COMPETENCE-BASED CURRICULUM

Rwanda Education Board

CURRICULUM FOR SUSTAINABLE DEVELOPMENT

DIGNITY AND NATIONAL IDENTITY

SUMMARY OF CURRICULUM FRAMEWORK FOR TEACHER TRAINING COLLEGES

FOREWORD

The Ministry of Education (MINEDUC) is pleased to present the Competence-Based Curriculum for Teacher Training Colleges (TTCs) in Rwanda. This is to align pre-service teacher training programmes to the National Competence-Based Curriculum (CBC) being implemented in basic education. For successful implementation of CBC, REB found it important to review Rwanda Pre-Primary and Primary Pre-service Teacher Training Curriculum. The review will help to improve the approach of teaching and learning towards successful CBC implementation.

This review focuses on the content, the methodology and the competences that student teachers acquire. The above mentioned are influenced by many factors, among them, the relevance of the curriculum, necessary and sufficient pedagogical approach by tutors, the assessment strategies and sufficient instructional materials. With respect to CBC, this will lead to having qualified and competent teachers to implement the Competence-Based Curriculum for pre-primary and primary education and hence develop a new generation of teachers with relevant knowledge, skills, attitude and values for the 21st century labour market. This revised curriculum will allow future teachers to contribute to the development of equity and quality education at pre-primary and primary levels for improved quality of education system as a whole.

The change to a Competence-Based Curriculum in teacher training colleges is about transforming learning, thus ensuring deepened, enjoyable and habit-forming learning. This change calls for new thinking with regard to instructional approaches in teaching, learning and assessment processes. The TTC curriculum framework is envisaged to be the main reference document based on elements highlighted in the harmonization of curricula and suggested implementation in the EAC partner states. The curriculum framework offers the basis for the creation of guidelines for pre-service and in-service teacher education, training and professional development.

The pedagogical approaches adapted by the tutors will enable student teachers to develop positive attitudes towards work and to demonstrate strategies and techniques to provide competence based learning in the pre-primary and primary schools.

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Minister of Education

ACKNOWLEDGEMENT

I wish to sincerely extend my special appreciation to all people who played a major role in the development of the curriculum framework for Teacher Training Colleges (TTCs). It would not have been successful without full participation of various education stakeholders and the financial support from different donors.

I would like to acknowledge the crucial role of University of Rwanda College of Education (UR-CE) administration and lecturers who elaborated the TTC curriculum framework in 2015 and started the review of subject syllabi.

Special appreciation goes to the Rwanda Education Board (REB) staff and Consultants who re-organized the whole process of this curriculum framework from its inception to completion and contributed their technical and professional expertise for its elaboration. Particular acknowledgement goes to TTC Principals, Deans of Studies, Tutors and individuals whose input during the elaboration process was very valuable.

Special thanks go to UNICEF who funded the development, designing finalization and printing of the curriculum framework.

I owe gratitude to different education partners more especially USAID-Soma Umenye, Save the Children, Right To Play, Help a Child, Aegis Trust,Humanity and Inclusion, Flemish Association for Development Cooperation and Technical Assistance (VVOB), Voluntary Service Overseas (VSO), Teach Rwanda and IEE for their technical support.

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1. INTRODUCTION

Rwanda is striving to build a knowledge-based economy, with particular emphasis on science and technology as engines of socio-economic development. One of the national priorities in the education system in Rwanda is to ensure that the quality of education continues to improve through closer integration of curriculum development, quality assurance and assessment, improved supply of learning materials, particularly textbooks and improved teaching and learning strategies.

The Government of Rwanda has detailed its plans to review the curriculum and the teaching programs. The competence based curriculum that was launched in April 2015, was envisaged to be responsive to the needs of the learners, society and labour market. The holistic learner centered approach demands linking Primary Teacher Education strategies and techniques with learning and assessment approaches in preprimary and primary schools.

The new approach to learning in teacher training colleges is to empower all student teachers to acquire knowledge and understanding, skills, positive attitude and values. The learning is personalized, active and participative. Learning activities will be organized in a way that encourages learners to construct the knowledge either individually or in groups.

The process of TTC curriculum review has been done through consultations with TTCs. The consultation was done by conducting a needs assessment using guided questionnaires for tutors, interviews with the Principals, Deans of studies and head teachers of demonstration schools as well as focus group discussions with student teachers. An observation schedule was also used to assess the availability and adequacy of various curriculum support materials. The desk review concentrated on aspirations and skills underlined in National policy documents and the literature that emphasize on the required TTC competence based curriculum framework and the associated syllabi from year one to year three. Findings from this desk review indicated some shortcomings and challenges in the draft curriculum framework.

The TTC Curriculum Framework is the nation's guiding curriculum policy document for Teacher Education, indicating how the TTC curriculum vision is translated into practice at the TTCs and reflected in learning experiences, assessment and in monitoring and evaluation. It is consistent with the Rwanda Curriculum and Assessment Policy.

It is an inspirational document, drawing on best practices in education systems around the world and setting out how student teachers can achieve the highest academic and professional standards.

The TTC Curriculum Framework is the point of reference for all decision-making relating to the TTC curriculum and it guides the work of curriculum developers, college principals, tutors, textbook developers and TTC Pedagogical inspectors and examiners. It also provides important information about the curriculum to all of the nation's stakeholders in education. In this way, the nation's ambitions for its student teachers are expressed through the learning expected of them. Learning which will empower them to achieve and to play a significant role in the global economy. Preprimary and Primary Teacher Education in Rwanda should be aligned to the Philosophy of Education in Rwanda, the Goals of Education and the objectives of the Education Sector.

2. RWANDA EDUCATION SECTOR OBJECTIVES

The Education Sector objectives are the reference point for the inclusion of education issues into other Rwandan policy documents. These objectives are aligned with those recommended in the East African Curriculum Framework proposals. The Government of Rwanda through law number 36/2018 of 29th June, 2018 determining the organization of education revised the objectives of the sector. These are to:

- provide Rwandans with adequate skills at all levels of general, professional, as well as technical and vocational education;

- offer quality education at all levels;

- promote science, technology and research in order to equip Rwandans with capacity to speed up national development;

- promote the culture of peace, tolerance, justice, respect for human rights, solidarity, democracy and that of avoiding any form of discrimination or favouritism;

- provide each Rwandan with an integrated education based on ethical values, science and social welfare and directed towards building a nation to ensure its sustainable development

- instill into Rwandans the love of a job well done, the value of hard work, punctuality and promotion of competence

- train Rwandans to have freedom of thought, be innovative, have abilities to acquire and be analytical towards other people's opinions and to communicate their own ideas, to be patriotic and encourage them to be updated on the situations prevailing elsewhere;

- eliminate all grounds and obstacles that hinder the development of girls and women education as well as of any other groups that need special attention.

These objectives and associated strategies are the backbone for developments in education including the curriculum, assessment policy and the curriculum framework.

3. THE TEACHER TRAINING COLLEGES (TTCs) CURRICULUM FRAMEWORK

3.1 Meaning of a Curriculum Framework

A curriculum framework is a set of policies, regulations, directions and guidelines central for the development of the curriculum, syllabi and other related documents. The framework also guides other learning and teaching materials, standards and benchmarks for the evaluation of quality of student achievements and college operations. The framework sets out what students should know, value and be able to do at all stages of learning. It gives colleges and tutors flexibility to plan and deliver the subject content to meet their varied needs but within the national framework. The curriculum is developed in line with the curriculum framework and the syllabus content is developed in line with what is in the curriculum for the level.

3.2 Components of a Curriculum Framework

It reflects education policies, Rwandan aspirations in Education sector, basic and generic competences, cross cutting issues, assessment approaches and student profile for the level. It comprises a set of interlocking components including: essential learning experiences, generic skills, values and attitudes and key learning areas.

Subject overviews form part of the framework, they are summaries of content to be taught every year, they focus on topic areas, sub topic areas and competences to be covered every year. Subject overviews guide the development of syllabus content and learning objectives/outcomes.

3.3 Purpose of the TTC Curriculum Framework

The main purpose of the TTC Curriculum Framework is to ensure that all necessary elements are put in place so that learning and teaching in the Teacher Training Colleges (TTCs) is transformed and student teachers in Rwanda reach new heights in terms of their achievement in TTCs and throughout their lives and to realize the nation's aspirations for its people. In particular, the framework serves the following purposes:

- To serve as the official policy document highlighting what the teaching learning process entails in and outside the college environment;
- To guide policy makers on how to restructure the teacher education system clearly showing exit points into the labor market;

- To guide subject curricula/syllabi developers to elaborate subject competences, learning outcomes and subject content topic by topic basing on the general overview reflected in the framework;

- To guide the appropriate pedagogical approach to be used with special emphasis on learning activities, learning materials and how tutors should address the issue of low achievers and those with other special needs in the learning process;

- To give orientation on assessment for learning and clearly distinguishes when and how criterion and norm referenced criteria are to be used;

- To facilitate the planning and organization of college operations, including the elaboration of schemes of work and lesson plans by individual tutors;

- To guide colleges, education administrators and other stakeholders in the organization, management and evaluation of curriculum implementation.

3.4 TTC Curriculum Vision, Mission, Aims, Objectives and Values TTC Curriculum Vision.

To be an inspiring 21st century teacher education curriculum provider, that will prepare competent preprimary and primary teachers, capable of effectively delivering subject content, handling all learners, ready for lifelong learning and able to cope with rapid changes.

TTC Curriculum Mission

To transform the delivery of pre-service teacher education by providing the necessary infrastructure and improving the quality of teaching and learning, through provision of adequate curriculum support materials and competent personnel.

TTC Curriculum Aims

The aims of the TTC curriculum are to develop teachers who are:

- Patriotic and responsible citizens, ready to play a full part in society
- Confident and self-reliant teachers, ready to take their place in the labour market and mould the learners

- Successful life-long learners, ready to adapt to new situations, and be agents of change nationally and internationally
- Creative and innovative teachers who are curious, adaptive and productive.

TTC Curriculum Objectives

The objectives of teacher education curriculum are to ensure that it:

- is engaging, dynamic and aligned to the future employment needs of the nation and the global economy;
- challenges all student teachers to optimize their achievement;
- promotes standards benchmarked internationally in terms of competences.

