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Towards a Curriculum for Global Education Integration and Implementation in sub-Saharan Africa: An Analysis of Rwanda's Secondary School Curriculum

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Master's thesis submitted in partial fulfilment of the requirements for the degree of Master in
(European Interdisciplinary Master African Studies), supervised by Professor (Luís Antunes Grosso
Correia)

and by Doctor (Dalila Margarida Pinto Coelho).

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Dedication

I dedicate this work to my parents and siblings, who have taught me the value of seeking knowledge and wisdom, as well as their unwavering support and encouragement.

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Declaration of Honour

I hereby declare that I am the author of this dissertation, which has never been used in other course units or subjects at this or any other institution. All references to authors (statements, ideas, thoughts, quotes) have scrupulously met the applicable citation rules and are, therefore, referenced in the text and in the bibliographical references in accordance with the referencing rules. I am aware that plagiarism and self-plagiarism is an academic offense.

[Porto, 31st July, 2022]

[Abiud Maosa Bosire]

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Resumo

Como resultado do aumento da interligação e interdependência global, as gerações atuais e futuras enfrentam desafios globais complexos. Isto exige que as escolas e os sistemas educacionais forneçam aos/às estudantes competências de educação global para os/as preparar para enfrentarem os desafios atuais e futuros. Este estudo investigou a integração e implementação da educação global como parte do currículo no Ruanda. Além disso, este estudo procurou compreender os conhecimentos e a consciência de professores e professoras, tanto do currículo ruandês como da inclusão de questões globais na aprendizagem. O estudo utilizou um método misto de concepção de estudos de caso para dar uma descrição detalhada da educação global no Ruanda, utilizando tanto entrevistas a informantes-chave, análise de documentos e questionários como os principais métodos de recolha de dados. A amostragem intencional foi utilizada para selecionar quatro informantes-chave, enquanto a amostragem aleatória estratificada e a amostragem de conveniência foram utilizadas para selecionar 15 escolas secundárias e 208 professores/as, respetivamente. Os dados foram analisados utilizando tanto métodos qualitativos como quantitativos. O estudo concluiu que os conceitos de educação global sob a forma de questões transversais estavam presentes no currículo e nos manuais escolares. A investigação sugeriu também que os/as professores/as tinham uma compreensão limitada do currículo e estavam conscientes das questões globais, mas com diferentes capacidades para as discutir. Além disso, os/as professores/as apreciam o ensino de questões globais nas escolas, apesar de enfrentarem inúmeros desafios para o fazer. O estudo concluiu que a educação global está presente nos documentos de orientação da educação no Ruanda, o currículo, e os manuais escolares, no entanto, não determinariam a sua implementação efetiva através da aprendizagem nas escolas. Como resultado, para implementar eficazmente a educação global nas escolas ruandesas, os professores devem receber formação em educação global para ensinar questões globais.

Palavras-chave: educação global, currículo baseado em competências, Ruanda, ensino secundário, África Subsariana

Abstract

As a result of increased global interconnectedness and interdependence, current and future generations are destined to face complex global challenges. This necessitates that schools and educational systems provide students with global education competencies to prepare them to face current and future challenges. This study investigated the integration and implementation of global education as part of the curriculum in Rwanda. Furthermore, this study sought to understand teachers' knowledge and awareness of both the Rwandan curriculum and the inclusion of global issues in learning. The study employed a mixed method case study design to give a detailed account of global education in Rwanda, using key informant interviews, document analysis and questionnaires as the main methods of data collection. Purposive sampling was used to select four key informants, while stratified random sampling and convenience sampling were used to select 15 secondary schools and 208 teachers, respectively. Data was analysed using both qualitative and quantitative methods. The study found that global education concepts in the form of cross-cutting issues were present in the curriculum and school textbooks. The research also suggested that teachers had a limited understanding of the curriculum and were aware of global issues but with varying abilities to discuss them. Furthermore, teachers appreciate the teaching of global issues in schools, even though they face numerous challenges in doing so. The study concluded that even though global education-related concepts were present in the education guiding documents in Rwanda, the curriculum, and textbooks, it does not reflect in actual implementation in schools through learning. As a result, to effectively implement global education in Rwandan schools, teachers must receive global education training to teach global issues.

Keywords: global education, competence-based curriculum, Rwanda, secondary education, sub-Saharan Africa

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Glossary

Competence-Based Curriculum:

A curriculum that seeks to develop learners' critical thinking, creativity and innovativeness and focuses on research and problem-solving skills, communication, cooperation, interpersonal skills and lifelong competencies (REB, 2015).

Curriculum Framework:

This is a broad concept, however, in the case of Rwanda, this is the nation's guiding document indicating how the curriculum vision is translated into practice in school and reflected in learning (REB, 2015).

Global Education:

This is a contested concept, however, for this study, global education is the learning approach that incorporates learning about other people's cultures, geographies, histories, and current issues around the world. In addition, this approach should emphasise the interconnectedness between people and global regions and should open people's eyes to the realities of the world (Osler & Vincent, 2002).

Learner-Centred approach:

Teaching that values the interests of learners. The teacher is a facilitator, and there is a dialogue between the teacher and learners. Its aim is to engage students in learning and inquiry (Freire, 2005, p.87).

Teacher-Centred approach:

A more traditional system of teaching where a teacher just deposits their knowledge in the heads of learners. The teacher is assumed to be the ultimate authority in presenting the subject matter and there is no creation of knowledge or social development of students (Freire, 2005, p.12).

List of Abbreviations and Acronyms

AU	AFRICAN UNION
AUC	AFRICAN UNION COMMISSION
CBC	COMPETENCE-BASED CURRICULUM
CCGL	CONNECTING CLASSROOMS THROUGH GLOBAL LEARNING
CESA.....	CONTINENTAL EDUCATION STRATEGY FOR AFRICA
DE.....	DEVELOPMENT EDUCATION
DES	DEPARTMENT OF EDUCATION AND SKILLS
DOE	DISTRICT EDUCATION OFFICER
ESD	EDUCATION FOR SUSTAINABLE DEVELOPMENT
GCE	GLOBAL CITIZENSHIP EDUCATION
GE.....	GLOBAL EDUCATION
GENE	GLOBAL EDUCATION NETWORK EUROPE
GS.....	GENERAL SECONDARY
HEC.....	HIGHER EDUCATION COMMISSION
IDEA	IRISH DEVELOPMENT EDUCATION ASSOCIATION
REB	RWANDA BASIC EDUCATION BOARD
KBC	KNOWLEDGE-BASED CURRICULUM
MINEDUC	MINISTRY OF EDUCATION
NCST	NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY
SADC	SOUTHERN AFRICA DEVELOPMENT COMMUNITY
SD.....	SUSTAINABLE DEVELOPMENT
SDGS	SUSTAINABLE DEVELOPMENT GOALS
TTC	TEACHER TRAINING COLLEGE
TVET.....	TECHNICAL AND VOCATIONAL EDUCATION TRAINING
UNESCO	UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANISATION
UNICEF	UNITED NATIONS CHILDREN’S FUND

1. Introduction

Globalisation¹, has accelerated to greater heights in the twenty-first century, becoming a pivotal factor in the rapid social, political, environmental, and economic changes and development that are reshaping and reconfiguring the modern society we live in (Moloi, Gravett, & Petersen, 2009). Furthermore, the growing importance of globalisation in contemporary society has heightened cultural encounters and made diversity more visible (Inka & Niina, 2013). In fact, globalisation affects all aspects of human life, and no country is immune. Pandemics, racism, social justice, extreme poverty and inequality, migration, population growth and demographic shifts, and the environment and climate change are all issues that must be addressed (Chapman & Aspin, 2013). As a result, today's educators and educational systems must respond in order to ensure a better future.

As a pedagogical or educational approach, global education promotes multiple perspectives and builds a learner-centred approach aiming for a critical awareness of global challenges. Scheunpflug (2008) avers that global education is an educational approach necessary to prepare people to live in a highly globalised society. Furthermore, this approach will prepare future citizens to respond to interconnectedness's challenges, take responsibility, and advocate for social solidarity (Scheunpflug, 2008). Through this educational process, people will acquire the capacity and ability to understand problems of the international system. This understanding of global problems will in turn contribute to a global perspective, as individuals develop an awareness of global interconnectedness and recognise diversity and similarities of human values and beliefs (Wolansky, 2016). Furthermore, global education focuses on complex, rapidly changing global issues that have long-term implications for all of humanity. As a result, it is critical for students worldwide to be aware of these issues and to consider them on a local and global scale.

Global education is not a new or additional curriculum subject; rather, it is a set of goals that can be integrated throughout the curriculum and taught in various subjects. This approach will help learners and teachers understand the relationship between what they learn in school and what happens in the real world (Reimers, 2020). Reimers (2020) further emphasises that global education, as an educational practice, provides learners with the opportunity to develop global competencies that will assist them in

¹ In this study, Globalisation refers to how the world is increasingly interconnected and interdependent. This is because of economic, social, and technological relationships which have impacted on social, political, and cultural life across countries (Gor, 2012, p. 396).

living and functioning in a highly interconnected and interdependent world. As one of the major promoters of global education, UNESCO (UNESCO, 2021) points out that learners can become active supporters of global social issues if they are taught about these issues and challenges.

The aforementioned global challenges necessitate collective solutions from individuals, communities, and governments rather than individual solutions (Tasneem, 2005; Altun, 2017). Therefore, to address these global challenges, the world needs broad knowledge and understanding that extends beyond our national borders, cultures, and languages (Capalbo, 2013; Pike & Selby, 2001 cited in Sharar, 2021). Hence, there is an undeniable need for a new educational dimension that will foster citizens' critical thinking and capacity to reflect on the realities around them while also developing understanding and sensitivity to these global issues (Youth Forum Jeunesse, 2008).

The relevance of global education is linked to current and emerging political, economic, technological, and cultural trends. Furthermore, as Svitačová and Mravcová (2014) articulate global education responds to global challenges, and through it, individuals can acquire knowledge to decipher developmental issues that cut across local and global realms. Similarly, Altun (2017) states that global education enables individuals to acquire knowledge to reflect on issues that affect societies both locally and globally. Additionally, Tani, Houtsonen, & Särkelä (2018) opine that this global understanding creates interest in global issues leading to responsible actions to tackle these global issues in order to achieve sustainable development.

Leaders around the world have recognised the importance of global education in addressing global challenges and have consistently advocated for learners to acquire global competencies and skills (Rizvi & Lingard, 2009; Colvin & Edwards, 2018). According to PISA (2018) and Asia Society (2022), the global competencies learners should acquire include knowledge and skills to actively navigate the 21st-century world. One possible action framework for these ever-increasing global challenges is the active and conscious implementation of Sustainable Development Goals (SDGs), particularly SDG 4.7 (Webb et al., 2019). SDG 4.7 emphasises the need for individuals and nations to act decisively, as well as the importance of global education and lifelong learning, stating that:

By 2030, [to] ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity

and of culture's contribution to sustainable development (UNESCO, 2016, p.287).

The setting up of the SDGs in 2015, and the Millennium Development Goals (MDGs) that preceded them in 2000, illustrate the recognition of the complexities of globalisation and global development challenges and need for transformative education (Webb et al., 2019). According to Mansori (2019), by using SDGs, governments would, through schools, equip learners with the required knowledge, skills, and competencies to live, work and participate in a highly globalised world. Despite widespread adoption and implementation of the SDGs, many countries, particularly in Africa, lag behind in their implementation of the goals (Begashaw, 2019). This contrasts with the progress made by countries in the global north. Europe, in particular, has taken the lead in implementing global education and related approaches such as citizenship education through a variety of stakeholders including schools, non-governmental organisations, and civil society organisations (Souza, 2012; Bullivant, 2014; Karvanková, Popjakova, & Kovariková, 2015). This GCE uptake and implementation in Europe, according to Manion and Weber (2018), is in response to the current task for educational systems of developing a curriculum that will instil knowledge, skills, and attitudes to prepare learners to make informed and ethical decisions now and in the future.

The demand for the current and future generations to possess skills and ability to work in multicultural settings and provide solutions to global challenges (DeMello, 2011), has led to a paradigm shift on the role of schools in our society (Goren & Yemini, 2016). This is a turn away for many countries where educational discourses focused on their own cultural, economic, and political discussions in relation to global trends. In most cases, external narratives, if ever-present, were limited to a smaller audience (Lambert & Morgan, 2010). According to Bourn (2020), this shift has in the last three decades, especially in Europe and North America, seen increasing efforts to promote and implement a learning approach that recognises a global outlook of the interconnected world and existing inequalities. For example, in North America, the emphasis has been on encouraging learners to broaden their learning horizons to a global level, whereas in the United Kingdom, it has been through curricula initiatives promoting global awareness and participatory learning approaches (Bourn, 2020, p.281)

As countries in the global north continue to implement the global learning approach, questions linger on Africa's efforts and progress. These concerns about sub-Saharan Africa's preparedness to address global challenges and whether learners are learning and acquiring skills for life and work in a highly interconnected (Leicht, Heiss, & Byun, 2018), are further compounded by the large number of countries yet to attain universal primary education in Africa (Mijgaard & Mingat, 2012). Scholars such as Ndille

(2020) argues that this slow uptake and implementation of globally oriented educational ideologies is due to the origins of these global ideologies, and many view them as Euro-North America generated while Africa and the Global South, in general, are the consumers. According to Ndille, "unless the Global South finds representation in the generation of these ideologies, the well-thought-out and well-intended global ideologies will continue to be seen as a perpetuation of the entrapment of the Global South, Sub-Saharan Africa included" (Ndille, 2020, p.203).

Despite the slow pace of implementation in Sub-Saharan Africa, some countries have made concerted efforts to establish global education. The Southern African Development Community (SADC) member states, for example, have endorsed lifelong learning as an important component of achieving global goals. This is evident in the region's efforts to develop SADC regional and national qualifications for the region's citizens' long-term learning (Maruatona, 2021). Other African countries have also made significant progress, though much remains to be done. According to UNESCO's lifelong learning report for Kenya, Namibia, Rwanda, and Tanzania, there is a need for a clear understanding and application of global education and lifelong learning in this region (UNESCO, 2018).

Cai and Ni (2011) and Olibie (2013) observe that another way to address global challenges has been through curricula reforms and changes from traditional and nationalistic oriented curricula to globally oriented curricula. These reforms are aimed at providing new knowledge and skills for citizens to live effectively in our globalised society. This shift in learning models allows learners acquisition of problem-solving skills and critical thinking and prepares learners to apply the same in real-life scenarios (Currie & Moretti 2003). Cunningham (2018) argues that these reforms have witnessed a huge movement from traditional curricula that were academic and teacher-centred to competence(y) or out-come based curricula.

These curricula reforms are not new to sub-Saharan Africa (Chisholm & Leyendecker, 2009) as countries move from knowledge-based curriculum to competence(y) based curriculum (CBC) as a step towards addressing global challenges. Countries such as South Africa, Nigeria, Tanzania, Zambia, Namibia, Cameroon, Kenya, and Rwanda have in the past reformed their curricula (Muneja, 2015; REB, 2015; Muraraneza, Mitshall & Mukamana, 2017; Cheptoo & Ramadas, 2019; Kabombwe & Mulenga, 2019). Interestingly, all these countries changed their curricula for various national reasons and needs. For instance, Cameroon adopted the CBC curriculum to develop learners' capabilities to solve social and economic challenges in contemporary societies (Cheptoo & Ramadas, 2019).

In Tanzania, the change to CBC was a result of the deficiency arising in training that affected the quality of graduates (Mwakabungu, Huang, & Nkya, 2021). For Kenya, the adoption of the Competency-Based Curriculum (CBC) in 2017 was based on the need to promote individual wellbeing, promote and nurture talent and the acquisition of skills and capabilities to contribute meaningfully to the economy and society at large (Akala, 2021). Rwanda adopted the Competence-Based Curriculum in 2015 to ensure learners achieve their full potential in terms of appropriate knowledge, skills, values, and attitudes to integrate into society and exploit employment opportunities (REB, 2015; Mbaushimana & Kuboja, 2016; REB, 2015b, as cited in Kizito & Hashitukya, 2018).

Even though these reforms across Africa were meant to address global issues, the reasons for reform reflect nationalistic needs. Over and above that, it remains unclear how global education or global learning is conceptualised and implemented through this CBC curriculum in Rwanda. Therefore, this informs the current study using CBC in Rwanda as the unit of analysis to explore the framing, conceptualisation, and implementation of global education concepts as part of the curriculum in Rwanda's secondary schools. As the implementation of a curriculum requires seamless coordination and effort from all stakeholders, the study also incorporated a teachers' perspective as the critical actors (Stabback, 2016) in the implementation of education concepts. In addition, the teacher's perspective was important as reforms in Africa are top-level decided and assume a top-down approach (Molapo & Pillay, 2018). Furthermore, Walshaw (2012), Guerriero (2014) and Ab Kadir (2016) opine that teachers' general pedagogical knowledge and awareness are important to understanding the quality and effectiveness of teaching and implementation of curriculum contents in schools. In this context, the study considered teachers' knowledge and perceptions of the CBC curriculum and global education-related concepts.

1.1. The scope and Significance of the study

The current study was conducted with an exploratory purpose of understanding whether global education is integrated and implemented in Rwandan secondary schools as part of the Competence-Based Curriculum. This scope was based on literature highlighting the number of countries reforming and changing their curriculum to a competence(y) based curriculum that focuses on creating sensitive and well-equipped citizens for the global scene, yet little documented evidence exists on the extent of global education implementation through these new curricula. In addition, the study focused on the case of Rwanda since it is among the latest countries to introduce the CBC curriculum in 2016, and also Rwanda's remarkable recovery post the 1994 genocide, with education as a major unifying factor.

Moreover, my knowledge of the East African region and Rwanda, particularly, informed the decision for Rwanda as the study location. Methodologically, this was a mixed method case study as the researcher had the intention to not only present descriptively present the issue under study but also provide a detailed account of the research question through the collection of in-depth data from the parts, hence the adoption of both quantitative and qualitative methods. The study adopted a multi-fold approach to data collection, utilising document analysis, teacher surveys and key informant interviews to have a broader and richer understanding of the CBC curriculum in Rwanda and the inclusion of global education as part of teaching in secondary schools. Monrad (2013) argues that the use of multiple approaches in research is complementary and avoids biases and blind spots that might occur if a study relies on a single method. The three tools that were used to collect different but complementary data that were later interweaved for well-grounded results. Practically, I expected that the use of these multiple methods would increase the chances of collecting robust data to understand the integration and implementation of global education in Rwandan secondary schools. Using this case study in Rwanda, this study aimed to contribute to the existing debate on Africa's role and contribution toward the attainment of Agenda 2030 through the integration and implementation of global education in secondary schools.

Global education is not a new concept, and its acceptance has grown over time. Furthermore, there is multistakeholder agreement and awareness of global challenges, as well as the need for a shift toward a more sustainable approach supported by globally oriented education systems (Zahabioun et al., 2013). On this basis, this study's first goal was to raise awareness about the state of global education and how it is conceptualised and perceived in the Global South, with Rwanda serving as the unit of analysis. The study also sought to document the direction of recent curriculum reforms in Africa in order to determine whether or not they were globally conscious.

Second, this study contributes to existing knowledge and literature on global education in Sub-Saharan African school settings by utilising the existing curriculum. As a result, the study aimed to benefit and provide recommendations for Rwanda, the Sub-Saharan Africa region, and other states and stakeholders thinking about implementing global education through the school curriculum. The study findings can be utilised by governments and other education stakeholders to identify educational gaps, particularly in educating for the twenty-first century and to implement effective curriculum reform strategies in order to achieve the sustainable development agenda. This is in full recognition that solutions for the twenty-first-century challenges are not the exclusive domain of any single entity.

Lastly, the study is useful for researchers and scholars who desire to investigate further and generate additional knowledge to fill identified knowledge gaps related to the implementation of global education not only in the global south but globally.

