# The dawn of education 5.0 philosophy: Implications on musical arts pedagogics in universities, Zimbabwe

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## Abstract

Musical arts education has a critical role to play in realisation of the Education 5.0 trajectory. This study seeks to examine how musical arts education in universities can align with education 5.0 and deliver tangible goods and services in their creative space. There is a scarcity of information concerning strategies, and ideas on how music education in universities can promote the new Education 5.0 ideology. Thus, this study based on the findings will propose a model which may be implemented to improve the music education output. In this qualitative research a descriptive research design was engaged to carry out the study and the sample comprise three state Universities offering musical arts education and six musical arts experts who were interviewed to generate data for analysis. Data analysis was accomplished through engaging thick descriptions and thematic analysis. The results of the study indicate that the musical arts education sector could transform through incorporating and equipping students with: innovation skills; industrialising skills, promote creativity, and adopting the heritage based philosophy in order to structurally align with the new education policy. Additionally, the quality of Zimbabwe's musical arts industry depends on an applicable, result oriented and dynamic musical arts curriculum. Therefore, the study recommend that tertiary musical arts education sectors could perform a critical role in imparting prerequisite skills to future music artists and develop new knowledge through incorporating entrepreneurship and current technological facets in the musical arts pedagogy.

Keywords: Education 5.0, pedagogics, musical arts, universities

**Introduction**

The main objectives of this study were to examine (a) how music education in universities can align with the new Education 5.0 ideology and (b) propose a model which may be implemented to improve music education output and to stimulate further research. The proposed theory can be used for further reference for musical arts education in Zimbabwe.

The chapter proposes a theory for musical arts education in universities through connecting the process of entrepreneurship, creativity, innovation and education. I seek to explicate the musical arts education and how the curriculum can meet the demands of the new Education 5.0 policy in Zimbabwe. The chapter contains six sections; the introduction, literature review, methodology, results and discussion, presentation of the proposed model and conclusion. The research methodology embraces the descriptive approach design, data collection, sampling and data analysis techniques. Results of the research are presented in the form of the proposed theory. Thus, in this paper I argue that musical arts students in Universities require an enabling curriculum and environment that facilitates the acquisition of knowledge and skills that enable them to match with Education 5.0 demands and the ever changing needs of society.

The advent of the Education 5.0 policy in the tertiary erudition in Zimbabwe, aims to bring forward the much needed transformation especially in the musical arts curriculum (Tagwira, 2018; Muzira & Bondai, 2020; Dziwa & Postma, 2022). Mutegi, Kinyanjui & Muriithi (2017) confirm that education is the basis for economic, social and political development of any nation. According to Vinnete & Pont (2017, p.19) an education policy "…can be formally understood as the actions taken by governments in relation with educational practices, and how governments address the production and delivery of education in a given system". In the same vein, an education policy may also be defined as the structure of control within the organisation of educational institutions (Bell, 2020). Thus, describing the education policy for Zimbabwe the Minister of Higher and Tertiary Education, Amon Murwira emphasised that the delivery of an education system that produces goods and services, has become mission critical for our Higher and Tertiary Education system.

According to Muzira & Bondai (2020) Education 3.0 failed to produce results of developing industries due to a deficiency in the knowledge gained in Tertiary institutions, hence the

introduction of Education 5.0. This Heritage based philosophy which is being promoted by the current Minister of Higher and Tertiary Education, supports the application of gained knowledge on the local environment in order to produce relevant goods and services (Bhurekeni, 2020). Hence, Education 5.0's focus is on research, teaching, community service, innovation and industrialisation, and the teaching aspect now requires theory to be blended with practice. Moreover, an undeniable link now exists between the five new pillars of higher education; teaching, research community engagement, innovation and industrialisation (Ministry of Higher and Tertiary Education, Science and Technology Development, 2018a).

In line with education 5.0 institutions of higher education will therefore produce graduates who have entrepreneurial skills and are equipped to set up industries rather than being job seekers. This has been evidenced by Chinhoyi University of Technology's artificial insemination project launched as a way of implementing Education 5.0 (Ministry of Higher and Tertiary Education, Science and Technology Development, 2018b). Kabonga & Zvoukomba (2021) also provided a detailed account of Bindura university graduates who had ventured into entrepreneurship after completing their education. In addition, a perfect example of student graduates entrepreneurship is that of Mark Zuckerberg the founder of Facebook. He created the company whilst he was still an undergraduate student at Harvard University and Microsoft was formed when Bill Gates was still a student. Student entrepreneurship contributes significantly to economic growth and create jobs for themselves and others (Kabonga & Zvoukomba, 2021). Thus, Education 5.0 is harnessed on Zimbabwe's state Universities as they are being mandated to launch "outcomes-focused national development activities" towards an industrialised Zimbabwe (Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development, 2019, p.1).

Interestingly, there is a large and rich source of literature that confirm that creativity, problem solving and critical thinking are the prerequisite skills for the two added pillars innovation and industrialisation in the new Education 5.0 doctrine, yet they are already a crucial domain in the arts studies (Dziwa & Postma, 2021; Riley, 2013; Festa, 2009; Reid et al, 2009). Therefore, musical arts education has a critical role in the designing, promotion, implementation, realisation and success of education 5.0 doctrine. However, there is a gap that exists as information is still lacking on how in particular musical arts education in

tertiary institutions can effectively align to the new education trajectory being proposed by the Government in Zimbabwe.