TTC Curriculum Values

The Rwandan Curriculum is underpinned by the values that represent the basic beliefs of the nation. These basic values permeate the curriculum because education has an important role to inculcate values in young people to complement what parents do.

The Framework recognizes that values are important to the socio-economic development and stability of the country, in the same way that competences in academics are important.

Curriculum values are those that underpin the curriculum itself and determine the nature of the subject syllabi. Some of these values are, excellence, aspiration and optimism, equity and inclusiveness, learner-centeredness, openness and transparency, the importance of family, Rwandan culture and heritage. Basic human values include; dignity and integrity, self- reliance, national and cultural identity, peace and tolerance, justice, respect for others and for human rights, solidarity and democracy, patriotism, hard work, commitment and resilience.

4. PRINCIPLES OF TTC CURRICULUM

4.1 General principles

The approach adopted in the Preprimary and Primary Teacher Education Curriculum development should be guided by the following:

The Rwandan Teacher Training Curriculum will:

- Provide a balance of knowledge, skills and attitudes that will produce a competence level of learning in the Teacher Training Colleges;
- Include the respected traditions and achievements of the previous curricula;
- Ensure coherence within subjects and across subjects, throughout the three years of training.;
- Provide learner- centered, active and participative learning experiences ;
- Ensure inclusiveness so that every individual is valued and there are high expectations of every student teacher;
- Effectively address issues of relevance, scope, sequencing, overlaps, overloads and repetitions
- Provide content and guidance that allows tutors to differentiate and tailor learning to meet individual and local needs and aspirations;
- Encourage flexibility so that it can evolve in response to changing circumstances and contexts and will engender adaptability in young people so that they are prepared for an uncertain future;
- Provide learning which is relevant to young people – addressing their individual needs, situations, interests and abilities
- Clearly state the intended learning outcomes that focus on individual and national interests.
- Focus on student teachers' roles and responsibilities to their families, to the community and to society;
- Engage with the world of work and with employers;
- Provide an adequate preparation for Lifelong Learning;
- Provide learning that encourages girls' ambitions and sense of self-worth and ensures all tutors and student teachers respect these ambitions;

- Shape teaching identity;

- Address issues of professional development.

4.2 TTC Curriculum Implementation Principles

4.2.1 Learner centeredness

The curriculum must address student teachers' individual needs, interests, abilities and backgrounds, creating an environment where learning activities are organized in a way that encourages students to construct knowledge either individually or in groups in an active way.

4.2.2 Competence-Based Approach

This is an approach where teaching and learning is based on discrete skills rather than dwelling on only knowledge or the cognitive domain of learning. Affective and psychomotor domains are also dealt with. Student teachers work on one competence at a time in the form of concrete units with specific learning outcomes broken down into knowledge, skills and attitudes. The student is evaluated against the set standards to achieve before moving on to other competences. The learning activities should be learner centered rather than the traditional didactic approach.

4.2.3 Inclusiveness

The curriculum must ensure that every individual is valued and there are high expectations of every student teacher. Learning must be organized so that all students thrive, including students with disabilities and those with special educational needs, regardless of their background.

4.2.4 Flexibility

The curriculum will cater for students' individual needs and talents and ensure the provision of a holistic education that includes knowledge, skills, attitudes and values. The curriculum should facilitate horizontal and vertical mobility within and across different education systems, nationally, regionally and internationally. This will involve developing a curriculum that allows interactive teaching and learning involving all categories of learners to provide opportunities to nurture them.

4.2.5 Transparency and accountability

To ensure successful teaching and learning, colleges, student teachers and communities must communicate openly and honestly about the curriculum and learning in the college. Parents, tutors and senior management in colleges must be engaged together in supporting teaching and learning and holding each accountable for their contributions. College management must be open to stakeholders and policy makers to support efficient administration and effective teaching.

4.2.6 Integration of ICT as a tool

The curriculum must enable educators and students to use ICT as a tool to improve the quality of education in all subjects at all levels in teaching and learning practices. ICT must support the emergence of teaching and pedagogical student-centered approaches as well as encourage research, communication and collaborative learning

4.2.7 Interconnectedness with Cross-cutting issues

All cross-cutting issues are important for student teachers to learn about and must be integrated across learning areas appropriately since they are not confined to one subject. The issues are embedded within the syllabi of different subjects, across the years rather than having a dedicated timetable slot of their own. Mainstreaming the cross-cutting issues in formal, non-formal and informal programmes will provide an opportunity for learners to acquire knowledge, skills and values which will enable them address salient issues in their lives and in the community. The issues include but not limited to the following: **Genocide Studies, Environment and Sustainability, Gender, Comprehensive Sexuality Education, Peace and Values Education, Financial Education, Standardization Culture etc.**

5. COMPETENCES IN THE TTC CURRICULUM

A competence is the ability to use an appropriate combination of knowledge, skills, attitudes, and values to accomplish a particular task successfully. That is, the ability to apply learning with confidence in a range of situations. There are two categories of competences in a competence based curriculum; these are **Basic** and **Generic competences.**

5.1 Basic Competences

These are the core, key or vital competences identified in line with the vision of the teacher education in Rwanda and based on the expectations and aspirations of the country. These include **Pedagogical competence, Literacy, Numeracy, Information and Communication Technology, Citizenship and National Identity, Entrepreneurship and Business Development, Science and Technology and Communication in the official languages**

Table 1: Basic Competences and Their Descriptors

Competences	Competence Descriptors: What the student teachers are able to demonstrate during the learning process
Professional/ Pedagogical competencies	Ability of an individual to use a coordinated, synergistic combinations of tangible resources such as; instructional materials and intangible resources such as knowledge, skills and experience to achieve efficiency and, or effectiveness in pedagogy
	This basic competence is the backbone of professional competences that the student teacher acquires in Foundations of Education, Special Needs and Inclusive Education and in different Teaching Methods and Practice of subjects taught in pre-primary and primary schools. A teacher with pedagogical/professional competences will have ability to:
	- Effectively cater for all learners of different ages and needs
	- Set relevant learning activities or tasks that are age appropriate and suitable to develop subject and generic competences
	- Set relevant tasks for formative assessment and effectively use assessment results to improve learner's performances
	- Make lesson plan, scheme of work and other pedagogical documents as required
	- Facilitate different sessions/lessons using well selected active methods, techniques and strategies
	- Demonstrate creativity, problem solving, innovation skills and sense of initiative when making and using teaching and learning resources.

	- Use preventative and responsive classroom management strategies to create a conducive, peaceful and safe learning environment
	- Observe a lesson taught by a fellow teacher and provide constructive feedback
	- Use methods and principles of guidance and counseling to understand learners 'emotions and detect their abilities, talents, as well as deal with behavioral problems.
Literacy	Reading a variety of texts accurately and fast. Expressing ideas, messages and events through writing legible texts in good hand-writing with correctly spelt words. Communicating ideas effectively through speaking using correct phonetics of words. Listening carefully for understanding and seeking clarification when necessary
Numeracy	Computing accurately using the four mathematical operations. Manipulating numbers, mathematical symbols, quantities, shapes and figures to accomplish a task involving calculations, measurements and estimations. Use numerical patterns and relations to solve problems related to everyday activities like commercial context and financial management. Interpreting basic statistical data using tables, diagrams, charts and graphs.

ICT and Digital competence	Locating, extracting, recording and interpreting information from various sources,
	Assessing, retrieving and exchanging information via internet or cell phones,
	Using cell phones and internet for leisure, for money transactions and for teaching,
	Using ICT as a teaching tool,
	Using computer keyboard and mouse to write and store information, Using information and communication technologies to enhance learning.
Citizenship and National Identity	Relating the impact of historical events on past and present national and cultural identity.
	Understanding the historical and cultural roots of Rwandan society and how the local superstructure functions in relation to the global environment.
	Demonstrating respect for cultural identities and expressing the role of the national language in social and cultural context.
	Advocating for the historical, cultural and geographical heritage of the nation within the global dimensions.
	Showing national consciousness, a strong sense of belonging and patriotic spirit.
	Advocating for a harmonious and cohesive society and working with people from diverse cultural backgrounds.

Entrepreneurship and Business development	Applying entrepreneurial attitudes and approaches to challenges and opportunities in school and in life.
	Understanding obligations of parties involved in employment.
	Planning and managing micro projects and small and medium enterprises.
	Creation of employment and keeping proper books of accounts.
	Taking risks in business ventures and in other initiatives.
	Evaluating resources needed for a business.
Science and Technology	Applying science and technology skills to solve practical problems encountered in everyday life including efficient and effective performance of a given task.
	Develop a sense of curiosity, inquisitiveness and research to explain theories, hypotheses and natural phenomena
	Reasoning deductively and inductively in a logical manner.
	Using and experimenting with a range of objects and tools of science and technology and drawing appropriate conclusions.

Communication in the official languages	Communicating and conveying confidently and effectively information and ideas through speaking and writing and other forms of communication using correct language structure and relevant vocabulary effectively in a range of social and cultural contexts.
	Comprehending language through listening and reading.
	Using oral and written language to discuss, argue and debate a variety of themes in a logical and appealing manner.
	Communicate clearly and confidently using a range of linguistic, symbolic, representational and physical expression.
	Developing and communicating formal messages and speech appropriate to the target recipient or audience.

5.2 Generic Competences

Generic competences are the competences which are transferrable and applicable to a range of subjects and situations including employment. They involve and promote the development of higher order thinking skills. In doing so they boost subject learning as well as being highly valuable in themselves. They are seen as generic because they apply across all curricular and can be developed in all the subjects studied. The generic competences help students deepen their understanding of subjects and apply their subject learning in a range of situations. Those competences are **Critical thinking, Research and problem solving, Communication, Cooperation, interpersonal management, life skills, Intra and Inter personal skills, Creativity and innovation and Lifelong learning.**

Table 2: Generic Competences and Their Descriptors

Generic Competences	Competence Descriptors: what learners are able to demonstrate during the learning process
Critical thinking	Think reflectively, broadly and logically about challenges encountered in all situations.
	Weigh up evidence and make appropriate decisions based on experience and relevant learning.
	Think imaginatively and evaluate ideas in a meaningful way before arriving at a conclusion.
	Explore and evaluate alternative explanations to those presented by others.
Research and problem solving	Be resourceful in finding answers to questions and solutions to problems.
	Produce new knowledge based on research of existing information and concepts and sound judgment in developing viable solutions.
	Explain phenomena based on findings from information gathered or provided.
Communication	Communicating and conveying confidently and effectively information and ideas through speaking and writing and other forms of communication using correct language structure and relevant vocabulary in a range of social and cultural contexts.
	Comprehending language through listening and reading.
	Using oral and written language to discuss, argue and debate a variety of themes in a logical and appealing manner.
	Communicate clearly and confidently using a range of linguistic, symbolic, representational and physical expression.
	Developing and communicating formal messages and speech appropriate to the target recipient or audience.

