



Continuities and Discontinuities between Competency-Based Curriculum and Education 5.0 in Zimbabwe: Implications for Curriculum Harmonization

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Abstract

Drawing on the concept of continuity and discontinuity, this qualitative theoretical study uses document analysis to explore the connections and contradictions between the newly introduced Education 5.0 and Competency-Based Curriculum (CBC) in one African country. The study used the case of Zimbabwe; and selected and critiqued studies, reports and documents published between 2010 and 2022 focusing on the Curriculum Framework 2015-2022 and Education 5.0. The findings suggest that the curriculum goals and objectives at the primary and secondary levels show some degree of continuity and congruence with the university's curriculum goals and objectives. However, a closer examination of Education 5.0 and CBC shows the manifestation of gaps and discontinuities in assessment issues, the focus on the sciences and philosophies that guide education. The study recommends that curriculum experts and policymakers align curriculum packages to be consistent across different levels and disciplines of education to demonstrate closer alignment of purpose and better integration in practice. This study offers new perspectives on education reforms and encourages countries to examine the degree of alignment between primary and secondary school curricula and university curricula.

Keywords: Continuities; harmonization of the curriculum; discontinuities; Education 5.0; competency-based curriculum

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1. Introduction

Education reform has become a global phenomenon or movement in the last three decades (Fullan, 2009). Most countries around the world have at one time or another considered and reformed their education systems after noticing certain constraints, of which Howson and Kingsbury (2021) argue that demands for curriculum reform stem from gaps between curriculum intentions and activities as well as links to results. Educational reforms can take place at different levels, confirming Fullan's (2009) theme of three-tiered reform, namely at the school, district or government level. This suggests that reforms come with a spectrum of foci. Motivated by the challenges of the 21st century, many countries have modernised their curricula; for example, in the period from 1997 to 2002, Finland and England witnessed some specific cases of system-wide reform in which progress in student outcomes was evident. The successes of large-scale educational reforms have been evident in Singapore, Alberta, Canada, Hong Kong, and South Korea (Fullan, 2009). These changes show that the recurrent discourse is that when the curriculum is no longer fit for purpose, old, pale and stale, reforms are inevitable. However, extensive curriculum change is expensive in terms of cost and time and is rarely evaluated. This study provides the case of one African country that has implemented extensive education reforms at primary, secondary and tertiary levels and then examines whether what is assumed at lower levels of education is consistent with what is taught at the university level. This unexplored area has remained uncharted, and the study intends to fill this scientific gap. In this study, document analysis was used to explore the continuities and discontinuities between Education 5.0 and the 2015-2022 Competency-Based Curriculum, drawing on Zimbabwe – one of the African countries. The study was guided by the following questions:

- What continuities and discontinuities exist between the competency-based curriculum and Education 5.0 in Zimbabwe?
- What implications do the continuities and discontinuities observed in systems have for students and the states?

The document is timely as Zimbabwe's CBC is being revised in 2022 and thus contributes ideas that may be useful in the process of evaluating education reforms. This study contributes to the study of the issue of curriculum revision given that all curricula designed and created must undergo modification to verify their relevance in the societies in which they operate as dictated by the demands of the 21st century.

1.1. Literature Review

After attaining statehood in 1980, Zimbabwe inherited an education system that was too academic and exam-oriented and therefore in need of intensive revision (Author, 2021). Following the recommendations of the Nziramasanga Commission, which was set up in 1999 to examine the limitations and strengths of older education, Zimbabwe undertook major education reforms for the first time in four decades after realizing that the country's concerns, feelings and wishes concerning what education in the country is expected to play has not been addressed. It was then that the Competency Based Curriculum (CBC) was born, planned for 2015-2022 (MoPSE, 2015). In the history of educational reforms, emphasis has always been placed on the feasibility of the changes made. Studies have been conducted on this CBC and the main theme that commonly runs through most of these studies has been the question of its feasibility (Dube & Jita, 2018; Maravanyika, 2018). Perhaps this study is to help the next review process, due to start in 2022, to show the direction of education reforms. While the 2015-2022 curricular education reforms were limited to primary and secondary education, the Ministry of Science and Higher and Tertiary Education Development also introduced a new education mantra code-named Education 5.0 (Murwira, 2019) which also aimed to address economic challenges the country faced. The two new curricula appeared to be converging and their visions showed similarities. As brilliant as this idea sounds, the implementation of the CBC and Education 5.0 Tertiary Institutions of the Ministry of Primary and Secondary Education in Zimbabwe has been fraught with various challenges. Most studies have focused on challenges and mitigation strategies without examining whether the two curricula are related or disconnected (Dube & Jita, 2018; Author, 2021). This area remains under-researched as very few if any, studies have explored the continuities and discontinuities between CBC and Education 5.0. Despite the interest CBC and Education 5.0 have generated in Zimbabwe, it remains to be seen whether the two curriculum packages are well aligned.

