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**No One Right Approach; A Review of 21st Century Skills Pedagogy
in Eswatini Curriculum**



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No One Right Approach; A Review of 21st Century Skills Pedagogy in Eswatini Curriculum

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Abstract

Purpose: The 21st century skills curriculum is adjusted in different ways to meet each country's education needs. This study is a review of how the 21st century skills curriculum is adapted in the Eswatini General Certificate of Secondary Education (EGCSE) curriculum. Its objectives were; to ascertain the vision of the 21st century skills curriculum as embraced by the EGCSE curriculum; to explore the interpretation of the 21st century skills pedagogy in the EGCSE curriculum and to examine other legal documents that embrace the notion of 21st century skills in Eswatini.

Methodology: It adopted the systematic literature review methodology. Four (N=4) documents were analysed to determine 21st century skills. These are the P21 Framework, the IGCSE Consultative Document for 2005, the National Curriculum Framework for General Education and the Eswatini Education and Training Sector Policies (EETSP) for 2011 and 2018.

Findings: The findings revealed that the 21st century curriculum philosophy is captured in the P21 framework and EGCSE curriculum in similar ways, as learner-centred and constructivist in design. The P21 Framework interprets the 21st century skills as; learning and innovation, information, media and technology skills and career skills. Contrary, EGCSE pool them together as; communication and language, numeracy, problem solving, technological awareness and applications, critical thinking, work and study, independent learning and working with others. Other legal documents that embraced the notion of 21st century skills were the Competency-based Curriculum Framework, the National Curriculum Framework for General Education and the Eswatini Education and Training Sector Policy for 2011 and 2018 within which there are two (2) sub-policies; Inclusive education, Education for All.

Unique Contribution to Theory, Policy and Practice: Though put differently, the 21st century skills in both frameworks are similar; they empower learners with ways of thinking and working, tools for working and living in the world. Also, only summative assessment is captured, a few is said on formative. It is recommended that both frameworks be revised for more speculations on formative assessment strategies. For teachers to understand the EGCSE curriculum, they need to refer to the other documents or policies.

Keywords: *21st Century Skills, Curriculum Documents, Education Policies*

INTRODUCTION

The 21st century demands for new skills that help learners perform in education, workplace and life in general have necessitated a paradigm shift in education. It defines traditional education focussed on basic knowledge and facts as one that was necessary for the 20th century. This is because it was the human capital approach to education that channelled and prepared the individual for professional white collar jobs and college admission. Contrary, the 21st century is for the idea that education should not only prepare learners for college, career and workplace. It moves that education must enable learners to utilise the learnt knowledge and skills in all environments within and outside the school. It describes education as a vehicle for social, human and cultural development (Chalkiadaki, 2018). This means that it must emphasise on what people can do with the knowledge and skills offered through education. This means that the knowledge and skills taught must be aligned to people's needs.

The shift in learning goals initiated by the 21st century led to the emergence of Education for Sustainable Development Goals (ESDG). Amongst the goals, SDG No. 4.7 is focussed on education. It dictates that “by 2030 education should be transformative by building knowledge, skills, values and attitudes that learners need to be able to contribute to a more inclusive, just and peaceful world”(UNESCO, 2015 p. 25). This goal implies that the school curriculum should make means to connect learners to real world experiences. Consequently, the adoption of this goal redefines the duty of the school as an institution that equips learners with knowledge, skills, attitudes, values and ethics (KSAVE) that are of demand in the 21st century fourth industrial era.

Like many other countries, the Kingdom of Eswatini has legally adopted 21st century skills at policy level. To embrace the notion of 21st century learning and innovation skills, the Kingdom of Eswatini adopted the International General Certificate of Secondary Education (IGCSE) curriculum, which is crafted as the Eswatini General Certificate of Secondary Education (EGCSE) curriculum. For purposes of this study, EGCSE is the curriculum that is offered in Eswatini junior and senior secondary school. Significantly, this curriculum entails that beyond acquisition of knowledge, attitudes and values, teaching and learning should equip learners with 21st century skills applicable globally. The aim of this study was to review the notion of 21st century skills as embraced by the EGCSE curriculum.

Background

Transformation in education and the slogan on education as a poverty reduction strategy has led to the emergence of 21st century skills. Originally, 21st century skills are qualities founded by the Partnership for 21st Century Skills (PTCS) (2012) through the National Education Association (NEA) (2010) as skills necessary for work, life and college. The vision for 21st century learning is unpacked in the P21, a Framework for 21st Century Learning. It describes the knowledge/content, specific skills, expertise and literacies required for students in the 21st century for them to succeed

in life and work in general (PTCS, 2012). According to the PTCS (2012) the P21 framework is the benchmark. All countries are expected to use it to design their curriculum and assessment.