Cooperation, interpersonal management, life skills	Co-operating with others as a team in whatever task assigned.
	Adapting to different situations including the job market.
	Demonstrating a sense of personal and social responsibility and making ethical decisions and judgments.
	espect others' rights, views and feelings.
	Having positive ethical and moral attitudes with socially acceptable behaviour.
	Perform practical activities related to environmental conservation and protection.
	Advocating for personal, family and community health, hygiene and nutrition.
	Developing motor skills to perform a variety of physical activities for fitness, health, leisure and social interaction.
Intra and Inter personal skill	Ability in facilitating interaction and communication with others
	Intra skills refer to the skills of knowing and living with oneself
	Inter personal skills deal with knowing and living with others
Creativity and innovation	Ability to develop new ideas that are unique, useful and worthy of further elaboration
	Ability to think creatively, calling into question the assumptions underlying our customary habitual ways of thinking and acting and then being ready to think and act differently on the basis of critical questioning
	Responding creatively to different challenges encountered in life.

	Use imagination beyond knowledge provided to generate new ideas to enrich learning.
	Take initiative to explore challenges and ideas in order to construct new concepts.
	Generate original ideas and apply them in learning situations.
	Demonstrate resilience when faced with learning challenges.
Lifelong learning	Taking initiative to update knowledge and skills with minimum external support.
	Coping with the evolution of knowledge and technology advances for personal fulfillment.
	Seeking out acquaintances more knowledgeable in areas that need personal improvement and development.
	Exploiting all opportunities available to improve on knowledge and skills.

6. DEVELOPING COMPETENCES

6.1 Developing competences in different subjects

Competences cannot be taught directly like subject knowledge. They are acquired over time through the cumulative effect of a learner centered approach. They require students to practice and employ the generic competences throughout the subjects that they study. They require the syllabi to be constructed with competences at their centre. They require teachers to adopt approaches that encourage and enable students to think critically, to carry out research, to solve problems, to be creative and innovative, to communicate, to co-operate and to become life-long learners.

The subject content provides a necessary context for students to develop the competences and the basic and generic competences help deepen students' understanding of the subject and build students' ability to apply their learning in practical situations. In this regard the curriculum is an important way of raising standards and making the curriculum more

relevant. The performance in a subject requires a student to have achieved an appropriate level in terms of all two categories of competences.

6.2: Higher Order Thinking Skills (HOTS)

Higher Order Thinking Skills (HOTS) are central to a competence-based curriculum because they develop the understanding that enables learning to be applied effectively. Learning objectives use more challenging action verbs so that students are required to think more deeply and to develop higher order thinking skills, as opposed to the knowledge and understanding learning objectives which relate to memorization and explanation (Basic CBC, 2015).

Education theory relating to HOTS, starting with Bloom's Taxonomy (1956) Norman Webb (2009)'s *Depth of Knowledge Guide* and *the Structure of Observed Learning Outcomes (SOLO)*, Biggs and Collis (1982) all show a similar pattern, ranging from memorization and recall through to the higher levels of thinking which lead to the deep and lasting learning students need from the curriculum.

High levels of thinking are crucial for a successful knowledge-based economy. It is through the focus on competences and higher order thinking skills in a competence-based curriculum that learners' skills and abilities are developed and as a consequence, their knowledge and understanding are deepened.

7. TEACHER EDUCATION IN RWANDA

7.1. Background of Teacher Education in Rwanda

Rwanda Primary Teacher Education system has learnt from best practices, challenges and mistakes encountered by other previous Teacher training systems from within the country, the region and beyond.

The primary teacher training system was initiated by religious associations early before Rwanda's independence. They started with a 3 years program after primary education to deliver a D3 certificate then after 4 years to deliver a D4 certificate. When the country got independence in 1962, due to the lack of teachers while the demand of education was increasing, special teacher education was organized for 2 years after the primary education in the schools called *Ecole des Moniteurs Auxiliaires* (EMA) and then after *Ecole*

Normale Auxiliaire (ENA). Those schools trained teachers to teach in lower primary.

To improve the quality of teacher education, a teacher education programme for 2 years after O Level (D5) in *Ecole Normale Inférieure* (ENI) and *Ecole Normale Technique* (ENT) and another for 4 years (D7) in *Ecole Normale Moyenne* (ENM) were introduced in 1967, three years after the introduction of O level in the Rwanda education structure. With those changes, the former ENA was discontinued.

The first major review in teacher education happened in 1978.It introduced a new education structure of 8 years of primary education and maximum of 6 years of primary teacher education. The choice of career path and specialization in branches of study including teaching profession started immediately after primary education. Then the graduate from 6 years of teacher education got a D6 certificate.

Teacher education schools program initially followed the same career pathways as the general education up to University level, depending on the results and the grades the candidates obtained from national examinations. Candidates having excellent results in examinations were allowed to continue for further studies while others were deployed to teach.

The teacher education system since 1994 has been gradually undergoing the paradigm shift to training for teaching skills as a profession that is terminal, rather than continuing to consider the teacher education as an integral part of the general education. It is in that perspective that all schools training primary teachers were grouped together in centers under the name Teacher Training Centers, which later came to be known as Teacher Training Colleges (TTCs). Those centers were established to take care of pre service and in service training. The graduating student teachers were expected to teach all subjects offered in the primary schools.

In order to uphold standards and quality in the teaching profession, the Ministry of Education at the time through a ministerial letter Ref. No. 3243/12.00/2010 dated 10/11/2010 decided to expand the role of the Kigali Institute of Education (KIE), currently University of Rwanda-College of Education (UR-CE) since 2013, to incorporate all teacher training institutions including TTCs (TDM Policy, 2007). The task assigned to KIE was to take responsibility of the Primary Teacher Training Curriculum and Examinations,

with the goal of de-linking the National Primary Teacher Qualification from the general secondary school leaving examinations.

In 2011, KIE developed and reviewed TTC programs to incorporate new trends in teacher education as a profession. At TTC level, students were given the opportunity to choose one option from the then existing three pathways namely: Teaching Modern Languages (TML), Teaching Social Studies (TSS) or Teaching Sciences and Mathematics (TSM).

In 2013, Ministry of Education recognized the Early Childhood Development Education as a vital foundation for learning, particularly for children from more disadvantaged backgrounds. To support effective governance and policy implementation, the University of Rwanda – College of Education (UR-CE) announced plans in 2015 to revise the Teacher Training Curriculum for Pre-primary and Primary Teacher Education. This was to align these pre-service teacher training programmes to the National Basic Education competence-based curriculum. There being no legal framework that addresses its jurisdiction as a Higher Learning Institution, having oversight over Primary Teacher Education, an official letter 1009/12.00/2017 dated 11th May 2017 on transfer of TTCs from UR-CE to REB was sent by the Minister of Education. The letter officially made REB, the institution in charge of the Teacher Training Colleges effective May, 2017.

7.2. Current Structure of Teacher Education in Rwanda

In Rwanda, the Primary Teacher Education course currently takes three years and student teachers are admitted to specific options from year one. However, they are taught all subjects, except that the weightings vary. This is done to enable student teachers be conversant with all the subjects offered in pre-primary and primary schools as they undertake the Teaching Methods and Practice (TMP) for their specialization.

The options are:
- Early Childhood and Lower Primary Education (ECLPE),
- Social Studies Education (SSE),
- Languages Education (LE),
- Science and Mathematics Education (SME).

The core subjects in year one of the course, for all options are; Foundations of Education, Social Studies, Creative Performance, Physical Education, English, Kinyarwanda, French, Kiswahili, Entrepreneurship, ICT, Teaching Methods and Practice, Special Needs and Inclusive Education and Religious Education. They also participate in Co-curricular activities. The student teachers will have to pass the examinations in all the subjects before proceeding to year two of the course.

In the second and third years of the course, those in SME will take Physics, Chemistry and Biology, instead of Integrated Science, while those in SSE will take History, Geography and Economics, instead of Social Studies. This will enhance their professional development as teachers and improve the professionalism, thus resulting in quality education, which is envisaged by the Country. This will also enable them to have the relevant combinations required for admission in degree programmes in education at various institutions of higher learning, nationally, regionally and internationally.

The qualification for the graduating student teachers can be equated to Level 3 of the Rwanda National Qualifications Framework (RNQF), which addresses the qualifications after, S4 to S6, TVET and Professional Studies.