1.2. Conceptual grounding

This article draws on the concept of 'continuity', which was used in this study to challenge the formulation of education policy which takes for granted that what we implement in primary and secondary schools is directly linked to tertiary education. Simply put, is what students learn in elementary and high school a good foundation for college or otherwise? Relating to this study, continuity refers to the developmental sequence of learning experiences in ways that allow students to build on previous experiences considering their mental development (MoPSE, 2015). Education and educational work for children in primary, secondary and higher education must be continuous; that is, there must be a connection between the three levels, as continuity leads to the achievement of effective educational outcomes. The essence lies in the

connection between a certain degree of concepts. Thus, any change in education that threatens consistency leads to a sense of discontinuity. The situation where students from educational institutions move from the familiar to the unknown is referred to as institutional discontinuity (Anderson, Jacobs, Schramm & Splittgerber, 2000; Prendergast, O'Meara, O'Hara, Harbison, & Cantley, 2019). Green (2007) explains that these discontinuities arise because of the division of the school system into sections into which students move and from which they move. This scenario is evident in almost every country in the world where the education system is divided into sections from primary to tertiary. Using the concept of continuity, it is very important that each phase of education, starting from early childhood, is properly handled and given the right balance of attention to avoid misplacing its students in the higher education system in the future. As Kazazi, Al-Rashdi, and Al-Azri (2015) argue, the transition from one level of education to another is among the most important and influential processes in the life of any student; therefore, these issues need to be given due attention and care by all relevant stakeholders, so that pupils get the best knowledge that is consistent across all the different stages of education.

The paper argues that all three levels of education should be reformed to advance the students' interests and that of the nation. While this sounds to be a noble idea, it does not resonate with what is evident in Africa. There have been different historical reasons for why national elementary educational systems were formed, different for secondary and tertiary. As pointed out by Mungazi (1991) elementary education in Africa was meant to promote two basic skills namely numeracy and literacy that acted partially as the foundation for further studies and was in response to the emerging capitalist society. That type of education was too bookish and academic and only served the capitalists. Zvobgo (1999) claims colonial education to Africans offered limited academic and foundational skills to promote labour exploitation and indentured servitude. Limited access to a quality education kept Africans subordinate to white colonists to advance British political and economic gains. At the attainment of political independence, most African countries reformed their education system to address such weaknesses.

Against this backdrop, Zimbabwe redesigned the education system from early childhood development to tertiary education, which was presented as two curriculum packages: one for primary and secondary education and the other for tertiary institutions. When designing and developing these packages, was there an attempt to verify whether the two are compatible or otherwise? Continuity as an underlying concept was used to answer this crucial question, thereby challenging policymakers to anticipate their intentions in the context of future needs. Several studies have been conducted to clarify what exactly happens in the transition between primary and secondary schools (McGee, Ward, Gibbons & Harlow, 2004; Galton, Gray & Ruddock, 2003; Prendergast, O'Meara, O'Hara, Harbison, & Cantley, 2019). These studies highlighted certain issues that were confined to the impact of the transition from one level of education to another

on children's academic performance as well as their social adjustment. Given that these issues have been established, was there any effort made by the countries of the world made any efforts to eliminate the discontinuities that exist within their curriculum packages to avoid future misplacement of students in the higher education system? Very few studies, if any, report continuities and discontinuities between primary, secondary and tertiary curriculum packages. This study fills this scientific gap. To contextualize the study, we interrogate the competency-based curriculum (CBC).

