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Primary and Secondary Education Curricula in three East African Countries: A Comparative Analysis

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Abstract

This study is intended to provide brief descriptions of the primary and secondary curricula of three East African countries, Ethiopia, Uganda and Tanzania, and to point out the similarities and differences amongst them. Comparative case study design with a qualitative approach was employed. Qualitative data were compiled from documents published/prepared in and after 2008, and are analyzed comparatively. Accordingly, both commonalities and differences are identified in the curricular structure, organization and selection of contents, intended teaching learning and assessment modes, from which countries can learn from each other's practice. The study revealed that there appear more similarities in curricular structure and length of cycles between Uganda and Tanzania, while that of Ethiopia is organized differently. Other important variations across the three countries regarding the type and organization of subject areas, use of instructional languages, and implementation practices are also noted. Notwithstanding the variations, efforts have been in place and thereby improvements in access, equity and quality in all of the three countries over the last decade. However, implementation in these countries has been challenged by common problems such as low skilled teachers, large class size, inequalities, school dropouts, low students' achievements and low completion rates.

Keywords: Primary education; Secondary education; Curriculum; Ethiopia; Tanzania; Uganda.

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1. Introduction

1.1. Statement of the problem

The three East African countries, Ethiopia, Uganda and Tanzania are among the low income countries striving to reduce poverty and bring about socio-economic development through quality education. As these countries have many commonalities and they have been faced by similar challenges related to education, there are possibilities that they learn from each other's unique experience. Previous studies, for example World Bank [1], seem to view and treat the education systems and curricula of Sub-Saharan Africa, including these three countries, as if similar in many aspects, overlooking examining nuances across them. Looking in to the similarities and differences in curricular practices among these countries will be helpful in order to identify and make use of experiences which work best in others. In view of that, this study is intended to describe briefly the primary and secondary curricula of the three East African Countries, Ethiopia, Tanzania, and Uganda; and to compare and show differences and similarities across these countries with respect to certain aspects of the planned, operational, and achieved curricula of primary and secondary education.

1.2. Objectives of the study

This study is generally aimed at describing the planned, operational and achieved curricula of primary and secondary education of the three East African countries, and then identifying the similarities and differences across them. Specifically, it is intended to:

- Describe the planned curricula with respect to the structure and length of cycle, the organization of contents, and the intended teaching and assessment modes in primary and secondary curricula in each of the three countries;
- Identify the major challenges in the implementation and assessment process;
- Indicate the similarities and differences in the curricular structure, contents, approaches and practices of teaching and assessment across the three countries.

1.3. Scope of the study and operationalization of concepts

This study is not claimed to be an exhaustive, as it is delimited to only on certain aspects of the planned, operational, and attained curricula of the primary and secondary education in the three East African countries. The planned curricula refer to the formal/written intentions as specified in curricular documents; in this study, it shall specifically refer to the structure and length of cycles, the selection and organization of learning areas and/or subjects, and the intended modes of teaching and assessment. Operational curriculum refers to the actual process of implementation; and in this study, it focuses on certain major challenges in the teaching-learning process as evidenced from relevant documents. The attained curriculum refers to results of learning; and in this study, it focuses on completion, dropout, repetition and pass rates of students as reported by the respective countries in recent years. The study focuses only on the curricula which are functional in the last decade; and data were collected from secondary sources (documents).

1.4. Limitation of the study

The data sources for this study are limited to the secondary sources (documents) owing to financial limitations; and that primary source of data through interview and observations might have provided additional insights, especially for further understanding of the operational curricula. Another limitation is that this study focuses only on the description of the curricular practices in three countries and pinpointing differences and similarities across them, but it does not show if and to what extent their differences and similarities have impact on the quality of education, which calls for further study.

2. Methodology

For this study, a comparative case study design with a qualitative approach is employed. Using this approach, qualitative data are collected and described for each case, themes are identified and homogenized, and then cross case comparison is made to pinpoint similarities and differences [2]. Sources used to assemble relevant information on primary and secondary curricula were documents such as: curriculum frameworks, educational annual statistics, Education Sector Development Plans, reports, educational policy documents, studies and other curricular materials (*see Appendix*). As the study focuses on the recently (not before 10-years) functioning curricula, documents published in and after 2008 are included. In this study, firstly, the primary and secondary education curricula of the three countries are briefly described. The descriptions focused on: the planned curricula (specifically on structure and length of cycle, learning areas/subjects, mode of teaching and assessment), operational curricula (specifically on some challenges in implementation of the curricula), and achieved curricula (some assessment results). Secondly, important themes are identified from these descriptions and juxtaposed (*see Tables 1 & 2*). In addition, data regarding some aspects of the operational and achieved curricula in a particular year (i.e. 2011) were compiled from the educational statistics of the respective countries and juxtaposed in Table-3 to make cross comparison easier. Thirdly, cross comparison is made, and similarities and differences across the three countries are identified and discussed. Finally, the major findings are summarized.

