless remedial measure are taken to correct past mistakes. Tilya and Mafumiko (2010) maintain that there is a lack of clarity among potential implementers (even some curriculum developers) and book writers on the meaning of CBC and a student-centred approach. As a result, there is fear of teachers losing control in the classroom. In reality, there are a large number of unprepared teachers, from pre-service training to practicing teachers, who have not benefitted from any sort of INSET offered in a sustainable way, who are required to teach the CBC. They all require empowerment if they are to be effective.

**10.2.5** Fifth: **teachers' mentoring and induction** programmes are essential for successful implementation of CBC. As Borich (2007) has clarified, new knowledge, skills, values and attitudes gained through CBC PRESET and INSET programmes, including mentoring and induction, help to enrich knowledge on how to plan instruction, establish a learning climate, improve strategies for instruction, and make teaching as interesting, effective and efficient as possible.

**10.2.6** Finally, for the CBE paradigm to be effectively implemented in Tanzanian primary schools, the **Examination System** must change. As Tilya and Mafumiko (2010) observe, currently the teaching processes in our primary schools are geared towards passing examinations and not to assess the level of competency attained by the student during primary education. Njabili (1999) had earlier observed that if the goal of examinations and the curriculum are not clearly stated and linked, the curriculum will be the

servant of examinations. She adds that examinations designed by teachers and implemented in Tanzania do not reflect real life situations that demand more complex skills than memorisation.

# 10.3 Improvement of Quality of Actual Teaching and Learning

Tanzania has done a commendable job of enhancing access, correcting gender imbalance in admission and building classrooms since the EFA initiative in 1990. The major focus of the reforms, however, has been on advancing quantitative goals, without a matching effort in improving quality as revealed in previous sections. Haki Elimu (2009) adds that poor quality of education as revealed in previous sections is manifested at all levels of education. Students are graduating and being awarded certificates, but the knowledge and skills when they leave is inadequate and sometimes irrelevant. This is confirmed in URT (2011: 36), "the percentage of pupils passing PSLE has shown declining trend as follows 2006 (70.5%) passed, 2007 (54.2%), 2008 (52.7%), 2009 (49.4%) and 2010 (53.5%)."

A number of factors contribute to this state of affairs. First is the quality of the teacher. This attribute has been comprehensively explored in the previous section. Haki Elimu (2009:1) adds: "the teachers we now have are poor due to inadequate training, large classes, poor working and living conditions and low salaries. One may add that the Ministry to date lacks a coherent programme for training teachers who can effectively teach some of the subjects that were recently introduced in the competency-based package introduced in 2006 – ICT, vocational education and Personal Development and Sports. So one should not be surprised if the ethos espoused in the CBC is not being realised.

Second is the level of capitation. Capitation grants for improving the quality of education provided has been in short supply (Table Ia and Ib pp 4-5). URT (2010) has revealed that Councils received Capitation Grants (CG) from MoF, but disbursement of the funds to respective schools was delayed. This delay caused an accumulation of funds in the Council Education Accounts.

The capitation grant disbursed to all councils visited was inadequate, ranging from Tshs 2,342 to Tshs 5, 545 as compared to the expected rate of Tshs 10,000 per pupil. Councils therefore disbursed less money than expected to schools. This affected the infrastructure in the schools. This is despite the reality that enrolment between 2002 and 2007 doubled (URT 2011:50). Although assertive leadership to mobilise sufficient resources to implement some reforms in the sub-sector is necessary, quality cannot be realised through political platitudes. It requires substantial investment to meet the pre-conditions for providing high quality and relevant CBE.

Third, the tinkering with the curriculum towards the end of PEDP I in 2006 thwarted all gains of previous procuring and supplying textbooks to students, since teachers' guides and textbooks were all new. Many schools were found lacking these essential inputs during the survey. Hence efforts made under EFA initiatives and massive donor support went down the drain because of too much political enthusiasm and the lack of systematic planning, which led to rushing and not considering the logical stages during implementation of major reforms such as PEDP. The PEDP Monitoring Report (2008) also indicated that many sub-standard classrooms were built during this era.