1.2. Dissertation organisation

In this initial chapter, a discussion on the study background on global education and reforms towards solving global challenges in Africa is provided. The chapter lays a background on challenges and realities due to globalisation and the collective effort needed to solve these challenges. The preliminary literature review indicated that countries in Europe and North America have taken prominence in the implementation of global education in schools supported by both government and non-governmental organisations. It was seen that some countries in sub-Saharan Africa have initiated projects, mainly through curriculum reforms leading to the adoption of the CBC curriculum by many African states as a departure to solving the global challenges of our time. After that, the scope of the study was discussed, indicating the case of CBC in Rwanda and the need to conduct a study to understand the presence and conceptualisation of global education in the secondary school curriculum in Rwanda. Moreover, the significance of the study was discussed and established the relevance of this study in contributing to the existing discourse on global education in schools. The second chapter reviews the literature on global education from a global perspective and presents the theoretical and conceptual frameworks for the study. The theoretical framework identifies perspectives providing the foundation that informed this study: the Sustainable Development Goal 4.7 and the global perspective as presented by Hanvey in 1976 and Kniep in 1986. The third chapter provides background information on the study area as well as the rationale for conducting the research in Rwanda. Finally, the chapter explores global education in Rwanda and presents literature on existing initiatives in the country that promote global education. The fourth chapter discusses the methodology and rationale for conducting the study, data gathering procedures and tools, and data analysis methods. Furthermore, the chapter discusses the study's ethical considerations. The fifth chapter presents findings from document analysis of the CBC curriculum and secondary school textbooks, as well as data from key informant interviews. Furthermore, cross-cutting issues in the curriculum are presented and discussed in relation to the theoretical framework of the study. The sixth chapter presents data from teacher surveys administered in the 15 selected for this study, in which 208 teachers participated. The goal of this chapter was to establish the presence and framing of global in the CBC curriculum, as well as teachers' knowledge of both the curriculum and global issues. Chapter seven concludes the thesis by restating the study's aim, which was to investigate how

global education has been integrated and implemented in Rwanda through the CBC curriculum at the secondary level. Furthermore, it summarises the findings and draws parallels and contradictions with other studies. Finally, pertinent recommendations for the study are made, as well as suggestions for future research on global education in Sub-Saharan Africa are presented.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter provides an overview of global education. The chapter begins with a historical overview of global education before presenting relevant global education initiatives for this study, as well as the concept and definition of global education. This is followed by a discussion on global education in schools and, lastly, the theoretical and conceptual frameworks.

2.1. Global Education: a trans-historical overview

Following the end of the Second World War and the creation of international organisations such as the UN and UNESCO, there was a need among policymakers to promote a form of international education that encouraged mutual learning around the world. Despite the fact that the cold war hampered international education, other themes such as intercultural understanding, peace education, human rights education, and learning about other countries gained popularity in Western Europe and North America (UNESCO, 2017). As a result, in the 1970s, global education emerged across the United Kingdom and the United States (Bourn, 2020).

This idea of alternatives to teaching international issues by UNESCO is echoed in the Universal Declaration of Human Rights adopted by the international community in 1948 (Shea, 2013). Its focus was to promote justice, equity, and dignity for all humans. The declaration states that:

“Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. Furthermore, it shall promote understanding, tolerance, and friendship among all nations, racial or religious groups and shall further the activities of the United Nations for the maintenance of peace”
(Unicef Canada, 2007, p. 7).

Scheunpflug and Asbrand (2006) argue that this earlier concept is directly related to development education and third-world pedagogy used to support colonial politics in schools and society during the colonial era. They further opine that the pedagogy started to evolve because of the Biafra crisis, the Cahora-Bassa Dam issue in Mozambique and the war in Vietnam, leading to a development-political kind of debate. These were some of the global events that sparked the global education discourse in favour of long-term peace and greater intercultural understanding among global actors (Tye, 2009).

Initially, this discourse was not reflected in public school curricula because most countries maintained a curriculum that was primarily national in nature. This approach, however, shifted slightly in the 1960s as

international non-governmental organisations expanded their public engagement efforts in various countries. These non-governmental organisations (NGOs) helped to establish the field of development education, which was first implemented in schools across Europe and North America in collaboration with UNICEF and other UN agencies (Heyneman & Lee, 2016). Around the same time, the peace education movement, which like development education, was hugely grounded on Paulo Freire's critical pedagogy idea sprung up (Bartlett, 2008). Further development occurred in the 1970s and 1980s, as a group of educators began to systematise and incorporate these new approaches to teaching international issues (Heyneman & Lee, 2016).

These two concepts, "development education" and "peace education," were linked with the UN's "education for international understanding" and "human rights," and the emphasis was on a child-centred approach and effective learning (Fujikane, 2003). Later, ideas about environmental sustainability supplemented ideas about social justice and intercultural understanding within societies (Pike, 2000; Osler, 2002). Focusing on the United States of America, Tye (2009) describes the 1980s and 1990s as the "golden years of global education" Tye argued in his report "How the United States Prepares for Its Future" that there are efforts to raise awareness of the need for a globally oriented education.

The term "global education" first appeared in the 1960s in the United States and in the 1970s in several European countries, including the United Kingdom and the Nordic countries, while in Japan, it was known as "world studies," "global perspectives in education," or "world-centred education" (Kirkwood, 2001; Hicks, 2003; Davies, 2006 as cited in Coelho, Caramelo, & Menezes, 2018). According to Bourn, global education emerged in "school education that strongly emphasises on child-centred and global awareness approaches for the development of attitudes and skills, with themes like education for international understanding and intercultural learning" (Coelho, Caramelo, & Menezes, 2018, p. 106).

Scholars such as Kenneth Tye, James Becker, Robert Hanvey, Jan Tucker and Merry Merryfield in the United States played a significant role in promoting GE through their publications and activities (Bourn, 2020). Their common goal was to encourage learning that broadened horizons and understanding of different perspectives (Hanvey, 1976, as cited in Bourn, 2020, p. 12). In the UK, Robin Richardson, Graham Pike and David Selby developed various curriculum initiatives that focused on a sense of world-mindedness and a learner-centred approach. Similar trends were witnessed elsewhere in Europe and in other countries such as Japan, Canada, and Australia in the 1970s and 1980s. In most of these countries 'education for international understanding or intercultural learning' was used (Ishii, 2003, as cited in

Bourn, 2020, p.12) opines that GE gained further popularity in the twenty-first century, in the process replacing 'development education' as people recognised the impacts of globalisation on international development processes. In most cases, the concept has been reconfigured as "global citizenship education", which in its implementation reflects the concept of global education. This new focus confirms its direct connection with social justice and not just international awareness (Davies, 2006) and a reaction to global development to overcome inequality through social justice (Scheunpflug & Asbrand, 2006).

2.2. Initiatives for Global Education

2.2.1. Maastricht Declaration

Because of Europe's high political and economic integration, there is increased movement of people and goods across Europe, necessitating the need for education that emphasises understanding others and global linkages that connect not only people but also places (Shea, 2013). For a long time, the global education movement debate has been at the heart of Europe's educational reforms. Through the global education conference in 2002, the Council of Europe's North-South Centre developed the Maastricht Declaration to spearhead curriculum reforms among European Union member countries. According to the Maastricht declaration, global education was defined "as the framework to open people's eyes and minds to the realities of the contemporary world and awaken them to bring about a world of greater justice, equity and human rights for all" (p. 67)

The declaration emphasised the critical importance of global education and laid the groundwork for Europe to focus on sustainable development, human rights, and gender issues in order to chart a course toward a secure and sustainable future. Aside from emphasising learning content, the declaration also emphasised global education methodology by encouraging active learning and participation by both learners and educators. Furthermore, the declaration emphasised diversity and respect for others, reinforcing the importance of allowing students to make their own choices locally while also considering the global context in which they find themselves (p.67). The declaration identified seven key pillars for global education in Europe (p.68 namely:

- i. An agreed framework on the importance of global education in Europe to global agendas for poverty eradication, global social cohesion, and sustainable development.
- ii. Political statements and a consensus on the importance of global education on achieving the agreed goals in global poverty eradication and sustainable development.
- iii. The adoption of the global education concept as a useful umbrella term.

- iv. The commitment by global stakeholders to establish a “South Caucus on Global Education” and to engage in further dialogue between the Global North and Global South.
- v. The development of a rights-based approach to global education.
- vi. The establishment of a European Global Education Review Process.
- vii. Focus on an ultimate quality benchmark and people's access to quality Global Education.

The Maastricht Declaration, widely regarded as a pioneering document in global education, defines global education as not only what is taught in classrooms but also how global aspects are taught and shared with learners. This highlighted the learner-centred global education pedagogical approach. As a result, the declaration encouraged the development and implementation of international cooperation projects in Europe that provided a framework for global education and sustainable development education (O'Loughlin & Wegimont, 2013).

2.2.2. Global Education First Initiative

The United Nations Global Education First Initiative notes that “It is not enough for education to produce citizens who are only able to read, write and count. The initiative further posits that education should fulfil its central role in helping people worldwide to forge more just, peaceful, tolerant, and inclusive societies” (United Nations, 2012, p.20) In this call, the UN is calling for the inclusion of global education in education systems to provide a clear understanding, skills, and values learners need to cooperate in resolving the interconnected challenges of the 21st century, including climate change, conflict, poverty, hunger, and issues of equity and sustainability.

2.2.3. Sustainable Development Goals

In 2015, the United Nations (UN) adopted 17 Sustainable Development Goals (SDGs) with targets and indicators to measure the intended outcomes of each goal. Two years later, in 2017, the UN General Assembly further adopted a global framework to guide and monitor the implementation of each goal by the member states (Leite, 2021). Therefore, as part of the 2030 Sustainable Development Agenda, the 17 SGDS aimed at improving life in all dimensions and aspects (Prieto-Jiménez et al., 2021).

The formulation of the SDGs in 2015 was in response to the realisation that sustainability, a key objective of the UN Millennium Development Goals formulated in 2000 was not fully achieved. Hence in 2015 sustainability was placed at the centre, giving the SDGs formulation a more holistic dimension of global development within the 2030 Agenda framework (Prieto-Jiménez et al., 2021).

The emphasis in this framework is on a global sustainable future and focuses on environmental issues, economic concerns, and the importance of achieving social well-being, raising critical citizen awareness, and achieving equity, justice, and quality of life for all citizens (Sachs, 2015). As a result of this more interconnected approach, there is a greater need for learning transformations that consider environmental, economic, socio-educational, and other perspectives in a more interactive manner (Loorback, Frantzeskaki, & Avelino, 2017). Therefore, the only way to achieve this is through an inclusive and critical education channelled through the SDGs. SDG 4.7 is particularly relevant in this view as it establishes the need to educate learners in both theoretical and practical concepts that promote sustainable development and sustainable lifestyles that will lead to the realisation of a sustainable future (UN, 2015).

2.2.4. Agenda 2063 and the Continental Education Strategy for Africa

Carney (2008) argues that even though educational policies are drawn based on critical traditions shaping a region, they should draw attention to meta-discourses that frame the regional agendas in their regions of application. Africa's efforts to promote global education are well documented through the African Union's Agenda 2063 document (AUC, 2015), which sets a pan-African vision of transformative sustainable development and the Continental Education Strategy for Africa (CESA) established in 2015 for the period 2016 to 2025 (AU, 2015). These two strategies, particularly the CESA strategy, are widely regarded as frameworks for the development of education on the continent. They were created to help regionalise the SDGs adopted in 2015 to fit the African regional context and to address Africa's pertinent issues as the continent strives to achieve the 2030 Agenda. As a result, we can argue that in their application, they provide frameworks for innovative curricula and interventions through formal and non-formal education.

Thanks to the adoption of the sustainable development goals in 2015, global education has achieved a hegemonic status in global discourses around the world (Tikly, 2019). As illustrated in the Nairobi Declaration and the Call for Action on Education in 2018 (African Union, 2018), which aimed at bridging continental and global education frameworks for the Africa we want, the main agenda was to enable African citizens to be effective change agents for the continent's sustainable development. Therefore, to achieve this agenda, the African Union Commission (AUC) commissioned an elaborate and comprehensive 10-year Continental Education Strategy for Africa (CESA 16-25) to aid in its implementation (UNESCO, 2017). Through CESA and Agenda 2063, the African Union envisioned an integrated, prosperous, and

peaceful Africa, driven by the citizens themselves while being conscious of the international perspectives. Culturally, Agenda 2063 aspires for an Africa that has a strong cultural identity, a common and shared heritage, shared values, and ethics (AUC, 2015).

Furthermore, CESA provides continuity on the central role of education in Agenda 2063 by establishing 12 strategic objectives aimed at revitalising the teaching profession, expanding access to quality education for all, harnessing ICT capacity, encouraging processes of national and regional integration, accelerating gender parity and equity, improving adult and youth literacy, strengthening science and mathematics education, and expanding technical and vocational education (Tikly, 2019). These priorities contained in both Agenda 2063 and in CESA are all related to global discourses on sustainable development (SD), education for sustainable development (ESD) and GE in general.

2.3. The Concept of Global Education

As the world continues to face complex, critical, and interconnected challenges, global education is an idea whose time has come, and it is apparent it has become a core part of quality education in the 21st century (Rybak, 2013). Even with these calls on the importance and need for global education inclusion in education and schools, there is still a longstanding debate on how best to define global education and what it means to different people in different parts of the world (Reynolds, 2015). In fact, Merryfield opines that global education is one of the most ambiguous innovations in education today (as cited in Brynes, 1997, p.96). Scholars such as Oxley and Morris (2013) and Reynolds (2015) avers that in different contexts and places, global education is entwined and used interchangeably with other terms such as global citizenship education, development education, human rights education, education for cosmopolitan citizenship, peace education, multicultural education, and international education. In most cases, the terms are understood differently within and across contexts (Marshall, 2007, as cited in Oxley & Morris, 2013, p. 302).

Broadly, global education is conceptualised as a way to create knowledge and awareness and to provide training for responsible citizenship under a perspective of lifelong development (Morris, 1977, as cited in Altun, 2017). In some cases, it has broadly been conceptualised as a pedagogical concept aimed at addressing the realities of today's world by enabling the development of knowledge and skills necessary to create a secure, just, and sustainable world (Cabezudo et al., 2012). Similarly, Gal (2005) argued that a global education perspective does not only focus on problems and issues which cut across national boundaries and the interconnectedness of cultural, environmental, economic, political, and technological

systems, but it also endeavours to cultivate in learners a cross-cultural understanding leading to the development of the “perspective-taking” skill. Therefore, by improving their skills and competencies, learners can see life from other people’s perspectives and understand their challenges.

However, in numerous cases and for applicability, Global Education has been modified to fit particular contexts. In Europe, for instance, GE was adopted by the Europe-wide Global Education Congress in 2002 and published in the Maastricht Declaration, mentioned previously, whose main theme was to achieve the Millennium Development Goals (2000-2015) through Learning for Sustainability.

Recognising the importance of Global Education and its evolution over the last 20 years, as well as political, social, and educational changes, Global Education Network Europe (GENE), a network of governmental bodies and agencies in education and development, is currently working on a new European Declaration on Global Education to develop a long-term vision that will encompass a broader and deeper political support for the period up to 2050. This new declaration will be adopted during a Global Education Conference scheduled for November 2022 in Dublin, Ireland (Global Education Network Europe, 2022).

Thus, this educational perspective arises from the fact that people live and interact in a globalised world. Therefore, to enhance individual participation in this globalised society, education should be able to instil in learners’ competencies to reflect and contribute to the complex set of social, environmental, political, and economic issues (Sá & Mesquita, 2020). This means global education is a lifelong learning process that will enable individuals to respect diversity, develop critical thinking and the capacity to actively participate in global affairs. Furthermore, this pedagogical approach is not just a single subject but an approach that is cross-cutting and touches on all dimensions of education and learning (Inka & Niina, 2013).

Another definition and conceptualisation of global education is the introduction of a critical global education concept. This critical global education perspective calls for a curriculum that fosters critical dialogue and action on global issues among students (Subedi, 2010). This school of thought argues that the incorporation of historical factors will help learners understand unequal global relationships and deal with issues beyond the nation-state and enhance their reflective ethical perspectives. Swift (1980, p.46) defines this curriculum as one that will involve students in cultural, scientific, ecological, and economic issues that affect everyone.

Despite the lack of consensus on the definition and description of global education, available frameworks agree on many of its characteristics. This includes understanding the interconnected world, respect for cultures and perspectives and helping learners understand global complexities (Inka & Niina, 2013; Fricke,

Gathercole, & Skinner, 2015; Pashby & Andreotti, 2015). Generally, global education is used with values attached to it. This includes concepts like human rights, sustainability, equity, conflict resolution and social justice, citizenship, intercultural understanding, and peace (Bourn, 2014; Reynolds, 2015).

2.4. Global Education in Schools

The need to ensure learners acquire skills and competencies to live in a highly globalised world has been widely acknowledged (Bourn, 2011; UNESCO, 2013, as cited in MacCallum, Proctor, & Hoad, 2020). Several European countries have made progress in incorporating these ideas for global education and global learning. For example, in Germany, the framework for implementing global education in schools has been in place since 2007. Initially implemented as a Standing Conference of the Education Ministries of the Federal States (KMK) and (BMZ), the framework was expanded in 2015 to cover all major subjects in schools with an emphasis on developing a whole-school approach toward global education and teacher education (Reddy, 2016). The United Kingdom until 2010, supported the incorporation of global education concepts in schools through its focus on education for a global dimension². Post-2013, this initiative was changed to the Global Learning programme that supports teachers through a school-led network and provision of tools to embed global learning through the curriculum for learners between eight and fourteen years old (Bourn, Hunt, Blum, & Lawson 2016). Still, in the UK context Harrison (2008) stated that Oxfam Uk was among the first non-governmental organisations to develop and promote global education in schools. This was in reference to Oxfam's global citizenship framework developed in 2006 and later revised in 2015, whose aim was to champion equity, sustainability and for people to take responsibility for their own actions in society (Oxfam, 2015a).

Other countries in Europe with programs to incorporate and promote global education in schools include the Czech Republic, Portugal, Spain and Ireland. The Czech Republic has, since 1989 incorporated global education ideas into Czech schools (Karvánková, Popjaková, & Kovaríková, 2015). In Portugal, for example, the history of Development Education and Global Education dates back to the 1980s through the actions and activities of NGOs, students and some progressive Catholic groups that supported liberation movements and denounced human rights violations taking place at countries under colonial domination (Coelho, Caramelo, & Menezes, 2019; O'Loughlin & Wegimont, 2014). Even though development education has existed in Spain since the 1940s, within charity work corridors, it was not until the year

² Its success was based on eight key concepts that include global citizenship, conflict resolution, social justice and perceptions, sustainable development, interdependence, human rights, and diversity.

2000 that it started appearing in scholarly work. Lacking specific implementation policy in the past (Argibay & Celorio, 2005, as cited in Santamaría-Cardaba & Lourenço, 2021), Spain has had significant progress in the last decades in legislation, research and educational practice. This is in addition to the work done by development NGOs in implementing DE and the national DE policy involving ministries of education and the formal education sector (Calvo, 2020). In Ireland, organisations such as Irish Aid, the Department of Education and Skills (DES), the Irish Development Education Association (IDEA) and Dóchas are all involved in supporting and facilitating global education and development education in schools (Global Education Network Europe, 2015, p.24).

The British Council Connecting Classrooms through Global Learning (CCGL) is one inter-continental program connecting learners and teachers between the UK and global south countries to work on collaborative projects related to the UN's SDGs. Teachers participating in this program are required to implement the core skills such as critical thinking and problem-solving in their teaching and to facilitate their students' personal global learning (Morrison, 2020). Similarly, UNESCO, after the U.N Secretary General's declaration in 2012 prioritising the implementation of global citizenship through education, has been promoting this concept in different parts of the (Whiteford, 2014, p.748). In its programs, UNESCO defines global citizenship "as a sense of belonging to a broader community and common humanity that emphasizes political, social and cultural interdependency and interconnectedness between local, national and the global perspectives" (UNESCO, 2015, pp. 13-14). This is reflected in UNESCO's global citizenship supporting documents namely; a review of the role of global citizenship education in preparing learners for the twenty-first century and a guiding document to assist member states in integrating global citizenship education into their education systems (UNESCO, 2014a; UNESCO, 2015).

In an analysis on the conceptualisation of GCE in Dutch secondary education, Duarte and Robinson-Jones (2022, p.1) noted that there even though liberal orientations dominated GCE conceptualisations, there were traces of critical, liberal critical, and neoliberal orientations. The dominant liberal orientations pivoted around political and moral themes. On the other hand, Shetty (2016) found that Arts teachers in India demonstrated greater global awareness than Science teachers. However, Shetty points out that both groups of teachers had a low level of global centrism overall, emphasising the need for teachers to consider global good rather than only national contexts in their teaching.

Mhlauli (2014) investigated the teaching of world-mindedness in Social Studies classrooms in Botswana. Teachers observed that teaching of the world was from a *Motswana* perspective and that teaching of

Botswana was prioritised over global issues. Despite the inclusion of global issues in the curriculum, their reflection in classrooms has yet to be realised in Botswana.