3. Results and Discussion

3.1. Brief description of primary and secondary curricula of Ethiopia

The current Ethiopian education system relies on the 1994 education and training policy, which emphasizes on problem solving skills and democratic culture. Following this policy, policy directives and extensive efforts have been made. Education sector development programs have been made and implemented since 1998. Curricula for both primary and secondary educations were revised in 2009, with the intention to link theory with practice and to use a problem solving approach.

Primary education

Primary Education is compulsory and fee-free. It is offered in 2-cycles, first cycle primary for children aged 7-10 years which lasts for 4- years (grades 1- 4); and second cycle primary for children aged 11-14 years, which lasts for 4-years (grades 5-8). The main objectives of the first cycle primary are to help children develop basic

literacy, numeracy and life skills; while the objective of second cycle primary education is to offer basic and general education to pupils in order to prepare them for further general education. First cycle subjects include 4-core areas such as languages (English, mother tongue, Amharic), mathematics, environmental science (integration of social science, home economics, agriculture and handicrafts), and aesthetic (physical education, music and art separately). Second cycle includes six core areas such as: languages (English, mother tongue, Amharic-official language), mathematics, social studies (integration of history, geography and civics), physical education, integrated science (integration of physics, chemistry, biology, home economics, agriculture and handicrafts for grades 5-6), sciences (physics, chemistry and biology separately for grades 7-8), and music and art for grades 5-6. Instructional languages in primary education are the local languages; while English is used in secondary education and above. Students learning progress is to be assessed on a continuous basis. At the end of grade-8, Regional Examinations are given to certify completion of primary education and to filter entry into general secondary education.

Secondary education

Secondary education includes two cycles: a 2-year General secondary education (grades 9-10) for children aged 15-16; and a 2-year Preparatory secondary education (grades 11-12) for children aged 17-18. General secondary education is intended to help students identify their areas of interests for further education, for specific training and for the world of work. Subjects included in general secondary education are Languages (English, Amharic-official language, local language), Maths, Physics, Chemistry, Biology, History, Geography, Civics, physical education and ICT; all of which are compulsory. General secondary cycle is sanctioned by a national examination called Ethiopian General Secondary Education Certificate Examination (EGSECE) at the end of grade-10 to assess students' learning achievements and to select students for preparatory secondary school.

Preparatory Secondary Education is intended to enable students chose subjects or areas of training and to prepare them for further tertiary education. It has two streams, natural science or social science streams. Subjects are grouped into three. One group comprises of special courses for each stream (for natural science stream: physics, chemistry, biology and Technical drawing; and for social science: history, geography, economics and business), the 2nd group includes common subjects for both streams such as English, Maths, civics, ICT and Physical education, and the 3rd group comprises of electives (Amharic, local language). Upon completion of this cycle, students sit for the Ethiopian Higher Education Entrance Certificate Examination (EHEECE) to enter to university education.

Some challenges in the implementation process

The annual statistics by the Ministry of Education [3] provides some indication of improvements related to Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER), pupil-teacher ratio, pupil classroom ratio in the previous 5-years (2009/10 to 2013/14) in both primary and secondary education, but the targets set for the year are not achieved. MoE [3] has also indicates problems such as high repetition rates and dropout rates and low completion rates, with high regional disparities and has not shown improvements in the previous 5-years.

Although active learning approach is advocated in the curricular documents, the teaching learning process in primary and secondary education is characterized by teacher domination [4], This is due to many interrelated

factors such as less motivated and less skilled teachers [5], esp. teachers in primary level (as students with lower achievement in grade-10 could go to College of Teacher's Education for a diploma), misunderstanding of the concept of active learning and large class size [4]. There are also challenges in the mother-tongue teaching in Ethiopia such as: scarcity of textbooks and teaching materials in the mother-tongue, parents' lack of interest, and difficulty in choosing one local language from others that are spoken by a small minority [6]. Using English as a medium of instruction has not found to be effective as students' English was so poor that they were unable to learn, and teachers' English was too poor to teach their students [5, 6].

Assessment Practices

The implementation of continuous assessment is poorly reported, and assessment is focused on classroom tests emphasizing on lower cognitive domains. Based on the 2004 and 2013 national assessments in primary levels (grade-4 and grade-8) in Ethiopia, students' performance has shown decrement (in grade-4 from 43.4% in 2004 to 40.06% in 2013; and in grade-8, from 39.7% to 35.3%) [7]. The overall grade-8 performance of students in the 2013 national learning assessment was far below the minimum standard, where about 50% of them achieved an average score of 34% and below for the 5 key subjects (ibid). Early Grade Reading Assessment in 2010 revealed that the achievement is low, with the urban regions modestly outperforming others [8].

3.2. Brief description of Ugandan primary and secondary education curricula

The current education system of Uganda relies on the 1992 Government White Paper on Education, which focuses on promoting basic scientific knowledge and skills, ethical and spiritual values. On the basis of this, education sector development plans (ESDPs) have been made; recently, the second ESSP (from 2004-2015) has been implemented. The primary and secondary education curricula have gone through frequent revisions in recent years (in 1990, in 2002 and in 2007).