In the P21 framework, the 21st century skills are grouped into three categories. The first is learning and innovation skills; creativity and innovation, critical thinking and problem solving, communication and collaboration. The second is information, media and technology skills; information literacy, media literacy and information communication technology literacy. The third is life and career skills; flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, production and accountability as well as leadership and responsibility (PTCS, 2012). Literature reveals that there is no one right approach to 21st century skills (PTCS, 2012; Kivunja, 2015; Scott, 2015; Chalkiadaki, 2018; Jones, Rossignoli & Amonoo-Kuofi, 2019). This study reviews the notion of 21st century skills as embraced by the EGCSE curriculum.

The rationale behind 21st century skills curriculum

Advancement in information and communication technologies, amongst other educational demands draw the major difference between 21st century and 20th century skills (PTCS, 2012; Chalkiadaki, 2018). This is because 21st century skills attach greater significance to teaching and learning aided by use of ICT. The reason being its greater ability to help students acquire 21st century skills (Joynes et al., 2019). Besides the potential for aiding mastery of skills during learning, scholars value use of ICT as a tool that develops research and information obtaining skills with learners (Alismail & McGuire, 2015). In support for the importance of ICT in teaching 21st century skills Chalkiadaki (2018) asserts that digital literacy ranks higher than all other skills in the 21st century framework (p. 9).

Educators need to understand that 21st century skills are not taught separately. They build upon the base of core content/ subject knowledge. This means that to integrate them, they must blend pedagogical content knowledge with the required skills, expertise and literacies (PTCS, 2012; Alismail & McGuire, 2015; Chalkiadaki, 2018). Also, educators need not worry because 21st century skills are universally applicable. Thus, the P21 framework is not an end or the be all framework to be adopted. Countries are allowed to draw their own frameworks under the banner of 21st century skills based on their economic well-being. This is what makes the skill sets for the 21st century to differ according to countries' diverse economic positions and demands. However, ICT remains central with a number of frameworks on 21st century skills, though it comes in different ways. Some curriculum frameworks for other countries refer to it as ICT, some as digital literacy and others as Information Technology. Besides ICT, research reveals that creativity, collaboration, communication, critical thinking and technological applications are key competencies required in the 21st century (Kivunja, 2015; Chalkiadaki, 2018; Joynes et al., 2019).

Thus, there is no one right approach to 21st century skills (Jones et al., 2019). UNESCO (1996) categorised 21st century learning and innovation skills into; learning to know, learning to do, learning to live together and learning to be. The Assessment and Teaching of 21st Century Skills

(AT21CS) ordered the skills into; ways of thinking, ways of living, tools for working and skills for living in the world (AT21CS, 2014; Scott, 2015). The Committee on the Assessment and Teaching of 21st Century Skills for 2011 grouped the skills into; cognitive, interpersonal and intrapersonal skills (Lai & Viering, 2012).

The above is evidence that 21st century skills are drafted and contextualised differently. According to Nyamkhuu & Murohashi (2019) countries too, interpret 21st century skills in a way that suits their socio-economic conditions and based on their own definition of ESD. Given the complexity of 21st century skills, the study sought to explore the Kingdom of Eswatini's adoption of the notion of 21st century skills through reviewing the EGCSE curriculum framework and other legal documents on 21st century skills available in the Kingdom of Eswatini.

As mentioned earlier in the study, the EGCSE curriculum is the syllabus currently rolling in the Kingdom of Eswatini junior and senior secondary level of schooling. It is drawn from the International General Certificate of Secondary Education (IGCSE). To make the IGCSE curriculum suit Emaswati socio-cultural context, it was localised thus, the name Eswatini General Certificate of Secondary Education (EGCSE). Before the EGCSE curriculum, the Kingdom of Eswatini had been offering the General Certificate of Secondary Education (GCE O' Level) curriculum. The major differences between the two curricula is that while the GCE O' Level curriculum was more into regurgitation of knowledge and acquisition of traditional skills, EGCSE seeks to equip learners with knowledge and 21st century skills (IGCSE Consultative Document, 2005). The main aim of this study was to explore the Kingdom of Eswatini's adoption of the notion of 21st century skills curriculum.

Research objectives

1. To ascertain the vision of the 21st century skills curriculum as embraced by the EGCSE curriculum.
2. To explore the interpretation of the 21st century skills pedagogy in the EGCSE curriculum.
3. To examine other legal documents that embrace the notion of 21st century skills in the Kingdom of Eswatini.

Research questions

1. How is the vision of the 21st century skills curriculum embraced by the EGCSE curriculum?
2. How does the EGCSE curriculum embrace 21st century skills pedagogy?
3. Which other legal documents embrace the notion of 21st century skills in the Kingdom of Eswatini?