In another sub-Saharan Africa context, MacCallum, Proctor and Hoad (2020) reported on a project in Zanzibar by Sazani Associates, a UK-based non-governmental organisation, in order to establish the organisation's integration of global learning into the curriculum as a way to build critical-thinking skills among pupils. Their findings indicated that the Sazani, through its curriculum materials and topic guides, relates to the Zanzibar realities besides its promotion of critical understanding of global pressures. Furthermore, the project fosters global learning as it encourages the development of cognitive skills and the capability to make informed social and political choices.

Tsegay and Bekoe (2020) conducted a study on how Global Citizenship Education (GCE) and teacher education in Africa relate to educational policies, course content and pedagogical practices. In reference to some African countries such as Eritrea, Kenya, Somalia, Liberia, and Rwanda, they concluded that the inclusion of GCE in many of these countries' education systems is vague and mainly associated with the political systems in these countries (p. 155). According to Akkari (2018), global education and its concepts, such as GCE, can be used to overcome tensions related to national citizenship, such as in Africa, where social, political, and ethnic tensions cause challenges to national citizenship. In support of this line of thought, teachers and students in Liberia indicated a few global ties while overwhelmingly associating citizenship with the Nation-State (Quaynor, 2015). However, research indicates that efforts are being made in Africa to promote global education (citizenship education), as seen in the case of Francophone West African States. For example, research conducted in Mali found that any type of education (whether informal or Islamic schooling) is important in empowering citizens as democratic agents (Bleck, 2015, as cited in Lauwerier, 2020). In Senegal, Lauwerier (2020) found that gaps exist between what the curriculum suggests for learners to achieve and the actual classroom practices.

2.5. Theoretical Framework

A review of the literature revealed two theoretical models that were used to study the conceptualisation and implementation of global education and global issues: Hanvey's Five-Dimensional Model and Kniep's 1986 model for Global Education. These theoretical models were chosen for this study because they reflected a global perspective, and they are discussed below.

2.5.1. Hanvey's Five Dimensional Model

This model was developed and proposed by Robert Hanvey in his 1976 work on "An Attainable Global Perspective". Even though Hanvey wrote explicitly for an American audience of teachers, reminding them that Americans' lives, actions, and decisions were inevitably connected to other places, the model applies to the current efforts to ensure schools and learners embrace a global approach to learning.

In this study, Hanvey's five-dimensional model offers a platform to understand the concept of global education and its incorporation in the curriculum. Through this attainable global perspective, Hanvey proposed five dimensions through which learners will achieve a global view and perspective of issues. From a global perspective, Hanvey defined education as a learning approach which enhances individuals' ability to understand their condition in society and improves their ability to make effective judgement (Klein et al., 2014, p.19). In explaining the five dimensions, Hanvey reiterated that no individual had equal ability to possess all the five dimensions, further stating that the capacities can only be enhanced through teaching the global perspective in school. According to Hanvey, schooling and learning improve how learners view the society around them. By situating the global perspective within school and education, Hanvey's arguments cement education's critical role in fostering global education aspirations about our environment and society. Much of what Hanvey suggested is directly related and relevant to the current calls for global education and global issues in learning. Below is a description of each dimension.

Perspective Consciousness

According to Hanvey, individuals have specific worldviews or cognitive maps that are not universally shared by others, and that may be shaped by factors we are unaware of and unable to control (Hanvey, 1976, pp. 4-5). This is important as a starting point for developing a more global perspective because individuals are aware that one's worldview is socially constructed and can be reconstructed.

State of the planet awareness

This is also known as knowledge of global conditions. It entails understanding current and emerging global conditions, such as population growth, migration, economic conditions, natural resources and the physical environment, political developments, science and technology, law, health, and international conflicts (Hanvey 1976, p.6). Through this dimension, Hanvey's focus was on increasing student awareness of existing and emerging differences in socioeconomic developments, as well as the effects of globalisation and the rise of digital technology on society and the environment, through this dimension. By criticising the American media for misrepresenting global issues such as influenza outbreaks as big news rather than

endemic malaria, Hanvey highlighted the critical role that schools must play in both balancing and correcting media. As a result, encouraging the development of cooperative reaching between science and social studies subjects emphasises the critical role that teachers and schools in general should play in ensuring students are properly grounded in global issues.

Cross-Cultural Awareness

Another important cross-cutting dimension is the respect for diverse ideas, values, and practises in human societies around the world (Hanvey, 1976, p.8). Despite proposing this dimension, Hanvey was sceptical about how education would accomplish it. He was concerned about the difficulty of encouraging students to accept other cultures without allowing them to immerse themselves in those cultures. He did, however, argue that education should allow students to consider how people in other cultures approach given situations. This call is emphasised further in current education calls, particularly SGD 4, target 4.7, which calls for an appreciation of cultural diversity. Willard Kniep addresses this dimension by discussing the history of contact and interdependence among peoples, nations, and cultures (Kniep, 1986). Furthermore, we must recognise the role that 21st-century media plays alongside the school in connecting learnings from diverse cultures in shared learning experiences to foster cultural diversity learning, awareness, and appreciation.

Knowledge of Global Dynamics

In this dimension, Hanvey wrote on the importance of understanding processes as part of a system of interacting components in the world, including the interplay of economic, political, ecological, and social aspects (Hanvey, 1976, p.13). In this study, this dimension helps conceptualise and assess the causes of poverty in the world and environmental issues. This provides a basis for establishing how the curriculum and teachers prepare learners to understand that their actions affect the local and global environment.

Awareness of Human Choices

Hanvey's work concludes with a call for individuals and nations alike to reconsider their resource consumption choices. Hanvey was concerned about the deterioration of environmental quality and the depletion of resources. As a result, Hanvey advocated for alternatives to unrestrained economic growth, resource exploitation, foreign aid rates, and consumption patterns (Hanvey, 1976, p.22). This dimension, therefore, calls for education to promote rational analysis of the long-term consequences of the current rates and activities for economic growth on the survival of future communities. Fast forward from 1976,

this is connected with the Sustainable Development Goals, especially the calls for governments and government policies to promote sustainable development and sustainable lifestyles.

This attainable global perspective is supplemented by Willard Kniep's (1986) four-part model for global education.

2.5.2. Kniep's Four-Part Framework

Willard Kniep, in his work on "Defining Global Education by its Content" (Kniep, 1986), addresses substantive and perceptual dimensions of what global education should focus on. Kniep states that global education will alter students' perspectives on their own worldview and contribute to a sense of interconnectedness among young people. Through his framework, Kniep identifies four elements as the focus of global education in schools:

1. Diverse human values: the study of universal human values that transcend group identity (for example, equality, justice, and liberty) as well as diverse cultural values that define group membership and contribute to differing worldviews (values related to aesthetics, lifestyle, and the environment).
2. Global economic, political, ecological, and technological systems: the workings and relationship of the four major global systems (economic, political, ecological, and technological).
3. Global problems and issues: persistent, transnational, interconnected concerns of our times-such as peace, security, development, the environment, and human rights.
4. The history of human contact and interdependence: related to the evolution of human values, the historical development of contemporary global systems, and the origins of current global issues and problems.

By integrating both Hanvey's and Kniep's frameworks, there is potential to achieve clarity about global education concepts, as are represented in the case of Rwanda. Furthermore, they will enable me to access and analyse the substantive and perceptual aspects of Global Education.

2.6. Conceptual Framework

This section presents the study's conceptual framework, which provides a conceptual link between the research question under study, the literature informing the study and the methodology to establish the study findings. This linkage relates to the concepts under study and the relationship between these concepts (Bloomberg and Volpe, 2012, p.88).

Using this conceptual framework that has constantly evolved throughout the study period, I will describe the study concepts informing the implementation of global education in Rwanda through the secondary education curriculum. In establishing the existence of global education-related concepts in Rwanda’s education system, I studied the official Competence-Based Curriculum framework document and selected textbooks. In addition, I inquired about the reason for curriculum change in 2015 and its mission through key informant interviews at Rwanda Basic Education Board. In acknowledging that the realisation of a curriculum's aims and mission is dependent on the implementing actors, I also studied teachers’ perception, attitudes, and awareness of both the Competence-Based Curriculum and global education concepts. All these factors were necessary to understand the progress made in integrating and raising awareness of global issues within the formal learning environments in Rwanda.

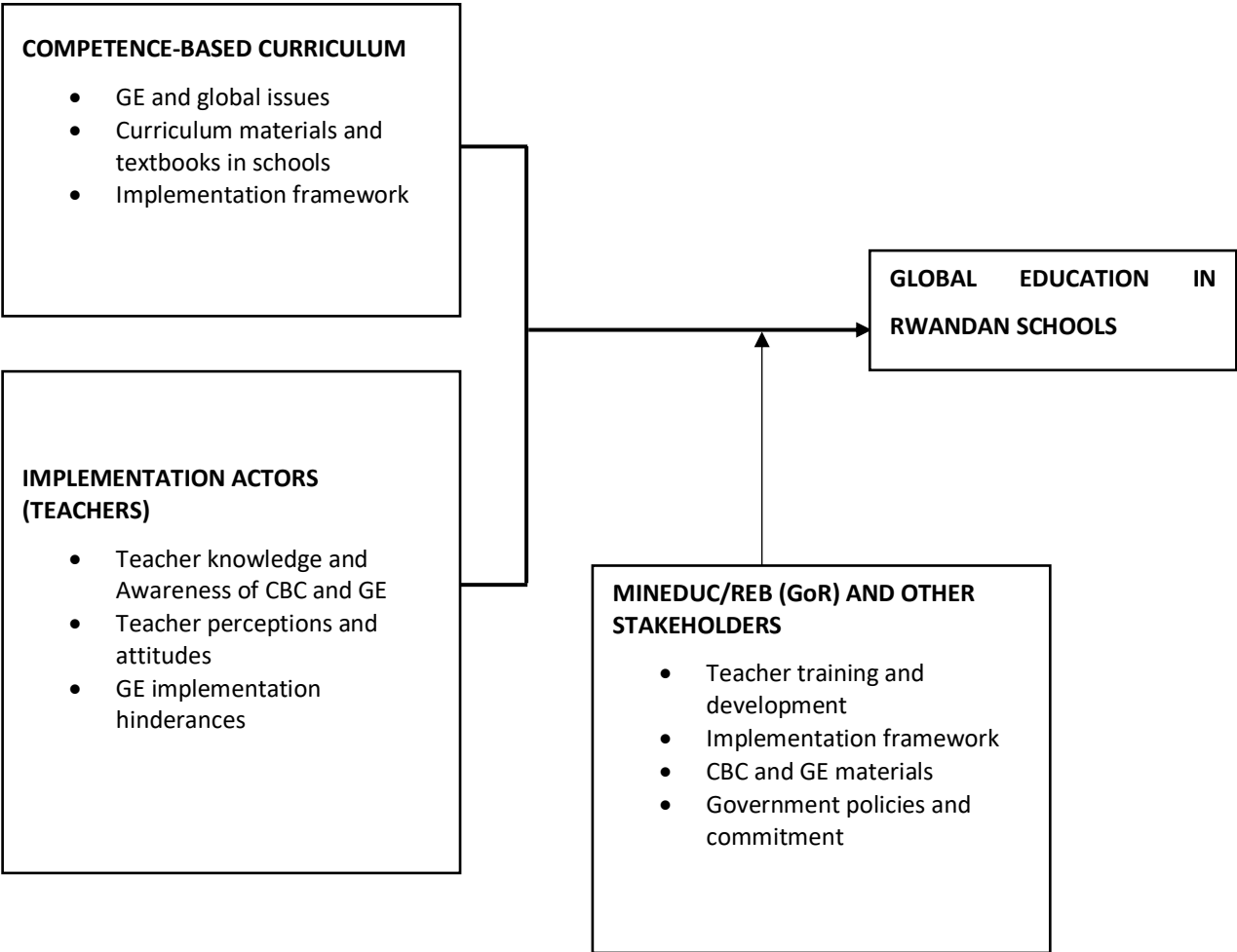


Figure 2.1-Conceptual Framework

In figure 2.1 above, the conceptual framework indicates that the implementation of global education in Rwandan secondary schools depends on two factors; the current educational curriculum, which is the

competence-based curriculum and the critical curriculum implementing actors, the teachers. The study was grounded on the fact that curriculum and teachers form the basis for incorporating GE into schools, and the absence of either makes it impossible to achieve this goal.

The Competence-Based Curriculum is the most influential tool or framework for primary and secondary school teaching and learning. This serves as a guide for teachers and other stakeholders in terms of what should be taught, how, and with what resources. Second, teachers are irreplaceable because they not only implement the curriculum and its components, but they also align it with the characteristics and needs of learners, as well as the regional and global needs it is supposed to address.

In addition to the two core components, the government, through the Ministry of Education and the Rwanda Basic Education Board, as well as other non-governmental actors, play a critical supporting role in the integration and implementation of GE and global issues in learning. Teacher training and development, as well as the availability of facilities, resources, and infrastructure, are all supporting factors. Most importantly, the government should ensure that favourable policies are developed and implemented to aid the process.

Using this conceptual framework to decipher the idea of integrating and implementing global education in Rwandan secondary schools, my proposition is that global education will be realised in schools in Rwanda if the curriculum framework captures the relevant global education issues, teachers are well acquainted with the curriculum through training, and the government provides necessary materials and implementation structures. If this is not done, or if the approach to implementation is inconsistent, the curriculum framework will remain an ineffective policy document, hence the absence of global education in Rwandan schools

3. THE LOCATION OF THE STUDY

This chapter provides context for Rwanda as the study location. The chapter specifically discusses Rwanda's geographical location, the education system and administration, the curriculum being implemented in the country, and current global education initiatives in Rwanda. These factors were critical in understanding Rwanda's unique case in Sub-Saharan Africa, as well as critically examining how the education system and curriculum being implemented relates to global education.

3.1. Rwanda and Kicukiro District

The research was carried out in Kicukiro District, Kigali Province, Rwanda. Kicukiro District is located in the south-east of Kigali City, and it is one of the three districts that comprise Kigali Province, or the City of Kigali as it is commonly known. The district is flanked by Gasobo District to the North and Nyarugenge District to the West (Govt of Rwanda, 2021). Kicukiro district's geographical location in Rwanda is as shown in the map in Figure 3.1 below:

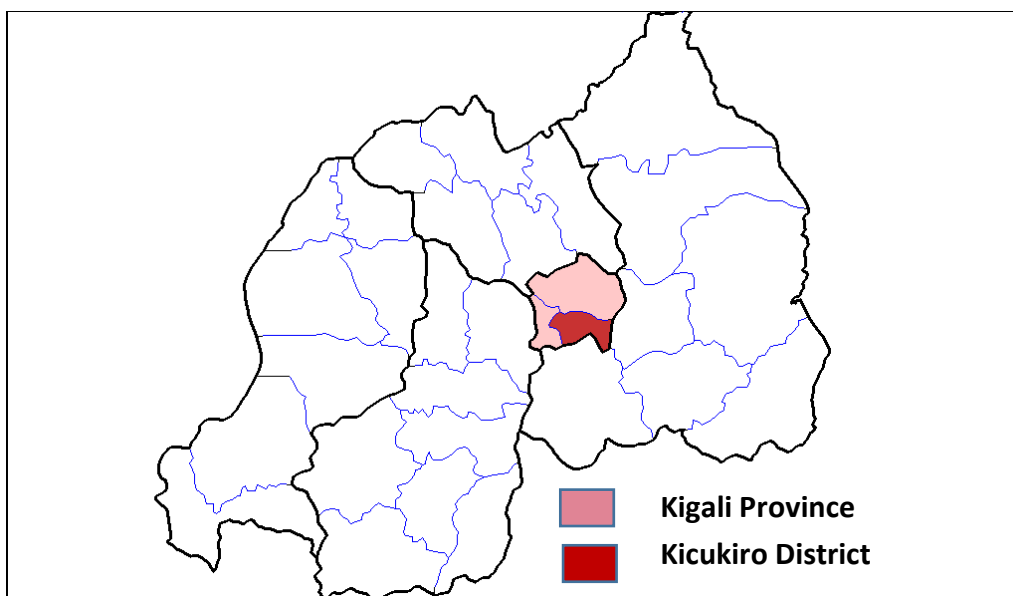


Figure 3.1-Kicukiro District on the Map of Rwanda

Source: (Global Administrative Boundaries, 2018)

Administratively, Kicukiro district has ten sectors³ (*Umurenge*), 41 Cells (*Akagari*) and 327 villages (*Imidugudu*) (Government of Rwanda, 2019) and covers a total area of 166.7 km². With respect to

³ The sectors include Kicukiro, Kagarama, Niboye, Gatenga, Gikondo, Gahanga, Kanombe, Nyarugunga, Kigarama and Masaka (Government of Rwanda, 2019).

education, the district has 65 nursery schools, 65 primary schools, 37 secondary schools, and 9 vocational training schools, also called youth training centres (YTC) (Ministry of Education,2018; Government of Rwanda, 2019). The district and its administrative units are as shown in the map in Figure 3.2 below.

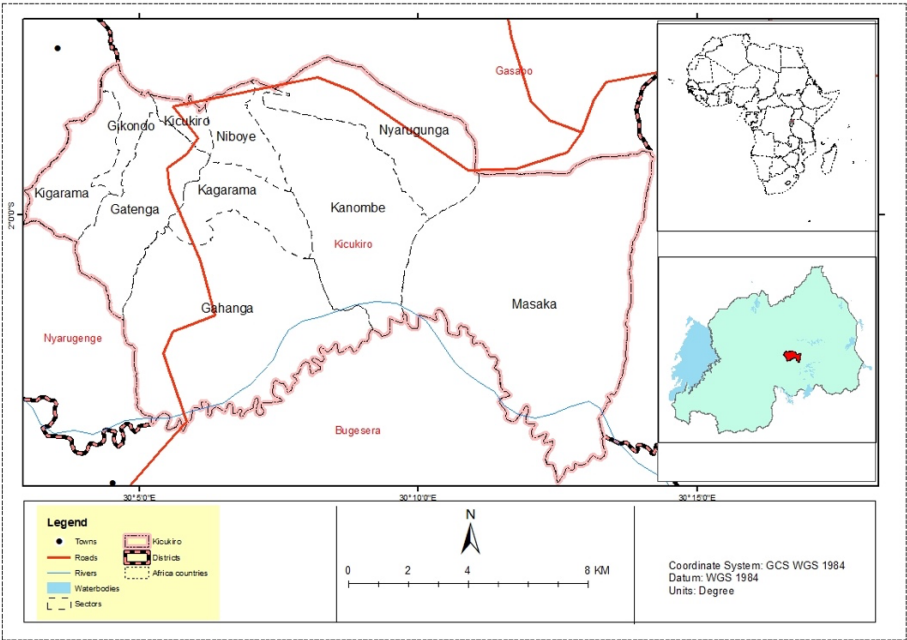


Figure 3.2-Kicukiro District Administration Map

Source: (Global Administrative Boundaries, 2022)

The study focused on Rwanda’s secondary education system considering the country’s past history of genocide in 1994 and its rebuilding process, with education at the centre of this process to create a peaceful co-existence and sustainable future (Bridgeland,Wulsin, & McNaught, 2009). Analysis of the Competence-Based Curriculum in secondary schools was premised on the Government of Rwanda and education authorities equating the CBC curriculum to a 21st Century Curriculum. For this study, this implies the adoption of a global approach to learning, akin to the question under study. In fact, according to Rwanda Basic Education Board (2015), Rwanda introduced the CBC curriculum for a more practical and skill-based approach or the working environment, daily-life and to open up opportunities for the Rwandese citizens both regionally and globally. I selected Kicukiro district as the study location since the district has over time, registered better results in terms of enrolment levels and literacy levels as compared to the other two districts (Gasabo and Nyarugenge districts) in Kigali province (Government of Rwanda, 2019).

3.2. Education in Rwanda

3.2.1. Education Administration in Rwanda

The Republic of Rwanda comprises two layers of government: the central government and local government. As per the 2005 reforms, the country is divided into five provinces, namely, Eastern Province, Western Province, Southern Province, Northern Province, and the Kigali City Province. The provinces are further subdivided into 30 districts (*akarere*) and 416 sectors (*imerenge*). The sectors are further subdivided into 2148 cells (*utugari*), and 14837 villages (*imudungu*) (Republic of Rwanda, 2022). All these units are headed by different people at different levels though they are synchronised and work towards the same cause. These administrative structures form the basis for educational administration in the country.

The overall responsibility of the National Education System lies with the Ministry of Education (MINEDUC) in Kigali, which sets the overall policies and strategies (MINEDUC, 2022). At the local level, education administration is managed by the District Education Officers, who implement MINEDUC policies and monitor schools and learning at the district level. The Rwanda Basic Education Board (REB), an agency under MINEDUC, is responsible for improving the quality of education through curriculum development, examination administration in schools, teacher training and development, and promoting the use of information and communication technology in education. REB was the leading agency in overhauling the curriculum from the Knowledge-Based Curriculum (KBC) to the Competence-Based Curriculum (CBC) in 2015 (REB, 2022).

