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Extendibility of the Education 5.0 Concept to Zimbabwe's Secondary School System as Encapsulated in Curriculum Framework 2015-2022

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Abstract: *The issue under scrutiny is the possible nexus between the Curriculum Framework for Primary and Secondary Education for period 2015-2022 and Education 5.0, which currently seems to be in a state of taciturnity as the latter is purported to be germane only to Zimbabwe's Higher and Tertiary Education system. This article is, thus, informed by the 'functional curriculum theory' – a principle which accentuates the ideal of instructional relevance. Hence, this reflection is essentially secondary research whereby the writer reflects on earlier works to do with Education 5.0 as well as the Curriculum Framework 2015-2022 which is presently the principal document on infant, primary and secondary education in Zimbabwe. As emerged from this reflection, there is vivid compatibility between Education 5.0 which is the brainchild of the Ministry of Higher and Tertiary Education, Innovation, Science and Technological Development [MoHTEISTD] and the Curriculum Framework 2015-2022 as the invention of the Ministry of Primary and Secondary Education [MoPSE]. In conclusion, this reflection envisions the possibility of widening the scope of Education 5.0, which is achievable through transferring the Education 5.0 concept to Zimbabwe's secondary cycle of education. Therefore, if Education 5.0 begins to take root as from secondary school level then its success at higher and tertiary education level is further guaranteed. This article, therefore, recommends that Education 5.0 be extended to secondary school level with a view to brightening its chances of success in stimulating the modernisation, commercialisation and industrialisation agenda of Zimbabwe.*

Keywords: Education 3.0, Education 5.0, secondary school system, Curriculum Framework for Primary and Secondary Education for period 2015-2022 [herein dubbed Curriculum Framework 2015-2022 or Government of Zimbabwe or GoZ (2015)].

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INTRODUCTION AND BACKGROUND

It is reported that when the Minister of Higher and Tertiary Education, Innovation, Science and Technology Development Prof Amon Murwira and his team carried out an Education System Design Analysis, their premise was that education must produce goods and services (Murwira, 2019). Hence, Murwira and Team discovered that the traditional university missions have been (1) Research (2) Teaching and (3) Community Service (Workshops, Contact leave, Sabbatical and Consultancy), and they coded this design as Education 3.0 because of its characteristic three missions (Murwira, 2019).

It is against this background that Education 5.0 was promulgated. Hence, Education 5.0 is an offshoot of its predecessor Education 3.0 whose inception could be traced to as far back as the second half of the 19th Century – the era in which European missionary education got entrenched into the Zimbabwean society. In fact, the inception of missionary education coincided with the establishment of Education 3.0 at higher and tertiary levels. Education 3.0 is an instructional regime which focused primarily on the three aspects namely 'teaching', 'research' and 'community service/outreach'

(Government of Zimbabwe or GoZ, n.d.; & Muzira & Bondai, 2020). Thus, Murwira (2019) comments:

By design Education 3.0 produces a worker not a person that produces goods and services. This is a colonial design which served its purpose and cannot be used by a nation that wishes to industrialise. So, although Africa did well by encouraging mass University Education, it was carried out in the Education 3.0 design and this explains the low levels of industrialisation emanating from this design.

Therefore, Education 3.0 was in place throughout the colonial era as it was just designed to feed employees into the existing colonial industries and economic system. This unfolded until recently when two pillars were added to those in Education 3.0 giving rise to a new model of instruction, which, in itself, has five missions namely 'teaching', 'research', 'outreach', 'innovation' and 'industrialisation' (GoZ, n.d.; Murwira, 2019; & Muzira & Bondai, 2020). In view of the five missions, this new instructional system is dubbed Education 5.0.