1.3. Competency-based curriculum as an educational reform

At the turn of the 21st century, poor economic performance and a lack of targeted national education policies in developing countries led many to move from one policy to another (Jansen, 1998; Keche, 2021) in search of vibrant education that could address declining wealth in the economy sector. Competency-based curriculum (CBC) was then introduced to fill this gap despite evidence from studies that overwhelmingly suggest that educational reforms do not improve the economy (Carnoy & Samoff, 1990; Psacharopoulos & Woodhall, 1986). As Jansen (1998) argues, there is no evidence in the nearly 80 years of curriculum change literature to suggest that curriculum change in schools leads to or is associated with changes in national economies. However, CBC was a better choice than a content-based curriculum. The term CBC refers to a curriculum that emphasizes what learners are expected to do rather than focusing primarily on what they are expected to know (Jansen, 1998; Kabombwe & Mulenga, 2019; UNESCO, 2017). Instead of emphasizing content coverage, it means that students must acquire and then apply knowledge, skills, values and attitudes to solve real problems they face in their everyday lives. The implication is that CBC is a departure from old narratives where the content of courses and what the teacher or textbook has to say is important; students do not play a very active role in the learning situation and are rarely allowed to demonstrate what they have learned and how to use their knowledge (Jansen, 1998). It is important in the discarded curriculum that students must remember and repeat everything they learn, regardless of whether they understand the facts learned or can apply them in different situations. This curriculum is too academic, and bookish and has seen better days in this 21st century hence the change to CBC.

Historically, the post-independent Zimbabwean government inherited an academic curriculum that only prepared students for wages and employability in a country that had declining job opportunities (Mufanechiya & Mufanechiya, 2020). By launching the CBC, Zimbabwe joined a global trend and made changes to the curriculum in schools and universities. Zimbabwe was not unique in choosing to transform its education system. Rather, many countries follow suit; for example, in South Africa, CBC policies were first enthusiastically embraced as instruments of reform after the fall of apartheid, but later preferred to be rejected (Muller, 2000; Allais, 2014). This was the case in Australia, Hong

Kong and Malaysia (Laurence, 2012; Muller, 2000). In 2013, Zambia adopted CBC, and studies from around the world have shown that the use of CBC has gained importance first in the developed world. According to Makunja (2016), CBC emerged from teacher education curriculum reform in the United States in the early 1960s and was applied to other professional education programs in the US in the 1970s and in other European countries in the 1980s after it was found a decline in industrial competitiveness, which was caused by deficits in the education systems of most countries. Therefore, when Zimbabwe launched the CBC, the country was headed in the right direction. As noted by Kim (2015), new trends in higher education over the last decade have shown the importance of innovative educational initiatives that involve the application of acquired knowledge to solve societal problems. Thus, CBC is argued to be effective and sustainable because it can be adapted to address community issues. As suggested by Burk (2005), CBC enables students to solve problems of real-life situations as it prepares them for their future lives. However, literature engaging with the dilemmas and complexities of turning towards competency or soft skills curricula has also been met with critique as to the kinds of issues they can create especially for the most marginalised in education. Edwards (2016, p.245) argues that as part of a power-knowledge formation, competency-based education is a “discourse of and about learning which, although based on the disciplinary knowledge of the behavioural sciences, had a narrowly confined and particular view of knowledge that excluded alternative perspectives.” Research also claims that CBC places emphasis on immediate employer needs and is less focused on preparing learners with the flexibility needed for a more uncertain future (Kabombwe & Mulenga, 2019). These critiques show that while CBC was appraised for its ability to develop a total person who fits well in the industries for development, it has also some limitations.