**Zimbabwe's Education Reforms: A Historical background**

Zimbabwe's education system has come a long way and experienced noticeable transformation since the pre-colonial era to the post-independence era (Masaka, 2016). The reforms can be identified as precolonial, colonial and post-colonial education (Zvobgo, 1986 & Mapara, 2009). In addition, the post-colonial education is also divided into two; Education 3.0 and Education 5.0. (Muzira & Bondai, 2020). In the precolonial era indigenous knowledge was the main form of education. Ezeanya-Esiobu (2019) asserts that indigenous knowledge as a concept is diverse as there are many interpretations of the term. Therefore, indigenous knowledge is defined as localised African systems established over time and its configurations are founded upon local knowledge systems and conveyed in local idioms (Matowanyika, 1994). In addition, Greiner (1998, p. 1) argues that indigenous knowledge is "the unique, traditional, local knowledge existing within and developed around specific conditions of women and men indigenous to a particular geographic area." Thus, indigenous knowledge consists of acquiring life skills in all fields of human aspects such as farming, hunting, carpentry and iron smelting, these skills are passed on to the young ones by their elders for their survival (Ezeanya-Esiobu, 2019 & Mapara, 2009).

In the colonial era the same indigenous knowledge and life skills continued to be taught through the implementation of new technologies and modern scientific knowledge (Tharakan, 2017). Colonial education was promoted over indigenous knowledge system, yet it enables local cultures to survive pressures of change (Ndangwa, 2007). However, the colonial system controlled the curriculum that was to be taught in mission schools resulting in indigenous people being educated to be future workers for the white people (Muzira & Bondai 2020). Formal and non-formal colonial agents dictated what education should be and ignored African viewpoints (Stafford and Bradely, 1971). Consequently, colonial education incorporated practical subjects such as agriculture, building, carpentry and dress making to prepare Africans as future workers (Nherera, 1994). Nherera is explicating how education was designed for Africans in order to fulfil the colonial agenda of instilling the servant ship mentality instead of a leadership mentality.

According to Ezeanya-Esiobu (2019), the post-colonial period was evidenced by major education reforms as the government sought to address racial and gender inequalities in education. Consequently, the Higher education sectors under the new government is now spearheading urgent reforms to meet the demands of the changed society, from Education 3.0 to Education 5.0.

**Education 5.0: The Journey**

According to the Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development (2019) the Education 5.0 journey was initiated by the following activities; National Skills Audit, Design Analysis and a Philosophical Analysis. The outcome of these activities revealed that critical skills were low, as evidenced by the lack of industrialisation initiatives from University graduates in particular. The audit unravelled that skills levels were at 38% while literacy was above 94%. Normally, skill levels and literacy levels need to be at par (Muzira & Bondai 2020). In addition, an Education System Design Analysis was carried out and it was concluded that Zimbabwean Education must produce goods and services for the nation. The traditional university design education 3.0 was anchored on research, teaching and community service, a colonial design unfits for a nation that is focused on producing goods and services.  Thus, the advent of Education 5.0 philosophy was to bridge the gap between University Outputs and Industry (The Patriot, 2019).

However, Muzira & Bondai (2020) & Kanyongo, (2005) believe that the journey to Education 5.0 commenced in the post-colonial era where university education was made accessible to everyone as private and state universities were introduced. Consequently, this initiative brought an influx of graduates who needed to be employment yet the job market was flooded.  On the other hand, Keche (2021) is of the view that the background context of the education 5.0 policy can be traced back to early 1980, when Zimbabwe's first education and culture minister, Dzingai Mutumbuka argued that the post-independence theory-based education policy inherited from the Rhodesian government was arsenic and needed to be eradicated urgently.  As a result of these observations, the Government had to take action. The action later came in form of the commissioning of the Chetsanga Report of 1995 and the Nziramasanga Commission (NC) of 1999 which are well known efforts meant to revolutionarise the country's post-independence Western-based education system. The two

reports concluded that the Zimbabwean education should be transformed towards production of goods and services instead of producing mere workers. Regrettably, Zimbabwe failed to implement the recommendations of NC and Chetsanga Report (Keche, 2021). The lack of implementation of the two crucial reports resulted in the lack of an effective and fruitful education system.

Therefore, the effects of failing to transform the colonial education system is now prompting the second republic government in 2020 to urgently transform tertiary Education 3.0 to Education 5.0 (Keche, 2021). Thus, to address this scenario, the heritage based Education 5.0 was then designed, to cultivate students' entrepreneurial skills for the development of industries. This initiative is expected to create new jobs, reduce unemployment and bring the country foreign currency through exporting the products, from the innovation hubs (Muzira & Bondai, 2020). Consequently, Education 5.0 depends on how universities in Zimbabwe will embrace the new education policy and reinvent their curriculum and operation to suit the demands of Education 5.0.