Primary education

Primary education lasts 7- years and it is free and compulsory for all children aged 6 and above. It is divided into three phases: lower primary (grades 1-3), transition year (grade 4), and upper primary (grades 5-7). The main objectives of the lower primary cycle are to help children develop basic literacy, numeracy and life skills, as well as developing English skills to use it as the medium of instruction in the upper primary cycle. A thematic approach is used to organize the curriculum, i.e., competences/skills and contents/subjects such as science and social studies are to be organized within broad learning areas (themes) that are familiar to children's experience; teaching methods emphasize on the child's activities rather than the teacher's. The thematic curriculum is not exhaustive. It includes 12 themes such as: our school and neighborhood; our home and community; the human body and health; food and nutrition; our environment; things we make; transport in our community; accidents and safety; peace and security; child protection; measures; recreation, festivals and holidays. Instructional materials at this level are more of non-textbook materials; charts, flash cards etc. Grade-4 is a transition year in which children will change from a theme-based to a subject-based curriculum and from their local language to English as a medium of instruction.

The main objective of the upper primary (grades 5-7) curriculum is preparing the learner for secondary education, the world of work, scientific and technical application of knowledge and life skills. In the upper primary, curricular contents are arranged in subjects including: English, Social studies, Religious education, Mathematics, Integrated science (with agriculture), Local language, Creative arts and physical education. Continuous assessment is to be used throughout primary level; and at the end of grade 7, students take the Primary Leaving Certificate examination to filter entry to O-level secondary school. Local languages are used as medium of instruction in lower primary grades, while English is used as a medium of instruction in the upper primary and secondary level. Moreover, the selected local language is offered as a subject to develop local language literacy.

Secondary education

Secondary education lasts 6 -years and it has two cycles: O-level (4-years) and A-level (2-years). At the end of the O-level, students take the Uganda Certificate of Education (UCE) examination to enter to A-level secondary or vocational training; and at the end of A-level secondary, they take the Ugandan Advanced Certificate of Education (UACE) examination for entrance into university and other tertiary level education. For grade to grade promotion, continuous assessment is to be used in combination with class exams.

The major objectives of secondary education curricula, among others, are: developing basic scientific, technological and commercial skills; and instilling and promoting national unity, ethical spiritual values. Subjects such as: English, mathematics, biology, chemistry, physics, geography and history are given as compulsory subjects; and other value and skill-based subjects such as: English literature, religious education, music, art, agriculture, technical drawing, woodwork, metalwork, business education, home economics, clothing and textiles, food and nutrition are given as elective subjects. Grades 8-9 students take a minimum of 8-subjects (7- compulsory & 1- elective); and grades 10 -11 students take a maximum of 10-subjects (7- compulsory & 3- electives). A-level students can select any three subjects to form a subject combination either in sciences or Arts. Student-centered approach, which involves students' active engagement in their learning is planned to be used in both primary and secondary education.

Some challenges in the implementation process

Although active learning approach is advocated in both primary and secondary curricula, very little of this is reported to take place and that skills remain largely untaught [9]. Emphasis is given to examination, and teaching is directed at achieving the highest grade in the examination, which assess mainly knowledge with little attention on achievement of skills. Implementation of active learning is challenged by a variety of factors such as shortage of qualified teachers, misunderstanding of the concept of active learning, lack of facilities [9]. Although teacher development programs have been in place, it has not yet solved the shortage of qualified teachers especially in science and mathematics. Textbooks are not enough in number and are lower in quality. Disparities in gender, rural/ urban and socio-economic status are also the pressing challenges of primary and secondary education in Uganda. For example, only 6% of children of the 25% poorest families complete secondary education compared with 22 % from the richest 25 % [9]. Teaching literacy in local languages in

Uganda has been challenged by lack of written materials, persuading parents and political problems surrounding languages of instruction [10].

Assessment practices

Although continuous assessment is intended to contribute to the percentage of the final marks, its implementation is far from what is intended; and it is claimed that assessment is concentrated only on cognitive skills and does not test affective and psychomotor domains [9]. As it is stated in [11], in the National Assessment of Progress in Education (NAPE) of 2007/08, only 47.2% of grade-3 and 49.6% of grade-6 students were proficient in literacy; and only 44.8% of grade-3 and 41.4% of grade-6 students were proficient in numeracy. Moreover, in 2007/08, the transition rate from primary to secondary education was 68.6%; the overall grade-7 completion rate was 47%; and the completion rate of grade-11 was 35%. In 2009 Primary Leaving Certificate examination, the average pass rate was 83.6%.

3.3. Brief description of primary and secondary curricula of Tanzania

The current primary and secondary curricula are based on the 1995 Education and Training Policy, which emphasizes on quality education and skilled workforce geared towards job creation and self-reliance. In realizing the policy, directives and programs like Education Sector Development Programs (ESDP) and Secondary Education Development Programs, inter alia, have been in place and are being implemented. The curricula for primary and secondary curricula are revised in 2007.