1.4. Competency-based curriculum in Zimbabwe

The need for CBC in Zimbabwe gained momentum when unemployment became a national problem, as reflected in speeches by political leaders, with Robert Gabriel Mugabe, the then president of Zimbabwe, in 2013 noting the need to transform the structure and curriculum of the education system of the country to adequately meet evolving national development aspirations (MoPSE, 2015). Emphasis was then placed on the teaching and learning of science, technology engineering and mathematics, including prioritising youth empowerment and entrepreneurship development. Based on this reasoning, Zimbabwe's Ministry of Primary and Secondary Education (MoPSE) set out major changes that required students to get their hands dirty and lay a solid foundation of professional skills that will enable them to grow businesses and contribute to socio-economic transformation. This challenged old narratives that education was responsible for developing strong content knowledge at the expense of critical skills and capabilities. It was now clear that mastery of content knowledge was not adequate as an output

attribute. The thrust was now more on the development of thinking skills and higher-order proficiencies that solve social problems.

In 2013, MoPSE began a national curriculum review process, which was formally launched in October 2014. The process involved a national consultation that culminated in the creation of the 2014–2015 Narrative Report, followed by the approval of the new curriculum in 2015 that led to the creation of the Zimbabwe Curriculum Framework for Primary and Secondary Education (Gory, Bhatia & Reddy, 2021). The curriculum framework created was to run from 2015 to 2022 and promoted a competency-based approach based on practice-based learning. The curriculum thus shifted from examination-based content to a competency-based (outcome-focused) curriculum, focusing on students' ability to apply knowledge, skills and attitudes in independent, practical and responsible ways. The Curriculum Framework 2015-2022 was only three years old when the sister ministry to MoPSE introduced a new mantra in tertiary education called Education 5.0.

1.5. Education 5.0 in Zimbabwe

Traditionally, tertiary education in Zimbabwe has been based on what has been called Education 3.0, which mandates tertiary institutions to articulate three missions limited to teaching, research and community service (Muzira, & Bondai, 2020; Jonathan, 2021). As confirmed by Murwira (2019), the traditional missions of the university were research, teaching and community service. The design was code-named Education 3.0 because of the three missions it focused on. The decision to move from Education 3.0 to Education 5.0 in Zimbabwe was made in the context of the government's focus on preparing students for the needs of the 21st century, growing concerns among policy makers and key stakeholders about the relevance of the education system and change in global education standards (Ministry of Higher and Tertiary Education, Science and Technology Development (MHTEDTD), 2018; Keche, 2021; Muzira & Bondai, 2021). The change was intended to prepare university graduates as job creators rather than job seekers. In this context, the Education 5.0 mantra consisted of five pillars, namely teaching, research, community service, innovation and industrialization, emphasizing the application of acquired knowledge, skills and attitudes to local communities to produce goods and services. . As such, Education 5.0 means that graduates must be equipped with skills that enable them to become innovative towards societal development through transformative scientific and technological applications that deliver goods and services. Education 5.0 was thus a restructuring of traditional education 3.0, which was based on three pillars. Murwira (2019) noted that Zimbabwe has redesigned university education to have five missions to improve the education system. In support, Mudondo (2020) posits that educational institutions have been called upon to redesign curricula that promote

the production of goods and services anchored on the modernisation and industrialization thrust of the country.

2. Method

This desktop study embedded in the qualitative approach explores the continuities and discontinuities between Education 5.0 and the competency-based curriculum. To generate data the desktop study selected research, reports and documents from the public domain as data sources. Two key policy documents were picked based on the basis that they were rich sources of information about the topic under exploration. The CBC is entrenched in a document entitled ‘The 2015-2022 Curriculum Framework’. That document, born out of the narrative report that culminated from consultations with the stakeholders in 2013 explicitly contains and explains all that was envisaged in the CBC. Education 5.0 is implanted and enshrined in a document named the ‘Doctrine for the Modernisation and Industrialisation of Zimbabwe through Education, Science and Technology Development to Achieve Vision 2030.’ That document was used to generate data since it was the main source of the Education 5.0 curriculum and thus central to the focus of the research. Both documents were interrogated to generate data that later formed the base of this study. To complement these two documents, research articles and reports published between 2013 and 2022 that focused on the 2015-2022 CBC and Education 5.0 were also selected and critiqued in search of continuities and discontinuities between the two curriculum packages. We used document analysis in this study on the premise that they are non-reactive data sources that can be read and reviewed multiple times while remaining unaltered by the researcher's influence (Cohen, Manion & Morrison, 2018). That increased the credibility of the study as the findings could be easily replicated using the same documents. We interpreted the documents and gave voice and meaning to the data by concluding the text concerning the research focus (Schutt, 2015).