Theoretical review

The study is informed by the Rand Change Agent model of curriculum implementation, which regard that change implementation is a mutual adaptation process that is not uniform (McLaughlin,1990; Suzuki, 2024). The tenets of the model are of the idea that implementation of educational change must be based on social equity. The model implies that though guidelines towards any change are key to be followed, local factors are major determinants of successful implementation of any change in education. These factors are learnt through an analysis of social changes and demands of the context (McLaughlin, 1990; Suzuki, 2024). The model is relevant for the study in that the research examines how the EGCSE curriculum was crafted alongside the guidelines of the 21st century skills curriculum and the social needs of Eswatini learners.

LITERATURE REVIEW

Literature for this study is reviewed under two (2) topics. The first one is the philosophical underpinning of the 21st century skills curriculum which has got other subtopics. These are the role of the teacher and instructional strategies recommended for the 21st century, the description of the learner and assessment strategies recommended. The second one is the empirical studies done on 21st century skills which also leads to the gap.

The philosophical underpinning of the 21st century skills curriculum

The 21st century skills model of learning posits that education should produce citizens who are capable of sustaining themselves in a complex society (PTCS, 2012). Education is viewed as a process of human development that enables people to fulfil their individual potentials and to contribute to the economic, political and social transformation of their countries (UNESCO,13b). It therefore regards that education is crucial for development. The 21st century skills philosophy is a deviation from the former philosophy of education that encouraged proficiency in the three Rs (reading, writing and arithmetic). The notion of 21st century skills views teaching the learners reading , writing and counting as inadequate and puts emphasis on the need for learners to demonstrate the ability to produce, communicate, solve problems, collaborate as well as critic and create (Kivunja, 2015; Erdogan, 2019).

Though the 21st century skills approach emphasises on skills, it also ensures learners' mastery of pedagogical content knowledge and expertise simultaneously during the teaching and learning session (PTCS, 2012). It embraces the concept of holistic education that aims to equip learners with the cognitive, socio-emotional and behavioural skills as three pillars of education enforced by ESD. What makes the 21st century skills curriculum to be highly regarded is that, besides mastery of the subject content it requires learners to produce, reason, analyse, make claims, compare and contrast, argue, synthesise and evaluate information from a wide variety of subjects and sources. Not only that but helps them develop understanding and respect for diverse cultures; an interdisciplinary approach to curriculum (PTCS, 2012; Berry and the Teacher Solutions 2030 Team, 2010; Goldberg, 2012). Consequently, the 21st century skills curriculum makes learners acquire multidimensional abilities. Therefore there is a need to understand the role of the teacher,

instructional strategies, the description of the learner and assessment approaches as defined by the 21st century skills framework (Alismail & McGuire, 2015).

The role of the teacher and instructional strategies recommended for the 21st century

Teachers are the offers of curriculum and designers of instruction, they therefore need to align their practices with 21st century skills curriculum recommendations. The 21st century curriculum recommends that teachers should use learner-centred teaching strategies that are collaborative, inquiry/problem-solving and authentic (PTCS, 2012; Goldberg, 2012; Alismail & McGuire, 2015). It also demands that teachers must offer instruction that is aided by use of supportive technologies and one that integrates the school and community resources. (Bell, 2009; PTCS, 2012; Goldberg, 2012). This means that teachers are expected to use the constructivist approach to teaching and learning in which they improvise and make use of available tools to create an environment that promotes development of skills. On the other hand, students are expected to construct knowledge by themselves. The constructivist approach to teaching and learning makes the teacher a guide, a facilitator of learning, an orchestrator of experiences of discovery and creation, a motivator empowering students, an explorer and a designer (Blair, 2012; PTCS, 2012; Davila, 2016).

Additionally, it demands that teachers should offer balanced instruction that caters for different learner intelligent styles and create environments that support differentiated learning and continuous evaluation of students (P21 framework). During the teaching process, the teacher should scaffold higher levels of thinking and foster communication skills with students (Goldberg, 2012). To support the idea, Berry and the Teacher Solutions 2030 Team (2010) cite that the 21st century curriculum changes teachers into teacherpreneurs who work closely with their students in their local communities. In this regard, the 21st century curriculum labels and assigns teachers as holistic educators serving multi-functional roles as development facilitators, learning concierges, virtual network guides, gaming experts, community organisers and policy researchers (Berry and the Teacher Solutions 2030 Team, 2010).

The description of the learner

The 21st century curriculum views the learner as someone who is naturally equipped with knowledge, skills, talents and abilities. It thus considers that when they come to class they possess prior knowledge acquired from the learners' interaction with different environments (NEA, 2010). It therefore prescribes that the process of teaching and learning should help learners connect new knowledge to prior knowledge and provide an avenue for the manifestation and further development of existing abilities. It is for this reason that scholars recommend that teaching and learning for the 21st century should be interdisciplinary; promote connection across subjects and activities within and outside school (NEA, 2010; Schleicher, 2012). The curriculum describes learning as an adventurous exercise that extends beyond the classroom.