Table 3: Subject Distribution in the Various Options

The subjects are distributed in the options as shown in the table below:

N	Subjects	Options							
		ECLPE		SSE		SME		LE	
		Y1	Y2&3	Y1	Y2&3	Y1	Y2&3	Y1	Y2&3
1	Foundations of Education*	6	6	6	5	6	5	6	5
2	Social studies	4	4	11	-	2	2	2	2
3	Geography	-	-	-	5	-	-	-	-
4	History	-	-	-	5	-	-	-	-
5	Economics	-	-	-	5	-	-	-	-
6	Religious education	4	4	4	3	1	1	1	1

7	Creative performance	4	4	4	4	2	2	4	4
8	Physical education	1	1	2	1	1	1	1	1
9	English	5	5	5	4	5	4	7	7
10	Kinyarwanda	5	5	2	2	2	2	5	6
11	Mathematics	3	3	3	3	6	6	2	2
12	Integrated sciences	4	4	1	1	11	-	1	1
13	Physics	-	-	-	-	-	5	-	-
14	Chemistry	-	-	-	-	-	5	-	-
15	Biology	-	-	-	-	-	5	-	-
16	French	4	4	2	2	2	2	7	7
17	Entrepreneurship	2	2	2	2	2	2	2	2
18	ICT	2	2	2	2	2	2	2	2
19	Teaching Methods &Practice	7	7	4	4	6	4	4	4
20	Special needs &Inclusive education	2	2	2	2	2	2	2	2
21	Kiswahili	1	1	1	1	1	1	5	5
22	Co-curricular activities	1	1	1	1	1	1	1	1
23	Self-studies	8	8	8	8	8	8	8	8
24	School attachments		Y3 Term1		Y3 Term1		Y3 Term1		Y3 Term1
25	Total	60	60	60	60	60	60	60	60

7.3 Entry requirements

Teacher Education is under the responsibility of Rwanda Education Board. To become a preprimary or primary school teacher, a person must gain entry into an accredited Primary Teacher Training College (PTTC) after successfully completing 9 years of basic education and undertaking a 3-year programme of teacher education, including School Attachment. By the end of the 3 years, a Primary Teacher Certificate is awarded to successful candidates. The training is organized around four options namely Sciences and Mathematics Education, Social Studies Education, Languages Education and Early Childhood and Lower Primary Education.

Previously in Rwanda the candidates who joined TTCs had to complete Ordinary level and pass with at least division IV. There is need to train quality teachers who would be able to effectively implement the competence based curriculum and hence, enhance quality education in Rwanda. This makes it necessary to set standards for those candidates joining the teacher training colleges, this will also facilitate their upward mobility in their professional growth. A candidate must satisfy the minimum requirements as prescribed in this document. To be eligible for the Preprimary and Primary Teacher Education Certificate Course, a candidate must have attained at least a **DIVISON 2(Aggregate of 33-45**) in the ordinary level national examinations. The candidate should also score a minimum grade of a credit pass (preferably C4) in English, being the medium of instruction both at the college and basic education levels. The English exam should have both written and oral parts. He /She should get a minimum grade of C5 in the major subjects in the option of choice. He/she should have the advanced level of English Proficiency.

7.4 Assessment

The aim of assessment is to establish the extent to which the student has acquired the expected competences. Assessment helps to diagnose and monitor the progress of a student, and provides feedback to students, parents, tutors and curriculum designers and implementers. This helps them plan learning in terms of what the student needs in order to continue advancing and fill gaps in understanding or performance. It also provides guidance on the selection of future subjects, certification and promotion to the next progression level.

Assessment in TTC curriculum should be competence based assessment using both formative (assessment for learning) and summative assessment (assessment of learning).

Formative assessment is used for the diagnosis of learning gaps, for corrective measures and feedback of evidence to tutors and students' self-evaluation. The assessment should focus also on abilities, attitudes and aptitudes that do not manifest themselves in the form of the written word. This aims at assessing a student's development in all areas of learning. In this scenario, the goal of formative assessment is to monitor student learning to provide ongoing feedback that can be used by tutors to improve pedagogical strategies and by students for improvement in their learning. The emphasis and focus is to foster skills and habits such as self-assessment, self-monitoring, and self-correction among students. Tutors may refer students to their personal goals or external standards as references for self-assessment. They may also facilitate self-assessment among students by introducing the use of self-reflection questions and exemplary work for students' consideration. It fosters self-assessment among students and promotes self-awareness of strengths and weaknesses in their learning.

The overall assessment should be followed by descriptive remarks by the tutor responsible for the subject about positive and significant achievements, avoiding negative comments even by implication.

During the course duration, assessment for learning is done continuously because in a competence based learning, the student teachers are expected to be acquiring competences as they take part in the various college activities such as core- curricular, co- curricular and extra- curricular activities. The student teachers' individual term and annual reports must show the performance of the student in every subject learnt. However at the end of the course, their academic achievements and acquisition of skills have to be assessed to warrant the awarding of a primary teacher education certificate.

Requirements to progress and to be awarded

At the end of first year the student teachers will sit for an end year exam. A student who fails in some subjects will only be promoted to second year after passing all the failed subjects. At the end of the second year the examinations set should be moderated by an external examiner to improve the quality. The students who fail some subjects will not be promoted to year three until they pass the failed subjects. The process will ensure quality

of the graduating teacher, so that only qualified students are allowed to proceed to third and final year of study. The teaching practice should be emphasized throughout the course duration and assigned a percentage pass of 30%. It includes; observation of actual teaching in pre and primary schools and watching video clips of lessons in progress, micro teaching, teaching practice, school attachment and final lesson exam. The student teacher is assessed gradually from year one to year three and records are kept until the completion of college. During the school attachment the assessment should be done by both internal and external assessors. The professional marks are added to the marks obtained in the final national exam which will account for 70%.

The assessment has two parts:

National examinations

In the national examinations there will be five common subjects across the options plus the core subjects in the specific options. The common subjects will be; Foundations of Education, TMP, English, Kinyarwanda and Entrepreneurship.

The examinable subjects per option are as following:

ECLPE: Common + Mathematics, Integrated sciences, Social Studies and Creative Performance and Physical Education (9)

SSE: Common + Geography, History, Economics, Religious education and Creative Performance and Physical Education (10)

LE: Common + French and Kiswahili (7)

SME: Common + Mathematics, Physics, Chemistry and Biology (9)

The subjects with a star in the tables below will be examined at the end of the three years in TTC. Many of these subjects cover the theoretical part. This assessment will cover 70% of the overall assessment.

Table 4: Science and Mathematics Education (SME)

SN	SUBJECT	PERIODS PER WEEK		
		Y1	Y2	Y3
1	Foundations of Education *	6	5	5
2	Mathematics*	6	6	6
3	Integrated Sciences	11	0	0
4	Chemistry*	0	5	5
5	Biology*	0	5	5
6	Physics*	0	5	5
7	English*	5	4	4
8	Kinyarwanda*	2	2	2
9	Creative Performance (Music & Fine arts)	2	2	2
10	Physical Education	1	1	1
11	French	2	2	2
12	Entrepreneurship*	2	2	2
13	ICT	2	2	2
14	Teaching Methods and Practice (TMP)*	6	4	4
15	Special Needs Education (SNE)	2	2	2
16	Religious education	1	1	1
17	Kiswahili	1	1	1
18	Social studies	2	2	2
19	Co- Curricular	1	1	1
	Individual Study	8	8	8
	School Attachment			1stTerm
	TOTAL	**60**	**60**	**60**

Table 5: Early Childhood and Lower Primary Education (ECLPE)

SN	SUBJECTS	PERIODS PER WEEK		
		YEAR 1	YEAR 2	YEAR 3
1	Foundations of Education*	6	6	6
2	English*	5	5	5
3	Kinyarwanda*	5	5	5
4	Mathematics*	3	3	3
5	Integrated Science*	4	4	4
6	Social Studies*	4	4	4
7	Creative Performance (Music and Fine Arts)*	4	4	4
8	Physical Education	1	1	1
9	Entrepreneurship*	2	2	2
10	ICT	2	2	2
11	TMP*	7	7	7
12	SNE	2	2	2
13	RE	1	1	1
14	French	4	4	4
15	Kiswahili	1	1	1
16	Co-Curricular	1	1	1
17	Individual Study	8	8	8
	School Attachment			1st term
	TOTAL	60	60	60

Note: TMP includes TMP of pre-primary and all subjects taught in lower primary.

Table 6: Social Studies Education (SSE)

SN	SUBJECT	PERIODS PER WEEK		
		YEAR 1	YEAR 2	YEAR 3
1	Foundations of Education*	6	5	5
2	Social studies	11	0	0
3	Geography*		5	5
4	History *		5	5
5	Economics*		5	5
6	Religious education*	4	3	3
7	Creative Performance*	4	4	4
8	Physical Education	2	1	1
9	English*	5	4	4
10	Kinyarwanda*	2	2	2
11	Integrated Science	1	1	1
12	Mathematics	3	3	3
13	French	2	2	2
14	Entrepreneurship*	2	2	2
15	ICT	2	2	2
16	Teaching Methods and Practice (TMP)*	4	4	4
17	Special Needs and Inclusive Education (SN&IE)	2	2	2
18	Kiswahili	1	1	1
19	Co-curricular activities:	1	1	1
20	Individual Study	8	8	8
21	School Attachment			1stTerm
	TOTAL	60	60	60

Note: TMP includes TMP of Social Studies, Religious Educaation, Physical Education and Creative Arts.

Table 7: Languages Education (LE)

SN	SUBJECTS	PERIODS PER WEEK		
		YEAR 1	YEAR 2	YEAR 3
1	Foundations of Education *	6	5	5
2	French*	7	7	7
3	English*	7	7	7
4	Kinyarwanda*	5	6	6
5	Creative performance (Music & Fine Arts)*	4	4	4
6	Physical education	1	1	1
7	Integrated Science	1	1	1
8	Mathematics	2	2	2
9	Kiswahili*	5	5	5
10	Entrepreneurship*	2	2	2
11	ICT	2	2	2
12	Teaching Methods and Practice (TMP)*	4	4	4
13	Special Needs Education (SNE)	2	2	2
14	Religious education	1	1	1
15	Social Studies	2	2	2
16	Co-Curricular activities (clubs, sports, public lectures)	1	1	1
17	Individual study (Research, library, Teaching Resource Center, etc)	8	8	8
	School Attachment			1stTerm
	Total	60	60	60

Note: TMP includes TPM of English, Kinyarwanda, French and Creative Arts.

Professional practice

Professional practice is another type of assessment, which contributes 30% to the overall assessment. The student teacher is assessed gradually from year one to year three and records are kept until the completion of the college. The student teacher's professional marks will be added to the marks obtained from national examinations to form the overall assessment results.

The components of professional practice assessed from year I to Year 3 include:

- Observation : 2marks

- Microteaching:2marks

- Teaching practice in demonstration schools:5 marks

- Final lesson (conducted by the team of internal and external examiners):8 marks

- School attachment and reflective practice (it should be assessed by both internal and external examiners): 13 marks 3 for the report and 10 for actual teaching.