The underlying principle of Education 5.0, as a scientific and developmental doctrine, is that education which does not produce goods and services is not relevant at all (GoZ, n.d.). Hence, Education 5.0 has

gained traction at Zimbabwe's Higher and Tertiary Education level. However, the researcher visualizes some vivid manifestations of Education 5.0 within the Curriculum Framework for Primary and Secondary Education for period 2015-2022 (known herein as the Curriculum Framework 2015-2022 or Government of Zimbabwe or GoZ, 2015). Yet these manifestations are still in a state of taciturnity within the current national educational discourse. It is against this backdrop that the writer reflects on the manifestations of Education 5.0 within the Curriculum Framework 2015-2022 with a view to envisioning the possibilities of extending Education 5.0 to Zimbabwe's secondary school system.

Statement of the Problem

The chief driving concern of this inquiry is located within the discernible dissonance between the Ministry of Primary and Secondary Education [MoPSE] and that of Higher and Tertiary Education, Innovation, Science and Technological Development [MoHTEISTD]. Thus, the two education Ministries are 'in principle' supposed to operate in unison but the direct reverse is true of them. In other words, the two cognate Ministries are to a larger extent disengaged and compartmentalised. Correspondingly, the problem under inquiry is the palpable silence that seems to exist on the nexus between the Curriculum Framework 2015-2022 of the MoPSE and Education 5.0 of the MoHTEISTD as the latter is purported to be germane only to Zimbabwe's Higher and Tertiary Education system.

Theoretical Underpinnings

This article is informed by the 'functional curriculum theory', which "emphasises that a learner should have a wide pool of knowledge and ideas to become a fully participating member of the global economy" (Gondo *et al.*, 2019). The functional curriculum theory, thus, resonates with instructional relevance, which, in itself, harmonises with the appropriateness of the curriculum. "The appropriateness in the curriculum should be based on the extent to which it meets individual attributes, the economy, the needs of the society and the challenges of the future" (Nziramasanga, 1999). The author, therefore, equates this 'appropriateness' to 'curriculum functionality' or 'relevance'. Thus:

The term relevance typically refers to learning experiences that are either directly applicable to the personal aspirations, interests, or cultural experiences of students (personal relevance) or that are connected in some way to real world issues, problems and contexts (life relevance) (Makuvaza & Hapanyengwi-Chemhuru, 2017).

This insinuates that an appropriate curriculum is that which appeals to the learner's concrete existentiality within their cultural context. This viewpoint is endorsed by Jerome Bruner who views instructional relevance as the culture-embeddedness of

the curriculum. In full view of the foregoing, a curriculum deemed appropriate and culture-embedded in the Zimbabwean context is, therefore, that which incorporates and upholds the five missions namely teaching, inquiry, community involvement, innovation and industrialisation – missions which constitute Education 5.0. Thus, for Zimbabwe's secondary education system (which, in itself, is a constituent part of the Curriculum Framework 2015-2022) to be appropriate and/or relevant, it also needs to address the five missions as contained in Education 5.0 with a view to contributing significantly to the development of Zimbabweans within their cultural context while keeping along the global trends.

REVIEWING RELATED LITERATURE

The Curriculum Framework 2015-2022 enunciates the structure and organisation of Zimbabwe's Updated Curriculum whose contents are on the whole consistent with the dictates of Education 5.0. Perhaps because the Curriculum Framework 2015-2022 was drafted before the promulgation of Education 5.0, this statutory document does not make deliberate reference to Education 5.0. It is also reminisced herein that the Curriculum Framework 2015-2022 (as an embodiment of Zimbabwe's infant, primary and secondary education) is logically bound to feed into higher and tertiary education whose torchlight is Education 5.0. Yet Education 5.0 is dissociated from the country's infant, primary and secondary education. Thus, the Curriculum Framework 2015-2022 and Education 5.0 are seen as two separate instructional models which have no common ground since the former addresses the school system whereas the latter speaks to higher and tertiary education. A knowledge gap, therefore, exists in the said curriculum framework's disengagement from Education 5.0. Hence, this article seeks to address the said gap by unpacking and revealing the link between the Curriculum Framework 2015-2022 and Education 5.0. This undertaking is with a view to envisioning and estimating the broadened scope of Education 5.0 so that its transferability to Zimbabwe's secondary school system is unmasked and ascertained.