Primary education

Primary education in Tanzania is a 7-years (Standard I to Standard VII - *to be named Grades 1-7 in this study for simplicity*) cycle for children aged 7- 13 years. It is compulsory and fee-free. There is a national examination at the end of Grade-7 to assess and filter entry into O-Level secondary schools. The objective of primary education is to develop numeracy and literacy at the early primary levels; at upper primary levels to develop knowledge and skills used as a basis for further secondary education and vocational training. The curriculum includes twelve subjects, namely: Kiswahili, English, Maths, science, geography, history, civics, ICT, vocational subjects, HaibanaMichezo, French and religion. All of these subjects are compulsory. Grade 1-2 students take elements of health instead of English and social studies. Active learning approach of instruction and continuous mode of assessment are to be used in the teaching-learning and assessment processes. The medium of instruction in the primary level is Kiswahili-a national language, while the medium in secondary level is English.

Secondary education

Secondary education comprises two cycles: O-Level and A-Level. The O-Level lasts for 4- years (Form1 to 4-*to be named Grades 8-11*) and is sanctioned by a national examination called Certificate of Secondary Education Examination (CSEE) at the end of Grade-11 to assess students' learning achievements and to select students for A-Level secondary schools. The A-Level lasts for 2-years and offers art and science subject combinations. At

the end of this level, students take the Advanced Certificate of Secondary Education Examination (ACSEE). The major objective of secondary education is to provide opportunities for learners to acquire essential knowledge, skills and attitudes so that graduates can join professional training and institutions of higher education. The secondary education curriculum consists of both core and compulsory, and optional subjects (of which students may choose none, any one or two of them). Core and compulsory subjects include: Maths, English, Kiswahili, biology, physics with chemistry (for grade 8-9 only), physics, chemistry, history, geography, civics and religion; and optional subjects include: home economics, agriculture, textile technology, information and computer studies, additional maths, music, fine arts, French, Arabic, other foreign languages (for grade 8-9 only), Islamic studies, Bible knowledge, and physical education. Students in A-level are supposed to choose subject combinations that consist of principal and supplementary subjects depending on their results in O-level; and they are not allowed to opt subjects outside subject combinations.

The secondary curricular documents advocated the learner-centered approach to promote problem solving skills through active involvement of students and facilitative role of teachers. Regarding assessment, formative assessment and final Examination are to be used. Formative assessment is to take place throughout the 6-years and the National final examinations are to be given at the completion of each level.

Some challenges in the implementation process

Many factors have challenged the implementation of primary and secondary curricula in Tanzania. Poor teaching approach i.e., teacher-centered, with students relying heavily on the teacher and old notes, making students passive listeners with minimal mental engagement is of the particular concern [12]. Poor teaching-learning materials and shortage of teachers, especially in science and English are also mentioned [12]. Despite ongoing efforts, the teacher training system has not responded adequately to the growing demand for teachers; and the primary student -teacher ratio in 2009 was 55. Regional and gender disparities also existed in PSLE pass rates. Although the situation has shown improvement, boys outperformed girls in exam, e.g., GPI in 2009 PSLE graduates was 0.78; and regional disparities in PSLE graduates vary from 32 % to 70 % [13].

Assessment Practices

Reading and mathematics scores in Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) was improved over the 2000-07 periods (from 546 to 578, and from 522 to 553, respectively). Moreover, in 2007 from 15 countries, including Tanzania and Uganda, which participated in SACMEQ that measures primary level (grade-6) students' performance in reading and maths, Tanzanian children were among the best performers in mathematics; they stood 3rd position [14]. In this score Uganda took the 11th position. But it is still claimed that the pass rate in Tanzania is not up to the required level. For example, in 2009 Primary School Leaving Examination (PSLE), only half of the students have scored the pass mark, which was lower than the 2006 pass rate of 70.5% [14]. Moreover, the pass rates in CSEE have shown decrement from 80% in 2008 to 66% in 2009 [15].

3.4. Comparison of primary and secondary curricula in three East African countries

3.4.1. Curricular structure and lengths of cycles

Across the three East African countries, Ethiopia, Tanzania and Uganda, there are similarities and variations in the structures and the lengths of cycles of the primary and secondary education (see Table-1). In Ethiopia, primary education lasts 8-years and secondary education lasts 4-years; while in both other two countries, Tanzania and Uganda, primary education lasts 7-years and secondary lasts 6-years. Variations are also noted in the number of sub-divisions of cycles and in the length of years in each sub-division of primary and secondary levels across the three countries. The total length of time to complete both primary and secondary education in Ethiopia (12years) is the shortest of all, as it takes 13years in each of the other two countries. Both Tanzania and Uganda follow similar structure in secondary level (4-year O-level & 2years A-level) and thus there are more similarities in terms of structure and length of cycles between Uganda and Tanzania than amongst the three.