For the student teacher to be awarded the certificate of successful completion of the teacher education course, the overall results should obligatorily contain at least 21 marks from the professional practice assessment results (21/30) which is equivalent to 70%.

7.5 Award of Certificate

To be awarded the Primary Teacher Education Certificate, a student teacher must: pass practical teaching and obtain a pass in all the subjects tested.

- A student teacher who does not pass teaching practice will redo it and pass, before being certified as a qualified teacher.

- A student teacher who fails to meet the requirements for the award of the certificate will be allowed to repeat the final national examination in the failed combination.

7.6 The Exit Profile of a Student Teacher

On completion of their training, the student teachers should have the characteristics to become quality teachers who will effectively implement the competence based curriculum and integrate positively into society. The exit profile is further determined by the option a student teacher undertakes for the three years. The profile and corresponding options make it easy to organize teacher training programmes at the university level and training activities.

By the time a student teacher is exiting the college after three years he or she should:

a. be able to compete not only locally but regionally and internationally;

b. exhibit professional ethics and develop an inquiring mind for innovative education;

c. be efficient in education administration, management, and assessment.

d. be competent, reliable, honest and responsible.

e. have competences that enable him/her to explore the learners' abilities and interests

f. be able to develop the child's ability in critical thinking, free expression and ideas

g. have a firm foundation for further education and training.

Exit profile for student teachers per option

The exit profile and the corresponding options make it easier to organize teacher training programs at the university level, implement training activities designed specifically for future teachers, and organize student teacher placements.

Early Childhood and Lower Primary option (ECLPE)

Students successfully completing the **Early Childhood and Lower Primary (ECLPE) Option** will be awarded a **"Certifcate of Primary Education: Preprimary and Lower Primary Education"**. They are prepared among others for:

- Teaching preprimary and lower primary classes
- Mentoring inservice peers
- Creating,leading and managing a preprimary and day care centers
- Being caregiver in day care centers
- Early childhood education advisor at sector level
- Pursuing early childhood and primary education at tertiary level

Languages Education option (LE)

Students successfully completing the **Languages Education (LE) Option** will be awarded a **"Certifcate of Primary Education: Languages Education".** They are prepared among others for:

- Teaching languages (French, English and Kinyarwanda) in primary education
- Mentoring inservice peers in terms of teaching languages
- Creating,leading and managing a primary school
- Language Education advisor at sector level
- Pursuing languages education and any related courses at tertiary level
- He could also be good in teaching creative performative.
- Be English Proficent.

Sciences and Mathematics option (SME)

Students successfully completing the **Sciences and Mathematics (SME) Option** will be awarded a **"Certifcate of Primary Education: Sciences and Mathematics Education"**. They are prepared among others for:

- Teaching sciences, numeracy and mathematics in primary education
- Mentoring   inservice peers in terms of teaching Sciences and Mathematics
- Creating,leading and managing a primary school
- Sciences and Mathemtics Education advisor at sector level
- He/She could be able to teach Physical Education.

- Be English Proficent.

- Pursuing Sciences and Mathematics Education and any related courses at tertiary level

Social Studies Education option (SSE)

Students successfully completing the **Social Studies Education (SSE) Option** will be awarded a **"Certifcate of Primary Education: Social Studies Education"**. They are prepared among others for

- Teaching Social Studies and Religious Education in primary schools

- Mentoring inservice peers in terms of teaching Social Studies

- Creating,leading and managing a primary school

- Social studies Education advisor at sector level

- Managing sport and cultural activities at school and community levels

- Pursuing Social Sciences education and any related courses at tertiary level.

- Be English Proficent.

8. TEACHING STANDARDS IN RWANDA

Teaching standards for Rwandan teachers are aimed at setting high quality effective teaching that is meant to improve overall students' achievement. The standards provide a consistent and supportive framework that teachers could reflect on their practice, use it to identify professional growth targets for further learning. Each teaching standard has descriptors in the form of competence indicators. The competence indicators are detailed descriptions of the knowledge, skills and attributes associated with each teaching standard. In the context of competences, the knowledge defines what tutors must know to teach the student teachers effectively. Attributes represent the attitudes, values and beliefs that play a critical role in teachers' practice. Attributes are foundational to teachers' professional practice and have been shown in the research to exert a significant influence on teaching and learning. Skills describe the application of teachers' attributes and knowledge in the classroom. Skills are the observable and measurable behaviors that represent what teachers believe, value and know about

teaching and learning.

A Rwandan teacher should have six quality standards as follows:

Standard No.1: Teacher as an expert of a competence-based curriculum

Competence indicators;

The Teacher:

- has understanding of a competence-based education and how it works,
- has knowledge of Basic Education Competence-Based Curriculum, core/basic curriculum competences, competence indicators and generic competences,
- should demonstrate the ability to develop and integrate the cross-cutting issues within and across subject areas.

Standard No. 2: Teacher as an educator

Competence indicators:

The teacher should:

- Use a range of different interventions/methods/techniques for effective classroom teaching and learning management,
- Show a thorough understanding of the child's background, developmental stages, interests, motivations and problems and can adjust his/her actions and the learning environment to the different needs of the learners,
- Use the phases and dynamics of group processes,
- Understand and use major types of special needs and related interventions,
- Master subject content,
- Show concern on promotion of nonviolence; conflict resolution and management, peace-making and peace building ,
- Act as a role model by showing empathy, trust, friendliness and peacefulness,
- Enhance and stimulates cognitive, social-emotional, physical and moral development of the children,

- Apply interventions that contribute to an inclusive, conducive, safe and peaceful learning environment for individual learners and the whole class (including students with special educational needs, males and females, student from different background, etc.),

- Apply interventions that contribute to the social-emotional and moral development of the learners

- Observe and recognize (special) needs of individual learners and the class as a whole,

- Planning activities/experiences referring to the needs and levels of the learner,

- Managing and organize teaching and learning activities and creating appropriate resources,

- Effective and supportive communication with children and their parents,

- Promote problem solving in life situation,

- Use assessment methods that are appropriate for the learner's age,

- Use ICT as a tool in education,

- Demonstrate ethical and moral responsibility including in leadership and management,

- Practice appropriate civic, moral and or religious norms and value,

- Demonstrate respect for the cultural identity, heritage and values of themselves and others.

Standard No. 3: Teacher as a communicator and connector

Competence indicators:

The teacher should:
- Use principles of language as well as language transition and subject integrated learning,

- Use a variety of communication skills (listening, writing,speaking, reading) and presentations (volume, articulation and facial expressions) techniques,

- Use the available range of modern means of communication and channels, like internet and e-mail, and their advantages and disadvantages and how to use them,

- Have language proficiency in both mother tongue and language of instruction as well as other official languages, act and communicate in a positive and peaceful way with the learners and create positive interaction with the learners,

- React open-mindedly and respectfully to other views and opinions,

- Show clear, respectful and peaceful communication with colleagues, parents and representatives of the community/society.

Standard No 4: Teacher as a guide, an organizer and a facilitator of the learning process and learning environment.

Competence indicators:

The teacher should:

- Use the core principles of special needs education and the most common special needs in Rwanda,

- Advocate for gender balance and equality in solving current gender issues in Rwanda,

- Use appropriately theories of learning to develop learner's competences using a variety of learner-centered teaching and learning techniques,

- Prepare and use effectively available teaching and learning resources in and around the school,

- Apply a wide range of assessment methods (feedback, formative and summative assessment, etc.) and their purposes for proper learning,

- Abide by school and national education policies, and human values,

- Facilitate and guide the learners' holistic development taking into account the individual differences and (special) educational needs,

- Organize and manage lessons and school activities effectively to maximize instructional time and student learning,

- Collect and analyze assessment data, adjust teaching in response and share the data with colleagues and parents.

Standard No. 5: Teacher as an innovator and reflective practitioner

Competence indicators:

The teacher should

- Reflect on the processes and adjust where need be,

- Give tangible and creative feedback on school attachment activities,

- Find information related to the profession and provides solutions,

- Constantly question his/her behaviour and teaching through reflective practice,

- Use small scale reflective practice to contribute to ongoing improvement of the teaching and the school practice,

- Identify, select and use relevant documents (like National Professional Standards for Teachers), new trends and insights related to the profession that help to identify and plan professional learning needs,

- Progress to tertiary education.

Standard No. 6: Teacher as a subject expert

a) Teacher as an expert in Early Childhood and Lower Primary Education (ECLPE)

Competence indicators:

The teacher should

- Consider different stages of a young child's development and bring the child to the next stage by a variety of teaching and learning approaches,

- Apply holistic, thematic and play-based learning related to early childhood education,

- Make a connection with the learning areas and educate the learners in all subjects in the language of instruction,

- Appreciate the importance and benefits of play-based learning and thematic approach to facilitate learning,,

- Use a variety of assessment methods for young children to monitor the learning progress,

- Advocate for environmental awareness and teach the children under their care   to be aware of their environment and how to respect it,

- Develop required mathematical skills and concepts into children under their care and make the learning enjoyable to them,

- Encourage appropriately the children under their care to develop sensory ability, physical coordination, fine and gross motor skills as well as good health habits,

- Present acquired creative arts expression skills and make them be appreciated by the children under their care,

- Use language skills in mother tongue and English language so that the children under their care develop early literacy: listening, speaking, reading and writing,

- Think Critically, act creatively and propose solutions to emerging problems,

- Manage and organize teaching and learning activities in corners using and creating appropriate resources for the age group,

- Give a friendly and approachable care to a child, react flexibly and tolerantly to a child's behaviour and stimulate a child's creativity,

- Use play-based learning in effective way,

- Collaborate with parents in order to ensure a joint responsibility for a child's proper development,

- Use assessment methods that are appropriate for the child's age with emphasis on formative assessment,

- Demonstrate a variety of teaching activities that enhance a smooth transition from Kinyarwanda to English as a language of instruction,

- Stimulate Kinyarwanda and English learning in such a way that the children by the end of P3 are able to make the transfer to English as a language of instruction in upper primary,

- Progress to teaching related tertiary education.

b) Teacher as an expert in Language Education (LE)

Competence indicators:

The teacher should

- Express themselves fluently, and with confidence, in speaking and writing using correct vocabulary and grammar appropriate to their level and relevant to their everyday interactions,