Fourth, as stated elsewhere, teaching given subjects – ICT and some vocational skills - theoretically kills talents. Similarly, the use of indigenous languages, such as Kiswahili, is not an automatic solution to the problems of poor quality of primary education. Indeed, many years of using Kiswahili as a medium of instruction at primary school level has not improved performance. According to URT (2011) 53 per cent of primary school leavers failed the PSLE in 2010, despite Kiswahili being the medium of instruction. It needs to be observed that the teaching of language by teachers with limited mastery and lacking confidence to inspire students to practice it, cannot nurture desirable communication skills. The reading

culture is gradually dying in Tanzania as students are rarely encouraged to search for knowledge or build their vocabulary through reading good textbooks, supplementary books and novels.

Furthermore, during classroom observation traditional teaching and learning methods were predominant. Most of the time the teachers talked and chalked while students listened and wrote some notes in their notebooks; sometimes on their laps, as they had no desks or chairs to sit on. There was little mental engagement of students in answering questions that required exploration and searching for answers on their own. Many students also came to school with empty stomachs. As many schools did not have feeding programmes, students were unable to concentrate on their studies. In such a context, the quality and relevance of what was taught and learnt was unlikely to improve. As Tilya and Mafumiko (2010:46) had earlier observed, "To complement the lecture, you often find learners being put in groups in the name of participatory teaching, with many students looking bored, and confused as to what was the point ...." Reasons given as to why teachers prefer this method include the need to cover the content, which does not allow time for deep understanding, too many students in the class (ref. Plates II p. 20 and IV p.21) that leads to lecturing and does not allow time to attend to individual student's needs, and the lack of teaching resources that support interactive and student-centred teaching methods and supplementary reading materials, such as novels for language skills enhancement. Teachers also did not know better ways to implement the CBC as they had experienced nothing better as students and in their career.

Kitta and Tillya (2010) maintain that learner-centred teaching, which facilitates competence-based learning, involves paying close attention to the knowledge, skills, attitudes and beliefs that learners bring to the educational setting. These include culturally responsive, culturally compatible and culturally relevant (Ladson-Billings, 1995) and diagnostic teaching (Bell, 1982), attempting to discover what students think in relation to problems at hand, discussing their misconceptions sensitively, and giving them situations to go on thinking about, which will enable them to readjust their ideas (Bell, 1982). The teacher therefore serves as facilitator in the search for and utilisation of knowledge that enriches, including its internalisation.

## 10.4 Generic Competences Relevant across all Subjects

Vars and Beane (2000) maintain that three "think tanks" have compiled a list of generic competences that cut across discipline and subject lines. They include the following:

**10.4.1** School-wide goals of learning. These are divided into learning to acquire skills, expanding and integrating knowledge, communication skills, thinking and reasoning skills, interpersonal skills and personal and social responsibility. A critical analysis of the basic competencies identified in various subject (Table 5 p …. ) reveal that the syllabi and accompanying textbooks emphasised only dwell on specific competencies, relating to cluster of knowledge, skills and attitudes, within a subject – Mathematics, English language etc. Generic competencies like effective communication, even in Kiswahili, which was the medium of instruction at primary school level, were not emphasised when teaching, say, Science, Mathematics or Civics. Classroom teaching did not provide opportunities for developing thinking and reasoning skills as the banking methods were predominantly used. Similarly, instead of interpersonal skills, of working together to solve problems or searching for additional knowledge being promoted in all subjects, they were to be developed separately in the newly introduced Personality Development and Sports subject. Social responsibility skills – maintaining a clean environment and judicious sharing of textbooks in the context of scarcity - were also not taught in all subjects.

**10.4.2 Core standards.** These consist of agreed levels of performance identified by authority or consensus. I wish to call these basic indicators of common learning levels. Many are not specified in the new syllabi, teachers' guides, or inspectors' guides. Standards must be met by all children in school, for

one to be satisfied that desirable quality was being realised. Unfortunately, the issue of standards is rarely considered in daily assignments and homework, project work, weekly, monthly or terminal tests and examinations. If this was done, teachers and heads of schools would have been alarmed early in time by poor performance and seen the need to take remedial action; in the spirit of 'a stitch in time saves nine'. The same is not happening after PSLE; hence the need to discuss the issue of accountability.

**10.4.3 Life skills**. These are skills that are important for the world of work. These include thinking and reasoning; working with others, self-regulation and life at work places. Again these generic competences are emphasised in the Personality Development and Sports subject, instead of being integrated in all subjects. Critical thinking and reasoning skills are just as needed in Civics as in Mathematics, Sports and Science. One cannot tolerate and value the views of others in any knowledge generation exercise irrespective of the subject (s) he is studying if one lacks self-regulation skills. When such skills are developed in the classroom, they will be easier to transfer to places of work in the future.