Table 1: Structures and lengths of primary and secondary curricula in 3-East African countries

| Levels | Ethiopia | Uganda | Tanzania |
|----------------------------|---|--|--|
| Primary Education | 1 st cycle Primary (4 yrs) 2 nd cycle primary (4yrs) | lower Primary (3 yrs) transition (1yr) upper primary (3yrs) | Primary (7yrs) |
| Secondary education | General secondary (2yrs) Preparatory Secondary (2yrs) | O-level secondary (4yrs) A-level secondary (2yrs) | O-level secondary (4yrs) A-level secondary (2yrs) |
| Total years | 12 years | 13 years | 13 years |

3.4.2. Organization of subjects or learning areas

In primary and secondary levels of these countries, varieties of courses or learning areas with difference in time allotments and contents are offered (see Table-2).

Primary education

It is noted that the primary curricula at the first levels of all the three countries focused mainly on fundamental literacy (reading, writing, comprehension) and numeracy. Moreover, most of the learning areas or subjects included in primary education are similar. In all of the case countries, English (foreign language) is offered, starting from the lower primary level. Subject integration is a commonly practiced trend in the three countries in both primary and secondary levels, although there appears variation in subjects and grade levels. Integrating related subjects are important for holistic learning approach by combining related concepts and allows focusing on integrated learning and teaching of competencies, instead of content subject matter [1].

However, some important differences are also noted across the three countries. For example, Uganda has organized the lower primary curricula based on thematic approach; while Ethiopia and Tanzania have organized on the basis of learning areas and subjects. It is also realized that while both Tanzania and Uganda have included religious education in both primary and secondary curricula, Ethiopia has not, and public education in Ethiopia is purely secular. In primary education of both Ethiopia and Uganda, local languages are used as instructional languages and offered as subjects; but in Tanzania, it is the national language i.e., Kiswahili, which is used as an instructional language and no local language is offered as a subject.

Table 2: Subjects/learning areas in primary and secondary education in three countries

| Level | Ethiopia | Uganda | Tanzania |
|------------------|--|--|--|
| Primary | <p>1st cycle: English, mother tongue, Amharic, maths, environmental science, physical education, music & art</p> <p>2nd cycle: English, mother tongue, Amharic, maths, social studies, physical education, integrated science for grades 5-6, physics, chemistry & biology for grades 7-8, and music & art for grades 5-6.</p> | <p>-Lower primary: themes include: school & neighborhood; our home & community; human body & health; food & nutrition; environment; things we make; transport in our community; accidents & safety; peace & security; child protection; measures; recreation, festivals & holidays</p> <p>-Upper primary: English, Local language, Maths, Social studies, Integrated science (with agriculture), Religion, Creative arts and physical education.</p> | <p>-Primary: Kiswahili, English, maths, science, geography, history, civics, ICT, vocational subjects, HaibanaMichezo, French and religion.</p> <p>- Grades 1-2 take health instead of English & social studies</p> |
| Secondary | <ul style="list-style-type: none"> • General secondary: Languages (English, Amharic, local language), Maths, Physics, Chemistry, Biology, History, Geography, Civics, physical education and ICT. • Preparatory secondary: 1) natural science stream: physics, chemistry, biology & Technical drawing; 2) social science: history, geography, economics and business); 3) common: English, Maths, civics, ICT & Physical education; 4) electives (Amharic, local language) | <ul style="list-style-type: none"> • O-level: 1) Compulsory: English, maths, biology, chemistry, physics, geography and history; 2) Elective: English literature, religion, music, art, agriculture, technical drawing, woodwork, metalwork, business, home economics, clothing & textiles, food & nutrition • A-level: a combination of (mostly three) compulsory subjects; and electives. | <ul style="list-style-type: none"> • O-level: 1) compulsory: maths, English, Kiswahili, biology, physics, chemistry, history, geography, civics and religion; 2) optional: home economics, information and computer studies, textile technology, agriculture, additional maths, music, fine arts, foreign languages, religion, and physical education • A-level: combinations of (mostly three) compulsory subjects; and optional: Examples of subject combinations: PCB (physics, chemistry, biology), PCM (Physics, chemistry, maths), CBM (chemistry, biology, maths), etc... |

Secondary education

In all of the three countries, secondary education comprised of two cycles, where the first cycle is designed to prepare students either into senior secondary academic education or into technical or vocational education; and the second cycle is designed to prepare students for continuation into tertiary education. Many of the

subjects/areas are common in secondary levels in all three countries; they are: English, Mathematics, Natural Sciences and social sciences. But some of the subjects are not common, for example, local language is offered in Ethiopia only; foreign languages (other than English) and agriculture are offered in Tanzania only; ICT and civics are offered in Ethiopia and Tanzania only; religion, and technical subjects (woodwork, textile, home economics) are offered in Uganda and Tanzania only, not in Ethiopia. There are also variations in the number of subjects students take in secondary education. In the junior secondary level, the minimum subjects students should take are 12 in Ethiopia, 8 to 10 in Uganda and 10 in Tanzania. In senior secondary curricula, there are differences in the organization of subjects or learning areas. In Ethiopia, there are compulsory subjects (specialized, which each students in her/his respective stream should take; and common, which all students in both streams should take) and few elective subjects. But in Tanzania and Uganda, there are a number of selective combinations of, mostly three, core/principal subjects from which students choose depending on their junior secondary results. In addition, students are required to take few electives or supplementary subjects in accordance with the field of study or subject combinations.