- Listen to, read and view, analyze, interpret and summarize a range of literary and non-literary texts in the target language,

- Use teaching/learning methods that enhance the learning of languages,

- Communicate information, ideas and feelings appropriately and effectively in a range of different social settings and cultural context,

- Integrate the official languages to show national consciousness, strong sense of belonging and patriotic spirit,

- Strive for harmonious and cohesive society and working with people from diverse backgrounds: social, cultural, political, linguistic and religious,

- Prepare and deliver coherent speeches on a range of themes for different audiences, purposes and occasions and critically appraise those of others,

- Apply different techniques of language assessment,

- Reflect on the daily teaching-learning processes and practices for continuous professional development,

- Stimulate learners' critical thinking, problem solving, creativity and effective communication,

- Demonstrate a variety of teaching/learning activities that enhance languages,

- Link the content of language with other subjects and connect in real life situation,

- Integrate cross-cutting issues (comprehensive sexuality education, Environment and Sustainability, financial education, Genocide studies, Gender, inclusive education, Peace and Values Education, Standardization Culture) in the teaching/learning of language,

- Contribute to the development of the country through acquisition of financial, vocational and entrepreneurial skills in business development,

- Analyze and evaluate rationally and constructively to resolve problems,

- Demonstrate the knowledge and skills required to progress to the next stage of their education (university).

c) Teacher as an expert in Sciences and Mathematics Education (SME)

Competence indicators:

The teacher should

- Apply mathematical concepts involving geometry, algebraic expressions and measurement of lengths, areas and volumes of different shapes and figures,

- Have a thorough Science and mathematics knowledge that enables him/her to develop the teaching/learning materials, lesson planning, to deliver the lesson and connect with his/her daily life activities using English as the language of instruction,

- Appreciate the importance and benefits of integration play-based learning in his/her teaching/learning Sciences and Mathematics,

- Describe, explain, analyze, interpret and make decision on scientific data,

- Work in systematic way to develop clear, logical, coherent and creative reasoning and imagination in science and mathematics,

- Use assessment methods related to science and mathematics to facilitate learning,

- Plan and Practice experiments of science and mathematics referring to the needs and levels of the learner,

- Manage teaching and learning activities and develop appropriate resources related to science and mathematics,

- Stimulate the learner's critical thinking, problem solving and creativity,

- Stimulate English in the teaching/learning of Sciences and Mathematics by considering the transition from Kinyarwanda to English as medium of Instruction,

- Use appropriate science and mathematics methods/techniques to assess learners and give constructive feedback to the whole class,

- Link the content of science and mathematics with other subjects and connect in real life situation,

- Integrate cross-cutting issues (comprehensive sexuality education, Environment and Sustainability, financial education, Genocide studies, Gender, inclusive education, Peace and Values Education, Standardization Culture) in the teaching/learning of Science and Mathematics,

- Make children aware of themselves physically and biologically within the world we live,

- Reflect positive attitudes towards environmental protection and conservation,

- Develop positive attitudes, practical skills and basic scientific concepts in their daily life,

- Use ICT tools to solve Science and mathematical problems,

- Demonstrate the knowledge and skills required to progress to the next stage of their education (university).

d) Teacher as an expert in Social Studies Education (SSE)

Competence indicators:

The teacher should:

- Demonstrate more abstract and complex thinking to inquire about the world and themselves including how past and present historical, geographical, sociological and cultural events, processes and systems shape our future,

- Show a strong sense of cultural identity and belongingness to society,

- Have a thorough subject knowledge that enables him/her to develop competences embedded in the upper primary social and religious studies curriculum, creative arts curriculum as well as physical education and sport curriculum,

- Express a strong sense of commitment to students, community and the society,

- Demonstrate an understanding of sustainable growth, conservation, reconstruction and development of the country in the regional and global context,

- Evaluate national, social, economic and political issues within the regional and global context and contribute to the national debate,

- Demonstrate ethical and moral responsibility including in leadership and management,

- Practice appropriate civic and moral norms and values of the society,

- Demonstrate respect for the cultural identity, heritage and values of themselves and others,

- Demonstrate curiosity in researching their area of study and creativity in presenting their findings,

- Demonstrate the emotional literacy and life skills required to make responsible decisions and choices especially in relation to personal nutrition, hygiene and fatal diseases including HIV/Aids and Malaria,

- Contribute to the development of the country through acquisition of financial, vocational and entrepreneurial skills in business development,

- Analyze and evaluate rationally and constructively to resolve problems,

- Perform musical, dramatic and sport activities,

- Show national consciousness, strong sense of belonging and patriotic spirit,

- Strive for harmonious and cohesive society and working with people from diverse social, cultural, political, linguistic and religious backgrounds,

- Connect historical events with the current issues,

- Implement social and religious, creative arts and physical education upper primary curriculum content in classroom settings,

- Empower learners with knowledge, skills and attitudes in order to promote the culture of peace, integrity, tolerance, reconciliation at school, community and the society,

- Develop learners' knowledge, skills and attitudes in creative performance and physical education as powerful means of shaping individual personality that is required for community and society sustainability,

- Demonstrate the knowledge and skills required to progress to the next stage of their education (university).

Figure 1 Below summarizes the quality standards for a teacher in Rwanda

9. SUBJECT RATIONALE

To train competent teachers, Teacher Training Colleges provide the student teachers with basic, professional and generic competences through subject content. Each subject plays its role in the acquisition of the competences needed and in the mastery of the pre-primary and primary curriculum and each subject has its rationale.

9.1 Biology

Biology is the study of living organisms and it plays an important role in our everyday existence. It has many applications, both in the natural

environment, in health and education.

Studying biology develops an understanding of living systems and how to apply learning in direct ways to maintain the health of humans, animals and plants. Biology enables us to understand the relationships between living organisms in ecosystem and to know what is beneficial and what is harmful. Technological advances in new areas, such as DNA and genetics, have made this varied discipline more exciting than ever. In addition, learning Biology in TTCs leads student teachers to different opportunities for higher learning and also enables them to teach SET in primary schools.

9.2 Chemistry

Chemistry, one of the natural science subjects is an important discipline that has contributed significantly to the global socio economic transformation through discoveries on the part of chemists. This has led to new technologies in the production of small scale and industrial products that are beneficial to People and the environment. Chemistry is a worthwhile subject because it prepares students for the real world of work through career path ways like medicine, agriculture, pharmacy, chemical engineering, food science, teaching, environmental studies and many others to provide skills that guide the construction of theories and laws that help to explain natural phenomenon and manage people and the environment. In addition, learning Chemistry in TTCs leads student teachers to different opportunities for higher learning and also enables them to teach SET in primary schools.

9.3 Creative Performance: Fine Art and Crafts

Since the earliest history of man, Art has been regarded as a fundamental area for the development of intellectual abilities, cognitive faculties, manipulative skills and creative talent. Art has also been widely viewed as a therapeutic subject that facilitates mental calm. Research also shows that it can heal simple trauma and emotions especially through the use of colour and forms.

Every child is born an artist with the ability of creativity, innovation and imitation. No work of Art is either right or wrong as long as the artist has interest in practice. Fine Art and Crafts therefore are central to all subjects, forming the basis of all creativity. This is a key reason why every student teacher in Rwandan colleges should have the opportunity to study and be

trained to teach Fine Arts and Crafts. This will also satisfy the needs for those who complete this program since it will enable them to be job creators and not job seekers, hence reducing the problem of unemployment in Rwanda.

Fine Art and Crafts develops innovation, imitation and creativity in the student teacher which can reinforce a deep learning of other subjects. It encourages a love for beauty, nature, culture and tradition which can develop responsibility and cultural awareness coupled with and harmony in the student teacher and the society in general. In addition, learning Fine Arts and Crafts in TTCs enables the student teachers to teach Creative Arts in Preprimary and Primary schools.

9.4 Creative performance: Music

Music provides opportunities to promote spiritual, moral, social and cultural development which are needed to help a student-teacher in his/her interrelation with other fellow student-teachers, and in his/her career as a teacher in a preprimary or primary school. It is worth noting that music is a subject taught in all levels of primary school and is used as a method of teaching other subjects. Besides, music is useful for relaxation and entertainment needed for children development.

9.5 Economics

Economics is concerned with the study of how scarce resources of the society can be allocated in the best way in order to satisfy the unlimited wants of man. The study of economics helps student teachers as individuals or groups in their societies to make the best choices using their limited resources to improve the quality of life. Economics prepares student teachers with transferrable soft skills ready for the real world of work and provides useful foundation for further studies through career paths related to economics with education. It also gives student teachers the critical knowledge and skills to communicate ideas using the language and tools of the discipline of economics. Economics also prepares the student teachers to become good future policy makers at family, local and international levels especially when it comes to resource allocation.

In summary, the study of economics in TTCs seeks to equip student teachers with the basic tools necessary for understanding and interpretation of economic phenomena experienced by Rwandan people and for teaching

and communicating intelligently and effectively on economic issues in the region and the wider international community.

9.6 English

The government of Rwanda decided in 2003 to have English language as official language along with French and the national and official language Kinyarwanda. Later on Kiswahili was included as the fourth official language. English is the medium of instruction from upper primary up to university education level. This was decided in 2008 and implemented in 2009.

English is also taught as a subject across all educational levels in Rwanda. These measures were taken in order for Rwanda to integrate in the region and the world as a whole. Rwanda is a member of the East African Community where English and Kiswahili are prominently used. Rwanda is also a member of the commonwealth as well as "Francophonie".

Therefore the student teachers should learn the English language for their personal development as citizens of Rwanda who will be able to interact with people from the region and the world. They will be able to compete nationally and internationally. However as teachers to be, they will have to teach efficiently at upper primary in English or teach English from pre-primary and primary at both lower and upper primary.

9.7 Entrepreneurship

Entrepreneurship stimulates people to build successful lives and contribute to the development of their society by creating and managing income generating projects adapted to local realities.

It prepares young people for the uncertainties and complexities of the real business world where business opportunities exist. In entrepreneurship education, there is a key to drive to ensure that Rwandans actively create employment opportunities rather than having a mindset of relying on others. It will also help them to qualify for further studies in higher education in different programs under colleges of education for education career advancement.