**Education Policies in Universities: A Review**

Many countries like Zimbabwe are seeking to reform their higher education systems to be more effective in the economic development of a nation. Rich (2010) conducted an examination on the Bologna Process, comprising 46 European countries in tertiary institutions. The Bologna process refers to a major transformation in European higher education which had a worldwide impact as witnessed by numerous countries who desired to adopt it. The main reform lies with the modernisation of higher education, encourage the development of a high-quality, internationally competitive system, and support the movement of students and labour. The Bologna Process involves the creation of national higher education systems which are like-minded and qualifications are more translucent and manageable.

Myklebus (2021) revealed that the Norwegian government sought to revisit the relevance of higher education to 'working life' to ensure that graduates are better prepared for employment. The government influenced the output of higher education, particularly its effectiveness through creating the 'workforce of the future'. The Norwegian nation also introduced student 'active learning' and teaching reforms to include working methods used in

working life. In summary according to Myklebus (2021, p.1) "Students will have skills that society demands and be taught how such skills can be used. The instruction will be research-based and developed in cooperation with users so that businesses can become more familiar with the skills of the students," the 'relevance to working life". The reforms were meant to suit the demands in the industrial workforce.

Molnar, et al, (2021) reveals that the COVID-19 pandemic in the United States of America promoted educational reforms in higher education as well, such as the adoption of 'virtual schooling' in the national educational landscape. Major stakeholders such as the tech industry, philanthropists, and vendor corporations are promoting virtual education as a possible solution for challenges faced in modern education. However, the implementation of virtual technologies during the pandemic also revealed fundamental limitations of this approach as hackers disrupted district connections, held student personal data for ransom, and "zoom bombed" classes. In addition, Molnar, et al, (2021) cited that numerous students and parents were side-lined due to lack of access to broadband, computers, and other digital necessities.

Maurya, & Ahmed, (2020) examined the new education policy in India, focusing on addressing the challenges of modern education. The new education policy which comprise of the higher education as well in India is entitled The Unified Education Policy. The policy was well thought out and has many merits. Maurya, & Ahmed, (2020) noted that educationists in India have to adhere to the unified education policy as non-adherence would mean benefit to a particular section of learners and The New Education Policy allows for the mother tongue to be a medium of instruction up to the 5th standard.

The African continent led by the African Union is also in the process of changing its higher education curriculum. According Woldegiorgis et al, (2015) Europe's Bologna Process has been identified as a pioneering approach in regional cooperation with respect to the area of higher education, to address the challenges of African higher education. Policymakers in Africa are recommending regional cooperation that uses the Bologna Process as a model. Based on these recommendations, the African Union Commission (AUC) in 2007 developed a strategic document on higher education harmonisation. The implementation of the policy of harmonisation in higher education systems in Africa will foster regional integration.

In Zimbabwe scholars have also documented and reviewed the education policies providing the much needed insight into the policies. Keche (2021) through face-to-face interviews with lecturers, explored the relevancy of new higher education approaches in Zimbabwe particularly Education 5.0 and virtual learning environments (VLEs). Muzira and Bondai (2020) presented an insightful and well thought out research on educators' perceptions towards the adoption of Education 5.0. The study revealed that educators perceived Education 5.0 more beneficial to the education system than the preceding Education 3.0. However, educators lamented the lack of infrastructure and financial resources for effective implementation. On the other hand, Dziwa & Postma 2020) revealed that the Zimbabwean labour market lacks the capacity to address technological, economic and industrial challenges. Thus, the new education policy, Education 5.0 requires graduates to design solutions to these problems. This conceptual paper exposed that the required creative and critical skills necessary for innovation are currently not learnt and developed in higher education.

However, in a departure from the above reviewed researches. This chapter will analyse how the musical arts pedagogy may align to the new Education 5.0 policy that has been introduced in Zimbabwe. Therefore, this chapter seeks to suggest a possible model that may explain how musical arts education may contribute to the realisation of the new education trajectory in Zimbabwe.

## Aligning Tertiary Pedagogy to Education 5.0

Universities are better positioned to grasp and run with the vision of transforming Zimbabwe through conjoining critical thinking, innovation and an entrepreneurial mentality to achieve national economic growth and provide industrial solutions Murwira (2020). Professor Tagwira (2018), further explains that our nation depends on the country's intelligentsia comprising, researchers, innovators, scientists and academia to address numerous challenges confronting the nation. Undeniably, the Higher education domain is the most crucial bridge for transformation of the economy than any other sector. Therefore, tertiary institutions have an urgent mandate to align to Education 5.0 in terms of objectives, content, methodology and expected outcomes for Education 5.0 to be realised.

Žalėnienė & Pereira, (2018) emphasise that tertiary education is the most powerful catalyst for transformation, hence it must be modelled in such a way as to deliver the mandate of a nation. Accordingly, University education in Zimbabwe has been redesigned to have 5 missions Research (2) Teaching (3) Community Service (4) Innovation, and (5) Industrialisation.  For the Education 5.0 doctrine envisions that graduates from tertiary institutions should be equipped with skills that enable them to be innovative through transformative knowledge application that produces goods and services (Murwira, 2019). More so, Professor Tagwira (2018) explains that the establishment of an educational super structure will transfigure knowledge into goods and services. For example, Great Zimbabwe University is being applauded for spearheading the Vision 2030 development agenda through the construction of the Centre for Innovation in Dry Land Agriculture in Chivi district, of Masvingo. An industrial park, office blocks and laboratories will be the driving force for developing crop and animal varieties that are suitable for dry land areas, a transformation which will ensure food security in the country (Great Zimbabwe University Newsletter, 2022). Hence, if more universities come up with such noble initiatives, Education 5.0 can be achieved.