3.4.3. Challenges in the implementation and assessment practices in the last decade

Growths in enrollment, improvement in gender parity, improvement in teacher training and teacher-student ratio are reported in both primary and secondary education in all of the three countries in the last decade. However, it is also claimed that these improvements have not been up to the required level; and the implementation is still challenged by many interrelated problems such as low skilled teachers, large class size, disparities (regional, gender). Although active learning approach is advocated in the curricular documents of all the three countries, the reality is quite different in that instruction has been teacher-centered, which is characterized by minimal involvement of students' in their learning and focus on factual learning. It is proved that mother tongue instruction benefits the understanding of concepts as compared to instruction in a second language. But, it is realized that although Ethiopia and Uganda use the mother tongue and Tanzania use the national language as instructional languages in the primary level, the instructional language at the secondary level and above is the foreign language, English. In all of the three countries, it is claimed that students and teachers are less proficient in English language; and using English as a medium of instruction has not found to be effective. This might have affected students' learning and have contributed to their low performance [16]. Instruction in local languages, in Ethiopia and Uganda, has also been challenged by common problems such as lack of written materials, lack of parents' interest and political problems surrounding languages of instruction. School dropouts, low students' achievements and low completion rates are still the pressing challenges identified in all of the three countries. In all of the cases it is reported that continuous assessment has not been properly put in to practice; and assessment of higher cognitive domains and psychomotor domains are at odds. Regarding students' achievement, Sub-Saharan countries positioned at the bottom compared to other countries and students' achievement in the higher cognitive domain is low [1]. This appears to be true in these three countries too, although there are slight variations, as for example Tanzanian grade-6 students have performed better and stood the 3rd position in the 2007 SACMEQ test.

3.4.4. Implementation and assessment practices in 2011

Implementation practices in 2011

Access to primary and secondary education has shown improvement in all three countries. Based on the data in 2011 (Table-3), there appear slight differences in Gross Enrollment Ratio (GER) and Net Enrollment Ratio (NER) among the three countries, where Uganda has the highest and Ethiopia has the lowest GER and NER ratios in primary schools; but in secondary school, Tanzania has the highest GER and NER and Ethiopia has the lowest ratios. The percentage of females in Tanzanian primary and secondary levels were 50.4 % and 49.6% respectively; in Ugandan primary and secondary levels were 50 % and 46.3% respectively; and in Ethiopian primary and secondary levels were 48 % and 46.3% respectively. This means that equal participation of girls and boys is achieved in Tanzania in both primary and secondary levels and in Ugandan primary level, while there appears difference in participation level between boys and girls in Ethiopian primary and secondary levels. Concerning teachers, it seems that all the three countries have faced problems, although with variation in degree, in fulfilling qualified teachers especially in primary levels. Of the three countries, Tanzania has the largest proportion (81%) of primary teachers with minimum qualification while Ethiopia has the lowest proportion (55.6%). Regarding student-teacher ratio, there are similarities in three countries in that the ratio is higher (50 in Ethiopia, 48 in both Tanzania and Uganda) in primary and it is lower (26 in Uganda, 29 in Ethiopia, and 34 in Tanzania) in secondary level. It is realized that the student-teacher ratios of each of the three East African countries are higher than the Sub-Saharan countries' average student-teacher ratio, which stood at 45 for primary level and 25 for secondary level in 2008 [17].

Table 3: Data on implementation and assessment practice in 2011

| Issue | Level | Ethiopia | Uganda | Tanzania |
|------------------------------------|---------------------|----------|--------|----------|
| GER | Primary | 95.4% | 117.7% | 102.7% |
| | Secondary | 24% | 27% | 36% |
| NER | Primary | 85.4% | 97.5% | 94% |
| | Secondary* | 17.3% | 23% | 32% |
| % of female students in | Primary | 48% | 50.1% | 50.4 % |
| | Secondary | 46.3% | 46.3% | 49.6% |
| Teacher with minimum qualification | Primary | 55.6% | 70.2% | 81% |
| | Secondary | 90.7% | 95.8% | 96% |
| Student-teacher ratio | Primary | 50 | 48 | 48 |
| | Secondary | 29 | 26 | 34 |
| Student-classroom ratio | Primary | 54.5 | 58 | 70 |
| | Secondary | 56 | 51 | 43 |
| Completion rate | Primary | 52% | 53% | 62.6% |
| Dropout rate | Primary | 8.5% | - | 4.5 % |
| Repetition rate | Primary | 16.3% | 10.2% | 4.4% |
| | Secondary | - | 2% | 4% |
| Pass rate | Primary(PSLE) | 81% | 85 % | 58.3% |
| | Junior sec. (JSSLE) | 67% | 63% | 53.6% |

*= data is only for general secondary i.e., grades 9-10

The student-classroom ratio in primary schools in Tanzania was 70, which is the largest of the three countries; while that of Ethiopia was 54.5, which is the smallest of the three countries. But the reverse is true in secondary level i.e., Ethiopia has the largest student- classroom ratio (56) while Tanzania has the smallest ratio (43).