Secondly, the 21st curriculum regards each learner as a unique being with special talents and abilities. To meet these individual learner differences the curriculum postulates that teachers must

use differentiated learning instructional approaches. These are direct teaching, whole group teaching, guided discovery, group work, self-study and individual discovery and personalised feedback (Schleicher, 2012, p.38). Thirdly, the 21st century curriculum views the learners as digital natives; a generation born with and surrounded by technology (NEA, 2010; McNutty, 2017). It therefore implies that teaching them how to manage information from a variety of backgrounds and situations is of great importance. It also implies that instruction should optimise the use of digital resources in order to train learners' ability to handle information from all sources. Lastly, it considers that the best way to achieve learner needs is for teachers to make learning a collaborative exercise that engages learners in a variety of interactions. There must be one between; the learner and the teacher, the learner and peers, the learner and the text and the learner and technology. In all these interactions, the curriculum expects that the learners must be at the centre (Saleh, 2019; Vygotsky, 2011).

Assessment strategies recommended for the 21st century skills curriculum

The notion of 21st century skills brought to an end the practice of evaluating key learning domains; learners' ability to read, write and count. It recommends use of 21st century assessment strategies that measure real world tasks and provide evidence of what learners know, do, say and make (UNESCO, 2005; Kim, Care & Vista., 2019). Evidence of this is the existence of the AT21CS document for 2011 which proposes the KSAVE model of assessing 21st century skills. The model implies that assessment should be focussed on ways of thinking, ways of working, tools for working and skills for living in the world (Binkley, Erstad, Herman, Raizen, Ripley & Rumbleet, 2010, p.15; AT21CS, 2014). This resembles a shift from old practice assessment found in a teacher-led classroom that are typically didactic, drilling, and more into memorisation and expository kind of learning. The change in assessment is also captured in the four pillars of quality education that are entailed in the Report on the International Commission on Education for the Twenty First Century as learning to know, learning to do, learning to be and learning to live together (UNESCO,1996). Thus, 21st skills assessment assesses what the learner can say, do, think, and feel.

Kim et al. (2019) complain that contextualisation of 21st century skills make them too diverse. This is especially because their competencies and practices are aligned according to each country's demands therefore, they lack clear approaches and evaluation tools. To concur with the above concern, Harshbergar (2016) submitted that there is no specific benchmark for measuring attainment of 21st century skills. This is regardless of the fact that SDG has set international standards for assessment of 21st century skills. The benchmark is that assessment should be appropriately targeted for different ability levels and also for individuals from different cultures and subgroups. Another expectation is that it must also consider varied national emphasis on curriculum, pedagogy and assessment. (IGCSE Consultative Document, 2005). However, research reveals that amongst the existing frameworks on assessment of 21st century skills, only the P21 and AT21CS capture features of formative and summative assessment (Voogt & Roblin, 2012).

Another challenge with 21st century assessment as viewed by Kim et al. (2019) is that teachers need guidance on learners' expectations on performance at the different levels of each 21st century skill. Another scholar who complains on 21st century skills assessment is Chalkiadaki (2018, p.2) who lodged a complaint that out of the four concepts "learning to be" remain hard to understand and apply in the classroom.

Empirical studies

There were several studies reviewed on 21st century skills. Chalkiadaki (2018) reviewed 21st century skills and competencies in primary education. Findings revealed that Chalkiadaki (2018) label the 21st century skills as multi-aspect and multi-level concepts that train learners in five skills: personal, social, knowledge and information management and digital literacy. In their review of 21st century standards and curriculum, Alismail and McGuire (2015) came up with various strategies for achieving 21st century skills such as; problem-based learning, collaborative learning, and tasks that link knowledge with reality as well as those that integrate digital tools in the classroom environment.

Kivunja (2015) explored the pedagogical meanings and implications of the 4Cs super skills for the 21st century through Bruner's 5E lenses of knowledge construction to improve pedagogies of the new learning paradigm. Findings revealed that integrating the 4Cs into curriculum is crucial for achievement of the moral purposes of education. Out of the three categories of 21st century skills Kivunja (2015) label the learning and innovation skills; the 4Cs as super skills that fuel the development of the other skills and elements of the 21st century skills that are metaphorically referred to as the Rainbow by the P21 framework.

Joynes et al. (2019) reviewed 21st century skills: evidence of issues, definition, demand and delivery for development contexts. Findings revealed that 21st century skills are defined differently by different countries and frameworks. Joynes et al. (2019) also discovered that skill sets for the 21st century differ according to each country's diverse economic demands. Lastly Joynes et al. (2019) conclude that though ICT is a much demanded skill for teaching 21st century skills there is flexibility in its application depending on each country's economic status; high, middle and low resourced countries.