2.1. Data analysis

Data generation and analysis took place concurrently and iteratively. The two of us independently collected and analyzed the data. Each of us evaluated patterns within certain content and/or across multiple pieces of content or communication sources. Using content analysis, we identified the frequency with which an idea was shared or talked about, such as the vision of Education 5.0 and CBC. From the two central documents, each one of us identified themes that were related to the vision and the philosophy that drives the two curricula under interrogation; the aims and objectives of the curriculum; the disciplines being taught at each level of education; the forms of assessment envisioned; and the skills to be developed. We then branded the themes into continuities

and discontinuities through a comparison of how each curriculum was configured. Content analysis helped us identify patterns of deeper underlying interpretations. Then after the first phase of classifying the data according to whether they were connections or divergences, the team met to collate it. The different sets of themes were then compared by members and any discrepancies were discussed to provide a correct and consistent interpretation of the data. Emerging themes were summarized using codes, categories, and finally subthemes. Under continuities, we noted that the aims and objectives of the two curricula fell under discontinuities while under discontinuities we had: the philosophy, continuous assessment of learning activities, life skills and the dichotomy of STEM and STEAM. The study had no human participants and/or animals and thus was not subject to ethical considerations regarding privacy, confidentiality and informed consent.

3. Results

Below we present the findings as themes and their subthemes. Two main themes emerged, namely continuities and discontinuities.

3.1. Continuities and their implications

3.1.1 Goals, objectives and intentions

An analysis of the documents revealed that Zimbabwean education was redundant and irrelevant to the society. Both CBC and Education 5.0 highlight significant shifts in the curriculum concerning objectives, outcomes, learning content, teaching and learning methods, and assessment. As such, both ministries have introduced and adopted Curriculum Action Plans for the sustainable transformation of the education system and have made progress in this regard through the Education 5.0 and CBC frameworks (Manokore & Shava, 2021). The documents showed a similarity in the goals, objectives and intentions of the two ministries, which agree that the products of the education system were to create jobs, not be job seekers as dictated by the challenges of the 21st century. The idea of having a graduate who is a producer rather than a consumer was common to the two curriculum packages.

This finding clearly shows that at the primary and secondary level up to the university level, there is a continuity of the system and a desire to face the challenges of the 21st to changes in the economy and society. This indicates that the aims and objectives of the curriculum at the primary level and the secondary level show continuity and congruence with the aims and objectives of the university curriculum. Observations from the documents reflect what the country expects, as evidenced by the aims and objectives of the education system. This then needs to be consolidated and strengthened so that students find comfort in their education when transitioning from primary and secondary

education to university. This finding finds support in Butts (1964, p. 3), who rightly argues that there is a need for congruence between the several levels and branches of education to show closer agreement in purpose and better integration in practice. A more recent study by Veličković (2013) advocates the importance of continuity in the curriculum and advises that the transition from one level of education to another should be smooth and seamless. To achieve this, practitioners and policymakers for both basic education and universities must share, collaborate and have the same vision in creating the new curriculum.

The harmony in the ministries in this regard might have been so because employment opportunities were waning, and the economy was on the brink of collapse. Both practitioners and policymakers were therefore worried about how best to solve societal problems and turned to relevant education for the rescue. Manokore and Shava (2021) stated that the country adopted Education 5.0 to revamp and revitalize industries with the latest technology, while MHTESD (2018) in its Education 5.0 doctrine hoped that the nation would fight poverty through an education system that produces goods and services. From this perspective, the guiding principle of Zimbabwe's higher education program was that knowledge that did not lead to goods and services was useless. This was because Zimbabwe's strategic vision of becoming a competitive, industrialized and modernized country by 2030 hinged on Education 5.0. Likewise, the spirit of students applying knowledge learned in schools in real-life contexts is echoed by MoPSE (2015), which states that the 2015-2022 Curriculum Framework for Primary and Secondary Education sets out what students are expected to know, what to understand, value and be able to do based on their experiences of learning in schools and non-formal education from early childhood development (ECD) to secondary level. Annala, Lindén, Mäkinen, and Henriksson (2021) argue in support that competency-based and interdisciplinary curricula are considered more forward-looking and innovative in addressing major societal issues and needs than traditional subject or subject-based curricula. It was also clear from the documents that the educational areas in primary and secondary schools were further developed in universities, although some of them were divided into separate subjects. For example, at the primary level, we have heritage-social studies, while at the tertiary level, anthropology, geography and history are separate subjects.