Higher education is governed and controlled by the central government under the auspices of the Higher Education Council (HEC), an agency under the MINEDUC established in 2007. HEC is tasked with setting standards and monitoring the quality of education and research at Higher Education Institutions (HEIs). In addition, the agency is involved in vetting and recognising private HEIs and the accreditation of the programs they offer. The agency advises the Minister in charge of Higher Education on the accreditation of higher education institutions in Rwanda (Higher Education Council, 2022).

3.2.2. Basic Education in Rwanda

Rwanda's educational history dates back to pre-colonial times, before the genocide, and after the genocide in 1994. Njoroge and Rubagiza (2003) aver that education in pre-colonial Rwanda was majorly informal and provided through the family and groups such as *Amatorero* for the boys and *Imbohero* for the girls. Furthermore, they state that this informal education aimed to prepare children for adulthood by

teaching boys skills such as hunting and military training, while girls received training in crafts and house chores (Njoroge & Rubagiza, 2003).

The advent of Christian missionaries, especially the Roman Catholic Church in the 20th century, led to the introduction of formal education in Rwanda. With the backing of the colonial administration, Roman Catholic missionaries built the first school in 1900 (Obura, 2003). Schools built in colonial Rwanda were owned and controlled by catholic and protestant churches because the colonial authorities had no direct control over education and schools. The missionaries initially established two types of schools: rural schools and central schools. The rural schools in the villages provided a two-year literacy education to the villagers. The missionaries trained the teachers in these schools, and the curriculum focused on reading, writing, elementary arithmetic, and hygiene. The second category included central schools built at mission stations and managed by missionaries. They admitted only the best candidates from rural schools and provided a five-year primary education to boys only because girls were not permitted in schools (Tikly et al., 2003 cited in Adejimi & Nzabalirwa, 2021).

Post-independence, the Rwandan government in 1962 expanded the state's role in education but did not monopolise it. Its efforts were concentrated on expanding access to primary education, declaring it free and mandatory for children from the age of six. Furthermore, in 1963 several secondary schools were established (Adejimi & Nzabalirwa, 2021). Despite the Rwandan regimes between 1962 and 1994 establishing a public education system, developing a national curriculum, and increasing access to education, their education policies were central to intensifying the conflict between the Hutus and Tutsis (Trines, 2019). These policies were akin to the colonial government policies.

Post the tragic events of the 1994 genocide, efforts were put in place to revive the education sector. These efforts were largely characterised by the 1998 Education Sector Policy declaring the urgency and need to improve access to primary education and improve the quality of teaching and learning at all levels (MINEDUC, 1998; Njoroge & Rubagiza, 2003). In addition, the creation of new education agencies and bodies was a major factor in reconstructing Education in Rwanda. For example, prior to 1994, the Bureau *Pedagogique* tasked with curriculum development, assessment, examinations, and teacher training was dismantled. As a result, agencies such as the National Examinations Council (NEC), The Inspectorate of Education and the National Curriculum Development Council (NCDC) were created (REB, 2015). In 2011 the Rwanda Basic Education Board (REB) was established as a result of a merger of 5 agencies. These agencies included the National Examination Council (NEC), National Curriculum Development Centre

(NCDC), Student Financial Agency Rwanda (SFAR), General Inspection of Education (GIE), and Teacher Service Commission (TSC). All tasks under these agencies were merged and are currently the responsibility of REB (MINEDUC, 2021).

Rwanda currently has a 6-3-3-4 education system. This system requires six years of primary education (P1-P6), three years of lower secondary or ordinary level education (S1-S3), three years of upper secondary or advanced level education (S4-S6), and four years of university education (REB, 2019). In 2010, nine Years Basic Education (9YBE) was implemented, merging primary and lower secondary to reduce school dropout and repetition rates. This also allowed for free education. Furthermore, in 2011, 12 Years Basic Education (12YBE) was declared, making a full cycle of schooling free (REB, 2015). As of 2010, English was the official language of instruction in Rwanda. However, Kinyarwanda is used in primary schools from P1 to P3, while English is used from P4 to university. French, which was previously the language of instruction and the national language, is now taught as a supplement subject in public elementary and secondary schools (Pearson, 2016). This study was interested in Lower-Secondary Education (ordinary level) and Upper-Secondary Education (advanced level), also known as the secondary education level.

3.2.3. Secondary Education in Rwanda

Rwanda's six-year secondary education consists of two cycles: lower-secondary education (ordinary level), which focuses on basic skills, and upper-secondary education (advanced level), which offers more academic options. The ordinary level lasts three years, from grades seven to nine (S1 to S3). Admission and placement to ordinary level are based on the Primary leaving Examination, where grade averages are used to determine whether learners are placed in their preferred school. However, this is bound to change as REB is currently introducing a new system of random placement that allocates learners to schools irrespective of their primary school performance (Ashimwe, 2019). The competence-based curriculum comprises 16 subjects: English, Kinyarwanda, Mathematics, Physics, Chemistry, Biology, Information Technology, History, Geography, Entrepreneurship, French, Kiswahili, and Physical Education. Other elective courses, including artistic subjects such as Home Science, Music, and Agriculture, are taught at this level with a total of 30 contact hours per week (MINEDUC & UNICEF, 2018). This secondary level concludes with an external ordinary level examination at grade 9. Under the new dispensation, this examination is prepared and administered by REB (REB, 2019). Graduates of lower secondary school go on to general academic upper secondary school (advanced level), technical secondary education, or teacher training programmes.

Post ordinary level, upper-secondary education starts from grade 10 to 12 (S4 to S6). Admission to this level is extremely competitive and is based on average performance and grades. According to a report by JICA (2012), the advanced level consists of three types: General Secondary (GS), Teacher Training College (TTC) and Technical and Vocational Education Training (TVET). Furthermore, the GS has three separate streams that include the sciences, humanities, and languages. Within these streams, learners can choose from a variety of different subject combinations (see appendix 1:

In addition to these combinations, learners must take Entrepreneurship, General Studies, and Communication Skills as core subjects, as well as one elective from the four languages, English, French, Kinyarwanda, and Kiswahili, depending on their stream. Students take the A-Level examination in at least five subjects at the end of grade 12. The examinations are usually held in November of each year, and they are overseen by the REB, which administers the exams and issues the final examination certificates.

3.3. Competence-Based Curriculum in Rwanda

Ford and colleagues (2014) state that the Competence/Competency-Based Curriculum was first developed in the United States of America in the 1970s. This was later adopted in the United Kingdom and Germany in the 1980s and in Australia in the early 1990s (Likisa, 2018). The principal mission of this curriculum and approach to education was to enable learners to solve real-life problems (Wong, 2013, p.7). Largely lacking a precise definition, the Competence-Based Curriculum, can be described as a learning approach that is task-based and outcome-oriented. It is based on industry and professional competence standards, with assessments using predetermined criteria. According to UNESCO, this type of curriculum focuses on the complex outcomes of a learning process, which includes knowledge, skills, and attitudes, rather than what learners are expected to learn. Furthermore, this curriculum is learner-centred and adaptable to changing student, teacher, and societal needs (International Bureau of Education, 2022).

In 2013, the Ministry of Education Rwanda, through the Rwanda Education Board, kickstarted a comprehensive review of the pre-primary, primary and secondary curriculum in Rwanda (REB, 2015). This was largely influenced by graduates' lack of technical skills and mismatch with the job market in Rwanda and beyond. Furthermore, the Ministry sought to bridge the existing gap and provide learners with the skills required to meet the needs of a growing national and globally competitive market through this review (Habimana, 2016).

This reform process culminated in the introduction of the Competence-Based Curriculum in 2015. A process that confirmed Rwanda's ambition to develop a knowledgeable society suited for both the growing regional and global job markets (REB, 2015). Mbarushimana and Kuboja (2016) aver that this education framework focuses on moving education from what academics and actors believe learners need to know (the teacher-centred approach) to what the students need to know and do in varying complex situations. REB (2015), on the inception of the CBC, reiterated that this curriculum was meant to develop learners' independent lifelong learning habits, appropriate skills and knowledge, and their application to real-life situations.

Similarly, Ndayambaje, a former REB Director-General in 2018, stated in 2018 that the curriculum was expected to improve learning outcomes, motivation for learning, and teaching methods, as well as increase their relevance to the labour market (REB, 2018). Ndayambaje goes on to say that "the CBC will help produce a new generation of Rwandan school leavers with the necessary skills, values, knowledge, and attitudes to effectively navigate the local, regional, and global complexities spanning social, cultural, economic, and political spheres."

According to Rwanda Basic Education Board (2015), the new CBC curriculum matches global trends, and it is in line with the initiatives for a Harmonised Curriculum Framework for the East African Community. As a result, it is intended to enable the country and the EAC region to develop a knowledge-based economy, with a particular emphasis on science and technology. To achieve these long-term goals, the curriculum was required because its emphasis was no longer on passive knowledge acquisition but on the development of skills and attitudes required to ensure the learner is competent in applying knowledge (Mutsinzi, et al., 2017). Important features of the CBC curriculum are the competencies and skills to be developed among the learners and the cross-cutting issues that the curriculum will address within learning lessons (REB, 2015). These cross-cutting issues, according to REB, include comprehensive sexuality education, environmental and sustainability education, financial education, genocide studies, gender, inclusive education, peace and values education, and cultural standardisation (REB, 2015). Apart from the cross-cutting issues and basic competencies, the curriculum focuses on generic competencies, normally referred to as transferable skills such as creativity and innovation, critical thinking and problem-solving, which are also 21st-century skills (Nsengimana et al., 2021).

3.4. Global Education in Rwanda

The tragic events Rwanda experienced in 1994 greatly affected the socio-economic structures of the country. Post genocide, the government of Rwanda has through different approaches and education programs continued to build a new civic identity. These programs are meant to promote both national and global aspects among the Rwandan nationals while others are solely focused on building a Rwandan national identity. For instance, *Itorero*⁴ which is a state sponsored, non-formal civic education program teaches citizens, especially high school students and school leavers about the Rwandan state and nationhood (Nzahabwanayo, 2018). The *Itorero* was revived in November 2007 by the Government of Rwanda (GoR) and officially commissioned in 2013 by the National *Itorero* Commission (NIC) with a sole objective of bringing up patriotic Rwandans with values of the Rwandan culture and a culture of *Intore*⁵. Another informal group, *gando*⁶ teaches participants about Rwandan identity, culture, and history (Purdekova, 2015). Others such as *urugerero*⁷ is meant for high school students, while *ndi umunyarwanda*⁸ established in 2013, encourages the Hutu to apologise to the Tutsi, further promoting ethnicity discussions and the Rwandan national identity (Joselow, 2014, as cited in Russell, 2018).

In addition, non-governmental organisations are involved through programs that aim to cultivate values and competencies that reflect a global mindset. For example, the *Turikumwe*⁹, is a program organised by Global Youth Connect, an American organisation based in Kigali that brings young leaders from Rwanda and around the world for a two-week training focusing on human rights and peace cultivation at national and international levels. Besides exploring different notions of human rights and peace education, participants also learn how to take action to promote peace and genocide prevention around the world (Global Youth Connect, 2020).

Furthermore, the government has since 1994 emphasised the promotion of citizenship education in and out of schools. However, most of these efforts towards citizenship education focus on cementing national identity “*Rwandenness*” first in order to avert divisive ethnic affiliations along the (Tutsi, Hutu and Twa)

⁴ This is a non-formal citizenship and values education program for high school leavers in the post-genocide Rwanda.

⁵ Patriotic men chosen and reliable for defending and representing the values of the Rwandan kingdom. Also refers to dancers who danced with spears in their hands as a symbol of bravery.

⁶ Solidarity camps for students, teachers, government officials and returnees.

⁷ A national service for those between 10-35 years old, with the aim of developing a sense of fraternity and national identity among the Rwandan youth.

⁸ A concept that breaks tribal beliefs brought by the colonial government and conceptualizes Rwandan values and beliefs.

⁹ Means we are together, a signifies unity.

tribal lines that led to the 1994 genocide (Nzahabwanayo & Divala, 2018; Nzahabwanayo, 2016; Mutabazi, 2021). For instance, in Rwandan schools, from Grade 1 to Grade 6, citizenship is referred to as “social and religious studies”, and in secondary schools, citizenship education was previously referred to as “political education” and was non-examinable under the KBC curriculum (MINEDUC, 2008). Under the current CBC curriculum, citizenship education is included in “History and Citizenship” learning subject and examinable at the end of ordinary and advanced levels (REB/MINEDUC, 2015). Other Rwandan educational documents, such as curricula and textbooks, have included global education concepts and discussions about global issues. Among the important items in the Rwandan Education Sector Plan of 2006 was the development of Rwandan citizens with a patriotic spirit, a sense of civic pride, patriotism, and global awareness values (Russell, 2018). Furthermore, the government intends to reform the old curriculum and align it with national, regional, and global aspects. For example, following the genocide, the government, with the assistance of UNESCO and UNICEF, developed a new civics curriculum based on models that emphasise topics such as human rights, unity, cultural diversity, and reconciliation (King, 2014). In fact, government agencies such as the National Unity and Reconciliation Commission (NURC), The Rwanda Demobilization and Reintegration Commission (RDRC), the National Electoral Commission (NEC), and the National Commission for the Fight against Genocide (CNLG) are involved in promoting the citizenship agenda in Rwanda (Nzahabwanayo, 2018).

Other government initiatives have focused on environmental and climate issues. For example, the Environmental Education for Sustainable Development (EESD) strategy aims to promote public awareness on environmental management and sustainable development. These issues are embedded in environmental topics in the K-12 curricula for environmental literacy (REB, 2019).

Besides these government initiatives, non-governmental organisations and international organisations are also involved in promoting global education in Rwanda. The British Council's work in Rwanda and Africa to enrich education, promote global citizenship, and foster international trust and understanding among participants is commendable. Among all of its programmes, the Connecting Classrooms programme for schools stands out. This programme, among other things, promotes the teaching of citizenship in schools, as well as teaching communication and collaboration, critical thinking and problem solving, and creativity and imagination, with the goal of enriching classroom life, broadening teachers' professional skills, and enabling young people to become global citizens (British Council, 2022).

As a response to the 1994 genocide, *Never again Rwanda* a non-governmental organisation, has been advocating for peacebuilding and social justice since 2002. The main goal of the organisation is to empower citizens from various backgrounds in Rwanda and the Great Lakes region to become active citizens for a peaceful society. Governance, citizen participation, and youth engagement form their priority areas (Never Again Rwanda, 2022). These programs and initiatives from different stakeholders indicate the current efforts to promote global education and learning in Rwanda.

However, the efforts are not sufficient as a majority of the learners are left out, further negatively impacting other UNESCO global education calls such as “leave no child behind”. Literature pointed to studies on global education-related concepts in other parts of Africa (Begashaw, 2019; Ndille, 2020), and Russell (2018) investigated the teaching of citizenship education in post-genocide Rwanda. Because I could not find enough literature on the integration of global education in schools through the curriculum, this informed the decided to conduct this research in Rwanda.

This chapter has described the study setting in Rwanda and education in the country. This includes a description of Kicukiro district as well as detailed maps of the study location. The chapter also included literature on education in Rwanda. The discussion on education in Rwanda focused on education administration, basic education, and secondary education in Rwanda. The competence-based curriculum was also discussed in this chapter as a guiding document for education. Finally, this chapter presented global education in Rwanda, highlighting initiatives and efforts from government and non-governmental organisations to promote global education ideas in the country. With this context in place, the following chapter discusses the methodology (the rationale for collecting, storing, and analysing data), which is at the heart of the study.

4. RESEARCH DESIGN

This chapter presents the proposed research design as well as a justification for it. The chapter begins with study objectives and the specific questions guiding the study and then goes on to explain the target population, sample and sampling design, data collection instruments and procedures, research instrument validity and reliability, data analysis procedures, and ethical considerations for the study.

Grounded on providing a detailed understanding of the current state and complexity of the integration and implementation of global education in sub-Saharan Africa, this study adopted a mixed-methods case study design to provide a detailed understanding of the current state and complexity of global education integration and implementation in Rwanda (Creswell & Creswell, 2018; Yin, 2018). According to Yin (2018, p. 14) defines a case study as an in-depth exploration and investigation of a contemporary issue from multiple perspectives and uniqueness within its real-world context. Besides, Creswell (2014, p.14) further opines that through case studies, researchers collect detailed information using a variety of data collection procedures over a sustained period. The case study was deemed appropriate for a more in-depth, detailed, and intensive analysis in order to generate an in-depth understanding of the question under study.

As a concurrent mixed-methods case study, the study employed both qualitative and quantitative approaches (Creswell & Plano, 2018, p.116). The qualitative and quantitative data was then integrated to provide in-depth evidence on global education in Rwandan secondary schools. Another justification for the design was that it allowed for the exploration of different research questions to provide complementary data on the existence of global education within the curriculum, policy actors' positions, and the exploration of critical curriculum implementing actors' positions on global education in Rwandan secondary schools (Bryman & Bell, 2003). Therefore, this approach developed results and interpretations that expanded the understanding of the phenomenon (Creswell & Plano, 2018, p. 221).

Data collection was done concurrently, with both qualitative and quantitative data collected at the same time. The qualitative strand included document analysis and key informant interviews while the quantitative strand consisted of data from the teacher survey administered to teachers in the sampled schools. Data analysis and presentation were carried out independently. However, the data was merged during the interpretation phase to provide a comprehensive understanding of global education integration in Rwandan schools. The research design was constructed as graphically shown in Figure 4.1 below.

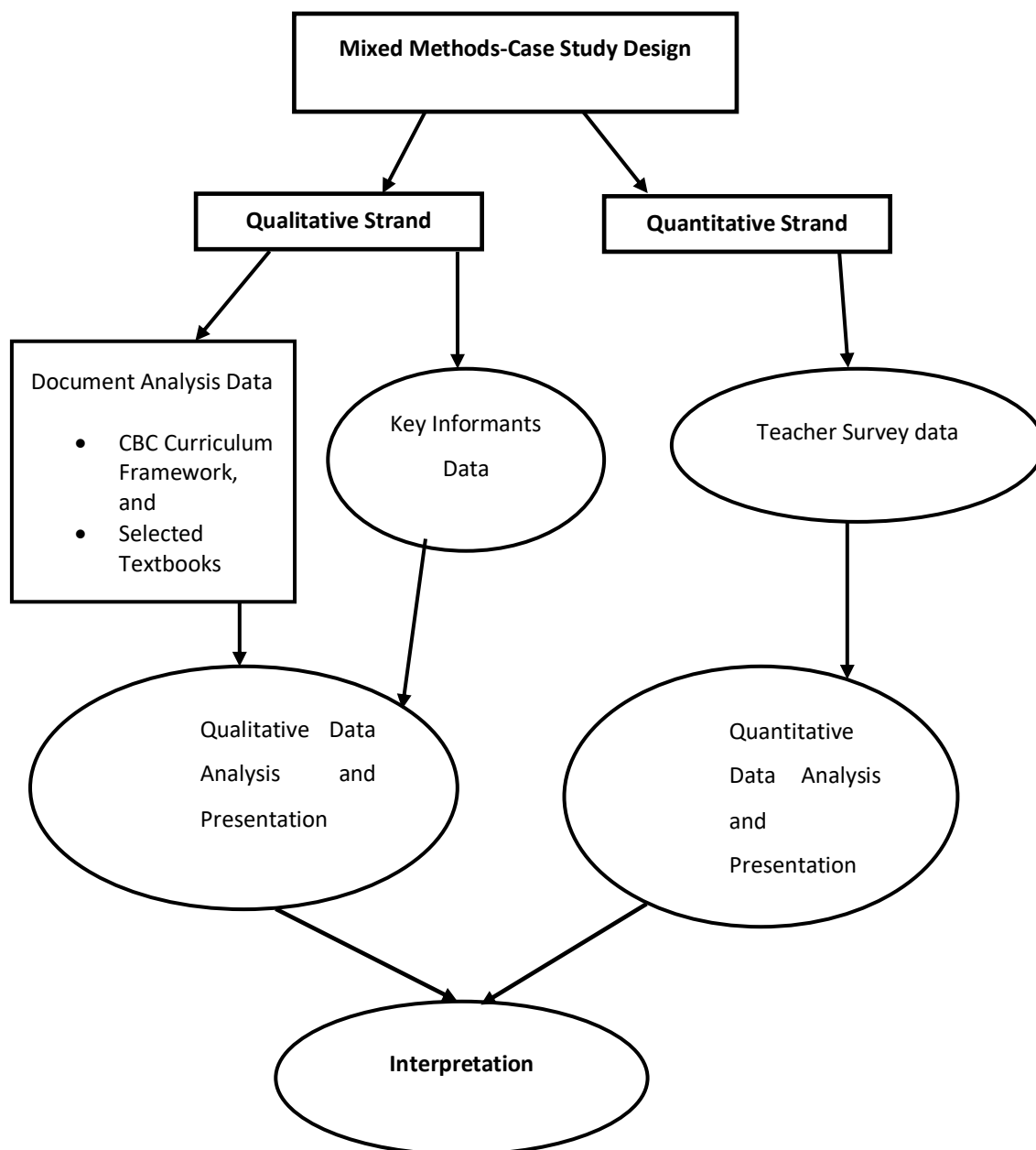


Figure 4.1-Graphical Representation of the Study's Mixed Methods Case Study Design

4.1. Study Objectives, Research Questions and Assumptions

Overall Objective

The study, through data collection in Kicukiro District in Kigali and analysis of Rwanda's basic education curriculum documents, aimed to establish how global education concepts are integrated and implemented in sub-Saharan Africa using the case of Rwanda's secondary school curriculum.