Study gap

Whilst Chalkiadaki (2018) focused on primary education, Alismail and McGuire (2015) studied the general standards of 21st century skills. Kivunja (2015) specifically studied the 4Cs out of the whole rainbow of 21st century skills. Joynes et al. (2019) analysed the definitions, demands and delivery of 21st century skills. The current study is motivated by the notion of "no one right approach to 21st century skills" as revealed by literature. Its main aim was to explore the notion of 21st century skills as embraced by the EGCSE curriculum. The hope is that findings of the study will contribute to the scarcity of literature on 21st century skills in the Kingdom of Eswatini.

Another desire is that the findings of the study may help teachers understand the need to localise the skills taught to learners in the EGCSE curriculum.

METHODOLOGY

The study adopted the systematic literature review methodology. Systematic review is a process of reviewing formulated questions using systematic and explicit methods to identify, select and critically appraise relevant research and to collect and analyse data from studies that are included in the review (Dewey & Drahota, 2016; The Cochrane Collaboration, 2005). The systematic literature review approach uses either quantitative or qualitative research methods to synthesise, summarise or integrate available high quality evidence that can be found on a particular topic (The Cochrane Collaboration, 2005).

This study is a qualitative research synthesis of 21st century skills as adopted by the EGCSE curriculum. It is a comprehensive discussion that finally draws broad and robust conclusions on 21st century skills in the Kingdom of Eswatini education curriculum. Like all systematic reviews the study aims to bring together, synthesise and critique (Siddaway, Wood & Hedges, 2019, p.1) available literature on 21st century skills in the Kingdom of Eswatini curriculum in relation to three (3) research questions. In this regard, it has identified relations, contradictions, gaps and inconsistencies (Siddaway et al., 2019) between 21st century skills curriculum as laid down in the P21 framework and curriculum documents used in Eswatini curriculum. The study did not go further to explore the reasons and explain the differences that account for inconsistency of findings. To minimise bias, the researcher explicitly uses the IGCSE Curriculum Consultative Document for 2005 as the major document for the review and other supporting documents as grey literature on 21st century skills. Grey literature are electronic and print formats of literature; technical/research reports from government agencies, reports and working papers from scientific research groups and committees, doctoral dissertations, conference proceedings, official publications and so forth (Siddaway et al., 2019). For purposes of this study, the researcher collected and analysed data from published curriculum documents that are used in the Kingdom of Eswatini.

According to Baumeister (2013) researchers who use the systematic review approach evaluate the inclusion and exclusion criteria for documents to be used in the review. Thus, the inclusion criteria for this study were curriculum documents used in the Kingdom of Eswatini, specifically those that contained information on 21st century skills. Whilst, rigorous research synthesis include both published and unpublished research (The Cochrane Collaboration, 2005), the researcher purposefully excluded unpublished research documents on 21st century skills because the study is not a rigorous research. The major aim of a systematic review is not putting literature together but broadening understanding of the phenomenon under study (Siddaway et al., 2019). It is hoped that findings of the study may highlight gaps between what we know and what we need to know about 21st century skills. Baumeister (2013) asserts that systematic review articles are highly influential;

as they comment on, evaluate, extend and link theory to evidence and evidence to theory. Thus, the study may inform practice and public policy.

FINDINGS

Research Question 1. The vision of the 21st century skills curriculum as embraced by the EGCSE curriculum

To embrace the vision for 21st century skills, the Kingdom of Eswatini adopted the IGCSE curriculum in 2006 which was localised to become SGCSE now changed to EGCSE. IGCSE is a 21st century curriculum that is integrated and multi-disciplinary in its design (IGCSE Consultative Document, 2005). It was found to be flexible enough to suit our national socio- economic status. However, the Kingdom did not adopt the whole range of 21st century skills conceptualised in the PTCS skills framework and P21 framework. The following skill sets were found to be in demand for the Kingdoms of Eswatini socio-economic status; communication and language, numeracy, problem solving, technological awareness and applications, critical thinking and work and study, independent learning and working with others (IGCSE Consultative Document, 2005).

Contrary to the P21 framework, the EGCSE curriculum framework does not group the skills into categories, it identifies skills necessary and required for the Kingdom of Eswatini and pools them together. However, the 4C skills; critical thinking, communication, collaboration and creativity are the most popular as they are with the P21 framework. Significantly, some of the skills are put in different terms. For example, ICT is stated as technological awareness and applications, critical thinking and creativity are considered to be synonymous. Also, collaboration is stated in phrasal form as “working with others”. Whilst ,the P21 framework uses the word ‘skills’ to refer to the 21st century qualities, the EGCSE curriculum refers to them as a combination of “skills” and “competencies”.