3.2. Discontinuities and their implications

3.2.1. The philosophy that guides the educational system.

Documents read and analysed revealed that the CBC in Zimbabwe was based on the Ubuntu philosophy, while Education 5.0 is driven by a heritage-based philosophy. No education can be meaningful without a theoretical foundation, but having two disparate philosophies in one country is educationally short-sighted. This indicates a serious

incompatibility in the education system which defeats the purpose of continuity. Primary and secondary students are groomed using Ubuntu, an African philosophy that advocates togetherness and collectivism. Several authors (Odari, 2020; Mangena, 2016) agree with Gad (2011), who explicitly defines Ubuntu as “humanity, humanity, human kindness” (pp. 307–308). In this context, Ubuntu recognizes that we are all connected and that what we do consciously or unconsciously affects others. Ubuntu is therefore a relationship in which everyone understands the pain of the other, tries to care for him and wants to contribute to his happiness (Odari, 2020). Ubuntu therefore stands for being humane and holds the idea that every action should be done for the benefit of the whole community. The values of Ubuntu, such as respect, solidarity, cooperation and humanity, are what students acquire in primary and secondary education, but as they progress to tertiary education, they encounter a new philosophy that has its own meaning. However, the philosophy for Education 5.0 means that STEM disciplines must be applied to provide solutions related to the local environment. Murwira (2019) explained that Zimbabwe has designed its higher education curriculum to follow a heritage-based philosophy which simply states that we must have advanced scientific knowledge from anywhere in the world but apply it to the local environment to create a competitive industry. Rather than promoting work for the good of all, not just the individual, as the Ubuntu philosophy does, Heritage-based Education 5.0 emphasizes the employment of the local environment. The two philosophies are disjointed and unconnected in their characteristics. From high school, students bring with them the values of Ubuntu, but once they enter university, these values are discarded in favour of a heritage-based education. Yet, Ramose (2002) aptly explains that educational contexts such as universities are best suited to restore the philosophy of Ubuntu to its rightful position: that of being at the centre of preserving African values among young people. We have found evidence pointing to the contrary in this study: Ubuntu philosophy is not evident in the 5.0 doctrine. So, does this mean that Ubuntu values are no longer important when one enters university education? If so, why waste time instilling such values in the first place? We argue that this is primarily a waste of effort spent on students and that it also points to a degree of inconsistency and neglect that policymakers have shown in adopting their values. Or was it a problem of a lack of genuine stakeholder involvement, exacerbated by attempts to adapt borrowed strategies and approaches to the local environment and a lack of local knowledge? If so, then it is a waste of time for citizens. We further support Loss and McGuinn’s (2018) argument that higher education needs to converge on a shared mission and partner primary and secondary education to advance the individual interests of students and the collective interests of the nation. Thus, we encourage joint deliberation and policymaking in curriculum design and development across the three sectors to ensure convergence rather than dissonance.