Specific Objectives

The study was guided by the following specific objectives:

- i. To examine the framing and conceptualisation of Global Education in Rwanda's secondary school curriculum framework.
- ii. To explore teachers' views and perceptions of the Competence-Based Curriculum.
- iii. To understand teachers' Global Education knowledge, awareness, and perceptions.
- iv. To establish challenges teachers face in teaching global education-related concepts in schools.

Research Questions

- i. How is global education conceptualised and framed within the Rwanda secondary school curriculum framework?
- ii. What are the teachers' views and perceptions of the Competence-Based Curriculum?
- iii. How do teachers in Rwanda understand and perceive global education?
- iv. What challenges do teachers face in teaching global education-related concepts in Rwandan secondary schools?
- v. What are the recommendations for the integration and implementation of global education through curricula in sub-Saharan Africa?

Study Assumptions

- i. Educational policies and frameworks affect global education integration and implementation in schools.
- ii. Teachers' familiarity with global education is very important to the implementation of global education and related concepts in schools.
- iii. Teachers in sub-Saharan Africa face a lot of challenges that hinder their effective teaching of global issues in classrooms.

4.2. Study Population

The study's target population included education stakeholders and teachers from secondary schools in Kicukiro's ten sectors, as well as Rwanda Basic Education Board employees. Casteel & Bridier (2021 p.343) aver, a population is a comprehensive group of individuals, groups, and organisation that a research study seeks to understand. Furthermore, this group has common characteristics that are of interest to the

researcher and are the focus of a scientific query to whom the researcher may have access (Creswell, 2013). This study focused on education stakeholders in Kicukiro district because they are the actors tasked with carrying out and implementing the Competence-Based Curriculum at the Secondary school level. Since the study's focus was on the integration and implementation of global education through the CBC curriculum, it was assumed that departmental heads at the REB and secondary school teachers were appropriate candidates with the necessary knowledge and information about the research question. In addition to this target population, and for the purposes of corroboration and synthesis, the researcher examined the Rwandan Competence-Based Curriculum to determine the existence and framing of global education and related concepts.

4.3. Sample Size and Sampling Procedures

Sample Size

Hanlon and Larget (2011) postulate that a sample is a specific group or subset of people drawn from the target population for which the researcher intends to collect data. The sample for this study was divided into two groups: department heads at the REB and secondary school teachers from selected schools.

In selecting the sample, the study adopted a mixed sampling procedure. Etikan and Bala (2017) articulate that in mixed sampling procedures, both probability random sampling and non-probability sampling procedures are applied in sample selection. Four key informants from REB were purposively sampled to participate in the study, while stratified random sampling and convenience sampling methods were applied to recruit 20 secondary schools and 208 teachers, respectively.

Purposive Sampling

Rwanda Basic Education Board is an arm of the Ministry of Education in Rwanda and is mandated with curriculum development, teacher training and professional development. The Board was hugely involved in the curriculum reform process in 2015 (REB, 2015) and as such departmental heads at this board were deemed to possess valuable information on the curriculum and hence relevant for this study. Based on the researcher's judgement as to who will provide the best and most relevant information for the study (Etikan & Bala, 2017, p. 215), four participants were purposively selected from the board. The researcher presumed that these employees were best placed to provide detailed insight on factors leading to curriculum change in Rwanda in 2015 and what the CBC curriculum aims to achieve.

This sample was subjected to inclusion criteria that call for respondents to meet certain characteristics to be included in the study (Patino & Ferreira, 2018). For purposes of this study, employees with over four years of work experience at the board were selected. The REB sample was distributed across the three departments:

- The ICT in Education Department.
- The Teacher Development, Management and Career Guidance and Counselling Department, and
- The Curriculum, Teaching and Learning Resources Department.

Stratified Random Sampling and Convenience Sampling

A stratified random sampling approach was used to select the sample of schools. A stratified random sampling procedure, according to Parsons (2014), is a technique in which the target population is divided into distinct groups (strata), with all elements in each stratum being similar in terms of the characteristics that are important to the study. This sampling procedure was chosen by the researcher to increase efficiency in selecting the school sample in Kicukiro district and to ensure that all school categories were represented. The schools were randomly assigned into the study as below:

Kicukiro district has a total of 37 secondary schools. These schools were divided into sector strata¹⁰ and then the school's status (based on the type of ownership). The schools were then randomised using the excel RAND () function, and a random number between 0-1 assigned to each school. Sorting was done by strata and by the generated random numbers in ascending order. Following the sampling frame developed by the researcher (Table 4.1), schools were randomly selected in an ascending order in each sector to meet the representation of the private schools, public schools, and government-subsidised schools. Schools from Kigarama sector were excluded from the main study sample as the pilot sample for pre-testing and validating the survey instrument was from this sector. Sample calculation and determination were in line with the calculated number of schools per sector and school status.

¹⁰ The ten administrative sectors in the district.

Table 4.1-Study sampling frame

Target Population Summary					Sample Determination			Summary of the Study Sample			
Sector	Public	Private	Govt-Subsidized	Total (N)	% in the population	Est no. of schools to be sampled	Schools sampled (Rounded-off)	Public	Private	Govt-Subsidized	Total (n)
Kicukiro		1		1	3,03	0,5	1		1		1
Kagarama	3	1		4	12,12	2,3	2	1	1		2
Niboye		1	1	2	6,06	1,1	1			1	1
Gatenga	3			3	9,09	1,7	2	2			2
Gikondo			1	1	3,03	0,5	1			1	1
Gahanga	1		2	3	9,09	1,7	2	1		1	2
Kanombe	3	1	1	5	15,15	2,9	3	1	1	1	3
Nyarugunga	3	3	1	7	21,21	4	4	2	1	1	4
Kigarama	2	1	1	0	0	0	0	0	0	0	0
Masaka	4	2	1	7	21,21	4	4	2	1	1	4
Total				33			20	9	5	6	20

4.4. Pilot Study

Before embarking on data collection, the researcher conducted a pilot study in Kigarama sector to test and improve the data collection instrument (the teacher questionnaire). Hassan, Schattner and Mazza (2006, p.70) define a pilot study as “a small study to test research protocols, data collection instruments, sample recruitment strategies, and other research techniques for a larger study.” In line with this, the researcher, with the aid of excel, randomly selected two schools out of four schools in Kigarama sector, where the teacher survey was tested. Upon completion, and in relation to the pilot data, the researcher revised the instrument to align it more closely to the research objectives.

4.5. Methods of Data Collection

I used qualitative and quantitative data collection methods to gather and consolidate data. This was done in accordance with the appropriate sampling techniques and procedures in order to ensure the credibility of the collected data. The data collection period lasted from January 15th to March 31st, 2022. The following data collection methods were used.

Document Analysis Method

Document analysis data formed part of the qualitative data strand of the study. Bowen and Frey (2018) opine that this qualitative research method employs a methodical approach to analysing documentary evidence and answering specific research questions. This approach to secondary data collection centred on analysing the Rwanda Competence-Based Curriculum and secondary school textbooks to provide

answers to objective one on “the presence, framing and conceptualisation of global education within the Competence-Based Curriculum in Rwanda” (see objectives in 4.1.2). The curriculum framework and seven randomly selected textbooks were analysed. The aim was to identify global education and related concepts within the curriculum and textbooks.

Textbooks were randomly selected across the cross-cutting issues, and they included History and Citizenship, Geography and Environment, Entrepreneurship, General Studies, Biology, Economics and English. The curriculum document analysis followed a systematic approach while considering Rwanda’s socio-cultural context and conceptualisation of the global education concepts. The analysis was guided by the following questions:

1. What is the vision and aims of the competence-based curriculum?
2. Which global education concept and global issues are captured in the competence-based curriculum?
3. In which subjects are the global education concepts taught?

For the selected textbooks, the document analysis was guided by the following questions:

1. Which cross-cutting or global education themes are captured in the book chapters?
2. Which sub-themes are discussed in these textbooks and under the cross-cutting issues the texts focus on?
3. What is the relationship between these concepts and global education?

To ensure accurate data finding, selection and synthesis, the researcher repeated the document examination twice to gain meaning and generate empirical knowledge for the construct under study. Themes and cross-cutting issues identified were further analysed in relation to the study's theoretical framework

Key Informant Interview

Key informant interviews are qualitative in-depth interviews with people who know what's going on. Furthermore, key informant interviews gather information from experts with first-hand knowledge of the community, group, or research phenomenon under consideration (Lavrakas, 2008). Therefore, the key informants provide knowledge and insight into the nature of the research problem besides giving recommendations for solutions.

Key informant interviews were used in the study to collect qualitative data on Rwanda's education status, as well as the road to and after the implementation of the Competence-Based Curriculum. Face-to-face and telephone interviews were conducted between the researcher and four key informants from the REB. The key informants were chosen for their extensive knowledge and understanding of Rwanda's current secondary education system and curriculum framework. To capture diverse perspectives and ideas, key informants were drawn from all three departments within the board. This method employed a semi-structured interview guide which allowed for a free exchange of ideas, the asking of diverse and detailed questions, and the elicitation of more specific responses from respondents. These interviews were used to augment data from the document analysis on Rwanda's Competence-Based Curriculum.

Questionnaire Method

A questionnaire was used to collect primary quantitative data from teachers in the selected schools). The questionnaire was considered appropriate and fundamental in acquiring information on teachers' knowledge and perceptions. In addition, considering the teacher population in the sampled schools, the questionnaire was appropriate to collect data from many people within a short period of time (Bird, 2009). The teacher questionnaire was developed by the researcher, with one section incorporating items from previous instruments and new items relevant to the issue in question. The teacher global mindedness section adopted some items from Jane Hett's 1991 global minded scale and was modified to fit the needs of this study. The teacher survey questionnaire contained five main sections with closed-ended Likert scale questions making it easier to administer and economical in terms of the information of interest (Patten, 2018. 65). The questionnaire was administered both in hard copy and digitally with the aid of the Open Data Kit tool (ODK).

4.6. Validity and Reliability of Research Instruments

Blumberg, Cooper and Schindler (2005) define validity as the extent to which a test or research instrument measures what it claims or is supposed to measure. Therefore, the instruments need to get accurate responses from the respondents. As a result, the instruments must obtain accurate responses from the respondents. Content validity method was used in this study to estimate how representative the research instrument items were of the subject matter (Newman et al., 2006). As a multimethod process, the tool was subjected to a combination of methods (both qualitative and quantitative) to determine the degree of consensus among global education and educational research experts about the instrument (Newman,

Lim, & Pineda, 2013; Zohrabi, 2013). Validity was also supported through the review of pilot data, where the reviewer's comments were used to finalise the tool.

On the other hand, Orodho (2012) defines reliability as the degree of consistency, dependability and replicability of the results obtained by the research instruments. In social science research, tools must be reliable, and the questions need to yield consistent responses when tested multiple times. To determine and ensure the questionnaire validity and reliability, two schools in Kigarama sector were selected for a pilot study and the questionnaire was tested with a sample of ten respondents. The sample included one private and one public school. The test-retest method was used to measure the instrument's reliability during the pilot study. This entailed a double administration of the instrument on the same pilot sample to assess whether the results were similar.

4.7. Methods of Data Analysis

The study utilised both qualitative and quantitative analysis methods and procedures. The qualitative approach of the study included the content analysis of the curriculum framework and selected textbooks in each cross-cutting issue and interviews with key informants to establish the framing and conceptualisation of the global education concepts and the mission of the CBC curriculum. Qualitative data were categorised for meaningful interpretations. These data were analysed with the aid of the MAXQDA software package. Identified concepts were coded and grouped into themes around the global education concept.

The quantitative aspect of the study collected data from teachers in the sampled schools using a structured questionnaire. The quantitative data was analysed with the help of *Jasp* statistical analysis software. This enabled the creation of numerical statistical descriptions based on means, medians, and standard deviations. The statistical summaries were displayed as frequency tables and charts.

4.8. Ethical Considerations

Moral Philosophy calls for the prevention of possible exploitation of research participants (Morrell, Epstein, & Moletsane, 2012). Similarly, Bryman and Bell (2007) that ethical considerations be put in place to ensure that every respondent is informed about the study and that participants' identities are kept private. Furthermore, their responses are private and confidential, and the study is scientifically sound. To ensure research ethics, the researcher followed all codes of ethics and applied the three research ethics principles outlined in the Belmont report of 1979. This included goodness, respect, and justice.

Accordingly, the researcher received internal clearance from the University of Porto through the FLUP Ethics Commission. Prior to conducting research and fieldwork in Kicukiro District, the researcher obtained a permit from the National Council for Science and Technology (NCST) to carry out research in Rwanda (Appendix 2) and a clearance from the Mayor of Kigali (Appendix 3). Additionally, to ensure schools were notified about the research by the Kicukiro District Education Officer (DEO) through a direct memo to the school headteachers.

Other standard research procedures were followed, including obtaining informed consent from key informants and teachers in the sampled schools prior to conducting interviews and administering questionnaires. As part of the consent, the researcher informed the respondents about the study's purpose and assured them of their anonymity, privacy, and confidentiality. This ensured that the respondents felt free and comfortable participating in the study, which translated to the respondents providing accurate and honest responses in order to achieve the study objectives.

This chapter has described the research design (mixed methods case study), the study area (Kicukiro district in Kigali province, Rwanda), the study sample (secondary school teachers and REB employees), the sampling methods (simple random, purposive, and convenience sampling), and the data collection methods (document analysis, key informant interviews and survey method). Furthermore, the instrument validity and reliability were discussed, followed by the data analysis procedures. Finally, the ethical consideration section outlined the ethical guidelines that guided the study and the researcher.

5. Global Education in Rwanda's Competence-Based Curriculum

This chapter presents the findings of the document analysis of the competence-based curriculum, teaching and learning materials (textbooks). The findings from the curriculum document and selected textbooks were complemented by interviews conducted with four officials at the Rwanda Basic Education Board (see 4.3). The interviews focused on the curriculum change process and what the curriculum aims to achieve in relation to global education. The findings in this chapter originated from and addressed the first objective, which focused on the presence, framing and conceptualisation of global education within the secondary school curriculum in Rwanda.

Table 5.1 below presents the profiles of the key informants who participated in the study. This background data shows that the participants – three men and one woman – are in management roles, thereby well informed about activities at the board with two in decision-making positions. In order to conform to research ethics as stipulated in (4.8) the study does not disclose the identity of any of the participants and instead adopted the use of symbols KI meaning Key informant followed by numerical (1, 2, 3, 4) for each of the participants. For example, KI 1 denotes key informant 1, who was female, and had worked at the board for a period between 10 to 15 years. Furthermore, the study does not disclose the departments they worked in.

Table 5.1-Participant Details

Participant	Gender	Age Group	Involvement at REB and with CBC change		
			Number of years working at REB	Role at REB	Participated in CBC change process
Key Informant 1 (KI 1)	F	45-50 years	10-15 years	Management and Decision Making	Yes
Key Informant 2 (KI 2)	M	40-45 years	5-10 years	Management and Decision Making	Yes
Key Informant 3 (KI 3)	M	30-35 years	5-10 years	Management	Yes
Key Informant 4 (KI 4)	M	30-35 years	1-5 years	Management	No

5.1. Analysis of Rwanda's Competence-Based Curriculum

White (1998) avers that a curriculum is a fundamental document in the operation of any education system in the world. Hence, the Competence-Based Curriculum, commonly referred to as the CBC Curriculum is the basic guiding tool for basic education in Rwanda, from pre-primary level to advanced level. This critical role of the curriculum framework was highlighted by the then Minister for Education Prof Silas Lwakabamba during its launch in 2015 stating that "The CBC framework was the official guide to competency-based teaching and learning in Rwanda" (REB, 2015, p.1).

The purpose of implementing the Competence-Based Curriculum was to ensure that young people in Rwanda reached their full potential in terms of knowledge, skills, and appropriate attitudes for integrating into society and expanding employment opportunities. In support of this finding, KI 1 stated that "there was a need to move away from rote and abstract learning in order to equip learners with relevant knowledge and competencies for the future." According to KI 1, "previously, we were having graduates who could not innovate or perform basic duties once they were employed." However, thanks to the CBC curriculum, our graduates can now develop tools that are innovative, create jobs, and are relevant to our job market, thereby promoting economic development in our country."

Importantly, the findings of this study indicate that the new curriculum framework was designed to prepare learners and future citizens to compete in the twenty-first century and contribute to Rwanda's development. All key informants agreed that the need to develop marketable skills, competencies, and knowledge, as well as for students to apply what they learn in school in real-life situations, was critical to the implementation of this framework in 2015. These sentiments are well expressed in the CBC framework vision, which states that the curriculum was designed to "establish an inspiring 21st-century curriculum, optimising the potential of all learners and enabling every young Rwandan to make a valuable contribution to the nation's sustained growth" (REB, 2015, p.3).

The study also discovered that the CBC framework was aligned with both national (Rwanda-based) and global economic needs. The curriculum was designed to provide learners with internationally recognised competencies, knowledge, and skills, as demonstrated in the aims and objectives sections. According to KI 3, in terms of internationally recognised competencies and skills, "learners will acquire necessary competencies and skills to fit into the East African Community job market and even the global market through this CBC curriculum." KI 3 further stated that, "this will enable Rwandan citizens to live, work, and interact with anyone in the world. "Both KI 1 and KI 3 cited the East African Community (EAC) member

states' curriculum harmonisation¹¹ initiative as one of the reasons for Rwanda to improve its education system in order to compete with other East African countries and meet regional and global education needs.

The curriculum was further examined to determine the presence of global education concepts and their application to teaching in schools. The results are presented in the following sub-point.

5.1.1. Cross-Cutting Issues in the Competence-Based Curriculum

This section presents global education themes found in the curriculum. Eight themes, referred to as cross-cutting issues in the curriculum, were found and are presented in Table 5.2 below. These cross-cutting issues are not taught in separate subjects but integrated across multiple subjects, years, and cycles (REB, 2015, p.4).

¹¹ Curriculum harmonisation by the East African Community member states is an initiative to harmonise education systems and curricula in the region to ensure quality and standardised education which would in turn guarantee skilled and tech-savvy workforce for the EAC labour market (East African Community, 2019).

Table 5.2-CBC Cross-Cutting Issues and Subject Focus

Nº	Cross-Cutting Issues	Subject
1	Comprehensive Sexuality Education	History and Citizenship, Biology, General Studies, French, Kinyarwanda, Kiswahili, Religious Education, Information Communication and Technology, Music, and Physical Education.
2	Environment and Sustainability	Geography, Biology, General Studies, Agriculture, Home Science, English, French, Kinyarwanda, Kiswahili, Entrepreneurship, Fine Arts and Crafts, Economics, Information Communication and Technology, Music, Physical Education, Physics, Chemistry.
3	Financial Education	Mathematics, Economics, Entrepreneurship, General Studies, Information Communication and Technology.
4	Gender	History and Citizenship, General Studies, English, French, Kinyarwanda, Kiswahili, Entrepreneurship, Economics, Literature in English, Information Communication and Technology, Music, Physical Education and Physics.
5	Genocide Studies	History and Citizenship, General Studies, Religious Education, Information Communication and Technology, Music.
6	Peace and Values Education	All subjects
7	Standardisation Culture	All subjects
8	Inclusive Education	All subjects

The curriculum framework contained eight cross-cutting issues related to global education, as shown in Table 5.2 .They are referred to as "cross-cutting issues" in the CBC curriculum. The term "Cross-Cutting Issues" refers to the importance of these issues in learning and the fact that they are not tied to specific curriculum subjects but are taught across several. KI 3 observed that:

“The cross-cutting issues are taught in different subjects to provide a holistic approach to learning. If they are contained in specific subjects, especially non-compulsory or elective subjects, some learners will miss out.”