9.8 French

The French language is a communication tool in national and international relations. In Rwanda, it is one of the three official languages used in administrative documents and in the media. As member of Francophone countries organization, Rwanda needs French language to communicate with other member countries. For that, TTC students should acquire the four communication skills in French: oral comprehension (listening), oral expression (speaking), written comprehension (reading) and written expression (writing) so as to communicate fluently using the language.

In addition to that, students enrolled in Language Education shall be called to teach French language in primary schools. They need communicative and linguistic skills that will enable them to effectively teach the French language in elementary school in the competence-based approach.

9.9 Foundations of education

Foundations of education is a cross cutting course that encompasses educational topics that equip student teachers with basic principles theories and practices governing education. Teachers should have a rich store of well organized knowledge about many specific situations of teaching. These includes knowledge about the subject they teach, their students and general teaching strategies but all these need to be driven by a strong knowledge in the field of 'foundations of education'.

Quality of education requires teachers who are well grounded with both content and pedagogical knowledge, skills and attitudes; so that they are competent enough to effectively teach students assigned to them. The Foundations of Education will enable develop teachers competences to interpret knowledge and related historical, philosophical, ideological and social contexts in educational services delivery. This will enable teachers to develop critical perspectives on education in colleges and beyond. The ultimate outcome is that the tutors can apply active learning pedagogy that can put the students at the center of the teaching and learning process. Moreover it will enable student teachers to develop skills, attitudes and values that promote inclusivity, peace building and development capabilities in their learner. Student teachers will also develop key competences including interpretive, normative and critical perspectives on existing educational

practices.

9.10 Geography

Geography is the study of the earth, including all the phenomena which make up the physical and human environment. Geography is one of the disciplines that are concerned with the real world in which the student-teachers live and are capable of solving problems and developing knowledge, skills, attitudes and values which are relevant to their present profession and future studies in geography with education.

Geography helps the student-teachers to understand physical and social environment in order to build unity in diversity. It also motivates the student-teachers to discover about the real world and enables them to recognize the importance of the sustainable development for the future of mankind. Geography also helps the student-teachers to develop generic competence skills, literacy and numerical skills to interpret the human and physical phenomena, maps, photographs and diagrams.

9.11 History

History is one of the social science subjects and is an important discipline that has contributed to the human activities, political and social transformation throughout the world.

History enables student-teachers to understand the past and the present so as to predict the future. It guides the interaction between the tutor and the student teacher in the learning process and highlights the knowledge, skills, attitudes and the values that a student teacher should acquire at the end of each unit which helps him/her to be professionally competent and participate actively and critically in the society. This would enable the student- teacher to pursue history related courses with education in higher institutions of learning.

9.12 Information and Communication Technology (ICT)

In Rwanda, ICT is penetrating every aspect of every day's life including service delivery. The country is going towards an intensive integration of ICT in education, which is a key player in the development of a country. ICT in education is to be used to enhance teaching and learning and to prepare

citizens who will adapt in this newly created environment. Student teachers have to study ICT topics namely word processing, spreadsheet, internet, computer graphics and database as they will develop in them inspiration and abilities to use ICT as a tool when they will be facilitating in primary school. This will ultimately allow them and their future pupils to actively participate in a world of communication, research and innovation for social and economic transformation.

9.13 Integrated Science

Teacher Training Colleges (TTCs) aim at producing qualified primary school teachers in Rwanda. This implies that the curricula of TTCs might cater for the courses to be taught in primary schools and how to teach them. The introduction of Science and Elementary Technology (SET) in primary schools needs appropriate curriculum which allows TTC leavers to be well equipped to teach SET subject. In order to enhance the teaching and learning of SET in Primary schools, the Integrated Science curriculum has been developed. This Integrated Science curriculum reflects that Sciences are not taught in isolation but as integrated topics using real life situations to enhance life skills and the learning experience.

9.14 Kinyarwanda

The study of Kinyarwanda language is essential in our society. Kinyarwanda is thenational and official language spoken and understood by the vast majority of Rwandans.Kinyarwanda, as a mother tongue, is the language of teaching and learning in nursery and lower primary schools. Kinyarwanda is also taught as a subject at different levels of studies. There is strong link between Kinyarwanda language, culture identity, cultural values and heritage. Hence, Kinyarwanda is the language of basic literacy which requires to be well mastered by TTC students. In addition, the rationale of the changes is to ensure that TTC leavers are qualified for job opportunities and further studies in Higher Education in different programs under for education career advancement.

9.15 Kiswahili

Kiswahili is a Bantu language spoken by many people in Africa. Rwandan cummunity is surounded   by countries in which Kiswahili is among the

communicative languages .In this case the Rwandans need to communicate with fellow EAC members for different socio-economic, political and cultural reasons.

9.16 Mathematics in SME&ECLPE

Mathematics plays an important role in the society through abstraction, modeling and logic, counting and calculation, measurement, systematic study of shapes and motion. Thus mathematical knowledge is an essential tool for learning other subjects for example statistics and probability play an important role in game theory, in the national census process, in scientific research and trigonometric theories play a big role in construction and air navigation. Learning of Mathematics enhances critical thinking and problem solving skills and enables student-teachers to be systematic, creative and self-confident in using mathematical language and techniques to reason deductively. Mathematics equips student -teachers with knowledge, skills, values and attitudes necessary to enable them to succeed in an era of rapid technological growth and socio-economic development as well as in effective teaching of Mathematics in Primary Education or pursuing tertiary education.

9.17 Mathematics in Languages Education (LE)

Mathematics subject in the options of Languages Education (LE) is designed to provide mathematical concepts with statistical aspects and logics in order to help student-teachers to demonstrate critical thinking, problem solving and decision making skills.

The syllabus concentrates on mathematical concepts that are useful tools for a student-teacher who intends to: teach in primary school, collaborate with others to solve real life problems in knowledge based economy society and undertake further studies at higher education. Particularly, statistical skills are needed for primary teachers to help them elaborate students' school reports, interpret them and other statistical data from different reference books, journals and relevant scientific documents.

9.18 Mathematics in SSE

Mathematics subject in the options of Social Studies Education (SSE) is designed to provide Mathematical concepts with statistical aspects, basics of arithmetic, basics of functions and graphs, equations and inequalities,

basics of calculus and the application of these concepts in solving simple problems in economics and other social sciences.

The syllabus concentrates on Mathematical concepts that are useful tools for a student-teacher who intends to: teach in primary school, collaborate with others to solve real life problems in knowledge based economy society and undertake further studies at higher education. Topics were chosen to help the student-teacher to well perform economics lessons where Mathematical concepts are essential. The Mathematics content for SSE are linked to real life situations and student's experiences to enhance life skills.

9.19 Physical Education

The primary purpose of physical education is to develop in young people an understanding of the positive impact and active lifestyle will have on their lives. The developmentaly appropriate programme also provides a unique learning environment where affective, psychomotor and cognitive skills can be developed. In addition good health practices, sportsmanship, self control, self expression and opportunity for positive social interaction with peers are fostered. Physical education and sports reinforces knowledge learnt in/across the curriculum and serves as a laboratory for application of content in science, social studies, communication skills and literacy.

Physical Education and sports develops student teachers' physical competence and confidence, and their ability to use and apply them to perform in a range of physical activities in teaching in the teaching and learning process. Student teacher learns how to plan, perform and evaluate actions, how to be creative and face up to different challenges both as individuals and as team members in groups. Students learn how to think critically in different ways to suit a variety of creative, competitive and challenging activities.

9.20 Physics

Physics is one of the natural science subjects and contributes significantly to global socio-economic transformation through its discoveries. Applications of Physics theories are evident in various domains including industries engineering, transport (automobiles, trains, and flights,), medicine, Information and Communication Technology (ICT).

This is in line with the ambition of the Government of Rwanda of developing a knowledge-based economy by promoting science and technology

throughout all levels of the Education System.

The Physics Curriculum will equip student-teachers with appropriate knowledge, skills and attitudes needed to meet the challenges of living in a technologically advanced society and allow them help students in widening their scientific understanding through systematic and scientific inquiry, help them pursue further studies in scientific areas and become more competitive both at regional and global job markets. In addition, learning Physics in TTCs leads student teachers to different opportunities for higher learning and also enables them to teach SET in primary schools.

9.21 Religious studies

Religious Education deals with a thorough explanation of religious beliefs. The major aspects include religious doctrinal teachings, practices worship and their influence on human.kind. Religious Education provides an explanation of the role of faith in enabling people to find meaning in life and guidance relating to the path to righteousness. Religious Education subject encourages student teachers to live religiously, spiritually and morally. Religious Education helps student teachers to become informed, caring and contributing members of society, they appreciate their own beliefs and values as well as the beliefs and values of others, hence, appreciating the intrinsic worth of each religion in the society.

The Religious Education syllabus will contribute to the moral and spiritual development of student teachers by developing values such as faithfulness, generosity, honesty, goodness, respect, responsibility, self-control, self-esteem and accountability that will help them to make good decisions and sound judgment about personal behavior, moral and life issues. Furthermore, Religious Education will help student teachers to be professionaly confident in helping pupils to solve problems and issues pertaining to behavior, meaning of life and worship in their daily life.

9.22 Social Studies

Social studies subject deals with human beings, the world they live in, their behavior, growth and development, organization, relationships and resources. It is a vital subject for student-teachers in Rwanda which provides them with the basic knowledge, skills, values and attitudes for their profession, continue for further studies in education related courses, make informed decisions and positively participate in society.

Social studies is also designed to increase various skills and abilities such as critical and analytical examination of the causes and effects of economic, geographical and historical phenomena both locally and globally. It has the ability to challenge student-teachers in various current political, socio economic and geographical issues to which they propose solutions as active members of the society. For example, they understand how different societies are structured, managed and governed, thus appreciate their place in the world by developing universal understanding of their environment and the interrelationship which exists between the natural and human habitats. Hence, it prepares them to be productive and successful citizens.