Similarly, GoZ (n.d.) articulates Education 5.0 in terms of its historical development, underlying philosophy, themes and transformative potential. GoZ (n.d.) also demonstrates under no uncertain terms that Education 5.0 is a blueprint formulated by the MoHTEISTD to guide instruction at higher and tertiary education level in Zimbabwe. This overallly presents a knowledge gap in the sense that the relevance of Education 5.0 is fathomed only within the purview of higher and tertiary education thereby leaving out the infant, primary and secondary cycles of the country's education system. The writer, thus, seeks to address this

gap by examining the relevance of Education 5.0 to Zimbabwe's secondary level of education in particular.

In the same vein, Tagwira (2018); & Murwira (2019) make vivid reflections on Education 5.0 by way of high-powered presentation papers which incorporate, *inter-alia*, the origin and etymology of the concept Education 5.0. They portend a bright future in terms of innovation, industrialisation, poverty alleviation and prosperity in Zimbabwe through Education 5.0. However, they tend to confine this Education 5.0 to higher and tertiary education thereby leaving behind the infant, primary and secondary cycles of the country's education system. This, in itself, presents a knowledge gap which this article seeks to address by examining the compatibility between Education 5.0 and Zimbabwe's secondary education system in particular. Hence, it is this compatibility which helps determine the possibility of transferability of the Education 5.0 concept to Zimbabwe's secondary school system.

From their investigations into educators' perceptions on the adoption of Education 5.0 in Zimbabwe, Muzira & Bondai (2020); & Muzira & Muzira (2020) illuminate the Education 5.0 concept further. In particular, Muzira and Bondai observed that University educators generally had a positive attitude towards the adoption of Education 5.0 and that they perceived it to be useful and of relative advantage than the preceding Education 3.0. However, these reflections are in the context of University education, a predisposition which equally leaves out the country's infant, primary and secondary education cycles. Muzira & Bondai (2020); & Muzira & Muzira (2020), thus, manifest a knowledge gap which this reflection seeks to address by extending the Education 5.0 concept to secondary education.

METHODOLOGY

To a larger extent this reflection is secondary research whereby the writer reflects on earlier works to do with Education 5.0. Beyond secondary and/or desk inquiry, this article engages document analysis as a research instrument deemed handy in scrutinising particularly the Curriculum Framework for Primary and Secondary Education for period 2015-2022, which is the principal document articulating Zimbabwe's current infant, primary and secondary education.

UNDERSTANDING EDUCATION 5.0

According to Tagwira (2018), the National Skills Audit conducted by the MoHTEISTD in 2017 showed that although Zimbabwe boasts of over 95% literacy rate, the critical skills availability is 38%. This is confirmed by Murwira (2019) who submits that "our average skills levels are at 38% while our average literacy is well above 94%." A trend of this nature demonstrates that there is a dearth of increased critical

skills development which is deemed a *sine qua non* of industrial and economic development at a national level. It is, therefore, ascertained that higher and tertiary education needed to be re-aligned and reconfigured with a view to boosting critical skills development in the country. Noting the need to re-align and re-configure Zimbabwe's higher and tertiary education, the MoHTEISTD formulated Education 5.0. Hence, Tagwira (2018) writes:

Higher and Tertiary Education in Zimbabwe has traditionally been focused on three missions which are teaching, community service and research, equivalent to Education 3.0. However, in order to deliver a competitive, industrialised and modernized Zimbabwe, the Ministry [MoHTEISTD] has adopted two additional missions that are Innovation and Industrialisation effectively re-orientating Education 3.0 to Education 5.0.

This way, the MoHTEISTD drifted from an essentially colonial model of higher education to a postcolonial but globalized one, which has the requisite acumen to promote industrialisation, national economic growth and development.