Another difference observed is that in the P21 framework, ICT is considered as 21st century skills sets under the information, media and technology skills and is regarded as central and a vehicle towards integration of 21st century skills in education. In the Kingdom of Eswatini EGCSE curriculum, ICT also forms part of the skills sets to be integrated into teaching and learning. It is taught as a basic subject compulsory for all learners at all levels. Also, it is offered both as digital literacy (equipping learners with basics) and as ICT (as a skill and a subject). As emphasise to the recognition of ICT, the EETSP 2018 postulates that “*ICT plays an important role in the development of 21st century skills in the Kingdom of Eswatini. Teaching and learning content shall be progressively digitised and ICT shall be introduced in all schools*” (Ministry of Education and Training (MoET), 2018, p. 26). To concur with the idea, Madzima, Dube and Mashwama (2013) posit that though met with various challenges, ICT remains a mother tool that enhances teaching and learning in the 21st century.

Research question 2. The 21st century skills pedagogy as embraced by the EGCSE curriculum

The 21st century paradigm insists that learners should be given the chance to utilise or exercise their existing strengths, knowledge, talents, skills and abilities (PTCS, 2012; NEA, 2010). On the same note the EGCSE curriculum postulates that teachers must consider that learners bring to the class existing knowledge, talents, skills, strengths and abilities (IGCSE Consultative Document, 2005).

The 21st century skills curriculum insists that learners must take the lead, own their learning and get involved. Therefore, it expects that teachers do away with their autocracy. The same is postulated by the EGCSE curriculum, it challenges teachers to shift from thinking that they are masters of knowledge and learners are empty vessels which need to be filled with the correct knowledge. In both curricula, the teacher is defined as a facilitator of learning, caring mentor, lifelong learner and a role model while the learners construct knowledge and acquire skills on their own (MoET 2018, p.33). The EGCSE curriculum also shares the same vision with the P21 framework as it rests on the premise that by their very nature learners are; creative, imaginative, knowledgeable, skills-oriented, inquisitive, and curious and have different learning styles. Emphasis is on learning as opposed to teaching. In this regard, the 21st century skills curriculum and EGCSE call for use of diverse learning techniques that embrace inclusivity. They are problem solving methods like collaborative tasks, active participation as well as authentic practical lessons that enhance critical thinking, creativity and innovation.

Specifically, the following participatory teaching methods and activities have been found to be of significance by the EGCSE curriculum; the project, debate, roleplaying/dramatization, discussion, values clarification and resource persons. The project is viewed by other researchers on 21st century skills as a teaching strategy on its own whilst the P21, IGCSE and EGCSE curriculum regard it as an activity. The IGCSE curriculum also views it as a super teaching activity that embraces all the four strategies for 21st century learning: problem solving, intrinsic motivation, experimental technique and co-operation of learners in small groups. Though games are recommended as another teaching activity for 21st century skills by literature, the EGCSE curriculum does not have them.

In terms of assessment the EGCSE curriculum proposes that teachers should be empowered through training to assess core skills and attitudes as well as knowledge and understanding. Such assessment aligns with the KSAVE model of assessing 21st century skills as proposed by the Assessment and Teaching of 21st Century Skills (AT21CS) framework. To align assessment with 21st century ways, Eswatini shifted from the GCE O' Level norm-referencing kind of assessment to the EGCSE criterion referencing. The reason being that it was comparing the learners' level of performance against the others contrary to postulations of the 21st century curriculum. Eswatini adopted the criterion referencing assessment that describes the learners' performance against the set criteria, an assessment practice lobbied for by the 21st century skills curriculum.

Additionally, the EGCSE assessment curriculum emphasises the need to standardise school-based assessment. It also recognises the pivotal role played by summative assessment in the entire

education system, that of eventually accrediting and certifying learners' performance. In this regard, Eswatini introduced the competency-based curriculum which increased attention to school-based assessment with the primary level of education. To strengthen the adoption, the Swaziland National Curriculum Framework for General Education (2018) postulates that assessment at all levels of the school system should provide information that will enable professional judgments to be made about learners' progress towards the desired competencies. The framework regards this as proof of the knowledge, skills and attitudes that learners have acquired and therefore suggests use of varied and appropriate assessment strategies (MoET, 2018). Though features of summative assessment are clearly specified in the EGCSE curriculum, no specific features of formative assessment are cited.

Research question 3. Other legal documents that embrace the notion of 21st century skills in the Kingdom of Eswatini

It was found that besides the EGCSE curriculum, the Kingdom of Eswatini has other frameworks and policies formed under the banner of 21st skills. They are the Competency-based curriculum, Inclusive Education and Education for all Policies under which there are other sub-policies affiliated.