**10.4.4 Back map skills.** These are the sort of after-the-fact skills that demand accountability of what was taught and learnt. Vars and Beane (2000) maintain that all stakeholders – students, teachers, families and the general stakeholders need to be informed and involved in efforts to provide every student with a meaningful learning experience. They also need to demand that the education provided is good enough to meet the expectations of stakeholders, so is able to move society towards important social, economic and social goals. It is a pity that the stakeholders are not raising their voices high enough when primary school performance, including the ethos of CBE, is not being realised.

Competency-based curriculum, textbooks and other teaching and learning materials for primary schools in Tanzania should therefore embrace all the domain-specific and generic competences if they are to be useful tools for supporting learning.

# 11. CONCLUSION

Through focus group discussions with education officers, school inspectors and teachers as well as classroom observation, analysis and discussion of the findings, the following strategies are suggested.

## 11.1 Recommendations

- The curriculum was still content driven and most teachers complained that there was too much to teach in the short time given. They maintained that knowledge was growing so rapidly that it was impossible to teach it all within the short time period they had in schools. In this regard teachers insisted that although content was important, information management skills were more important for continuous information acquisition. They believed that the content could be reduced, but students could still learn more.

- Teachers required the basic competencies to develop and use appropriate learner-centred methods. They needed to be aware of the gaps in their skills and knowledge, as well as their weaknesses and strengths in implementing a competence-based curriculum. For enhancement of those abilities, teachers needed a lot of training and retraining. This is only feasible when pre-service training of teachers embraces trainees' skills for implementing a CBC. The pre-service training programmes should lead to the production of teachers who are academically and professionally competent. Similarly, opportunities for induction and development of teachers to enhance their competences to teach the skills effectively are needed before implementation.

- Quality and enough teacher-support materials are essential to ensure the new curriculum is well implemented. Competence-based education was a new idea for most teachers, therefore quality and relevant teaching and learning materials should be readily available for both teachers and students. When TIE prepares the curriculum they should also ensure teachers' guides and books are available before commissioning it for use in all schools in Tanzania, so that students learn in uniformity.

- There is a need to maintain quality of candidates selected for the teaching profession; in ICT language, 'garbage in, garbage out'.

- Curriculum changes should involve all education stakeholders. Teachers in particular, should be fully involved in the preparation of the curriculum so that they contribute to what is on the ground.

- Subject clubs and teachers' resource centres should be revived to help teachers share the skills and knowledge they have.

- Teacher preparation programmes needed to change from training teachers to use traditional teaching methods to introducing trainees to an authentic learner-centre approach. This would promote pedagogical skills necessary for the teaching and learning process.

- Teachers' clear remuneration, promotion criteria and other fringe benefits to boost their motivation and morale to work need to be improved and paid on time. Too often Government has placed demands on teachers without considering incentives. Gone are the days of charity work, when teachers' salaries and benefits cannot make ends meet.

- Class sizes in most of the schools posed a big challenge to carrying out competence-based curriculum, since its focus is on the individual learner, not learners as a group. More schools and classrooms should be built and be well furnished. More teachers should be trained and recruited. This requires more money to be invested in improving the teaching/learning environment, teacher training and development and supply of textbooks as well as other teaching and learning inputs.

- The existing culture among pupils, teachers and parents that teaching should focus on preparation for examinations or tests and not knowledge and skills acquisition needs to change as holistic, competency-based education requires genuine teaching and learning.

- There is a lack of  coherent programmes for training teachers to effectively teach some of the subjects that were recently introduced in the competency-based package introduced in 2006 – ICT, vocational skills and Personality Development and Sports. As the old adage states, you cannot give what you do not have.

- Emphasis in the summative assessments carried out by NECTA should focus on questions that foster thinking skills rather than memorisation. There is a need for assessment of students' use of higher-order thinking skills, and real-life tasks should be used to evaluate a student's level of understanding, on a scale of performance standards, ranging from novice to experts. Students need the ability to adapt to change, to solve problems, to produce products valued by society, to innovate and to collaborate.