It should be reminisced abundantly that the notion of critical thinking permeates the entire Education 5.0 concept. As such, critical thinking is the cautious application of reason to forms of belief, observing the conceivable significance and meaning of claims, and it is thinking that has a purpose and assurance to acceptance of the outcomes of that reasoning. Thus, Mulnix (2012) argues that critical thinking or reasoning well essentially involves obtaining, exercising, and developing the ability to understanding inferential relations holding among statements. Consequently, critical thinking harmonises significantly with the notion of 'thinking outside the box'. Therefore, Zimbabwe's Tertiary Education Institutions should be tailor-made to churn out graduates who are not gullible but critical in thought because critical thinking is the desideratum of innovation and industrialisation.

The Government of Zimbabwe's vision in Education 5.0 entails that graduates from Tertiary Education Institutions should be equipped with skills acquisitions that empower them to become innovative towards societal development through transformative science and technology knowledge application that delivers goods and services (Tagwira, 2018; & GoZ, n.d.). To Tagwira (2018), therefore, "Education 5.0 reaffirms the primacy of universities, polytechnics, teachers' colleges and industrial training colleges in economic growth, technological transfer and generation of new knowledge." Thus, Education 5.0 deems it incumbent upon Zimbabwe's Tertiary Education Institutions to spearhead the processes of ideation, design thinking, innovation and industrialisation.

Operational definitions of the terms introduced above are as follows: Firstly, ideation fundamentally refers to idea-generation or the method characterized by the interchange and utilisation of both divergent and convergent thinking processes based on good reasoning/logic/critical thinking. Secondly, design-thinking is used to nurture solutions to intricate challenges/problems with a view to coming up with new services or products to market and to addressing organizational, operational or strategic issues, or at times social problems. Thirdly, innovation (which, in itself, harmonises significantly with design thinking) is an inventive method or innovative methodology or a set of cognitive, strategic and practical processes by which design concepts or proposals for developing new products or improving existing ones such as buildings, machines, communications are ideated. Lastly, industrialisation basically refers to societal transformation from an agro-based economy to the manufacturing-driven economy. Thus, critical thinking, ideation, design thinking, innovation and industrialisation are interwoven subjects which underpin the concept of Education 5.0.

In more specific terms, education 5.0 is “the doctrine for the modernisation and industrialisation of Zimbabwe through education, science and technology development to achieve Vision 2030” (GoZ, n.d.). The above quote implies that the apotheosised and highly sloganeered Vision 2030 is underpinned by Education 5.0. Pertaining to Education 5.0, GoZ (n.d.) reiterates that “the underlying principle is an education, science and technology system that produces goods and services useful to the economy based on heritage.” This expresses the adoption of heritage into Education 5.0, which is consistent with the culture-embeddedness of instruction articulated earlier.

A heritage-based education, science and technology development is delivered conscious of the environment it seeks to transform (GoZ, n.d.). The heritage-based education is, therefore, an embodiment of the relevance thesis endorsed and reinforced by Murwira (2019) whose understanding is that the country’s MoHTEISTD “must have advanced scientific knowledge from anywhere in the world but apply it to our environment for producing a competitive industry.” This accentuates the ideals of contextualisation and functionality in how Zimbabwe’s Higher and Tertiary education should dispense Education 5.0. Hence, Zimbabwe’s national heritage reposes in its agricultural, climatological and mineral heritage which the country is called upon to tap into for national development.

Consequently, Education 5.0 is guided by Zimbabwe’s heritage-based philosophy which is mediated to use “cutting-edge, competitive, universal, scientific and technological knowledge for production of quality goods and services” (GoZ, n.d.). Thus, Education 5.0 is steered by the principle of putting to

full utility the resources which are readily available. This is also reiterated by GoZ (n.d.) which states that “Zimbabwe is adopting an education system that imparts knowledge, which is suitable for exploitation of locally available resources for its transformation to an industrialised and modernized economy.” This demonstrates that Education 5.0 is a relevant model of instruction which seeks to achieve Vision 2030 through the utilisation of locally available resources – a predisposition, which, in itself, is a recipe for sustainable development in Zimbabwe. “The heritage-based philosophy which is being promoted by the current Minister of Higher and Tertiary Education, Prof A. Murwira, supports the application of gained knowledge on the local environment in order to produce relevant goods and services” (Muzira & Bondai, 2020). Therefore, the heritage-based philosophy is consistent with the agenda for Africanisation of education, which, in turn, harmonises with the Zimbabwe Government’s indigenisation policy.