The Competency-based curriculum

The Competency-based curriculum (CBC) is a pedagogical framework that has been founded by the Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA). It is another framework that conceptualises 21st century skills. The National Curriculum Framework for General Education, the document that contains information on the CBC was officially launched on Friday, the 6th of July 2018. After the launch, the Kingdom of Eswatini adopted and started rolling out the Competency Based Education in the year 2019 in grade 1. The CBC encourages the development of 21st century skills through promoting innovative and integrated ways of thinking about education and the curriculum (Royal Society for the Encouragement of Arts, Manufacturers and Commerce, 2013). Motsa (2020) commented that the framework is a move towards the achievement of National Development Goals and a poverty reduction strategy. This therefore aligns it with the 21st century skills curriculum.

The framework is designed to integrate five key competencies; citizenship, learning to learn, managing information, relating to people and managing situations. Teachers are to use the competencies to develop curricula that suit their own schools and can use whatever content they like. The central theme of the CBC is to develop and nurture a learner according to his or her talents and capabilities (B. S., Dlamini, Bhebhe & P. A., Dlamini, 2018). It therefore urges that teachers should teach through the competencies which become the lesson objectives. According to RSA (2013), a competency-based approach is teaching and learning that enables learners not just to acquire the subject knowledge but to understand, use and apply it within the context of their wider learning and life. The approach also offers holistic and coherent ways of learning which

allow the learners to make connections and apply knowledge across different subject areas; a multidisciplinary approach to teaching and learning.

Inclusive Education and Education for all Policies

The Kingdom of Eswatini also adopted Inclusive Education and Education for All, born out of the notion of education as a civil right. The Kingdom moved further to legalise and lay them down as educational policies crafted within mother body documents that guide effective teaching and learning, the Eswatini Education and Training Sector Policies. Inclusivity is entailed in both the Eswatini National Curriculum Framework for General Education (2018) and the Eswatini Education and Training Sector Policies for 2011 and 2018. It postulates that education should incorporate inclusive education principles which seek to ensure that every learner, regardless of age, gender, capacity to learn or level of achievement, benefits from curriculum delivery (Eswatini National Curriculum Framework for General Education, 2018, p.3; EETSP, 2011). Inclusive education principles emphasise the right of every learner to quality and equitable education that meet his or her basic learning needs. It regards the diversity of backgrounds and learning abilities as learning opportunities, an idea also emphasised by the 21st century skills curriculum. Eswatini also has the Child Protection and Welfare Act (2012) as another back-up document that cites education as a basic right for every child. It states that “*Every child including children living with disabilities have a right to education as a basic need*” (Child Protection & Welfare Act 2012, p. 8).

The idea of inclusivity is also captured in the MoET 2018 policy which cites Sustainable Development Goal No.4 that describes the main aim of education as “*To ensure inclusive and equitable quality education and to promote lifelong learning opportunities for all*” (MoET, 2018 p.65). Target 4.4.2 of this goal specifies that education should increase the number of youth and adults who have relevant skills applicable in reality; workplace, college and life in general. These are 21st century skills. The notion of inclusivity in education adapts to the needs of the individual; recognises that all students are socially useful and the process of teaching is viewed as a form of instructing and reinforcing the different learner intelligent styles (UNESCO, 1994). Thus, inclusive education seeks to expand accessibility and provision of appropriate and relevant education to every learner; it is summed up together as education for all.

To expand on the notion of accessibility, appropriateness and relevance in education, the World Bank (2019) cites that education should be focussed towards addressing economic challenges through offering knowledge and technologically related skills. Indeed, all 21st century skills are better developed through embedding ICT skills though at varying levels of necessity. Thus, ICT is regarded as central to teaching and learning in the 21st century (Madzima et al., 2013). Another clause that gives significance to the idea of relevancy is Section 1.1 of the Eswatini Education and Training Sector Policy (EETSP) 2018 of the Kingdom of Eswatini which dictates that;

“ The continuing guiding philosophy of the education and training sector is to produce enlightened and participatory citizens that have skills, knowledge and attitudes to contribute positively to economic and social development. Each learner is regarded as a unique individual who needs a secure, caring and stimulating atmosphere in which to grow and mature emotionally, intellectually, spiritually, physically and socially (MoET, 2018, p. 1)”.

The policy continues to dictate that the goal of education is to offer lifelong opportunities and development of creative minds to shape and adapt to the fast changing and complex world. Learners must think critically and analytically, integrate and synthesise knowledge and draw conclusions from complex materials. It regards that this develops them holistically; intellectually, morally, culturally, aesthetically, emotionally, physically and in practical capacities (MoET, 2018). Adapting to the complex world and attainment of the above higher order thinking skills require teaching and learning to fuse the 3 R's and 21st century skills.