3.2.2. *Continuous assessment of learning activities*

In this study, it emerged that the method of student assessment in primary, and secondary schools and universities shows manifestations of gaps and discontinuities. There is no shred of evidence to suggest convergence and continuity in this respect. Primary and secondary school students are involved in educational activities that are continuously evaluated, which is not done at the university. It was clear from the analysed documents that the 2015-2022 curriculum framework has a part in its framework that supports the need to carry out Continuous Assessment of Learning Activity (CALA). As students move to tertiary institutions, CALA is absent and MHTEDS is silent on it. CALA includes any learning activity or assessment that requires students to perform and demonstrate their knowledge, understanding and expertise. Its importance is that it delivers a tangible product and/or performance that serves as evidence of learning. As stated by Gama (2022), CALA presents a situation that requires students to apply their learning in context, as it provides a holistic assessment of the learner's profile, including assessment of skills and values, among others. CALA thus becomes a major shift away from the exam-based model of education that primarily assesses a student's knowledge bank after completing a course, because this approach involves continuous assessment of student proficiencies that include knowledge, skills, abilities, values, and attributes showing what students can do and becoming (GoZ, 2020; MoPSE, 2015). The absence of CALA in tertiary education defeats the concept of continuity. Dropping CALA in Zimbabwean universities is a waste of 15 years of education when students are used to it. What, then, is the meaning of CALA if higher education does not celebrate it, or if higher education loses a critical component that must be incorporated for students to become producers of goods and services? The finding shows that there are major challenges to be confronted at the policy level, to ensure institutional coordination, collaboration, and continuity of experience for children, as they progress from one phase of schooling to the next (Ames, Rojas & Portugal, 2010).

We argue that CALA is a very important part of education if we are to benefit from education in the 21st century. The inconsistency in forms of assessment has serious implications, of which Kazazi (2015) suggests that African countries need to respond effectively and quickly to such curriculum package challenges to avoid the pernicious dichotomies of stark differences and gaps between primary, secondary and university education. We argue that there is a need to support the coordinated approaches of both ministries in transforming and implementing changes in education to achieve the intended goals. We agree with Manokore and Shava (2021) who propose that higher education must strategically position itself to accommodate the new students from the middle level so that efforts made at the lower levels in preparing them for the future are not missing at the point of entry. Thus, there is a need to review the current assessment processes and procedures underlying these discontinuity experiences to ensure that

children benefit from greater continuity and collaboration among educational settings and levels.

3.2.3. STEAM and STEAM

The study showed that universities differ from primary and secondary education in terms of the disciplines they offer and emphasise. Science, technology, engineering, arts and mathematics (STEAM) education is emphasized at the primary level, while the secondary and tertiary levels focus on science, technology, engineering and mathematics (STEM) to innovate and industrialize the country. STEM is more aligned with university, while STEAM dominates primary school. Therefore, another point of departure between CBC and Education 5.0, as seen in the documents, lies in the subjects they offer and the emphasis. The 2015-2022 Curriculum Framework focuses on STEAM disciplines that help students develop skills that are useful in technical and professional fields they may pursue later in life. According to MoPSE (2015), history, languages and humanities remain important for communication, cultural enrichment and building a sense of identity and belonging. In contrast, MHTESD (2018) emphasises the development of STEM disciplines. This finding is consistent with several studies that report that universities in Africa seem to overemphasise science and technology studies (Allais, 2014; Mudondo, 2020; Kazazi et al., 2019). This means that college graduates are limited to science majors and lack arts and humanities majors. This suggests that the educational curriculum at the university level has neglected African knowledge systems and other cultural aspects of the country due to failure to teach the arts and humanities that promote African values. This undoubtedly indicates the separation of the university from primary and secondary education, a situation that should be ended. Although technology and science are essential to Africa's development, the humanities must not be neglected. This is because it is from these disciplines that we define ourselves as Africans. They give Africans their identity. It follows that there is a need for indigenisation of the curriculum with an emphasis on indigenous knowledge and its creation and dissemination. Many African scholars confirm this position (Nyamnjoh, 2012; Samkange & Samkage, 1980; Gade, 2011). The discontinuity shown by the emphasis on STEM subjects at tertiary level and STEAM at primary and secondary levels reflects that the arts and humanities are not given the prominence they deserve in university education. This neglect has detrimental effects on the formation of citizens. What kind of graduates will the country produce? An engineer without Ubuntu morals and values who is not afraid to destroy humanity with new scientific discoveries born of STEM.