Assessment practices in 2011

In general all the three countries have faced problems of completion, repetition and school dropouts, especially in primary school levels. When the primary levels of the three countries are compared in terms of completion rate, dropout rate and repetition rate in 2011, it is realized that Tanzania was in the best status with the completion rate of 62.6% (the highest), repetition rate of 4.4% (the lowest) and dropout rate of 4.5 %. But the repetition rate in secondary level of Tanzania (4%) is higher than that of Uganda (2%). The completion rate of primary education in Uganda (53%) and Ethiopia (52%) are almost comparable, but the repetition rate of primary education in Ethiopia is 16.3%, which is the highest of the three.

Based on the 2011 data, the highest pass rate in Primary School Leaving Examination (PSLE) is recorded in Uganda (85%) while the lowest pass rate is in Tanzania (58.3%); and in junior secondary education certificate examination, Ethiopia has the highest pass rate (67%) while Tanzania has the lowest pass rate (53.6%). This data is just to reflect the practices and to be informed on how much proportion of students pass their respective primary and secondary (junior) school leaving exams; otherwise, the intention is not to make comparison of students' achievement based on the pass rates across the three countries as there are differences in the difficulty levels and standards among the national examinations offered by the three countries.

4. Summary and Conclusion

This study is intended to provide brief descriptions of the primary and secondary curricula of three East African countries, Ethiopia, Uganda and Tanzania, and to point out the similarities and differences amongst them. Comparative case study design with a qualitative approach was employed. Qualitative data were compiled from documents published/prepared in and after 2008, and are analyzed comparatively. Accordingly, both commonalities and differences are identified in the curricular structure, organization and selection of contents, intended teaching learning and assessment modes.

There appear more similarities in curricular structure and length of cycles between Uganda and Tanzania, as they both have 7-years of primary and 6-years of secondary, which takes a total of 13 years to complete both primary and secondary education; while that of Ethiopia are organized in 8-years of primary and 4-years of secondary education, which takes a total of 12 years. Other important variations are also noted. For example, the lower primary curriculum in Uganda is organized on the basis of themes, while that of Ethiopia and Tanzania are organized on the basis of learning areas and subjects; local languages are used as instructional languages and offered as subjects in primary level in Ethiopia and Uganda, but not in Tanzania; and religious education is included in both primary and secondary levels of Tanzania and Uganda, but not in Ethiopia.

Subject integration, offering English language starting from the early primary level, and using English as medium of instruction in secondary level are the commonly practiced trends in all of the three countries. Most of

the subjects in secondary level are similar in three countries. But some of them are not common; for example, local language (in Ethiopia only); foreign languages other than English and agriculture (in Tanzania only); ICT and civics (only in Ethiopia & Tanzania); religion, woodwork and textile (only in Uganda & Tanzania). There is also variation in the number of subjects students must take in junior secondary, ranging from 8 in Uganda to 12 in Ethiopia. Subjects in senior secondary curricula in Ethiopia are organized in to specialized, common and elective subjects; while in Tanzania and Uganda, they are arranged in combinations of core subjects (mostly three) and electives from which students choose. Thus, it is possible that these countries can learn from each other, for example Ethiopia may consider offering religious education to foster ethical values.

Notwithstanding the variations, efforts have been in place and thereby improvements in access, equity and quality in all of the three countries over the last decade. However, implementation in these countries has been challenged by common problems such as low skilled teachers, large class size, inequalities, school dropouts, low students' achievements and low completion rates. Although active learning and continuous assessment are advocated in the curricula of all the three countries, they have not been properly put in to practice. English as a medium of instruction has not found effective in all of the three countries.

Based on the data in 2011, there appear variations in GER of primary schools, ranging from 95.4% in Ethiopia to 117.7% in Uganda, and GER of secondary school from 24% in Ethiopia to 36% in Tanzania. In both primary and secondary levels in Tanzania, the participation of girls equals to males, while in Ethiopia the percentage of girls is smaller than that of boys. The student-teacher ratios of each of the three East African countries are higher than the Sub-Saharan countries' average student-teacher ratio, which stood at 45 for primary level and 25 for secondary level in 2008. In the primary levels, Tanzania has the highest completion rate (62.6%) and the lowest repetition rate (4.4%). The completion rates in Uganda (53%) and Ethiopia (52%) are comparable, but the repetition rate in Ethiopia (16.3%) is the highest of the three.

References

- [1] World Bank. Curricula, examinations, and assessment in secondary education in Sub-Saharan Africa. World Bank working paper no-128, Washington, D.C., 2008.
- [2] D. Goodrick. Comparative case studies. Methodology Briefs: Impact Evaluation 9, UNICEF Office of Research, Florence, 2014.
- [3] MoE. Education Statistics Annual Abstract (2013/14). Addis Ababa: EMIS, 2015. Available at: <http://www.moe.gov.et>
- [4] MoE. Education Sector Development Program IV (ESDP IV), 2010/11 – 2014/15, Program Action Plan. Addis Ababa, Ethiopia: Ministry of Education, 2010.
- [5] K. Seidel and J. Moritz. "Changes in Ethiopia's Language and education policy pioneering reforms?" In: Ege S. et al. (eds.), Proceedings of the 16th International Conference of Ethiopian Studies, Trondheim, 2009.

