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A paradigm Shift Approach in Transforming Arts and Humanities in East African Universities from Endangerment

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Abstract: This paper discusses the current situation of the arts and humanities disciplines in East African universities and their endangerment. Basing on a sample of 170 respondents, selected from 10 universities, the paper applies a mixed-method approach to collect primary and secondary data by means of questionnaire and interview guides. The analysis applied the thematic approach. The findings show that the causes of the arts and humanities disciplines include lack of government support and sponsorship, misconceptions by the public and limited employability. Despite their relegation to a weak position, it was found that these disciplines significantly contribute to both national and international economies. In addition, they remain fundamental to contemporary societies which call for a symbiosis between STEM and non-STEM disciplines. It is in this context that this paper proposes a paradigm shift to save the arts and humanities from demise through the following strategies: curricular reform, embedding sciences in culture, improvement of marketing and admission approaches, assessment of the contribution of the arts and humanities to national and international economies as well as adopting a competence and market-based approach.

Keywords: Arts and humanities; endangerment; science and technology; education; paradigm shift; stakeholders.

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Introduction

Over the past four decades, the humanities have been subject to a progressive devaluation within the

academic world (Costa, 2019). Some analysts think this is a result of the current globalised, science and technology-led world. Alcaraz and Hughes (2002)

112 East African Journal of Education and Social Sciences (EAJESS) 5(1)112-122.

attributed this devaluation to the labour market. Accordingly, it is the market-driven trend that "prevents the natural need to study any university discipline for its own sake. This endangerment has made teachers to express concerns at what they consider to be "the increasing philistinism of the market-driven 'global village' SO dear to entrepreneurs and university managers alike (Alcaraz & Hughes, 2002). For other analysts, as far as the arts and humanities are concerned, the endangerment is the outcome of most government policies, which seek to promote science and technology at the expense of other disciplines. Kelly (2013) refers to the phenomenon as the neoliberal turn of the last decades which has emphasized markets and competition. To this end, education has increasingly become commodified and the proper functions of education and the role that public education should play in society have been reshaped as a result of putting profits first and knowledge second.

The fall into decay of the arts and humanities that used to be at the helm of all academic knowledge in the 18th century, known as the century of enlightenment, is not a phenomenon that is peculiar. As noted in the report by Harvard Working Group on the Arts and Humanities (2013, p.4),) "the transmission to undergraduates of distinctive forms of thought in the humanities is under pressure in both the United States and broadly analogous nations." The report pinpoints a number of challenges facing the arts and humanities disciplines expressed in four arguments, two of which appear to be more appropriate in serving the purpose of this paper.

The Vocational Argument

The vocational argument suggests that university disciplines must do at least one of the following three things to draw the support of university administrators: the disciplines must be devoted to the study of money, they must be capable of attracting serious research money or ensure demonstrable promise that its graduates will make significant amounts of money at the job market (Harvard Working Group on the Arts and Humanities.

The Technological Argument

As far as the vocational argument is concerned, human societies have had to be understood through works of art that require deep immersion in the subject matter. However, the current situation has proved that deep immersion is no longer the concern of the technological era in which we are living today (Harvard Working Group on the Arts and Humanities, 2013).

The same group of research cushions the degrading situation of the Arts and Humanities in the United States. In this regard, it puts forward two main reasons for the gloomy picture of these disciplines: there is no such thing as a national university system where profit making has replaced the provision of knowledge even for its own sake. Secondly, there is profound institutional and social environment in the liberal arts in the United States of America. In the light of reason, we are brought to understand that the difference in university education ownership (either public or private) has a key role to play in the way disciplines are taught and supported. Financial autonomy allows universities to determine their priorities. Universities thus enjoy full powers to develop their teaching disciplines; they uphold their missions and visions in the following examples: "devotion to excellence in teaching, learning, and research, and to developing leaders in many disciplines who make a difference globally" (Association of American Universities (2024) or educating aspiring leaders who serve all sectors of society (Yale University, 2024).

In Africa, the situation is rather the opposite: majority of the continent's biggest universities are fully state-owned and sponsored, and the EAC countries do not make an exception. Today, in Rwanda, what used to be public universities and institutions of higher learning have now been merged into one university. Makerere University in Uganda, University of Dar es Slam in Tanzania, and Moi University in Kenya are equally fully-state owned. Full reliance on government funds to support their budgets confines these universities to their governments' funding prioritisation principle according to which the state's funds should be spent on areas that are judged to serve direct 'national interest' or 'societal benefits. The 'national interest' trend did not spare even universities from the West. In the case of Canadian universities, Benneworth and Jongbloed (2009, p. 573) note: "From the mid-1990s, the Federal Government began intimating that a pre-condition for increased funding would much greater focus on converting that funding into societal benefits. Another pre-condition that has been newly established by funding bodies of research initiatives, including governments, is what now commonly referred to as "impact assessment." Citing the Higher Education Funding Council for England (HEFCE), Benneworth and Jongbloed (2009, p. 577) stated that, in the UK, there has been "a wider emphasis of the 'impact' agenda, with recent signals that substantial amounts of core university funding will be allocated according to impact assessment."