In order to align with the new Education 5.0, state universities must adopt a number of measures that includes adopting and nurturing a job-creator (JCR) mind-set. The job-creator mind-set is facilitated through close interaction with their host communities to identify economic opportunities, which will in turn inform their curriculum trajectory and innovation agenda. Thus, in short "Zimbabwean state universities must also open for business" and   take advantage of the provincial economy concept which may provide funding for their initiatives and innovative ideas (The Doctrine for the Modernization and Industrialization of Zimbabwe through Education, Science and Technology Development, 2019. Universities are being encouraged to be creative and find avenues for generating entrepreneurial ideas to generate income.

Furthermore, for state universities to align to effectively align to Education 5.0 they need to urgently implement the industry solutions provider (ISP) model. To achieve this Model university may link up with industries in their host communities, research their problems and provides the industry solutions. The JCR and ISP create economic value from knowledge

packaging and provide state universities access to link with industry CEOs. This enables industrial exposure and experience that enrich their research and teaching staff.

Muzira & Bondai (2020) recommend that university administrators should source funding from business partners and banks to build physical infrastructures such as industrial parks and innovation hubs to support Education 5.0 adoption. More so demanding the participation of Councils should be another agenda for state universities as the Council is responsible for dictating funding and incentives approaches. In arguably, the innovate and industrialise pillars may require, the creation of an Innovation and Industrialisation Fund (IIF) to fund concrete and achievable innovative initiatives managed by people with a demonstrated track record in successful start-ups. Additionally, staff, students and alumni who make Education 5.0 to materialise must be incentivised (Qayum, Shefa & Hassan, 2014). Universities are being advised to have a strong, loyal and innovative alumina community that is able to provide strong links with the industries and business community for successful business ventures to materialise.

## Methodology

The study applied a descriptive approach to explicate how universities can align to education 5.0 philosophy, with particular focus on musical arts teaching. The descriptive research design produces huge amounts of rich data for detailed analysis as well as enabling researcher to study the phenomenon in its natural and unchanged environment (De Vaus, 2001). Interviews were conducted in Gweru, Harare and Masvingo cities to discuss experiences and knowledge on how music education in tertiary institution can align to Education 5.0 and produce goods. A total of ten participants were interviewed to get an insider's view designed for exploring education policies and musical arts curriculum. Online interviews were also conducted with all the carefully chosen participants and recorded for future analysis (Kaluwich, 2005). Recording interviews is crucial as it will enable an in-depth analysis of research results.

In this qualitative study the population is attained from three state universities, ten music students and three experts. The music experts were chosen because of their vast experience and commitment in the teaching, performance and management of musical arts in Zimbabwe.

The respondents provided primary data on the state of musical arts education in State Universities. This strategy involves identifying key sources of information involved in the administration, learning, performance and teaching of music. Therefore, purposive sampling technique targeted specific informants who were reliable sources of information.

This study employed observation as a technique for assembling data. Observation allows immersion in daily life of the subjects under deepening the understanding of the research problem (Aspers & Corte, 2019). Therefore, the researcher observed the lives of selected musical arts students for future analysis. Observations were made on how modules were created, prepared and delivered to students and outcomes after their graduation. The observations provided insight into the issue musical arts education and Education 5.0.

According to Shumbayawonda (2011, p. 28) "Ethics refers to the branch of philosophy which deals with human conduct in respect to the rightness or wrongness of certain actions and to the badness or goodness of the motives and ends of such actions". Thus, consent to participate in this research was given freely and voluntary as participants will be made to understand the main purpose of the research and its objectives. Selected State Universities and music experts will have freedom to decide whether to participate or decline.

Data analysis was executed through engaging thick descriptions to bring together the final document. Geertz argued that thick description requires researchers not only to describe, but to interpret (Geertz, 1973). Thick descriptions facilitate the generation of a rich and detailed qualitative data to analyse how musical arts education can align to Education 5.0 and deliver tangibles goods and services in their creative space (Devanga, 2014). Thick descriptions enable researchers to give a detailed account of research events providing in-depth understanding to consumers of the research.

**Results and discussions**

The dawn of the education 5.0 policy in Zimbabwe implies that the musical arts curriculum in tertiary institutions has to transform in order to align perfectly with the new education trajectory. Hence, the following aspects have been suggested for incorporation in musical arts education curriculum and will be discussed as below: innovation, industrialisation, creativity, heritage-based philosophy and a proposed model for aligning musical arts and education 5.0.