Inclusive Education and Education for All gave birth to other three most crucial policies; the Free and Compulsory Primary Education (FPE), Normal Progression and Compulsory Teaching and Learning of the mother tongue siSwati. The FPE policy seeks to fight exclusion and discrimination in education by ensuring access to education for every learner regardless of social, economic, political, cultural background and other issues. The FPE policy grant funding for primary education in the Kingdom is a mother baby towards the fulfilment of FPE and increased accessibility to education. It is a move to fight against discrimination and exclusion of underprivileged children in education. Non-discrimination is cited as one of the principles or pillars necessary for the growth and development of a child by the Child Protection and Welfare Act 2012.

On the other hand, the Normal Progression is an assessment policy that holds the notion of appropriate and relevant educational outcomes and proof of total adoption of 21st century skills. It dictates that “*The normal progression of learners from one class to the next is 50%*” (MoET, 2017 Selected Circulars, p. 21). The policy seeks to reduce repetition through emphasising that education is focussed on skills development not knowledge. This means that it is not highly competitive but assesses learners' attainment or achievement of set objectives instead of the learner against other learners. This form of assessment aligns to 21st century skills assessment of what the learners can say, do, feel, hear and make. Conclusionally, assessment proposed by the Normal Progression Policy is summarised as assessment of the hand, head and heart (Miller, 2005). It thus necessitates the need for the primary school curriculum of the Kingdom of Eswatini to shift from the objective-based curriculum to the competency-based curriculum. Also, the senior secondary school curriculum from the GCE O' Level norm-referenced curriculum focussed on drilling, memorisation and regurgitation of facts to the EGCSE skills-based and integrated criterion-referenced curriculum that assesses learners' acquisition of knowledge alongside skills.

Another policy drawn from the emblem of “Inclusive Education” and “Education for All” is compulsory teaching and learning of the mother tongue siSwati for all learners undergoing education in the Kingdom of Eswatini. The policy seeks to entrench the mother tongue siSwati as a way of ensuring participation in education. It resonates from evidence by scholars that teaching and learning of the mother tongue makes learning much easier as learners deal with just the skills, language is not an issue thus, increases interaction or participation (Bamgbose, 2011; RUTU Foundation, 2023).

The policy is also drawn from the Constitution of Eswatini for 2005 which mentions that siSwati and English are official languages of the Kingdom of Eswatini (Dlamini, 1972). The mother tongue policy in the Kingdom of Eswatini is in two folds. For general education it postulates that “*SiSwati should be taught as a core subject at all levels of schooling and be passed by all learners; as a first language for native speakers and as a second language for non- native speakers*” (MoET, 2017, p. 23). On the second fold, it comes as an effort to ensure relevance of the education system for the primary level of education. The policy directive is that “*the mother tongue siSwati shall be officially used as a medium of instruction for the first four grades of school after which English shall be the medium of instruction*” (Dlamini, 1972, p.10). This therefore means that use of the mother tongue siSwati either as a compulsory subject or as a medium of instruction contributes immensely towards development of the desired 21st century skills.

CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

It can be concluded that the EGCSE curriculum is aligned to the 21st century skills curriculum in different ways. Though put in slightly different ways, there is similarity with the 21st century vision of teaching and learning unpacked in the P21 framework, the EGCSE curriculum and other legal documents reviewed. The 21st century vision for teaching and learning in Eswatini is not only outlined in the EGCSE curriculum but within the curriculum for the other levels of schooling and in other policy documents as well. This therefore implies that, for easy understanding and implementation of the 21st century skills curriculum, teachers should not only refer to the EGCSE curriculum but to the other curriculum documents as well.

Secondly, both the P21 and the EGCSE curriculum attach greater significance to the need for teaching and learning to embed use of ICT. This means that is as a much demanded tool and resource country wide and in the Kingdom of Eswatini. In the EGCSE curriculum, it is listed as technological awareness and applications. In the P21 framework ICT is classified under the second category of 21st century skills sets as information, media and technology skills. Other scholars on 21st century skills refer to it as a mother skill that fuels development of the other 21st century skills. This therefore implies that ICT is a major 21st century skill and learning platform. Also, out of all the 21st century skills outlined, the 4C skills (communication, collaboration, critical thinking and creativity) are cited as key in both the P21 framework and the EGCSE curriculum. This therefore implies the need to pay greater attention to them.

Lastly, the P21 framework just summarised problem-based/inquiry-based learning, cooperative/collaborative learning and instruction that link knowledge with the real world as instructional pedagogies for the 21st century. Contrary, the EGCSE curriculum specifies an array of learner-centred and participatory teaching methods that recognise learners' existing strengths. They are the project, debate, roleplaying/dramatization, discussion, values clarification, resource persons and field trips. This therefore means that learner-centeredness and active participation are conceptualised by the EGCSE curriculum and the P21 framework as the basis for teachers' choice of teaching strategies.

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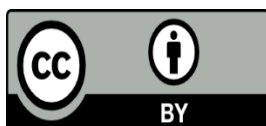
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