During school visits for teacher surveys, I discovered that some schools were aware of and actively addressing cross-cutting issues in their daily operations. The cross-cutting issues and generic competencies that learners must acquire were pinned in the teachers' staffroom in one of the schools, as shown in Figure 5.1 below.

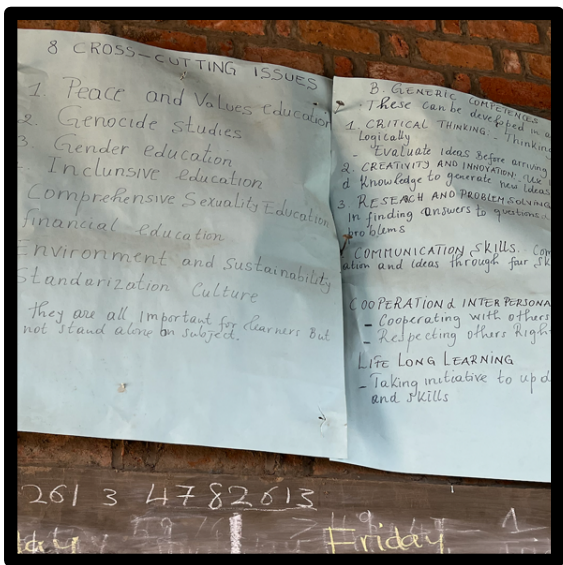


Figure 5.1-Cross-Cutting Issues and Generic Competencies in a School Staff Room
Source: (Author, 2022)

In Figure 5.1, the notice in the teachers' staffroom has eight cross-cutting issues as indicated in the CBC framework. There is a reminder at the bottom of the notice that "the cross-cutting issues are all important for learners and are not taught in specific subjects." Additionally, the notice lists generic competencies that learners must acquire. As a result, I observed that some schools we are making efforts to encourage teachers to instil 21st-century competencies in their students through their teaching.

In the next section, these cross-cutting issues are discussed in relation to the study's theoretical framework (see section 2.6).

5.2. Cross-Cutting Issues and Global Education

The eight cross-cutting issues identified in the curriculum (see Table 5.2-CBC Cross-Cutting Issues and Subject Focus) were analysed in relation to global education and are discussed as per the study's theoretical framework, the global perspective.

Global Problems and Issues

At the core of global education are peaceful co-existence and a cooperative global society. According to the theoretical framework, the theme “global problems and issues” focuses on awareness of the problems the world faces, such as peace, security, and human rights violations. Following the 1994 unfortunate events in Rwanda, the researcher expected this theme in the curriculum. In relation to this theme, the study found the cross-cutting issues:

Peaceful coexistence and a cooperative global society are at the heart of global education. The theoretical framework's theme "global problems and issues" (see 2.6) focuses on raising awareness of the world's problems, such as peace, security, and human rights violations. Following the tragic events in Rwanda in 1994, I anticipated this theme in the curriculum. The following cross-cutting issues in the curriculum were related to this theme on global problems and issues:

- i. Peace and Values Education, and
- ii. Genocide Studies

In the CBC curriculum, Peace and Values Education is defined as: “Education that promotes social cohesion, positive values, including pluralism and personal responsibility, empathy, critical thinking and action in order to build a more peaceful society.” Further, the curriculum states that peace and value education is present and taught in all subjects. The framework, on the other hand, stated that through Genocide Studies:

“Learners will know about the 1994 genocide perpetrated against the Tutsi alongside other genocides such as the Holocaust. Knowing about the genocides is not enough, hence the framework emphasises that learners should understand the causes of the 1994 genocide in Rwanda and its consequences. By knowing and understanding about the genocides, the curriculum stipulates that the learners that form the current and future generations will be in a better place to fight genocide ideologies.”

Both cross-cutting issues as used in the curriculum are meant to promote a culture of peace and non-violence in Rwanda and beyond. For instance, the cross-cutting issue of Peace and Value Education refers to peaceful co-existence in society. Similarly, the inclusion of Genocide Studies in the curriculum was a major step toward a global perspective in Rwanda. In fact, in addition to the 1994 genocide in Rwanda, this cross-cutting issue requires learners to have the knowledge and understand genocide in other parts

of the world such as Holocaust and other genocides in the world (see Table 5.2). In both cross-cutting issues, a connection was established between the local and the global. As cross-cutting issue, Genocide Studies is taught in select subjects in different grades, while Peace and Value Education is taught in all subjects (see Table 5.2). However, conspicuously missing from the framework was the concept of *human rights issues* which falls under this global perspective, yet it is an important agenda on the global problems and issues the world is grappling with.

State of Planet Awareness

The state of planet awareness, according to the theoretical framework (see 2.5), is the knowledge of environmental conditions such as the use of natural resources and the physical environment. The cross-cutting issue of "environment and sustainability" in the CBC curriculum was directly related to this global perspective. This cross-cutting issue, as stated in the CBC curriculum, integrates knowledge across environmental issues, climate change, and sustainability.

Furthermore, it provides a platform to balance economic growth, social well-being, and ecological systems in Rwanda and beyond. Broadly, I suggest that this cross-cutting issue was meant to open discussions on multiple intertwined global issues that affect Rwanda and other regions of the world. This includes but is not limited to issues related to the environment such as global warming and the loss of biodiversity, sustainable lifestyles, and others such as sustainable development and climate change. This cross-cutting issue was integrated into almost all curriculum subjects (see Table 5.2).

Diverse Human Needs

The theme of Diverse Human Needs, which focuses on universal human values that transcend group identity, was critical. In relation to this global perspective, the framework identified only two cross-cutting issues:

- i. Gender, and
- ii. Comprehensive Sexuality Education.

As previously stated, this concept of gender is also known as gender equality in SDG 4.7 and gender sensitivity in other contexts. The inclusion of gender and gender-related cross-cutting issues in the curriculum demonstrates the education system's efforts to integrate relevant issues within schools. This finding demonstrates that gender and related issues are an important component of any educational system in shaping a just and equitable society. Indeed, international organisations such as UNESCO have

been pushing for the inclusion of these concepts in educational curricula for the last decade, which is also well captured in SDG 5¹².

The CBC framework conceptualises gender in a broader perspective. The curriculum states that: “Gender will be understood in schools beginning with family complementarities, gender roles and responsibilities, the need for gender equality and equity, gender stereotypes, gender sensitivity, gender mainstreaming, and gender-blind/ gender-unaware” (REB/MINEDUC, 2015, p.5). Similarly, Comprehensive Sexuality Education was found and related to the diverse human needs global perspective. The curriculum framework states that:

“Comprehensive Sexuality Education will equip learners and other young people with knowledge, skills and values in a cultural gender-sensitive environment and manner to enable them to make responsible choices to clarify feelings, values and attitudes, and sustain a risk-reducing behaviour” (REB/MINEDUC, 2015, p.5).

These concepts, gender and comprehensive sexuality education were integrated and taught in different subjects at different levels (see Table 5.2).

Knowledge of Global Dynamics

The theme of knowledge and global dynamics is important to this study because there is a need to understand the world as a system, as well as the interacting components such as economic, ecological, political, and social systems. The curriculum addressed three cross-cutting issues, which were as follows:

- i. Financial Education,
- ii. Inclusive Education, and
- iii. Standardisation Culture.

As per the curriculum, financial education was a necessary precondition to achieving financial inclusion targets and improving the financial capability of the Rwandan people in the global system. On the other hand, inclusive education focuses on “the right for learners to receive quality and equitable education that meets their basic learning needs.” These three cross-cutting issues are taught in different subjects, as shown in Table 5.2.

¹² To achieve gender equality and empower all women and girls as a fundamental human right. This will lead to a peaceful, prosperous, and sustainable world.

The study findings suggest that the curriculum framework used the cross-cutting issue of *standardisation culture* to improve health systems, economic growth, industrialisation, and trade. To achieve this, the curriculum framework proposed the implementation of standardisation of quality assurance, metrology and testing to ensure high-quality services for Rwandans according to global standards. This finding implies that this cross-cutting issue is connected to the global economic shifts and the need for Rwanda to position itself competitively in relation to other countries.

The above findings suggest the presence of global education concepts within the curriculum framework. To understand their implementation at school levels and in learning, the study further analysed secondary approved textbooks for their presence, conceptualisation and distribution across subjects. Seven randomly selected subjects textbooks (History and Citizenship, Geography, Entrepreneurship, General Studies, Biology, Economics and English) were analysed, and the results are discussed in the next subsection.

5.3. Cross-Cutting Issues in CBC Approved Textbooks

The findings from textbook analysis on the presence of cross-cutting issues and their scope is summarised in Table 5.3 below.

Table 5.3-Global education concepts in textbooks

Source: Secondary school textbooks

Themes	Sub-Theme	Textbook subject
Climate, Environment and Sustainable Development	Climate change in Rwanda	Geography and Environment
	Climate change adaptation in Rwanda	
	Environmental conservation in Rwanda	
	Climate change in Africa and worldwide	
	Sustainable development	
	Ecology and conservation	
	Sustainable use of scarce resources	Entrepreneurship
Globalisation	Meaning of globalisation	Economics
	Types, causes and effects of globalisation	
Genocide and Tolerance	Genocide against the Tutsi (Rwanda, 1994)	History and Citizenship
	Genocide against the Jews-Holocaust (Germany, 1938-1945)	
	Consequences of Genocide in Rwanda	
	Genocide prevention	
Citizenship	Not found	History and Citizenship and English
A culture of non-violence, peace, and value education	Human rights, duties, and obligations	History and Citizenship
	Conflict and violence	
	Forms and consequences of violence	
	Conflict transformation	
	Conflict management	General Studies
	Prevention and resolution of conflicts	
Gender Issues	Gender equality and equity	History and Citizenship, General Studies
	Sexual violence and gender-based violence	History and Citizenship
	Gender and culture	General Studies
	Gender roles and stereotypes	
Cultural diversity and awareness	Tolerance and respect	History and Citizenship
	Social cohesion	Entrepreneurship
	Fight against cultural discrimination	General Studies
	Pluralism in the world	General Studies
	Heritage and culture	General Studies
	Groupings	History and Citizenship
Financial awareness	Not found	Entrepreneurship and Economics
Disability and inclusive education	Not found	History and Citizenship

The findings presented in Table 5.3 above complement the findings in Table 5.2 in addressing objective one of this study which inquired about “the presence, framing and conceptualisation of global education concepts in the CBC curriculum.” These themes and sub-themes are discussed in detail below.

Climate, Environment and Sustainable Development

The theme of *climate, environment and sustainable development* was identified in the Geography and Environment textbooks and Entrepreneurship textbooks that were sampled. The theme focused on both local (Rwanda-based) issues as well as issues on a global scale. Furthermore, words or sub-themes such as climate change and adaptation in Rwanda, climate change worldwide, environmental conservation, and sustainable development were identified. Figure 5.2 below was extracted from the geography textbook the presence of this issue in the curriculum books. This finding indicates that the CBC curriculum and materials used have embraced global education, particularly the concept of sustainable development.

Globalisation



Figure 5.2-Climate Change issues in Geography and Environment textbook

Source: (REB, 2020)

Economics textbooks, the theme of globalisation was identified in relation to global economic trends and how they have been influenced by globalisation aspects. The meaning of globalisation, as well as the causes and effects of globalisation, emerged as sub-themes within the globalisation issue. **Figure 5.3** was extracted from the Economics S6 textbook and illustrates part of the globalisation content taught at that level.

Topic Area 4: International Economics	203
Sub-Topic Area 4.2: Globalisation	203
UNIT 7: Globalisation	205
7.1 Meaning of Globalisation	207
7.1.1 The main features/ characteristics of globalisation	208
7.1.2 Types of globalisation	210
7.1.3 Causes of globalisation	212
7.1.4 Effects of globalisation	213
7.2 Multinational Corporation (MNC)	216

Figure 5.3-Globalisation issue in Economics textbook
Source: (Bwebare and Mirembe, 2017)



Figure 5.4-Globalisation Content
Source: (Bwebare and Mirembe, 2017)

Genocide and Tolerance

The theme of genocide and tolerance was expected given Rwanda's recent history. It is clear that the country used education as a tool for coexistence and peacebuilding following the 1994 genocide. This theme was present in History and Citizenship textbooks (see Figure 5.5) across all learning grades, and it not only focused on genocide issues in Rwanda but also mentioned genocide in other parts of the world. Some of the sub-themes identified included genocide against Tutsis in Rwanda in 1994, genocide against Jews, also known as the Holocaust in Germany, the consequences of the Rwandan genocide, and how to prevent genocide in Rwanda and globally. The images below were extracted from the History and Citizenship textbook and captured the issue of genocide. The first part displays a topic on genocide and its features while the second part highlights the history of genocide and further presents comparison of genocides in other parts of the world.

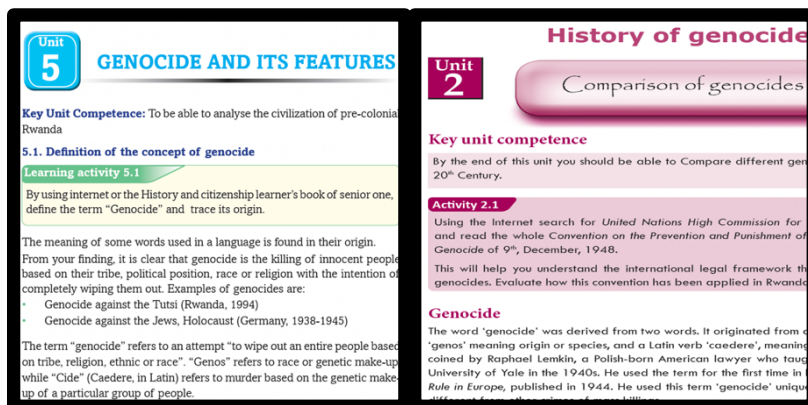


Figure 5.5-Genocide issue in History and Citizenship Textbook

Source: (REB, 2020)

A culture of Non-Violence, Peace, and Value Education

Cross-cutting issues concerning a non-violence culture, peace, and value education were identified in History, Citizenship, and General Studies subjects (as in Figure 5.6). It focuses on human rights issues, duties, and obligations; conflict and violence; conflict forms and consequences; conflict transformation and management; and conflict prevention and resolution. As the textbooks presented topics from various parts of the world, the syllabus scope addressed these issues on both a national and global scale. Figure 4.5 was extracted from History and Citizenship S1 textbook addressing violence and its intended to instil in learners the importance of embracing peace.

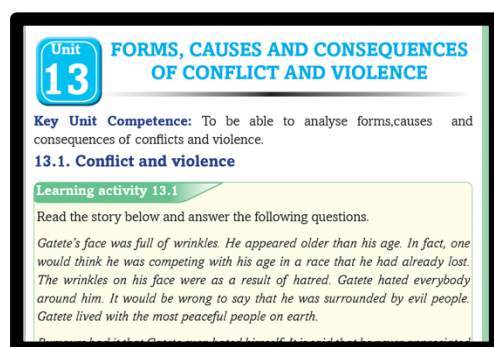


Figure 5.6-Violence issue in History and Citizenship textbook

Source: (REB, 2020)

Cultural Diversity and Awareness

This theme of cultural diversity and awareness appeared in three subjects on the CBC curriculum: History and Citizenship, Entrepreneurship, and General Studies. Tolerance and respect, social cohesion, the fight against cultural discrimination, global pluralism, heritage and culture, and groups in Rwanda and elsewhere were among the issues addressed. Figure 5.7 Shows a topics outline in the General Studies textbook and covers the heritage and culture issue and vulture and society.

Unit 11: Heritage and Culture	132
11.1 Elements of national heritage.....	133
11.3 Impact of differing cultures on lifestyle and habits.....	143
11.4 Influences of culture on what is considered acceptable and unacceptable sexual behaviour.....	146
11.5 Ways in which culture, human rights and social practices influence gender equality and gender roles.....	147
11.6 Unit summary.....	148
11.7 Test your competence.....	148
Unit 12: Gender and Society	149
12.1 Gender equality and equity.....	149
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Figure 5.7-Cultural diversity and awareness in General Studies textbook

Source: (REB, 2020)

Gender was identified in History, Citizenship, and General Studies subjects. Gender equality and equity; sexual violence and gender-based violence; culture and gender; and gender roles and stereotypes were among the topics covered. Other topics covered in these themes included the advantages of gender equality and complementarity. Other cross-cutting issues were identified, but the subjects did not go into detail on these issues. Citizenship was discussed in History, Citizenship, and English textbooks. In History, the emphasis was on developing Rwandan-conscious citizenship, whereas in English, there was a mention of global personalities and their impact or influence on global citizenship. Entrepreneurship and Economics books mentioned financial awareness, while History and Citizenship books mentioned disability and inclusive education.

As part of the study's qualitative strand, concepts related to the global perspective were found to be present in both the competence-based curriculum and textbooks used at the secondary school level in Rwanda. Despite being phrased differently, the scope, content, and objectives they were set to achieve resonate with a global education perspective. Therefore, the study submits that global education concepts have been integrated and are present in the CBC curriculum in Rwanda. The next chapter presents findings

from the teacher survey in schools to shed light on teachers' perspectives on the curriculum framework and global education in secondary schools in Kicukiro District. Additionally, analysis of the curriculum and textbooks established concepts that fit into four global perspective themes. In relation to the SGD 4.7 framework, a number of important concepts were missing. This included the concepts of global citizenship, and human rights issues.

6. TEACHERS' PERSPECTIVES ON GLOBAL EDUCATION INTEGRATION AND IMPLEMENTATION IN SCHOOLS

This chapter presents findings from the teacher survey administered in 15 schools (N=208 respondents) in Kicukiro District, Rwanda. The focus of this chapter was on the second, third and fourth objectives of the study, which include understanding teachers' views and perceptions of the CBC curriculum, teachers' knowledge, awareness and perception of global education, and challenges teachers face in teaching global education-related concepts in schools. The findings are presented in three sub-categories. First, the chapter presents findings on the competence-based curriculum from teachers' perspectives. Second, findings on teacher understanding and awareness are presented, including their views about global education and its integration and implementation in schools. Lastly, the challenges teachers face in teaching global education-related concepts are described.

First, the chapter presents a summary of the socio-educational characteristics of the participants, starting with the participating school categories, followed by teacher demographics.

6.1. Characteristics of Survey Respondents

6.1.1. School Distribution In Kicukiro District

The teacher sample in Kicukiro district was drawn from 15 schools, representing the three categories¹³ of schools as in Figure 6.1 below. As shown in Figure 6.1 below, 47% of the participating schools were public, 33% were government subsidised, and 20% were private. This distribution of schools ensured for a potential representation of teachers from various school backgrounds.

¹³ Category of schools refers to ownership and operational status. Public and Government-Subsidised schools are run by the government, receiving both financial and material support. Private schools are owned privately.

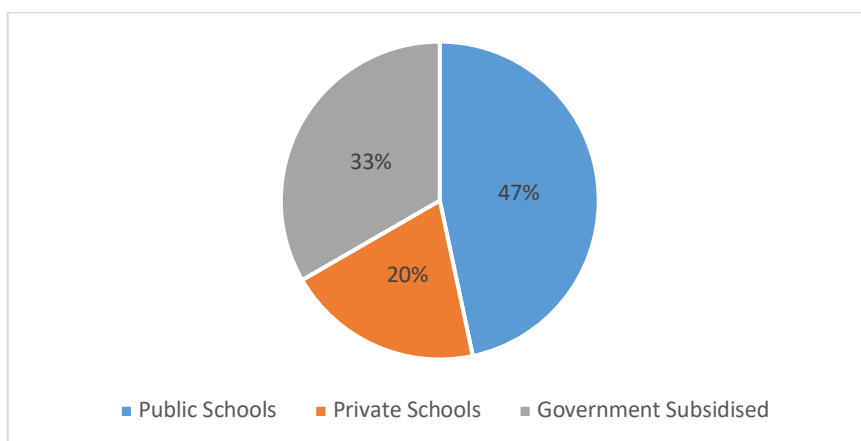


Figure 6.1-Category of Schools in Kicukiro District

6.1.2. Socio-demographic and educational characteristics

The main socio-demographic and educational characteristics of interest to the study were respondents' gender, age, level of education and years in service (teaching experience), as summarised in Table 6.1 below.