- [6] D.Vujcich. Policy and practice on language of instruction in Ethiopian schools: Findings from the Young Lives school survey. Oxford: Young Lives, 2013
- [7] NEEA. Ethiopian 4th national learning assessment on grades 4 and 8. Addis Ababa, 2013
- [8] B. Piper. Ethiopia early grade reading assessment: Language and early learning. Addis Ababa ,2010
- [9] A.Clegg, J. Bregman and W. Ottevanger. Uganda secondary education and training curriculum, assessment and examination (CURASSE) roadmap for reform. Draft document prepared for Biennale, ADEA,2008. Available at: www.ADEAnet.or
- [10] J. Tembe and B. Norton. "Promoting local languages in Ugandan primary schools: The community as stakeholder". The Canadian Modern Language Review, Vol. 65, PP. 33–60, 2008.
- [11] UNESCO-IBEB. World data on education, Uganda (7th ed.), 2010. Available at: <http://www.ibe.unesco.org/links.htm>
- [12] MoEVT. The development of education: National report of the United Republic of Tanzania, 2008. Available at: www.moe.go.tz
- [13] UNESCO. Tanzanian education sector analysis: Beyond primary education, the quest for balanced and efficient policy choices for human development and economic growth., Tanzania, 2011
- [14] UNESCO-IBEA. World data on education, Tanzania (7th ed.), 2010. Available at: <http://www.ibe.unesco.org/links.htm>
- [15] MoEVT. Education Sector Development Program (SEDP II 2010 -2015). Dar es salaam,2010. Available at: www.moe.go.tz
- [16] E.R. Tibategeza. "Implementation of bilingual education in Tanzania: The realities in the schools". Nordic Journal of African Studies, Vol. 19(4): PP. 227–249, 2010.
- [17] UNESCO. Education for all 2015 National Review Report: Ethiopia, 2015. Available at: www.efa2015reviews@unesco.org
- [18] UNESCO. Education for All 2015 National Review Report: Tanzania, 2014. Available at: www.efa2015reviews@unesco.org

Appendix

List of documents used as source of data

For Ethiopia:

MoE. (2010). Education Sector Development Program IV (ESDP IV), 2010/11 – 2014/15 Program Action Plan. Addis Ababa, Ethiopia: Ministry of Education

MoE (2012). Education Statistics Annual Abstract (2011/12). Addis Ababa: EMIS. Available at: <http://www.moe.gov.et>

MoE (2015). Education Statistics Annual Abstract (2013/14). Addis Ababa: EMIS. Available at: <http://www.moe.gov.et>

UNESCO (2015). Education for All 2015 National Review Report: Ethiopia. Available at: www.efa2015reviews@unesco.org

UNESCO-IBE. (2010). World data on education, Ethiopia (7th edition). Available at: <http://www.ibe.unesco.org/links.htm>

For Tanzania

Institute of Tanzanian Education.(2013). *Curriculum for advanced secondary education in Tanzania*. Dar es salaam. Available at: www.moe.go.tz

Institute of Tanzanian Education.(2010). *Curriculum for ordinary level secondary education in Tanzania*. Dar es salaam. Available at: www.tie.go.tz

MoEVT. (2010). *Education Sector Development Program (SEDP II 2010 -2015)*. Dar es salaam. Available at: www.moe.go.tz

MoEVT. (2008). *The development of education: National Report of the United Republic of Tanzania*. Available at: www.moe.go.tz

Prime Minister's Office, Regional Administration and Local Government (PMO-RALG).(2014). *Pre-Primary, Primary and Secondary Education Statistics 2013, Tanzania*.

UNESCO (2014). *Education for All 2015 National Review Report: Tanzania*. Available at: www.efa2015reviews@unesco.org

UNESCO (2011). *Tanzanian Education Sector Analysis: Beyond primary education, the quest for balanced and efficient policy choices for human development and economic growth*. Tanzania. Available at: www.moe.go.tz

UNESCO-IBE.(2010). *World data on education, Tanzania* (7th edition). Available at:
<http://www.ibe.unesco.org/links.htm>

For Uganda

MoES.(2004). *Education Sector StrategicPlan2004-2015*.Uganda. Available at:www.education.go.ug

MoES.(2011). *Ugandan Education Statistical Abstract 2011*.Kampala.available at: www.education.go.ug

National Curriculum Development Center (NCDC). (2014). *Entrepreneurship education in Uganda*. Kampala: Kyambogo Hill. Available at: www.ncdc.go.ug

UNESCO (2015). *Education for All 2015 National Review Report: Uganda*. Available at:
www.efa2015reviews@unesco.org

UNESCO-IBEc.(2010). *World data on education, Uganda* (7th edition). Available at:
<http://www.ibe.unesco.org/links.htm>