**Innovation, industrialisation, creativity: Catalysts for achieving education 5.0 in musical arts education**

a) **Industrialisation**

Universities are now being mandated to impart industrialisation skills to all students' in this case musical arts students in order to align with the new education 5.0 policy. Industrialisation is defined as:

> "…. a generic name for a set of economic and social processes related to the discovery of more efficient ways for the creation of value. These more efficient ways are lumped together under the label 'industry' or 'the secondary sector' (the primary sector of economic activity referring to agriculture, hunting, fishing, and resource extraction, and the tertiary sector referring to services (Simandan, 2009, p. 419)_ ……

In addition. Simandon (2009) argues that industrialisation is a process, resulting from a collection of events that develop over time. Thus, Minister Murwira asserts that:

> "Our vision for Zimbabwe is to become a developed upper middle-income economy by 2030. This is only possible if we develop an industry that produces quality goods and services; if we develop an education system that leads to an industry that produces quality goods and services".

Participant 5 had this to say:

> *"Education 5.0 yauya kuti vadzidzi vemimhanzi mumauniversity vabudise zvinhu zvinobatika kana vapedza kudzidza".*

> Education 5.0 has come to make sure music students in universities produces tangible goods after graduating.

In addition, participant 7 added that:

> *"Tinotenda zvikuru chirongwa chedzidzo chehurumende chitsva ichi nekuti chichaita kuti vana vedu kana vapedza zvikoro zvekudzidza music varege kupeta maoko asi vamutsewo makambani avo akasisyana siyana. Akaita seoku gadzira zviridzwa, consultancy, academies, kumutsa maband, pamwe nekuimbira vashanyi vanenge vabva kune dzimwe nyika vachiwana mari. Nyika yedu zvomene inosimukira".*

We thank the government very much for their new education programme, for it will cause our children not to be idle but they will create their own various companies. The companies will include music making musical instruments, music consultancy, forming their own bands and providing entertainment to tourist generating income for themselves. Our country will develop for sure.

Education by nature must lead to industrialisation and modernisation through the production of goods and services (Murwira, 2019). In support, the Patriot (2018) asserts that "…if education cannot industrialise, then it is barren". For example, the New Education policy in India is also stressing a skill-based education due to the no availability of the skilled workforce and rising numbers of educated unemployed people (Maurya, & Ahmed, 2020). Another concrete example is that of China which is regarded as the largest manufacturing hub, due to its emphasis on vocational training. In China, the senior secondary curriculum is dedicated to vocational or skill-based studies (Deccan Chronicle, 2020). This implies that in order for education 5.0 to succeed a bottom up approach is needed. The education reforms may have to be conducted from the primary curriculum up to the university level.

Therefore, there is need to transform the mind-sets of musical arts students in academic institutions to have an entrepreneurship ideology (Permana & Mursitama (2018). Musical arts students can be taught to Create Cultural Industries (CCI's) such as music academies, music consultancy companies, music instruments making workshops, recording music and setting up music studios in order to generate income for themselves (Joffe, 2021). In Singapore a skill-based education policy has facilitated an industrial revolution among the youth (Holt, 2017). Furthermore, Taiwan has also witnessed an economic improvement due to vocational education. Vocational education as being praised for developing a whole-person and developing human capabilities (Maurya, & Ahmed, 2020)

**b) Innovation**

Innovation skills and knowledge is a critical drive for growth and prosperity for Zimbabwe's higher education graduates and the nation at large (Dziwa & Postma, 2022). According to Lin (2006) innovation originated from Latin word, *innovare* which means "to make something new". Afuah (1998) defines innovation as the "use of new technical and administrative knowledge to offer a new product or service to customers". Thus, many authors conceptualise innovation as "any practices that are new to organizations, including equipment, products,

services, processes, policies and projects" (Nur et al, 2016, p.88). According to Professor Tagwira (2018) innovation is the bridge between knowledge produced in lecture rooms, laboratories and industrial production. Innovation hubs will be responsible in providing legal services, marketing services and product specific technical services. From the innovation hub, approved patterns will then be implemented at the Industrial Park. Thus, the Industrial Park is the last stage for production of goods and services. This process will be based on the following four pillars: programme infrastructure, promotion infrastructure, physical infrastructure and financing infrastructure (Tagwira, 2018).

Additionally, Professor Murwira (2019) reveals that for the purposes of innovation five Innovation Hubs have been built and most tertiary institutions have created their own innovation hubs, as well as Industrial Parks linked to these institutions, with the objective of developing products for the marketplace. Innovation hubs shall be sources of our new technology where technology will be born.  For instance, the Harare Institute of Technology (HIT) has successfully launched several innovative solutions including the BUS tracking system and Tap Card system.

On the issue of innovation hubs another participant lamented that:

> *Tinodawo kuti musical arts sector ivewo ne mainnovation hubs ayo zvinoita kuti basawo remartists rionekere munyika".*
>
> We also wish if the musical arts sector also have their own innovation hubs which will also make their work more visible in the country.

### c) Creativity and creative thinking

The achievement of Education 5.0 in tertiary institutions requires musical arts students who will be effectively equipped with creative skills in order to bring change top the nation (Dziwa & Postma, 2022). Creativity is defined as a thinking process that entails inventing new ideas and solutions (Beaty, 2018). In the same vein, Eisner (2002) contends that creativity refers to the process of conducting things differently or de novo.