The aforesaid heritage-based philosophy bequeaths to Education 5.0 an outlook of a culture-embedded model of instruction. Hence, this heritage-based philosophy seems to be in close propinquity with the philosophy of *Unhu/Ubuntu*, which, according to Curriculum Framework 2015-2022 or GoZ (2015), is the controlling African ideology - the African philosophy of life and cornerstone of African values which guides Zimbabwe’s infant, primary and secondary education. This connotes that both the heritage-based philosophy and the *Unhu/Ubuntu* philosophy accentuate the contextualisation and indigenisation of education with a view to ensuring instructional relevance. This renders the extension and/or cascading of Education 5.0 to secondary education an exigency as well as a glaring possibility.

Since, the Government of Zimbabwe’s vision is to see graduates being equipped with skills acquisitions that empower them to become innovative towards the production of goods and services, therefore, Education 5.0 entails restructuring the higher and tertiary education sector with a view to inaugurating universities and college training institutions focused on five missions: teaching, research, community services (consultancy), innovation and industrialisation (GoZ, n.d.; & Muzira & Muzira, 2020). The subsequent section which seeks to draw parallels between Education 5.0 and Curriculum Framework 2015-2022 is, therefore, sub-headed under teaching, research, community involvement, innovation and industrialisation since these are the themes that constitute the instructional development blueprint called Education 5.0.

Exploring the Compatibility between Education 5.0 and Curriculum Framework 2015-2022

The current reflection argues that it is of immense prudence to avoid articulating the five

missions of Education 5.0 (teaching, research, outreach, innovation and industrialisation) in isolation since they are on the whole overlapping and complementary. This interrelatedness of the said missions is substantiated by Muzira & Bondai (2020) who recount that:

There is a deliberate link between the pillars of higher education as teaching should probe research, research influences community service through innovation, and innovation should lead to commercialisation and industrialisation through the introduction of innovation hubs and industrial parks.

Hence, these missions should be conceived of as parts of a correlated and integrated model of instruction.

The Teaching Mission and the Curriculum Framework 2015-2022

Education 5.0 puts store in the use of Zimbabwe's local environment in teaching and learning (GoZ, n.d.; & Tagwira, 2018), in line with the heritage-based philosophy. Education 5.0 also seeks to make technology simple and be understood, for concepts can be expressed in any language (GoZ, n.d.; & Tagwira, 2018). The assumption that 'concepts can be expressed in any language' denotes the fact that the use of indigenous languages in instruction is allowed although it is not officially communicated. Muzira & Bondai (2020) also submit that "the teaching aspect now requires that theory be blended with practice. As a result, the Minimum Bodies of Knowledge and Skills [MBK/S] that are being introduced to the university curriculum will also influence teaching." This demonstrates that the Teaching Mission as embedded in Education 5.0 should aim to straddle intellectual-cognitive development with the physical-psychomotor-vocational development of the neophyte. The foregoing is substantiated by Muzira & Muzira (2020) who argue that "Degrees should equip the students with both knowledge and skill" in line with the "doctrine for the Modernization and Industrialisation of Zimbabwe through Education, Science and Technology Development to achieve Vision 2030." Thus, the imparted knowledge constitutes intellectual-cognitive development whereas the skills taught epitomise physical-psychomotor-vocational development of the learner.

Likewise, the Curriculum Framework for Primary and Secondary Education for period 2015-2022 (GoZ, 2015) spells out learner exit profiles at various levels in the education system, "which describe the acquired knowledge, skills, values, attitudes and attributes that a learner should possess as a result of their learning." Thus, in congruity with the Teaching Mission of Education 5.0, the Curriculum Framework (2015-2022) provides for teaching with a view to imparting knowledge and skills, among others.