Now that the 'social benefit' and 'impact factor' paradigms have been adopted by higher education funders as a yardstick to fix their priorities, and arts and humanities relegated to the position of those disciplines breaking the norms, it is timely to wonder what their fate will be.

Conceptual orientations

The term 'paradigm shift' was used for the first time by Thomas S. Kuhn in his book The Structure of Scientific Revolutions in 1962. Describing the history of science, Kuhn (1962, p. 10) shows how scientific advancement is not evolutionary, but rather a "series of peaceful interludes punctuated by intellectually violent revolutions," and in those revolutions, "one conceptual worldview is replaced by another." Basing on the above Kuhn's thinking and for the purpose of this paper, the researchers adopted a simpler definition of the concept 'paradigm shift' by Stevenson (2010): "fundamental change in approach or underlying assumptions." In this respect, the term paradigm shift is considered as a revolution, a transformation or a sort of metamorphosis, which does not merely happen. Instead, it is driven by agents of change. For the case in point, agents are all stakeholders involved in the higher education sector in the EAC countries among whom the sample was selected.

The scope of this paper is framed within the disciplines of arts and humanities as taught in the East African universities. In some instances, these programs are referred to as non-STEM mean disciplines which are not classified under Science, Technology, Engineering and Mathematics (STEM) (Uddin et al., 2021). Apart from some programs like African literatures and languages, which are specific to Africa, most of these disciplines are universal and correspond to the categorization made by the UK's Arts and Humanities Research Council: Classics, Ancient History and Archaeology, Visual Arts and Media, English Language and Literature, Medieval and Modern History, Modern Languages and Linguistics, Librarianship, Information and Museum Studies, Music and Performing Arts, Philosophy, Law and Religious Studies (Arts and Humanities Research Council, 2008).

The position and scope of these disciplines depend on the university priority and structure. As hinted on earlier, in the University of Rwanda, Arts and Humanities are distributed in schools under the College of Arts and Social Sciences (CASS). More specifically, CASS offers the following programs: Linguistics and Literature, Translation and Interpretation Arts, Journalism and Communication, law, Sociology, International Relations and Political Sciences, and Public Administration (University of Rwanda, 2022)

Methodology

This paper was structured along a joint research approach, which combined survey and case-study design to establish stakeholders' perceptions towards the teaching and learning of arts and humanities in selected East African universities. Ontologically, the study followed a relativist viewpoint to collect subjective data from respondents in selected East African universities.

Instruments

The study relied on questionnaires and interview guides. Secondary data was collected from different sources, including soft, online and hardcopy materials.

Population and sampling

In selected universities distributed across the region, the study took a relatively long period of three years from early 2020 to the end of 2022. The study used a multi-stage cluster sampling method. According to Bryman (2012), this approach is suitable for collecting data from a large group of respondents.

The primary sampling units were randomly selected from the following EAC member-states: Rwanda, Burundi, Uganda, Tanzania and Kenya. South Sudan, Somalia and DRC were not included in the study because by the time of data collection these countries had not joined the EAC. The secondary sampling units were purposively selected basing on the criterion of private/public ownership as well as the existence of arts humanities programs in the selected universities. The final sampling level, also referred to as the ultimate sampling unit was purposefully done to include students, lecturers and administrative staff in the departments and faculties of arts and humanities.

Students

In order to establish why students chose or avoided taking arts and humanities disciplines, First Year and Final Year students were purposively selected to participate in the study. Hence, 10 students from

each institution were selected using a selfcompletion questionnaire while 5 students participated in FGDs. In total, 150 students participated in the study. A summary of Category 1 respondents is summarised below:

Category 1: Students

Country	University	Status	No. Students
Rwanda	University of Rwanda (UR)	Public	15
	University of Kibungo (UNIK)	Private	15
Burundi	University of Burundi (UB)	Public	15
	Université Lumière de Bujumbura (ULBU)	Private	15
Uganda	Makerere University (MU)	Public	15
	Islamic University in Uganda (IUIU)	Private	15
Tanzania	University of Dar es Salaam (UDSM)	Public	15
	Open University of Tanzania (OUT)	Public	15
Kenya	University of Nairobi (UoN)	Public	15
	The East African University (TEAU)	Private	15
Total			150

Other education stakeholders

The second category of respondents included other education stakeholders, namely university officials managers, policy-makers and from governments and parastatals, lecturers, professionals in the fields of arts and humanities as well as parents and guardians. In this category, respondents were purposively selected in each country, taking into account their role in the education and labour sectors and their possible contribution to this specific study.

The second category of respondents included other stakeholders in university and other government departments. These included managers, policymakers, officials from government and parastatals, lecturers, and parents. In this category, 4 respondents were purposively selected in each country to have 20 respondents. The two categories of respondents lead to the total sample size of 170 subjects.