Participant 3 assert that in English:

> Creativity in the arts is an ability to face challenges and bringing change in the community. Thus, creative activities, critical and creative thinking that are essential in

art education are key to innovation and industrialisation to support the education reforms in Zimbabwe higher education.

Creative thinking calls for non-traditional thinking, different from the ordinary day to day practices (Wallas, in Sadler-Smith, 2016). Therefore, university education systems in Zimbabwe that offer musical arts pedagogy are being encouraged to incorporate creative skills acquisition for their musical arts students. In support, the World Economic Forum (2018) reports that creativity and innovation are the skills of choice in the labour market. Creativity and innovation are inseparable and university graduates need to have these crucial skills and concepts ingrained in them to be successful in the field of work.

**Heritage-based philosophy: An insight**

The heritage based philosophy is being forwarded to bring consciousness and understanding of our heritage, for the development of Zimbabwe using its natural resources, its people, science and colleges (Murwira, 2019). Universities are being urged to use the local resources in order to advance this country. For instance, Zimbabwean music artists are being encouraged not to focus on western music but on local music genres such as *mbira* music and *afro jazz* music which is home-grown unique and have the potential to attract tourists and other music lovers. In agreement, Saudi Arabia was developed because of its oil heritage (ibid). Thus, Zimbabwe is being urged to industrialise based on the musical heritage (The Ministry of Higher Education Doctrine, 2019).

Participant 6 emphasised that:

> *"Ichokwadi kuti nyika inovakwa nezvakaikomberedza zvakayapiwa naTenzi kuti igobudirira. Zvino zvinonetsa vanhu vanoda kuvakirwa nyika ivo vagere zvacho vasina kana chavanofungawo".*
>
> It is true that a nation is built by its natural resources which God has given in order to prosper. However, it is difficult because people want their nation to develop but they are not being innovative and creative.

Furthermore, participant 10 reiterated that:

> *"Mauniversities ose omunyika dai abatisisa zvinorehwa na Minister wedu kuti, ngatishaindise zviwanikwa zvatakapiwa muno, nevanhu vemuno zvekare kusimudzira nyika".*