9.23 Special Needs and Inclusive Education

Special Needs and Inclusive Education is a new stand-alone subject that has been introduced in TTC's curriculum to prepare the pre-service teachers to teach inclusively by being able to cater for the needs of each learner in the classroom. This subject has 6 topic areas with 27 subtopic areas and 33 units. Briefly, it gives an overview regarding the general concepts used in special need and inclusive education, historical background of inclusive education and its legal policies/frameworks, categories of learners with special needs and disabilities, approaches to assess their needs, and teach them. The special needs and inclusive education programme has been deliberately tailored to enable student teachers to participate and cultivate values and attitudes of inclusion within the school and the neighbourhood communities, expected to positively change stigmatization levelled at Rwandan people with disabilities and other disadvantaged groups and paving away for ultimate equal participation in the development of the Country.

9.24 Teaching Methods and Practice

Within 3 years of Teacher Education student teachers are prepared to teach in pre-primary and primary schools and to accomplish some other activities related to education. For them to achieve the standards of a teacher and become competent enough to teach their students effectively, they are given subject content related to the option, Pedagogical Content Knowledge (PCK) skills and attitudes developed through TMP subject. In general, student teachers' coursework focuses primarily on the subjects of their specialization in addition to general education courses for secondary students.

For the sake of progression in acquiring pedagogical skills, attitudes and values, student teachers should be exposed to teaching experiences from year 1 through observation of experienced teachers in demonstration schools, reporting on the lesson observed, micro-teachings, teaching practice and finally school attachment in year 3.

Foundations of Education equips student teachers with essential general education theories, general principles and methods used to enable students' learning. These general principles and methods of teaching are not sufficient to make students competent teachers. They also need PCK through TMP. Teaching methods and practice is crucial to complete and to apply theories and skills gained from Foundations of education. This subject focuses on understanding of specific features and requirement for each subject taught in preprimary and primary education such as syllabus content, teaching methods techniques and strategies, as well as suitable teaching and learning resources. It also provides student teachers with opportunities to develop professional skills in a progressive way through observation and analysis of lessons (Real lessons or by Video) and Micro teaching, teaching practice in the real classes on a weekly basis and during school attachment.

- collect and analyze assessment data, adjust teaching in response and share the data with colleagues and parents;

9.25 School Attachment

The Teacher Education programme can only be complete if it has the practical component, to make the student teachers more effective when they graduate from the colleges. The school attachment is an opportunity for student teachers to be in a school environment and begin to see how the theory and skills they have been learning can be applied.

At the end of year three, student teachers are equipped with necessary teaching skills acquired especially through Foundations of Education and Teaching Methods Practice. During the first term of Year 3, the student teachers go for School Attachment as a professional learning bridge between the ending of pre-service professional preparation and the first year of teaching. Under the supervision and guidance of TTC tutors and teachers from demonstration schools, they consolidate their knowledge and experience across all facets of the role of a teacher in the school. School

attachment will provide them with an opportunity to further develop skills in teaching and to be mentored in preparing themselves as thoroughly as possible for their early experiences of teaching.

9. 26 Final Lesson

During the third term of year 3, every student teacher takes the final lesson exam. That exam is organized by the Teaching Practice coordinator and the evaluation is done by internal and external evaluators including demonstration school teachers. The pass mark is 60%.

10. IMPLEMENTATION OF THE TTC CURRICULUM

Implementation is a critical issue in any curriculum development or review process because the curriculum can only succeed if effectively implemented. The change to a competence-based curriculum is about transformation, ensuring that learning is deep, enjoyable and habit-forming, leading to high standards and levels of achievement. There is need to prepare the tutors to accept the paradigm shift and be facilitators in the learning process.

10.1 Teaching and Learning Methodology

Tutors need to shift from traditional methods of instruction and adopt participatory and interactive methods that engage student teachers in the learning process, both in groups and as individuals. This ensures that learning is active, participative and engaging rather than passive. It is also personalized, addressing the student's individual needs and expectations. This learner-centered approach should involve diverse learning experiences, including but not limited to individual, paired and group work, oral questioning, discussions, debates, role play, presentations, projects, practical work, investigations, problem solving, assignments, field visits, tests and quizzes.

10.2 Language of Instruction

According to the national policy, English is the language of instruction from P1 onwards, it is therefore essential that the student teachers are prepared well in English to be able to affectively teach in the primary schools. The standard of English for every student teacher should be high to enhance their efficiency. This calls for the tutors to do their best in encouraging the students to use English at all times while in the college.

10.3 Inclusion

Inclusiveness will be achieved by training the student teachers to acknowledge each learner's abilities and needs and how to meet them. Student teachers will use teaching methods that encourage all learners to participate actively in the learning process, irrespective of their gender, disability, physical appearance, levels of performance, or social or economic background.

There is therefore need for high-quality teachers who are equipped to meet the needs of all learners in order to provide not only equal opportunities for

all, but also education for an inclusive society.

The competence based teacher education curriculum has included Special Needs and Inclusive Education as one of the subjects to be studied by all teacher trainees. This will provide the best means of creating a new generation of world class teachers who will ensure the successful implementation of inclusive policies and practices. This review will prepare teachers to engage with learner diversity arising from age, gender, ethnic, cultural or religious backgrounds, socio-economic status, disability or special educational need. Good practice in terms of inclusion is an important element of teacher training, both pre-service and in-service.

10.4 Teaching and Learning Resources

There is need to develop curriculum support materials to be used by the curriculum implementers and the student teachers. Teachers' Guides should be developed to facilitate the implementation of the Curriculum. These provide subject tutors with advice and guidance on effective strategies for teaching their subjects and for optimizing students' progress in terms of subject knowledge, skills, attitudes and competences. They offer valuable advice on assessment for learning, continuous assessment and the assessment of competences. Printed copies of curriculum framework and subject syllabi (all subjects) should be provided to all the colleges. All the resources mentioned cannot be of benefit without the human resource. There is need to have competent tutors to effectively implement the curriculum. They should be properly oriented before implementation. With the introduction of TMP in the colleges as a stand-alone subject there is need to assign a specific tutor to be in charge of the subject including the school attachment in third year. He/ She will be responsible for coordinating the professional aspect of teacher education in consultation with the other college staff.

10.5 Demonstration Schools

With the revised TTC Competence Based Curriculum there will be need for each college to have well equipped demonstration schools, having complete pre-primary and primary levels with adequate classrooms. They should also have qualified, competent and experienced teachers, who can effectively implement the competence based curriculum. The demonstration schools should be located near the colleges. The schools should be equipped with adequate teaching and learning resources for all subjects. They should double up as the model schools in the country. This will provide the student teachers with conducive environments for practice. The schools will also be used when training in-service teachers.

There should be a memorandum of understanding between the colleges and the demonstration schools to avoid inconveniences.

11. TTC CURRICULUM IMPLEMENTATION PLAN

11.1 Phasing In/ Phasing Out

This curriculum will be tried out for 3 Years starting 2019 to 2021. During this period data will be collected from the colleges to allow its evaluation. By addressing the eventual weaknesses and challenges, the final curriculum will be rolled out in 2022.

Table 8: Phasing in/Phasing out Implementation Strategy

The table below shows the implementation strategy in 3 years from 2019 to 2021:

Academic year	Which Curriculum to be used		
	Year 1	**Year 2**	**Year 3**
2019	REB revised version	Year 2 to continue with the UR-CE draft syllabi	Year 3 to continue with the UR-CE draft syllabi
2020	REB revised version	Year 2 REB revised version	Year 3 to continue with UR-CE draft syllabi
2021	REB revised version	Year 2 REB revised version	Year 3 REB revised version

11.2 Monitoring and evaluation

The implementation of the TTC curriculum will be closely monitored so as to get feedback and improvements done to specific areas before long. At agreed intervals the impact of the curriculum will be evaluated. Responsibility for monitoring and evaluation lies at every level of the education system from individual tutors through to the Ministry of Education.

The following principles apply to the monitoring framework for the implementation of the TTC curriculum:

- Monitoring indicators are to be collected and reported regularly, through existing structures: colleges, sector and district quality assurance or inspection units;

- The indicators will focus on learning and teaching methodology, assessment approaches, utilization of instructional materials and the intended impact on the overall learning process;

- The national department in charge of quality assurance or inspection will be responsible for the coordination of monitoring activities and ensuring regular evaluation of the monitoring reports;

- During the initial stages the focus of monitoring and evaluation will necessarily be based upon student teachers' and tutors' perceptions of the impact of the curriculum on learning and attitudes to learning. Once the curriculum has been in operation for a full cycle it will be possible to judge the impact of the curriculum by comparing outcomes using hard outcome measures.

Initially the focus will be on the extent to which the curriculum:

- engages the student teachers;
- presents all student teachers with an appropriate degree of challenge;
- motivates students to strive for higher levels of performance;
- increases student teachers' sense of responsibility;
- builds students' confidence in their learning skills and positive attitudes to learning.

The monitoring and evaluation will also focus on the extend to which:

- tutors feel they have the skills to deliver the new curriculum;
- students and tutors value the curriculum support materials.

GLOSSARY

Basic/Core Competences are the key or vital competences identified based on the expectations and aspirations of a country. They are the sum of skills needed to live in a contemporary knowledge society.

Competence is the ability to use an appropriate combination of knowledge, skills, attitudes and values to accomplish a particular task successfully. That is, the ability to apply learning with confidence in a range of situations.

Competence- Based Assessment is a process where a student is confronted with a complex situation relevant to his/her everyday life and asked to get a solution by applying what has been learnt (knowledge, skills, competence and attitude).

Competence-based curriculum is a curriculum designed to develop learners' competences and not only knowledge. It focuses on what learners can do. It is founded on learner-centered pedagogy and emphasizes on formative assessment.

Cross-Cutting Issues are important curriculum contents that do not belong to any one subject or learning area exclusively but which are best taught and learnt in a number of subjects.

Curriculum framework is a document that explains the philosophy within which the curriculum is developed / reviewed, implemented, and evaluated.

Curriculum is a broad concept which includes all planned activities and subjects which take place during the normal school day. It also includes after school planned co curricula activities such as sport, clubs and drama.

Exit Profile refers to the general learning outcomes expected at the end of each level of education

Exit Profile for a student teacher refers to the general learning outcomes a student teacher is expected to exhibit at the end of three years of teacher education.

Generic Competences are the competences which are transferrable and applicable to a range of subjects and situations including employment.