Pertaining to knowledge in particular, the Curriculum Framework (GoZ, 2015) submits that:

At the most basic level, every learner has to be fully literate, numerate and skills-oriented. Beyond this, it is important that all learners must be exposed to a generic education that encompasses Science, Technology, Arts and Mathematics [STEAM] disciplines and are informed by knowledge of history, culture and geography of Zimbabwe and the world at large.

The foregoing quote demonstrates that Zimbabwe's primary and secondary education system focuses on the mastery of content knowledge as well as relating that content knowledge to practice, again in line with the Teaching Mission of Education 5.0. Moreover:

A skill refers to the ability and capacity acquired through deliberate, systematic and sustained effort to effectively carry out complex activities. The Curriculum Framework provides for the acquisition of skills that will make learners productive, employable and have the capacity to create employment (GoZ, 2015).

With this predisposition towards recognising the prominence of knowledge and skills especially at the secondary school level, the Curriculum Framework (2015-2022) is compatible with the innovation, commercialisation, industrialisation and modernisation agenda as embedded in Education 5.0.

The Research Mission and the Curriculum Framework 2015-2022

As stated earlier, teaching probes research. According to GoZ (n.d.), research and development are the engines for bringing new ideas and innovations. Thus, Education 5.0 incorporates inquiry with a view to promoting and sustaining the production of new knowledge, among others. In the same vein, Muzira and Muzira (2020) argue that in Education 5.0 emphasis is on lecturers guiding their students as they do research. This, therefore, demonstrates that research is the mainstay of literary development, ideation, innovation, industrialisation, commercialisation, economic growth and modernisation in Zimbabwe.

The recently resuscitated Continuous Assessment Learning Activity(s) [CALA], which is part of the Updated Curriculum or Curriculum Framework 2015-2022, gives Zimbabwe's secondary school system a research-oriented outlook thereby making it compatible with the Research Mission of Education 5.0. According to GoZ (2021), CALA requires learners to perform, demonstrate their knowledge, understanding and proficiency. Thus, it yields a tangible product and/or performance that serves as evidence of learning and it presents a situation that calls for learners to apply their learning in context. Therefore, CALA comprises

problem-based and research-based activities. In CALA, Learners apply knowledge, concepts, and skills learnt and generate knowledge. CALA incorporates practical activities such as data collection through interviews, questionnaires, checklists, observations, and experiments. Hence, CALA is endowed with originality, creativity and innovativeness. Moreover, CALA is characterised with learning area integration. With its inquiry-based nature, CALA fundamentally compels learners to venture into the local community to inquire on any given area of concern. CALA, thus, harmonises with the Research Mission of Education 5.0.

In the same vein, the Curriculum Framework (2015-2022) incorporates inquiry-based learning as “an approach that aims at nurturing thinking, reflection and problem-solving among learners” (GoZ, 2015). Hence, the said framework recognises the centrality of research in teaching and learning at primary and secondary school levels. Thus, inquiry-based learning as an approach covers a number of methods of teaching and learning that utilise inquiry. These include discovery method, project-based learning, problem-based learning and design-based learning (ibid). The problem-based learning in particular, which is also referred to as the problem-solving learning, entails starting with an ill-defined or ill-structured problem (ibid). It “involves empowering learners to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a defined problem” (Savery, cited in GoZ, 2015). In short, the inquiry-based learning, problem-solving and problem-based learning all revolve around and resonate with research and hence they concur with the Research Mission of Education 5.0.

The Community Service Mission and the Curriculum Framework 2015-2022

Research influences community service through innovation. “To sustain the competitive position among world higher and tertiary education systems, there is need to radically improve the relevance to development of the educational community. Thus, the education system has to be oriented to achieve this goal” (GoZ, n.d.; & Tagwira, 2018). Therefore, Zimbabwe’s higher and tertiary education should be tailor-made to becoming relevant in the thrust towards developing local communities socially, economically and politically in congruity with the heritage-based philosophy, the functional curriculum theory and *Unhu/Ubuntu*.