- There was a need for enhanced coordination and communication between key players. TIE, NECTA, Inspectorate, EMAC, TTCs and Faculties of Education need a forum to jointly reflect on and be conversant with the innovations and reforms taking place in the education system.

- Research and development was an important element that had been the missing link in the implementation of the revised curriculum. Reflective action research, together with monitoring and

evaluating skills were needed in order to gauge the impact of the initiatives. Such research would enable teachers to uncover the problems and issues pertaining to specific contexts, as well as the values, attitudes and behaviours of the community that affect students' learning.

# 11.2 The Bottom Line

Competence-based curriculum is not a self implementing paradigm. It requires the effective interplay of five factors. First priority is a well-designed package that clearly calculates the basic skills and expected outcomes.

Second is a well-coordinated management team of various players knit together to ensure a holistic approach from curriculum development to implementation evaluation, feedback and application. TIE, the Commissioners Office Directorate of Primary and Teacher Education, and teacher training institutions, NECTA and the Inspectorate all need to be well informed about their roles and prepared for effective implementation from the outset. It is counter productive, for instance, for the Commissioner's Office to issue a circular (No2 of 2010) on textbook use five years after issuing another circular introducing CBC in schools as from January 2006. Similarly, it is absurd for NECTA to issue a circular to schools on Competency Based Examinations scheduled for September/October 2011 through established channels, when there is little or no evidence from the field that CBC has indeed been effectively implemented in at least 80 per cent of schools.

Third are well-trained teachers with sufficient academic knowledge and skills, graduating from college and those in schools receiving sufficient induction and INSET to give them confidence to teach the new curriculum effectively. Several subjects – Vocational Education, Music, Personality and Sports and ICT – were introduced in the revised Primary Education Curriculum, but most instructors who teach them have very shallow subject matter content and professional skills. This anomaly requires immediate action.

Fourth, sufficient funds need to be injected into most primary schools to increase classroom and office space, buy desks, textbooks and other capital items. CBC cannot be effectively implemented in the contexts clearly illustrated in some of the plates contained in the preceding section, as well as in the context of high teacher pupil ratio, textbook/pupil ratio, lack of basic teaching materials - charts, maps, globes etc. and teaching of practical subjects theoretically. Having all the necessary inputs in place alone will not automatically lead to the facilitation of the required competences/skills. They must also be effectively used to facilitate the acquisition of these competences.

Fifth, there is a need to develop an effective system of quality assurance and quality control that provides regular feedback to teachers and learners, the Ministry and the various agencies responsible for curriculum development and evaluation. According to the findings, the Inspectorate was not performing its functions up to expectation due to underfunding and staff having doubtful credibility among teachers. Hence, they were unable to get much assistance from them on the extent to which the intended ethos was being developed among children in schools. Similarly, the schools that were visited, except East Africa International, had not developed an internal mechanism of heads of schools and departments, as well as students, constantly evaluating and providing feedback on what was taught and learned.

Indeed, we need to learn from the colonial middle school curriculum and accompanying directives that "no teacher who was not sufficiently qualified, should be allowed to teach a given subject." Similarly, no teacher who cannot communicate effectively using the language of instruction should be allowed to teach any subject. For example, in Japan, according to Tabata (2003), teachers who are wanting are suspended until they produce evidence of sufficient development though systems of retraining or INSET.

For all these factors to improve, more resources need to be directed to teacher education and teacher development rather than the dismal average allocation of less than 2 percent of the total education budget. The Government has to rethink spending over 40 per cent of education resources on student loans for higher education, and use them more effectively for financing capital items and motivating teachers. A fund to finance students' loans needs to be established outside MoEVT, and independently managed by an agency, to ensure that those who apply for loans repay them.