> If all our universities in Zimbabwe grasp this concept that is being forwarded by our Minister of Education which states that, let us use our local God given resources as well as our own people to develop our country.
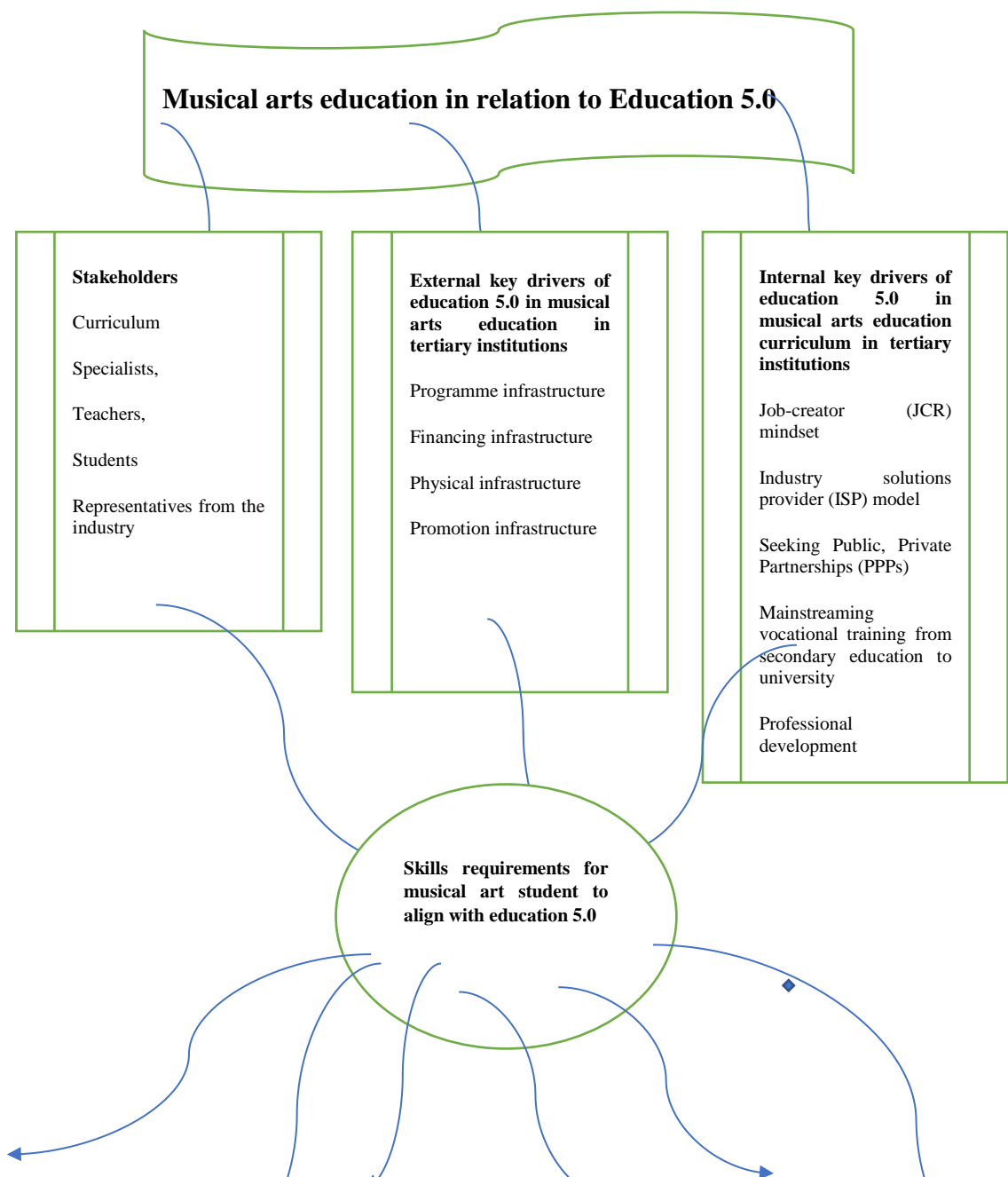
Heritage based philosophy is built in the idea that education should grow industry, not vice versa. For example, Agriculture in most African continent is dominated by crops that are not ecologically suited to Africa due to a lack of a heritage approach (Murwira, 2019). Thus, the University of Zimbabwe as a way to promote heritage based science for industrialisation, have initiated the Future Grains for Africa programme, to develop novel products from finger millet, pearl millet and sorghum to promote food security and economic growth.
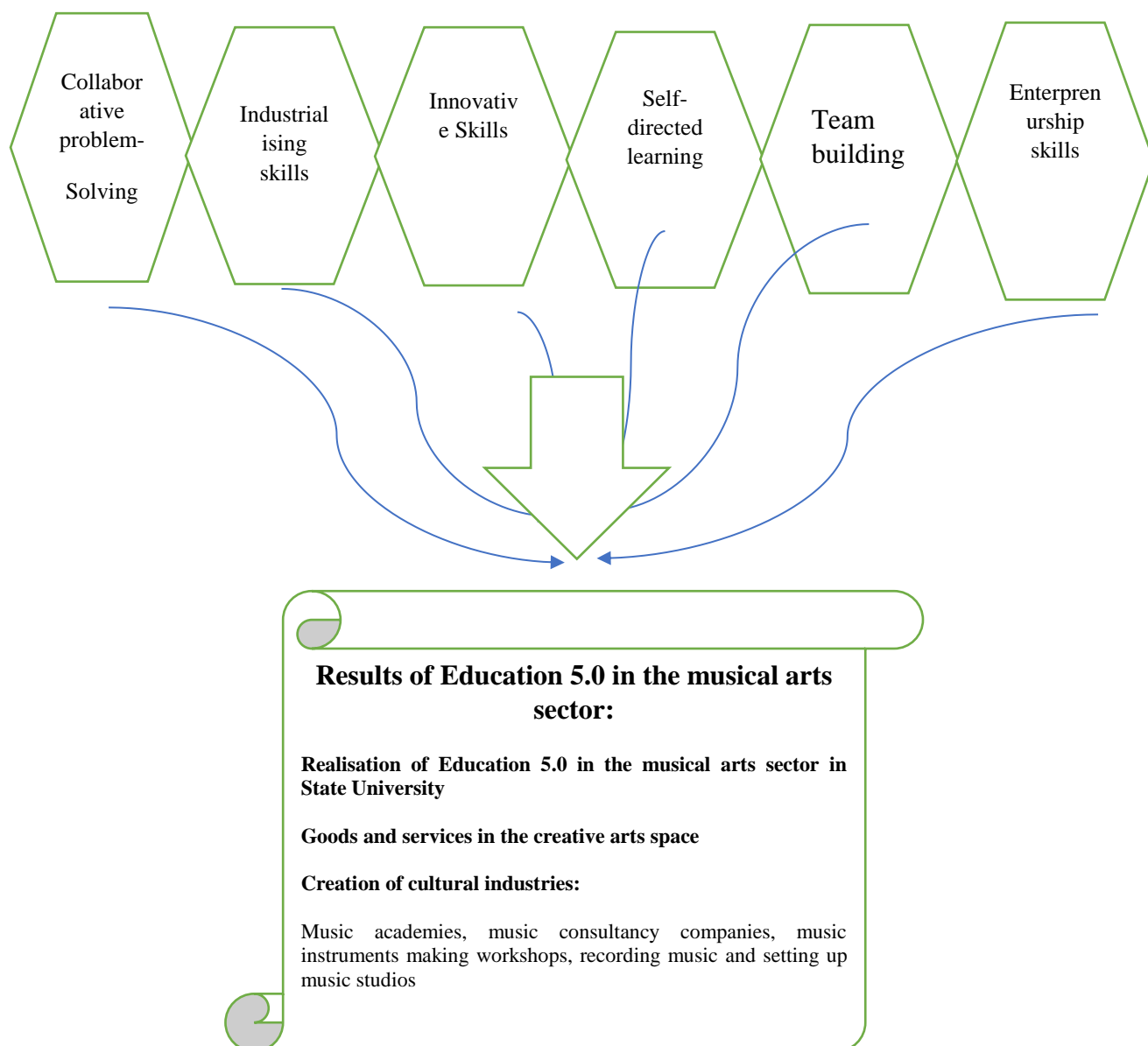
According to Murwira (2019) importing goods and ideas will not assist at all in developing the nation. The key phrase is 'local resources'. For, instance. Japan, China and Germany utilises their local resources, which refers to both people and objects (Van Art & Pilat, 1993). Therefore, musical artists and students are being encouraged to be innovative and utilise their local indigenous musical heritage to create ideas and designs that can encourage the development of our nation. Zimbabweans are thus, being advised not need to reinvent the wheel but to tap on their heritage to gain innovative ideas (Murwira, 2019). Creativity and innovation will elevate Zimbabwe to the world stage. Hence, for innovation and industrialisation to be achieved in Zimbabwe universities and their graduates are being encouraged to employ their natural heritage as a stepping stone to creativity.