Findings in Table 6.1 indicate that, from the 208 respondents, more male teachers (n=120, 57.6%) than female teachers (n=88, 42.3%) participated in the study. The majority of the teachers (n=57, 27.4%) were within the age bracket of 31-25 years, and in total (n=125, 60.1%) were below 35 years. As for the level of education, the majority of the teachers (n=172, 82.7%) held bachelor's degrees, with (n=21, 10.1%) holding a diploma qualification and only (n=15, 7.2%) held the highest formal qualification, a master's degree. Only one teacher (n=1, 0.5%) had been in service for over 31 years, with a majority (n=64, 30.8%) having taught for between 6-10 years.

From these findings, Kicukiro district has a largely youthful population of teachers, who are well trained, and skilled to implement the Competence-Based Curriculum mission, given the teacher qualification levels and age distribution. Thus, this represented a very important teacher demographic aspect for curriculum implementation and integration of global issues in schools.

Table 6.1-Participant Socio-Demographic and Educational Characteristics (N=208)

Category	Variable	Frequency (f)	Percent (%)
Gender	Male	120	57.6
	Female	88	42.3
Age	Below 25	12	5.8
	26-30	56	26.9
	31-35	57	27.4
	36-40	44	21.2
	41-45	24	11.5
	46-50	10	4.8
	51-55	3	1.4
	Above 56	2	0.9
Level of Education	Diploma	21	10.1
	Bachelors	172	82.7
	Masters	15	7.2
Teaching Experience	1-2 Years	31	14.9
	3-5 Years	53	25.5
	6-10 Years	64	30.8
	11-15 Years	42	20.2
	16-20 Years	10	4.8
	21-25 Years	4	1.9
	26-30 Years	3	1.4
	31 years and more	1	0.5

6.2. Teachers' Perspectives on the Competence-Based Curriculum

6.2.1. Teachers' Awareness and Perceptions of CBC in Rwanda

The teachers' awareness of the Competence-Based Curriculum, their perceptions of its content and the content relevance to addressing global education were analysed. Teachers' awareness of the CBC curriculum was derived from a 5-point Likert scale where the scores are represented cumulatively through the means of respondents' scores, as summarised in Table 6.2 below.

Table 6.2-Teachers' Awareness of the CBC Curriculum (N=208)

Teachers Awareness of the Curriculum	Mean	Std. Deviation	Minimum	Maximum
1. I am aware of Competence-Based Curriculum that was introduced in 2015	4.106	0.658	1.000	5.000
2. I follow the Competence-Based Curriculum in all my teaching	3.764	0.760	1.000	5.000
3. I have been trained on the CBC contents and requirements and how to implement the curriculum in school	3.625	0.908	1.000	5.000
4. My school has been provided with the CBC documents and materials such as books	3.697	0.840	1.000	5.000
5. As a teacher, I have a good understanding of the CBC and what I am supposed to teach	3.841	0.735	2.000	5.000

(Key: 1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree)

Most items had a mean score of less than four, while one item had a mean score of 4, suggesting that teachers in Kicukiro district are relatively aware of the CBC curriculum. On specific items in the construct, most teachers indicated that they had been trained on CBC contents and requirements and how to implement CBC in schools ($\sigma = 0.908$).

Further analysis was conducted on teachers' awareness of specific CBC curriculum aspects. The focus was on teacher awareness, teacher training to implement the curriculum, availability of materials and resources, and the application of the curriculum in teaching. The results were summarised in Table 6.3.

Table 6.3-Teachers' responses to statements on awareness of the CBC curriculum (N=208)

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
I am aware of the Competence-Based Curriculum that was introduced in 2015	0.5	2.4	6.7	66.8	23.6
I follow the Competence-Based Curriculum in all my teaching	0.5	2.9	31.7	49.5	15.4
I have been trained on the Competence-Based Curriculum contents and requirements and how to implement the curriculum in school	2.4	6.3	33.6	41.8	15.9
My school has been provided with Competence-Based Curriculum documents and materials e.g., textbooks	1	7.7	26	51.4	13.9
As a teacher, I have a good understanding of the Competence-Based Curriculum and what I am supposed to teach	0	1.9	30.3	49.5	18.3

(Key: 1=Strongly Disagree, 2=Disagree, 3 Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree)

On the basic level of agreement (4=Agree) to specific CBC aspects, only two aspects had over 50% of the teachers agreeing CBC related issues. The majority of the teachers, 66.8%, agreed and stated that they

were aware of the CBC curriculum, while 51.4% agreed that their schools had received CBC materials such as textbooks. In the other three aspects, 49.5% indicated that they followed the CBC in their teaching, 41.8% stated that they had received training on CBC, and 49.5% stated that they had a good understanding of the CBC curriculum.

The study suggests that this average percentage rating on curriculum aspects hampers effective curriculum implementation as teachers are not uniformly informed or resourced in all schools. This raises the question of whether all teachers know and understand the framework to follow in secondary schools and whether they had received sufficient training on this new curriculum. It is important to note that if teachers are not aware of the curriculum and the approach to follow, it is impossible to realise its founding aspirations.

The study also considered the environment where teachers worked (schools) and whether teachers' awareness and knowledge of CBC varied in different school categories. Therefore, school category¹⁴ was examined in detail in relation to teacher awareness, and the results were summarised in Figure 6.2below.

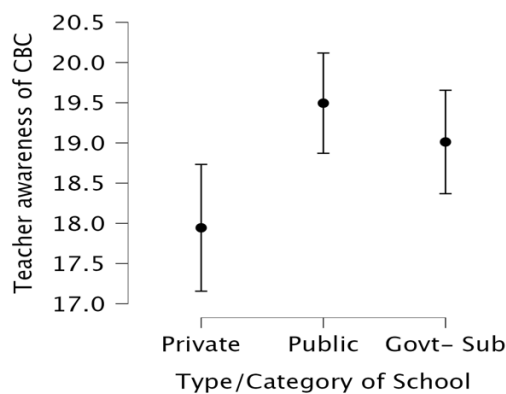


Figure 6.2-Relationship Between School and Teacher Awareness of the Curriculum

As shown in Figure 6.2, teacher awareness of the curriculum varied across the three categories of secondary schools in Kicukiro district. Teachers in government-run and supported schools (both public and government-subsidised) exhibited high awareness levels of the CBC curriculum, with a mean of 19.5 and 19, respectively, compared to teachers in private schools. This difference in CBC awareness might be a result of public and government-subsidised schools receiving financial and material support from the government while private schools do not. Additionally, teachers in private schools might be missing out

¹⁴ Either public, private, or government subsidised.

on in-service training on CBC implementation offered by the government, hence their low awareness of the curriculum. Outrightly, this points to the existing discrepancies between different types of schools in the same country and system, which may also reflect what learners are taught in the different schools.

6.2.2. Teachers' Perception of CBC Content and Relevance to Global Education

Having established teachers' knowledge and awareness of the CBC curriculum, the curriculum's content, and its relevance to teaching global issues (that translates to global education) were analysed. The findings were summarised in Table 6.4.

The findings in Table 6.4 above suggest that teachers are generally undecided on the CBC content's relevance in addressing global education, as all aspects of the CBC content, except for "4) CBC is aligned with major national objectives as outlined by the government" with a mean score of around 3 (3=Neither Agree nor Disagree). On specific content and relevance aspects, most teachers stated that the CBC curriculum only prepares students for the local market ($\sigma = 0.916$), with another majority set indicating that the curriculum promotes inclusivity in the society (Rwanda and across the borders) as indicated by the findings ($\sigma = 0.908$). Based on these findings, I argue that there is inconsistency in teachers' perceptions of the CBC content and its relevance to advancing global education.

Table 6.4-CBC Curriculum Content and Relevance to Global Education

CBC Curriculum Content and Relevance		Mean	Std. Deviation	Minimum	Maximum
1.	The CBC Curriculum will help solve local issues (Rwanda based issues such as high unemployment)	3.865	0.896	1.000	5.000
2.	The CBC curriculum Takes care of new and emerging local and global issues	3.524	0.816	2.000	5.000
3.	The CBC curriculum is aligned with major national objectives as outlined by the government	4.000	0.736	2.000	5.000
4.	The CBC is aligned with global best perspectives in education	3.543	0.867	1.000	5.000
5.	The CBC curriculum primarily aims to cultivate in students' knowledge, skills, and competencies for their personal development	3.630	0.818	1.000	5.000
6.	The CBC enables students to acquire lifelong skills (e.g., critical thinking, adaptability, creativity)	3.659	0.870	1.000	5.000
7.	The CBC curriculum promotes gender equity in the society	3.654	0.849	1.000	5.000
8.	The CBC promotes inclusivity in the society (Rwanda and across the borders)	3.582	0.908	1.000	5.000
9.	The CBC creates a favourable condition for developing learners' attitudes and values (e.g., freedoms, humanity, creativity, diversity)	3.630	0.782	2.000	5.000
10.	The CBC only prepares students for the local job market	3.548	0.916	1.000	5.000
11.	The CBC curriculum contributes to creating a better and just society by empowering the future generation (leaners) to be better citizens of the world	3.625	0.745	1.000	5.000

6.3. Teachers and Global Education

6.3.1. Teacher Knowledge and Awareness of Global Issues

Together with the curriculum, teachers form a critical set of actors in ensuring that whatever is in the curriculum is delivered in classrooms and to schools. Therefore, for teachers to teach global issues, it is imperative that they understand the issues first before actual teaching to learners. Results on teachers' knowledge and awareness of global issues are summarised in Tables 6.5, 6.6, and 6.7.

The study inquired on teachers' knowledge and awareness of 14 specific global issues (Table 6.5 below). The analysis indicates that on average, teachers know these specific global issues and can provide a general explanation of these issues ($\bar{x}=3$), with only three global issues that seem to be less clear for the respondents - Sustainable lifestyles, global citizenship, and human rights ($\bar{x}=2$) – (indicating they know but cannot explain what the issues mean). Of all these global issues, more teachers were aware of global citizenship ($\sigma = 0.795$) and sustainable lifestyles ($\sigma = 0.737$), however they were not able to explain the issues. Gender equality was the least known global issue ($\sigma = 0.620$), though teachers who were aware

of the issue claimed to have a general sense of this topic. In reference to these findings, I propound that teachers in Kicukiro district are generally aware of global issues, a positive departure point for the inclusion of global education issues in schools.

Table 6.5-Teachers' Knowledge and Awareness of Global Issues

Global Education Concepts/ Issues	Mean	Std. Deviation	Minimum	Maximum
Sustainable development	3.034	0.677	1.000	4.000
Sustainable lifestyles	2.913	0.737	1.000	4.000
Climate change and global warming	3.111	0.683	1.000	4.000
Environmental issues	3.067	0.670	1.000	4.000
Global health	3.024	0.684	1.000	4.000
Migration	3.163	0.661	1.000	4.000
The promotion of a culture of peace and non-violence	3.144	0.651	1.000	4.000
International conflicts and wars	3.120	0.645	1.000	4.000
Hunger or malnutrition	3.115	0.634	1.000	4.000
Causes of poverty in the world	3.159	0.644	1.000	4.000
Gender equality	3.144	0.620	1.000	4.000
Global citizenship	2.572	0.795	1.000	4.000
Human rights issues	2.909	0.685	1.000	4.000
Peoples' different cultures and appreciation of cultural diversity	3.087	0.654	1.000	4.000

(1=I have never heard of this; 2=I have heard of this, but I am not able to explain what it is; 3= I know about this, and I can explain the general issue; 4= I am familiar with this, and I am able to explain it well)

Further descriptive were derived to determine frequency distribution across the 14 global issues as summarised in Table 6.6 below. When asked about specific global issues, the highest number of teachers (N=131) would provide a general explanation of hunger and malnutrition. For those who indicated that they were fully aware and would explain issues well, more teachers (63%) would explain migration and causes of poverty well. On the same measure, only (11.5%) of the teachers stated they were able to explain global citizenship. The findings in Table 6.6, similarly inform of teachers' awareness of global issues and their good position to incorporate these issues in their teaching.

Table 6.6-Teacher Awareness of Specific Global Issues

Global Issues	I have never heard of this (1)	I have heard of this, but I am not able to explain it (2)	I know about this, and I can explain the general issue (3)	I am familiar with this, and I am able to explain it well (4)
Sustainable development	2 (1%)	38 (18.3%)	119 (57.2%)	49 (23.6%)
Sustainable lifestyles	4 (1.9%)	54 (26%)	106 (51%)	44 (21.2%)
Climate change and global warming	3 (1.4%)	29 (14%)	118 (56.7%)	58 (27.9%)
Environmental issues	3 (1.4%)	31 (14.9%)	123 (59.1%)	51 (24.5%)
Global health	3 (1.4%)	37 (17.8%)	120 (57.7%)	48 (23.1%)
Migration	2 (1%)	25 (12%)	118 (56.7%)	63 (30.3%)
The promotion of a culture of peace and non-violence	2 (1%)	25 (12%)	122 (58.7%)	59 (28.4%)
International conflicts and wars	2 (1%)	26 (12.5%)	125 (60.1%)	55 (26.4%)
Hunger and malnutrition	3 (1.4%)	22 (10.6%)	131 (63%)	52 (25%)
Causes of poverty in the world	2 (1%)	23 (11.1%)	123 (59.1%)	60 (28.8%)
Gender equality	1 (0.5%)	24 (11.5%)	127 (61.1%)	56 (27%)
Global citizenship	16 (7.7%)	81 (38.9%)	87(41.8%)	24 (11.5%)
Human rights issues	5 (2.4%)	44 (21.2%)	124 (59.6%)	35 (16.8%)
People's different cultures and appreciation of cultural diversity	3 (1.4%)	27 (13%)	127 (61.1%)	51 (24.5%)

In addition, the study examined the relationship between teachers' demographics (age, gender, and level of education) and their awareness of global issues as summarised in Table 6.7 below.

Table 6.7-Relationship between Teachers' Demographics and Awareness of Global Issues

Demographic		n	X	Std. Deviation
Gender	Female	88	42.2	8.1
	Male	120	42.9	6.7
Age	Below 25	12	43.4	8.3
	26-30	56	44.1	7.9
	31-35	57	41.9	5.5
	36-40	44	44.2	7.3
	41-50	24	39.3	8.7
	51-55	3	43	3.2
	Above 56	2	43	1.4
Level of Education	Diploma	21	39.9	8.3
	Bachelors	172	42	6.6
	Masters	15	53.1	4.5

Analysis of Table 6.7 indicates that teachers' gender and age do not seem to be a factor in the awareness of global issues (Female, $\bar{x}=42.2$; Male, $\bar{x}=42.9$). However, awareness of global issues varied with the level of education, with master's degree holders having a high awareness ($\bar{x}=53.1$) as compared to bachelor's degree and diploma holders ($\bar{x}=42$), ($\bar{x}=39.9$) respectively. Therefore, the study suggests that level of education is a factor for awareness of global issues.

6.4. Teacher Global Mindedness

The study adopted and modified part of Hett's global mindedness scale to measure teachers' global mindedness. Hett (1993, p.31) defines global mindedness as "a world view in which individuals perceive themselves as being connected to the world and are aware of their responsibility to other members". Individuals' attitudes, beliefs, and actions all demonstrate this type of mindset. The analysis comprised 18

items from the original scale¹⁵, selected and modified for this study considering its pertinence for the research object and context. First, the study analysed teachers’ general global mindedness using the modified scale¹⁶. General global mindedness findings are summarised in Table 5.8 below.

Table 6.8-General Teacher Global Mindedness

	Valid	Mean	Std. Deviation	Minimum	Maximum
Teacher Global Mindedness	208	69.856	5.621	51.000	88.000

Notes on scoring: i) Range of Scores: 18-90. li) The sum of all responses and the highest scores indicate a high level of global mindedness

Findings in Table 6.8 above indicate a global mindedness mean score ($\bar{x}$ =69.856), which was above the average score on the global mindedness scale, suggesting a moderate to high level of global mindedness among the teachers. This seems to inform the desire and willingness of the teachers to not only embrace but also incorporate the teaching of global issues in their schools.

A further analysis on specific global mindedness items revealed that teachers have an above average level of global mindedness ($\bar{x}$ =4), see Table 6.9. Findings in Table 6.9 suggest that teachers have a good understanding of global interconnectedness, global challenges, and the need to a global approach for a better and sustainable future.

¹⁵ Hett’s 1991 global mindedness scale had 30 items and the range of scores was 30-150. Higher scores indicated a higher level of global mindedness. Same criteria was adopted to determine level of global mindedness, however, the use of 18 items was a limitation and not possible to determine the global mindedness dimensions.

¹⁶ The modified scoring scale was between 18-90 (sum of all responses, and the higher the score the higher the level of global mindedness). Reverse scores items included (6,16 and 18).

Table 6.9-Global mindedness measure on specific items

Overall Teacher Global Mindedness	Std.			
	Mean	Deviation	Minimum	Maximum
I think of myself, not only as a citizen of my country (Rwanda), but also as a citizen of the world.	4.413	0.703	2.000	5.000
I generally find it stimulating to spend time talking with students or people from other cultures.	4.154	0.752	1.000	5.000
I enjoy trying to understand people's behaviour in the context of their own culture.	4.207	0.582	2.000	5.000
I am aware that global issues are interconnected.	4.236	0.686	1.000	5.000
I feel obligated to speak out when I see the government doing something I consider wrong.	3.596	0.963	1.000	5.000
Really, there is nothing I can do about problems of the world as a teacher.	3.596	1.146	1.000	5.000
As a teacher, I always think about the kind of world we are creating for future generations.	4.010	0.674	1.000	5.000
I believe global education can help learners to understand and act on global issues.	4.154	0.516	2.000	5.000
I have general knowledge about some issues and challenges that unite and divide geographical and cultural areas of the world.	4.029	0.547	2.000	5.000
I know that members of different cultures view the world differently.	4.106	0.555	2.000	5.000
I understand that global interconnectedness has both positive and negative consequences for Rwanda and the whole world.	4.125	0.533	2.000	5.000
I understand that Rwanda and Rwandese citizens have a role to play as global citizens.	4.106	0.572	1.000	5.000
Rwandese citizens can learn something valuable from different cultures and peoples.	4.106	0.546	3.000	5.000
When I see the poor conditions that some people in the world live in, I feel a responsibility to do something about it.	4.024	0.577	2.000	5.000
Looking after the global environment is important to me as a global citizen.	4.034	0.609	2.000	5.000
Generally, an individual's actions are too small to have a significant effect on the ecosystem.	2.779	1.150	1.000	5.000
It is important that we educate learners to understand the impact current policies might have on future generations.	4.000	0.538	3.000	5.000
Sometimes I feel annoyed with people from other countries because they do not understand how we do things here.	2.183	0.649	1.000	5.000

Of further interest to the study, was the relationship between different teacher demographics and their global mindedness. In line with this, the teachers age, level of education were analysed to establish whether global mindedness varied in relation to demographics. The results are presented in Figure 6.3 and Figure 6.4.

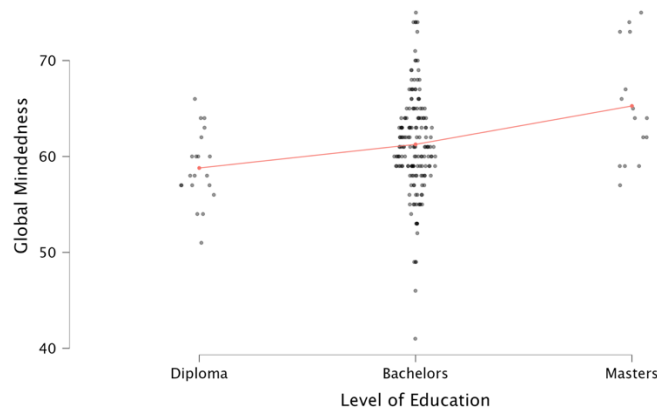


Figure 6.3-Relationship between Level of Education and Teacher Global Mindedness

As per this study's sample, the lowest entry qualification for teachers to the teaching service is a diploma, and the highest was a master's degree. Following the findings in Figure 6.3 above, a high level of global mindedness was recorded among teachers holding master's degrees (65.3), while the lowest was among teachers with a diploma qualification (58.8). These results suggest that level of education has some influence on global mindedness. However, it has to be noted that even though master's holders had the highest level of global mindedness, they had the lowest representation in the district.