It is against the current background of changing societal needs that “the Government took a decision to carry out a curriculum review in order to ensure that the curriculum is responsive to the socio-economic needs of the country” (GoZ, 2015). Thus, Zimbabwe’s curriculum at infant, primary and secondary levels should constantly be adjusted for it to meet the imperatives of the times. The imperatives

alluded to in the preceding certainly do incorporate the exigency of having primary and secondary education which reaches out to the local community(s). This highlights the fact that Zimbabwe’s Curriculum Framework for Primary and Secondary Education for period 2015-2022 is expected to engage and service the local communities accordingly - a predisposition which is consistent with the Community Service Mission of Education 5.0.

The Innovation Mission and the Curriculum Framework 2015-2022

In addition to the definition of the term innovation proffered earlier, it also argued that “innovation is the bridge between knowledge produced in lecture rooms, laboratory and industrial production” (GoZ, n.d.; & Tagwira, 2018). This implies the concept of innovation hub which denotes the harnessing of knowledge acquired from the lecture room or laboratory in addressing the socio-politico-economic problems vexing communities within a postcolonial but globalising Zimbabwe. In this regard, Murwira (2019) claims that his Ministry [MoHTEISTD] is creating ecosystems for innovation and modernization. These ecosystems are, in themselves, the innovation hubs about which Murwira (2019) writes:

We have started creating innovation hubs at all Higher and Tertiary Education Institutions, as well as industrial parks linked to these institutions, in order to create a collaborative community of forward-looking private and public players and academics with the objective of developing cutting-edge products for the marketplace. Innovation hubs shall be sources of our new technology. Innovation hub is where technology will be born.

The foregoing quote speaks to having students putting into practice what they would have learnt in the lecture room. Similar sentiments are echoed by Muzira & Muzira (2020) who emphatically declare that “what has been learnt in class should be put to practice by the students thereby developing critical thinking in students so that they do not become mere reflectors of other people’s thought.” This revolves around and resonates with the ideal of ‘education with praxis’. Moreover, it could be argued as well that the absence of critical thinking occasions poor innovation and in turn poor industrialisation.

The Curriculum Framework for Primary and Secondary Education for period 2015-2022 adopts the Innovation Mission through the seemingly erstwhile but practically functional agenda on Science, Technology, Engineering and Mathematics [STEM]. To substantiate the preceding, GoZ (2015) argues that “school institutions need to engage learners with renewed focus on STEM so that they can thrive in a knowledge-based economy and society.” Thus, Zimbabwe’s primary and secondary education system should be inclined towards

contributing to the churning out of innovative graduates who are well-positioned to thrive in the production-based economy. Basing on his research findings, Wagner, cited in GoZ (2015), argues that “STEM education empowers learners with the most important skills that they need in order to be productive citizens.” Through STEM, it is, therefore, possible to cascade the ‘innovation hub’ concept to Zimbabwe’s secondary system of education for a start. This way, knowledge acquired from the classroom and school laboratory is harnessed for the production of goods and services thereby contributing to the commercialisation, industrialisation and modernisation of the country.

The Industrialisation Mission and the Curriculum Framework 2015-2022

As implied in Education 5.0, innovation should lead to national industrialisation. Hence, “from the innovation hub, certified prototypes are relayed to the industrial park. Thus, the industrial park is the highest stage for production of goods and services” (GoZ, n.d.; & Tagwira, 2018). This mainly parades development of Zimbabwe’s manufacturing sector (industrialisation) as the ultimate goal of the country’s higher and tertiary education within the new world order powered by the globalisation sensibilities. “Institutions of higher education would therefore produce graduates who have entrepreneurial skills and are equipped to set up industries rather than being job seekers” (Muzira & Bondai, 2020). This substantiates the position that the ultimate aim of Education 5.0 is to commercialise and industrialise the nation as well as empower the citizens economically.