**Tertiary Musical Arts Education and the Education 5.0 policy Model: A Suggestion**

The study proposes the **Tertiary Musical Arts Pedagogy and Education 5.0 Model** for possible implementation in Universities offering musical arts education to meet the demands of Education 5.0. The model was informed by ideas borrowed from Dziwa & Postma 2022, Muzira & Bondai 2020 & The Ministry of Higher Education Doctrine (2019).

# The Tertiary Musical Arts Pedagogy and Education 5.0 Model

## Musical arts education in relation to Education 5.0

### Stakeholders

Curriculum

Specialists,

Teachers,

Students

Representatives from the industry

### External key drivers of education 5.0 in musical arts education in tertiary institutions

Programme infrastructure

Financing infrastructure

Physical infrastructure

Promotion infrastructure

### Internal key drivers of education 5.0 in musical arts education curriculum in tertiary institutions

Job-creator (JCR) mindset

Industry solutions provider (ISP) model

Seeking Public, Private Partnerships (PPPs)

Mainstreaming vocational training from secondary education to university

Professional development

**Skills requirements for musical art student to align with education 5.0**

| Collaborative problem-Solving | Industrialising skills | Innovative Skills | Self-directed learning | Team building | Enterpreneurship skills |

**Results of Education 5.0 in the musical arts sector:**

**Realisation of Education 5.0 in the musical arts sector in State University**

**Goods and services in the creative arts space**

**Creation of cultural industries:**

Music academies, music consultancy companies, music instruments making workshops, recording music and setting up music studios

The Musical Arts curriculum and Education 5.0 model seeks to pave way for creative arts students in universities to acquire the relevant skills and aptitude needed to align to the new education policy in Zimbabwe. Thus, this model suggests that in order for the realignment of music education and the education 5.0 to materialise there is a need for major stakeholders such as curriculum specialists, music teachers, music students and representatives from the industry to collaborate. Major consultations and meetings that incorporate all the stakeholders mentioned above maybe organised, in order to map the way forward, generate ideas and formulate resolutions that brings everyone on board.

The current study borrows ideas from Muzira & Bondai (2020) and The Ministry of Higher and Tertiary Education (2018a) who stipulates that the steps to achieve and implement Education 5.0 requires clear laid down procedures. Therefore, this model adopts the four steps to be followed if education 5.0 is to succeed. The steps include: program infrastructure, promotion infrastructure, physical infrastructure and financing infrastructure. These external factors are crucial in the implementation of a transformed musical arts education that align perfectly with the education 5.0 trajectory.

Moreover, there are internal factors that need to be considered for Education 5.0 to be realised in the universities. These factors include; having a job-creator (JCR) mind-set, seeking public, private partnerships (PPPs), mainstreaming vocational training from secondary education to university and lastly incorporating professional development for musical arts teachers and administrators. Musical arts lecturers in universities have to ascertain that musical arts students attain prerequisite skills in order for education 5.0 to succeed. According to Dziwa & Postma (2022) these skills are; collaborative problem-solving, industrialising skills, innovative skills, self-directed skills, team building skills and entrepreneurship skills in order for education 5.0 to materialise. Thus, taking into account of all the above mentioned information will result in the realisation of Education 5.0 in the musical arts sector. Goods and services in the creative arts space will result in the creation of cultural industries such as; music academies, music consultancy companies, music instruments making workshops, recording music and setting up music studios.

**Conclusion**

Musical arts education curriculum in Zimbabwean Universities could transform significantly, in order to perfectly align to the new Education 5.0 trajectory. This study examined how the musical arts education sector may meet the demands of the Education 5.0 and deliver tangibles musical goods and services in their creative space. The results of the study indicate that the musical arts education sector needs to transform through incorporating and equipping students with: innovation skills; industrialising skills, promote creativity, and adopt the heritage based philosophy in order to structurally align with the new education policy. Therefore, the study recommends that a skill-based curriculum must be implemented from grassroots levels from primary up to university levels if the nation needs to industrialise and come up with innovative solutions for the nation. More studies may be carried out to further determine more effective methods of how musical arts sector can industrialise for the

betterment of the society. Finally, the study proposed a model which may be implemented on how tertiary institutions may improve music education output in order to produce cultural goods and services.

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