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# APPENDICES

**Appendix 1: Standard IV Textbooks in Use**

| School | Subject | Recommended Text book/ Publisher | Textbook in Use/Publisher | No. of Copies available | Pupils No. |
|---|---|---|---|---|---|
| Kibasila | English | Success English for Tanzanians STD 4 (Ujuzi Books Ltd.). Primary English Course STD 4 (Ben & Company) | Primary English Course STD 4 (Ben & Company) | 7 | 72 |
| | Kiswahili | Kiswahili Darasa la 4 (Ben & Company) Kiswahili kwa Shule za Msingi  Darasa la 4 (Educational Books Publishers) | Kiswahili Darasa 4 (Ben & Company) | 7 | 72 |
| | Historia | Fahamu Historia Darasa la 4 (Mture Educational Public) Twiga Historia (Mac Millan Aidan) | Fahamu Historia Darasa la 4 (Mture Educational Public) | 7 | 72 |
| | Hisabati | Twiga Hisabati (Mac Millan Aidan) Hisabati Shule za Msingi 4 (Oxford University Press) | Hisabati Shule za Msingi 4 (Oxford University Press) | 7 | 72 |
| | Uraia | Uraia Shule za Msingi (Oxford University Press) Uraia Darasa 4 (Ben & Company) | Uraia Darasa 4 (Ben & Company) | 7 | 72 |
| | Jiografia | Jiografia  Shule za Msingi (Oxford University Press) Jifunze Jiografia (Educational Books Public) | Jiografia Shule za Msingi 4 (Oxford University Press) | 7 | 72 |
| | Sayansi | Sayansi Shule za Msingi (Oxford University Press) Sayansi kwa Vitendo (Mture Educational Publisher) | Sayansi Shule za Msingi (Oxford University Press) | 7 | 72 |
| | Haiba na Michezo | Haiba ya Michezo (Jadida Book House) 2. Twiga Hiaba na Michezo Darasa la 4 (Macmillan Aidan) | Twiga Hiaba na Michezo Darasa la 4 (Macmillan Aidan) | 7 | 72 |
| | Stadi za Kazi | Stadi za Kazi Halisi (Jadida Book House). Stadi za Kazi (Educational Books Publisher) | Stadi za Kazi (Educational Books Publishers) | 7 | 72 |

| | | | | | |
|---|---|---|---|---|---|
| **Sanze** | English | Success English for Tanzania STD 4 (Ujuzi Books Ltd.). Primary English Course STD 4 (Ben & Company) | Primary English Course STD 4 (Ben & Company) | 4 | 53 |
| | Kiswahili | Kiswahili Darasa la 4 (Ben & Company) Kiswahili kwa Shule za Msingi  Darasa la 4 (Educational Books Publishers) | Kiswahili Darasa 4 (Ben & Company) | 4 | 53 |
| | Historia | Fahamu Historia Darasa la 4 (Mture Educational Publisher) Twiga Historia (Mac Millan Aidan) | Fahamu Historia Darasa la 4 (Mture Educational Publisher) | 4 | 53 |
| | Hisabati | Twiga Hisabati (Mac Millan Aidan) 2.  Hisabati Shule za Msingi 4 (Oxford University Press) | Hisabati Shule za Msingi 4 (Oxford University Press | 4 | 53 |
| | Uraia | Uraia Shule za Msingi (Oxford University Press) Uraia Darasa 4 (Ben & Company) | Uraia Darasa 4 (Ben & Company) | 4 | 53 |
| | Jiografia | Jiografia  Shule za Msingi (Oxford University Press) Jifunze Jiografia (Educational Books Public) | Jiografia Shule za Msingi 4 (Oxford University Press | 4 | 53 |
| | Sayansi | Sayansi Shule za Msingi (Oxford University Press) Sayansi kwa Vitendo (Mture Educational Public) | **Jifunze Sayansi  Darasa la 4 (Educational Book Public) | 16 | 53 |
| | Haiba  na Michezo | Haiba ya Michezo (Jadida Book House) Twiga Hiaba na Michezo Darasa la 4 (Macmillan Aidan) | **Haiba na Michezo Darasa 4 (Ben & Company) | 8 | 53 |
| | Stadi  za kazi | Stadi za Kazi Halisi (Jadida Book House). Stadi za Kazi (Educational Books Publisher) | **Stadi za Kazi Darasa 4 (Ben & Company) | 8 | 53 |
| **Mloganzila** | English | Success English for Tanzania STD 4 (Ujuzi Books Ltd.). Primary English Course STD 4 (Ben & Company) | Primary English Course STD 4 (Ben & Company) | 5 | 65 |
| | Kiswahili | Kiswahili Darasa la 4 (Ben & Company) Kiswahili kwa Shule za | **Kiswahili Darasa 4 (Mture | 10 | 65 |