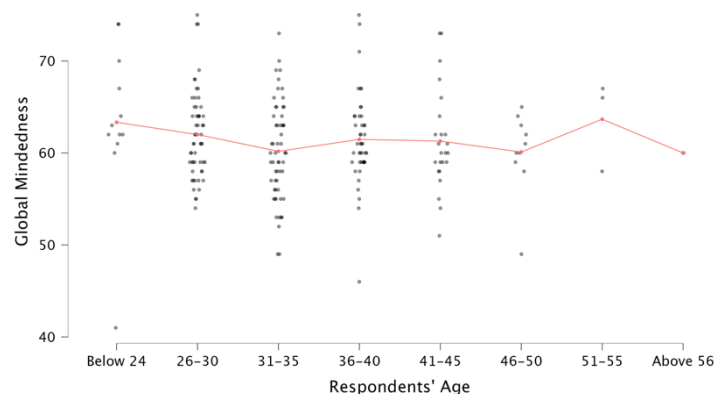


Figure 6.4-Relationship between Age and Teacher Global Mindedness

Findings in Figure 6.4 above show that there was a minimal difference in global mindedness scores across different age groups. Teachers below 24 years, and 51-55 years had the highest level of global mindedness (63.3) and (63.7) respectively. Therefore, in comparing the two demographics (level of education and age), age was not a factor for global mindedness. For the level of education, results seem to raise concerns on teacher training and development as a way to improve level of global mindedness considering the level

of global mindedness was reflected in the education qualification of teachers (the higher the education qualification the higher the level of global mindedness).

6.5. Global Education and Global Issues in CBC School Subjects

The inclusion of global issues (for global education) in school subjects is imperative to develop learners' skills, knowledge and attitudes needed to participate in the highly interconnected world. In this regard, the study examined the inclusion of global issues in the CBC secondary school subjects through a teacher perspective, and the results are summarised in Table 6.10 below.

Findings in Table 6.10 below indicates that most if not all of the listed global issues are not captured in the CBC curriculum subjects. All global issues of interest had ($\bar{x}=2$), with a mean of 3 being the average. This suggests that these issues are not present and that teachers do not teach these issues in their subjects. In relation to the findings in (section 5.3) these contradicts findings establishing global issues in the curriculum. This contradiction can be attributed to the idea that teachers teach varying subjects the issues might not be reflected in the areas of specialisation. This points to the existing bottlenecks in the actual implementation of these concepts in schools.

Table 6.10-Global Issues in CBC Secondary School Subjects

Global Issues in CBC Secondary School Subjects	Mean	Std. Deviation	Minimum	Maximum
Sustainable development	2.452	1.273	1.000	5.000
Sustainable lifestyles	2.365	1.208	1.000	5.000
Climate change and global warming	2.423	1.260	1.000	5.000
Environmental issues (e.g., desertification of tropical rainforests and depletion of soil resources)	2.524	1.293	1.000	5.000
Global health (e.g., epidemics and diseases)	2.442	1.226	1.000	5.000
Migration	2.495	1.308	1.000	5.000
The promotion of a culture of peace and non-violence	2.514	1.308	1.000	5.000
International conflicts and wars	2.466	1.274	1.000	5.000
Hunger or malnutrition in different parts of the world	2.351	1.178	1.000	5.000
Causes of poverty in the world	2.409	1.252	1.000	5.000
Equality between men and women in different parts of the world and in different sectors of life (gender equality)	2.447	1.277	1.000	5.000
Global citizenship	2.202	1.154	1.000	5.000
Human rights issues	2.313	1.233	1.000	5.000
People's different cultures and the appreciation of cultural diversity	2.486	1.274	1.000	5.000

(Key: 1=Not part of the curriculum; 2=Not at all; 3=Very little; 4=Somewhat; 5=To a greater extent)

6.6. Infusion of Global Education in Rwandan Secondary Schools

Global education is a necessity for the 21st Century learners, and its implementation in schools is imperative. Its inclusion in learning will help address the world's most pressing issues in a collaborative manner. For that reason, the study inquired about the teachers' perceptions and views on the need to infuse global education in teaching and learning in secondary schools. The results were summarised in Table 6.11 below.

Table 6.11-The Need for and Importance of Global Education in Schools

The Need for and Importance of Global Education	Std.			
	Mean	deviation	Minimum	Maximum
Global education should primarily aim to cultivate in students' knowledge, skills, and competencies for global citizenship	4.514	0.622	2.000	5.000
Global education should be incorporated into the school curriculum and be taught in schools	4.452	0.635	2.000	5.000
It is essential for secondary students to learn to become global citizens	4.269	0.691	1.000	5.000
I believe global education is an important tool for helping students to become global citizens and in achieving the sustainable development goals	4.346	0.578	2.000	5.000
Global education is important in Rwanda and globally now and in the future	4.058	0.579	3.000	5.000
By teaching global education in my school and impacting on the learners' views, I can make a difference globally	4.029	0.589	1.000	5.000

(Key: 1=Strongly Disagree, 2=Disagree, 3 Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree)

Findings in Table 6.11 above indicate teachers' unanimous agreement on the importance of infusing and implementing global education in schools. All items in the construct had a mean score of 4, indicating teachers' agreement on the need to include global education as part of learning in schools.

In fact, during school visits, I found that some schools have already incorporated global education issues through their everyday practices. In one of the schools, I found notices with messages related to global education as shown in Figure 6.5 below.

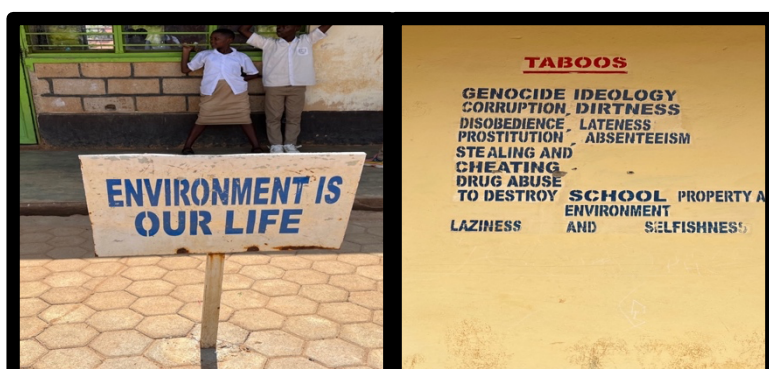


Figure 6.5-Global Education-related Messages in a School in Kicukiro District

Source: (Author, 2022)

In Figure 6.5, the notice in front of the classrooms reads *Environment Is Our Life*. This message was meant to provoke students to care for and protect the environment, a theme central to global education. This further invokes the goal on the *environment and sustainability* at this school. The painting outside listed taboos (prohibited practices) learners are supposed to refrain from. Similarly, in the second message genocide ideology, and destroying the environment as taboos, thereby promoting the themes of environment and sustainability and appreciation of cultural diversity and the promotion of a culture of peace and non-violence.

6.7. Teaching Global Education in Schools: Challenges and Limitations

The study explored the challenges teachers face in teaching global issues in schools. Findings in Table 5.12 point to varying challenges to the integration and teaching of global education concepts in secondary schools in Kicukiro district. All measurement parameters had an average score of below 3. The study suggests that challenges, such as lack of in-service and continuous training and development, lack of materials, overall school climate and general support directly related to the infusion of global education concepts countered any efforts to integrate and implement these concepts in schools. In particular, these challenges raise questions on personnel and system suitability to implement global education.

Table 6.12-Challenges Teachers face in Teaching Global Education

Challenges Teachers face in Teaching Global Education	Mean	Std. Deviation	Minimum	Maximum
I have sufficient knowledge and skills to teach global education and global issues in school	2.995	1.019	1.000	5.000
The official education authorities and my school have provided me with continuous in-service training to improve my teaching skills on global education and global issues	3.120	0.998	1.000	5.000
I am provided with sufficient and current materials such as books to teach global education and global issues	2.947	0.984	1.000	5.000
The competence-based curriculum policy does not allow me to teach global issues in school	2.841	0.957	1.000	5.000
My low interest level hinders me from teaching global issues	2.697	0.953	1.000	5.000
The overall school climate hinders me from teaching global issues	2.817	0.914	1.000	5.000
I received training and materials on global education and global issues from the government through the Ministry of Education	2.942	0.915	1.000	5.000
Overall, I have received enough support, facilities, and resources from curriculum leaders for the adaptation of global issues into the competence-based curriculum	3.053	0.841	1.000	5.000

Conclusion

This chapter investigated the integration of global education in schools in Rwanda from the teachers' perspectives, presenting data collected through the teacher surveys administered in 15 secondary schools in Kicukiro district, with 208 respondents. The main issues of interest included teachers' awareness of competence-based curriculum, its content and relevance to global education, teachers' knowledge and awareness of global issues, teachers' global mindedness and the challenges teachers face in teaching global issues in school.

The detailed analysis of these issues was presided by a presentation of the teachers' socio-educational data, which revealed that the teachers in this district are qualified, with the entry-level being a diploma qualification and master's degree as the highest qualification. In addition, teaching experience varied among the teachers ranging from one year to a maximum of 31 years. The analysis proceeded to present teachers' knowledge and awareness of the curriculum and global education matters both in the curriculum and in schools. The second objective focused on teachers' awareness and perceptions of the curriculum and its contents, and the overall finding was that teachers are aware of the competence-based curriculum. However, teachers' awareness of the curriculum varied in different types of schools, where teachers in private schools were found to be less aware as compared to teachers in government-supported schools. This can be considered an impediment to successful curriculum implementation.

The third objective analysed teachers' global education knowledge, awareness, and perceptions. The results indicated a medium level of awareness of global issues. In contrast, the teachers had a high score on global mindedness, indicating their desire to have global education concepts integrated into learning subjects in secondary schools. However, from a teacher's perspective, there was no consensus on the existence of global education concepts in schools. The fourth and last objective was on the challenges to infusing and teaching of global education in schools. The overall finding was that there are profound challenges that require streamlining to implement global education in schools. Challenges mentioned included the lack of proper materials, lack on in-service training and development and school environment challenges. The findings in chapter four and five, informs the focus and discussion in the next chapter.

7. SUMMARY, CONCLUSION AND RECOMMENDATIONS

The previous chapter (chapter five and six) presented the study's qualitative and quantitative findings. The first section presented qualitative findings and discussed cross-cutting issues present in the CBC curriculum and textbooks in relation to global education while the second section presented findings from the teacher survey on the integration and implementation of global education in schools. This chapter will discuss the findings and relate them with findings from other similar studies. This will be followed by a conclusion to the study based on research questions. The limitations of the study will be explained, and chapter will conclude with recommendations and suggestions for further research.

In the first objective, the study examined the presence, framing and conceptualisation of global education and related concepts in Rwanda's CBC curriculum. I agree with Tsegay and Bekoe (2020), that there are concepts related to global education in sub-Saharan educational documents, such as curriculum frameworks and textbooks. Clearly, the cross-cutting issues in the Rwandan curriculum are concepts related to global education. However, I cannot conclude that GE is present in the Rwandan curriculum as the framework does not explicitly mention GE. The need for 21st-century competencies is important for 21st-century citizens, and the presence of the generic competencies in the curriculum concurs with Nsengimana and colleagues (2021, who also refer to them as transferable skills.

The suitability of the CBC curriculum to advance global issues and challenges was questioned by teachers' indecisiveness on whether it addresses pertinent global issues ($\bar{x}=3$). This is comparable to Mhlauli (2014, pp.51-53), where teachers in Botswana preferred to approach global issues from a Motswana perspective rather than prioritising global issues. This indecisiveness and selective implementation of curriculum content raise concerns on whether teachers, as critical implementing actors, follow the curriculum and other policy documents. Despite the indecisiveness in the curriculum content, teachers were aware of the CBC curriculum ($\bar{x}=3.76$), even though this also varied across different school types. Wahyudin and Suwirta (2017) noted that teachers' awareness of the curriculum was important to teaching cross-cultural and GCE issues in school. However, teachers faced challenges in implementing these concepts in school such as the lack of training on CBC content and requirements and how to implement the curriculum in school and the availability of materials and documents such as books.

Teachers' awareness was also reflected in their knowledge of global issues, and they were able to provide general explanations of global issues ($\bar{x}=3$). However, three issues were problematic to the teachers, sustainable lifestyles, global citizenship, and human rights issues. Mirroring teachers' awareness of global

issues was their consensus on the need to integrate global education concepts in schools ($\bar{x}=4$). This was further reflected in the above average ($\bar{x}=4$), level of teacher global mindedness in Kicukiro district. However, global mindedness varied with teachers' educational qualifications.

Despite establishing cross-cutting issues in the curriculum and teachers' awareness of global issues, challenges exist in integrating GE concepts in teaching. Lack of sufficient knowledge, materials and a conducive school environment were some of the identifiable challenges. Private school teachers reported more challenges, and this might be due to lack of state support (financial and material support) to this category of schools. Overall, I can argue that there exist GE related concepts in the CBC curriculum in Rwanda, however, I cannot conclusively state that GE exists in the curriculum and other education documents, as my literature search did not establish this, and neither did the curriculum framework mention GE. Furthermore, the presence of GE concepts in the curriculum does not translate to school integration as noted by teachers' uncertainty of the curriculum and the challenges teachers face in schools.

Considering change takes time, and so is a new curriculum implementation process. It is critical to note that curriculum changes in sub-Saharan Africa, as noted in the case of Rwanda, have marked the departure point toward the inclusion and implementation of GE and global learning in schools across the continent. On account of these findings, I conclude that the relevance and effectiveness of a curriculum to support global education implementation cannot be examined and understood solely through policy documents. This can, however, be accomplished in collaboration with actual implementation in schools (considering the teachers as implementors and learners as receivers).

In relation to the study assumptions, the findings confirm all three assumptions and demonstrate that curriculum frameworks are an important tool for understanding how teaching and learning are carried out in schools. It is easier to align the learning objectives in the country, particularly in secondary schools, with a good curriculum, such as Rwanda's Competence-Based Curriculum. This means that when a proper structure and guiding tool are in place, all actors in the education sector can embrace a global perspective initiative. Furthermore, a knowledgeable teacher with a global mindset is required for the implementation of global education in Rwanda and across Sub-Saharan Africa's secondary schools. Authorities should work to eliminate obstacles that impede teachers' efforts to implement global best practises through their teaching in the study area with a globally oriented teacher base and curriculum framework. As a result,

achieving global education in African schools is only possible if all of the necessary factors are in place, such as guiding documents, well-trained teachers, and institutional support.

Competence-Based Curriculum in Rwanda has been implemented for the last six years. A good curriculum framework is great, however, for the framework to bear fruits, it requires well-trained and knowledgeable implementors. It is imperative that Rwanda and other sub-Saharan African countries provide well-grounded teaching training. Furthermore, there is a need to include global issues and concepts in learning materials, according to Tsegay and Bekoe (2020) Global themes should be uniformly defined to enhance the acquisition of knowledge of global themes. Lastly, infusing a global perspective into the curriculum is important for relevant and meaningful learning in the 21st century and beyond. It is recommended to further connect teachers with their peers in other regions (continentally or globally) to enhance their global knowledge and global learning ideas. In addition, schools and teachers should be supported by education leaders and bodies such as the Ministry of Education.

I encountered several challenges while conducting the research. First, available time was not sufficient to conduct extensive research because the study relied on both qualitative and quantitative data. The integration of the two approaches in research takes a long time, so a three-month period in the field was too short. Second, obtaining the necessary documentation to conduct fieldwork in Rwanda's Kicukiro district took time. It implied receiving a research permit from the National Council for Science and Technology (NCST), Kigali City Mayor, and Kicukiro District Education Officer (DEO). This was made possible, however, thanks to the assistance of the University of Rwanda's College of Education.

The inclusion of paper surveys for the teacher survey was the third challenge. The teacher survey was to be administered entirely online, according to the initial study plan. However, due to technical difficulties, some teachers were unable to access and complete the online surveys, forcing hence schools to visit and distribute and collect paper surveys. This was problematic due to heavy rain in Kigali, and as a result, some schools were inaccessible. Lastly, It was less economical as an outsider conducting research in Rwanda because I had to work with a field assistant for navigation to schools and introduction in some schools. Furthermore, I had to establish a trustworthy relationship with the head of schools before conducting surveys, which took time given the limited time available to conduct the research in Kicukiro District.

In light of the study findings and gaps in current research, I argue that more research on global education in Sub-Saharan Africa is required. In line with this, I propose the following research directions:

- First, further research on the definition of global education, its components, and its implementation in various Sub-Saharan contexts is required.
- Second, further research on teachers' classroom teaching practises and how they present global issues in Rwanda, and Sub-Saharan Africa is needed. This is based on the study's findings on the inclusion of global education-related concepts in the curriculum; the suitability of the curriculum to promote these concepts. Furthermore, this study only focused on education documents and teachers, leaving out learner perspectives. As a result, recipients of what is in the curriculum framework and what teachers do in schools were not considered in the study. Therefore, an inquiry into teaching practices and classroom practices will establish whether curriculum contents are translated into actual teaching and learning in classrooms.
- Finally, research on how social, economic, cultural, and historical factors influence people's global mindsets is needed, which is largely lacking in educational research on global education, citizenship education, and global mindedness.

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Appendix 1: UPPER SECONDARY SUBJECT COMBINATION

Category	Combinations
Sciences	Mathematics – Physics – Geography (MPG) Physics -Chemistry -Mathematics (PCM) Physics- Chemistry- Biology (PCB) Biology -Chemistry – Geography (BCG) Mathematics -Economics -Geography (MEG) Mathematics-Computer Science -Economics (MCE) Mathematics -Physics -Computer Science (MPC) Mathematics – Chemistry -Biology (MCB)
Humanities	History -Economics -Geography (HEG) History – Geography – Literature in English (HGL) History – Economics – Literature in English (HEL) Literature in English – Economics – Geography (LEG) Religious Education – History – Literature in English (RHL) Religious Education – History – Geography (RHG)
Languages	Literature in English – French – Kinyarwanda (LFK) Literature in English – Kiswahili – Kinyarwanda (LKK) Literature in English – Kiswahili – French (LKF)

APPENDIX 2: NCST RESEARCH AUTHORISATION

REPUBLIC OF RWANDA



**NATIONAL COUNCIL FOR
SCIENCE AND TECHNOLOGY**

Mr. Abiud BOSIRE
Passport N°:BK116523

Kigali, 09th February 2022

N°: NCST/482/296/2022



Dear Abiud,

RE: Approval to Conduct Research in Rwanda

I am pleased to inform you that your request to conduct research in Rwanda entitled: **"Towards a Curriculum for Global Education Integration and Implementation in sub-Saharan Africa: An Analysis of Rwanda's Lower-Secondary School Curriculum"**, has been approved under research permit **No: NCST/482/296/2021**.

This permission covers research activities specifically related to the provided research project title, and project proposal submitted to the National Council for Science and Technology (NCST) for the period from **09th February 2022 to 31st December 2022**.

The research will be carried out under the affiliation of **University of Rwanda, college of Education** under the supervision of **Dr. Irenée NDAYAMBAJE**, Lecturer at UR (+250788609810) and will take place in Kigali City.

As a requirement, you are requested to prepare a power point presentation of your results, and present at NCST Stakeholders Scientific Conference and submit both the progress and final reports after completion of your research activities to the NCST, UR and the Mayor of Kigali City.

I wish you success in your research.

Sincerely,

Dr. Eugene MUTIMURA
Executive Secretary



CC:

- Hon. Lord Mayor of Kigali City
- The Vice Chancellor of University of Rwanda
- Dr. Irenée NDAYAMBAJE, Supervisor of the study

APPENDIX 3: KIGALI CITY APPROVAL



*Republic of Rwanda
City of Kigali*



Ref. N° 18.006/07.01.16/22

Kigali, on

Abiud Bosire
Faculty of Arts and Humanities-University of Porto
And College of Education-University of Rwanda
Email: up202003646@edu.letras.up.pt@gmail.com

Dear Sir,

**Re: Towards a Curriculum for Global Education Integration and Implementation in
sub-Saharan Africa: An Analysis of Rwanda's Lower-Secondary School Curriculum**

Research Permit Reference Number: NCST/482/296/2022

The City of Kigali considered your application to conduct your study in Kigali and to collect data in Gasabo District and Kicukiro District on **"the Integration and Implementation of Global Education in Lower-Secondary Schools"**. We are pleased to inform you that your request is hereby granted.

Please note that authorisation to conduct this study will automatically expire on the 31st of December 2022, as stated in your research permit. In addition, before starting your research, you must submit this letter to the District Offices in Gasabo and Kicukiro Districts to clarify your need and receive permission to visit schools.

Please notify the City of Kigali when the study is completed.

Regards,



Julian RUGAZA
City Manager

Cc:

- His Worship the Mayor, City of Kigali;
- Vice Mayor in charge of Urbanisation and Infrastructure;
- Kicukiro District Executive Administrator;
- Gasabo District Executive Administrator

KIGALI