The inconsistencies shown by the emphasis on STEM and STEAM can de-Africanise students as they enter university education without African values derived from the humanities and arts, alienating them from their African culture and identity upon completion of higher education. We argue that if we want graduates of the education

system to come away with life skills that will help them become productive citizens, there is a need to incorporate the arts and humanities to instill civic education. This can be met by engaging students in learning content and experiences from various areas of education, including the arts. This suggests that policymakers must streamline and create a seamless education system in a country to avoid inhumane acts in the global villages. Neglecting the arts and humanities in university education is a recipe for disaster. Earth will eventually have scientists who have ruthless hearts and are not afraid to experiment with human life.

3.1.4. Life-Skills Orientation Programme and Integrated Work Learning

From the documents studied, it emerged that the Life Skills Orientation Program (LOP) was a paper exercise. It was a window-dressing idea that never took off the ground from the time it was proposed yet this was to give learners a base for their Work-Related Learning (WIL) at the tertiary institutions. The idea was that the LOP should start at the primary school level, thereby providing an orientation to what students will experience when they get to tertiary institutions and do WRL. According to MoPSE (2015), this could be achieved by creating synergies between schools, communities and business spaces where students could visit these spaces as they connect theory with practice. Failure to do LOP indicates that primary and secondary schools are entering tertiary education without the necessary skills as required by Education 5.0. We agree with Manokore and Shava (2021) who argue that MoPSE-ZIMSEC has not been able to fully implement CBC since its inception; as a result, A-level graduates progress to universities without some capabilities and skills being assessed. This confirms that there is a discontinuity between Education 5.0 and CBC that needs to be addressed. This is because the Curricular Framework 2015-2022, which provides the main tool for guiding primary and secondary education practice in Zimbabwe, emphasizes the acquisition of lifelong and work-related competencies. If this does not happen, students are denied learning opportunities in the cognitive, psychomotor, and affective domains. Ultimately, primary and secondary school graduates are not equipped with the skills and attitudes that would enable them to become innovative towards the development of society. Instead, they will acquire skills that will require regulations on what they should do after school (Government of Zimbabwe, 2018). From this point of view, Education 5.0 is therefore seen not as a departure from traditional Education 3.0, an educational system that focuses more on teaching, research and community service.

Using the lens of continuity, policymakers have pointed out what was needed in the CBC through the 2015-2022 Curriculum Framework, but what has been missing is implementation, either through omission, mandate or lack of follow-up. This shows the limitations of a top-down approach in cascading curriculum issues. It could be argued that sometimes the implementers waited for action from above because they developed a syndrome of working on what the policymakers gave as a prescription. While LOP was a

noble idea with a novel intent, it remained a paper exercise and its implementation in primary and secondary schools remains to be seen. As a result, Zimbabwean students join tertiary institutions half-baked at the time of reporting and are likely to struggle to fulfil their WRL until they get the hang of it. The importance of LOP depends on the fact that it provides every student with the opportunity to practice the general and specific skills expected of school leavers in work, social and civic environments (MoPSE, 2015). Expected skills to develop include problem-solving, self-management, communication leadership and teamwork, initiative and entrepreneurship, learning and technology skills, among others.

4. Conclusions

We conclude that elementary education in most countries of the world has been designed to include the whole population providing a broad and basic education, whereas in secondary and tertiary there are different degrees and ways of selecting students to enter them, as well as selection within them as to what each student will study. However, it is increasingly clear that having separate ideas, policies, and programs in the three educational levels that do not engage or align with each other will only perpetuate the great divide and undermine the effectiveness of the country's educational system. We argue that the continuity and collaboration among educational programmes in elementary, secondary and tertiary education should be based on the relative strengths of each and regarding all as equal partners. We believe that it is necessary to develop and design the curriculum and instructional practices that show coherence and convergence from elementary school through to university for the betterment of the students and the state. Policymakers are therefore provoked to ensure continuities in the planning and designing of curriculum for a nation. As for the curricula that show discontinuities, the policymakers and experts must collaborate and harmonise the curriculum. Curriculum packages need harmonization for the continuity of education from the primary level to the university level. Hence, there is a need for alignment between several levels and disciplines of education to show closer alignment in purpose and better integration in practice. To achieve this, curriculum experts and policymakers for both lower education and universities in any country need to share, collaborate and have the same vision when creating a new curriculum for the whole nation.

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