| | | | | | |
|---|---|---|---|---|---|
| | | Msingi  Darasa la 4 (Educational Books Publishers) | Educational Publisher) | | |
| | Historia | Fahamu Historia Darasa la 4 (Mture Educational Publisher) Twiga Historia (Mac Millan Aidan) | Fahamu Historia Darasa la 4 (Mture Educational Publisher) | 15 | 65 |
| | Hisabati | Twiga Hisabati (Mac Millan Aidan) Hisabati Shule za Msingi 4 (Oxford University Press) | **Hisabati Shule za Msingi 4 (Mture Educational Publisher) | 15 | 65 |
| | Uraia | Uraia Shule za Msingi (Oxford University Press) Uraia Darasa 4 (Ben & Company) | **Jifunze Uraia Darasa 4 (Educational Books Publisher) | 10 | 65 |
| | Jiografia | Jiografia  Shule za Msingi (Oxford University Press) Jifunze Jiografia (Educational Books Publisher) | Jiografia Shule za Msingi 4 (Educational Books Publisher) | 13 | 65 |
| | Sayansi | Sayansi Shule za Msingi (Oxford University Press) Sayansi kwa Vitendo (Mture Educational Publisher) | **Jifunze Sayansi  Darasa la 4 (Educational Book Publisher) | 13 | 65 |
| | Haiba na Michezo | Haiba ya Michezo (Jadida Book House) Twiga Hiaba na Michezo Darasa la 4 (Macmillan Aidan) | Twiga Haiba na Michezo Darasa la 4 (Macmillan Aidan) | 13 | 65 |
| | Stadi za Kazi | Stadi za Kazi Halisi (Jadida Book House). Stadi za Kazi (Educational Books Public) | **Stadi za Kazi Darasa 4 (Ben & Company) | 13 | 65 |
| **Visegese** | English | Success English for Tanzania STD 4 (Ujuzi Books Ltd.). Primary English Course STD 4 (Ben & Company) | **English for Primary School STD 4 (Oxford University Press) | 14 | 41 |
| | Kiswahili | Kiswahili Darasa la 4 (Ben & Company) Kiswahili kwa Shule za Msingi  Darasa la 4 (Educational Books | Kiswahili Darasa 4 (Ben & Company) | 14 | 41 |

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**A Case Study of Learning Materials Used to Deliver Knowledge and Skills– or Competency–Based Curricula (in Tanzania)**

| | | | | | |
|---|---|---|---|---|---|
| | | Publishers) | | | |
| | Historia | Fahamu Historia Darasa la 4 (Mture Educational Publisher) Twiga Historia (Mac Millan Aidan) | Fahamu Historia Darasa la 4 (Mture Educational Publisher) | 5 | 41 |
| | Hisabati | Twiga Hisabati (Mac Millan Aidan) Hisabati Shule za Msingi 4 (Oxford University Press) | Hisabati Shule za Msingi 4 (Oxford University Press) | 14 | 41 |
| | Uraia | Uraia Shule za Msingi (Oxford University Press) Uraia Darasa 4 (Ben & Company) | Uraia Shule za Msingi Darasa 4 (Oxford University Press) | 5 | 41 |
| | Jiografia | Jiografia Shule za Msingi (Oxford University Press) Jifunze Jiografia (Educational Books Publisher) | Jiografia Shule za Msingi 4 (Oxford University Press) | 8 | 41 |
| | Sayansi | Sayansi Shule za Msingi (Oxford University Press) Sayansi kwa Vitendo (Mture Educational Publisher) | **Sayansi Darasa la 4 (Ben & Company) | 14 | 41 |
| | Haiba na Michezo | Haiba ya Michezo (Jadida Book House) Twiga Hiaba na Michezo Darasa la 4 (Macmillan Aidan) | **Haiba na Michezo Darasa 4 (Ben & Company) | 6 | 41 |
| | Stadi za kazi | Stadi za kazi Halisi (Jadida Book House). Stadi za Kazi (Educational Books Publisher) | **Stadi za Kazi Darasa 4 (Ben & Company) | 6 | 41 |

**Source**: Field Data

# Appendix 2

**TIE Focused Group discussion Members**

1.	Revocatus Kundi
2.	Aisha Guhia
3.	Razia Yahaya
4.	Lina Muhando
5.	Yusufu Selemani

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1.	 Zuberi Samataba – Ag. Director
2.	Grace Rwiza – Assistant Director
3.	Donald W. Pambe – Principle Ed. Officer