In congruity with the Industrialisation Mission of Education 5.0, the Curriculum Framework 2015-2022 (GoZ, 2015) holds that “Zimbabwe’s participation in a new global economy is premised on an education system with a Science, Technology, Engineering and Mathematics [STEM] bias.” This demonstrates that STEM is again the powerhouse of the envisaged Industrialisation Mission of Zimbabwe’s primary and secondary education. Moreover, the five pathways at Advanced Level include the STEM disciplines, among others (GoZ, 2015). Hence, the Innovation and Industrialisation Missions of Education 5.0 are well represented at the secondary school level.

Furthermore, if patiently and meticulously implemented, the Continuous Assessment Learning Activities [CALA] can also turn out to be a vivid manifestation of the Industrialisation Mission as encapsulated in Education 5.0. The author advances this argument because ideally the CALA component of learning revolves around and accentuates learners’ acquisition of problem-solving and creativity competencies, which are highly cherished in the country’s manufacturing sector. With some schools evolving into production units (schools practicing cattle rearing, chicken production and piggery) as urged by

the Curriculum Framework 2015-2022, Zimbabwe’s education system is envisaged to manifest a robust ‘commercialisation of education’ drive or a vibrant ‘education with production’ thrust, which is so central in the country’s Industrialisation Mission. Thus, Zimbabwe’s secondary school system, as embodied in the Curriculum Framework 2015-2022, presents a sound platform for cascading Education 5.0 from higher and tertiary education to the school system.

Visions in Juxtaposition

With Education 5.0 in place, the MoHTEISTD is optimistic and it dares “to dream big for victory and fulfilment in reducing poverty” (Tagwira, 2018). This implies that the said Ministry envisions the vast possibilities of poverty alleviation and national economic recovery through Education 5.0. Thus, Tagwira (2018) emphatically and confidently writes: “We will create jobs that today have no names through innovation and research. We will produce knowledgeable, relevant and quality graduates with enhanced technical, vocational and entrepreneurial skills among others for employment creation, self-employment and decent work.” This expresses the vision of churning-out development-oriented and empowered graduates who are exigent in the country’s industrialisation process and the much anticipated economic recovery.

It is this same vision of producing development-oriented graduates which underpins and energises the implementation of the Curriculum Framework for Primary and Secondary Education 2015-2022 about which Mugabe is quoted saying “...hence the need to educate all, the academically-oriented as well as those with practical/technical bias...” Thus, like Education 5.0, the Curriculum Framework 2015-2022 apotheosises an educative process which focuses on imparting development-oriented knowledge and training in critical skills development with a view to addressing the economic quagmire which has set in and taken root in Zimbabwe. This demonstrates that the inclination towards producing knowledgeable, relevant and quality graduates with enhanced technical-vocational skills for self-employment and employment creation is also at the heart of Zimbabwe’s infant, primary and secondary education.

On the one hand, it should be reminisced that chances are high that the well-meaning sentiments on industrialisation and poverty-alleviation as contained in both Education 5.0 and the Curriculum Framework 2015-2022 could degenerate into mere state rhetoric without corresponding action. Should this be the case, then it is unfortunate for Zimbabwe as a nation. On the other hand, if the above-referred sentiments are genuine and are bound to reach fruition, then chances are equally high that one day or the other Zimbabwe will resurrect from the cemetery of poverty where she is currently laid to rest.

CONCLUSION AND RECOMMENDATION

It has emerged from the foregoing that there is strong compatibility between Education 5.0 which is an invention of the MoHTEISTD and the Curriculum Framework 2015-2022 compiled under the auspices of the MoPSE. This reflection, therefore, envisions the possibility of broadening the scope of Education 5.0 so that it incorporates Zimbabwe's secondary cycle of education, for a start. In other words, the possibility of cascading Education 5.0 to Zimbabwe's secondary education is vividly foreseeable. This connotes that if Education 5.0 begins to take root as from the secondary school level then its success at higher and tertiary education level is further guaranteed. This article, thus, recommends that Education 5.0 be cascaded to the secondary education level with a view to brightening its chances of success. Success in this undertaking is deemed a development of paramount importance since it is envisaged to further stimulate the modernisation, commercialisation and industrialisation agenda of Zimbabwe.

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