Validity and Reliability

The study strengthened the validity and reliability of the instruments through expert consultations. This was coupled with rigorous comparisons and reviews of literature. In addition, pilot testing took place using a small number of respondents. This helped to refine the items in the instruments. The researchers incorporated feedback from participants and experts to enhance clarity and relevance of interview/questionnaire items.

Statistical Treatment of Data

The interpretation of data called for subjective analysis on causes of the reduction in numbers of

students doing arts and humanities. The study addressed the endangerment of Arts and Humanities disciplines. Epistemologically, the study adopted an interpretivist-constructivist orientation, which according to Denzin and Lincoln (2005) engaged the mixed approach (qualitative and quantitative) to establish the actual situation of arts and humanities in terms of enrolment, retention and graduation. By means of thematic analysis techniques, the study identified emerging themes for analysis. The triangulation approach linked primary data with secondary data.

Ethical considerations

In complying with the principles of ethical integrity, the researchers encouraged respondents to participate voluntarily. Before the commencement of the investigation, the researchers transparently communicated the purpose and procedures of the study to the participants and requested for their consent. The participants were also informed of their right to withdraw from the study at any time. The study involved rigorous measures, such as participant anonymity and confidentiality. Lastly, the research team sought ethical approval from different National Research Councils in respective countries.

Selected universities had colleges, faculties, schools or departments that taught arts and humanities-related disciplines like history, languages, philosophy, sociology, political sciences, law and communication.

Research Question 1: What is the current situation of teaching the arts and humanities in the East African countries?

According to Makerere University (2011), the Departments of Literature, Linguistics, African Languages and that of European Oriental Languages did not enrol any student at the undergraduate level. At postgraduate level, only four students were registered in the programs of Masters of Arts in Linguistics, and four in the Masters of Arts in Literature. A similar situation continued in subsequent years as no single student from the embattled disciplines appeared on the graduation list of the College of Humanities and Social Sciences in February 2017 (Makerere University, 2017).

Though the situation presented a better performance scenario in the University of Nairobi, some arts and humanities-related disciplines still enrolled fewer students at postgraduate level. According to the graduation list published by the University of Nairobi during the 56th graduation that took place in December 2016 (University of Nairobi, 2016), only two students, 11 students, four students and six students were awarded a Master's degree in philosophy, German studies, History and Literature, respectively. On the other hand, Linguistics and Kiswahili enrolled an increased number of students (31 and 30) in each discipline, respectively.

Findings and Discussion

Research Question 1: What is the current situation of teaching the arts and humanities in the East African Countries?

In the University of Dar es Salaam, the situation of the arts and humanities seemed to be different. During the academic year 2010/11, the former College of Arts and Social Sciences enrolled 5,324 students at the undergraduate level, which was 44.5% of the total population of 11,938 students enrolled in the Mwl. Julius K. Nyerere Mlimani Campus (University of Dar es Salam, 2022). On the other hand, the Faculty of Arts and Humanities of the University of Burundi was among the most populated faculties in 2012 with an enrolment 2,032 students out of the total number of 12136 (Ambassade de France au Burundi, 2014).

However, a worst-case scenario appeared at the University of Rwanda where statistics depicted a gloomy picture in arts and humanities. In 2014, the University of Rwanda's College of Arts and Social Sciences enrolled 2,081 students out of the total

enrolment of 30,401 (6.7% of the entire University student population). The university graduated only 422 students out of the 8,178 graduation candidates (5.2% of the total graduates). In 2015, the same College graduated only 471 students (5.8% of the total graduation candidates) by the end of the 2014/2015 academic year. During the academic year 2019/2020, the College enrolled only 3% in Arts and Humanities out of the 25,084 enrolled students at the University (University of Rwanda, 2020). Concisely, the teaching and learning of the Arts and Humanities in the East African Community universities faced the endangerment situation, which calls for education policy actions that favour the Arts and Humanities disciplines.

Research Question 2: Are the Arts and Humanities endangered subjects in EAC universities?

In responses to the question whether the Arts and Humanities disciplines fell in the category of endangered subjects, most respondents from Rwanda indicated the endangerment of the discipline. The respondents cited some examples of closed departments (such as the department of African Languages, department of French and the department of History). The University of Kibungo closed the department of Languages due to different reasons, including limited number of enrolled students. On the other hand, student enrolment in the department of Languages of the University of Dar es Salaam improved compared to other East African countries (University of Dar es Salam, 2022).

However, in some other Tanzanian universities, the enrolment rates in the Arts and Humanities were on the decreasing trend. At the Open University of Tanzania, the enrolment dropped from 200 to 100 in 2017. This affected programs like BA Literature, BA History and BA Philosophy and Religious Studies (Open University of Tanzania, 2018). The similar situation was observed in the University of Burundi in which no student was enrolled in Year One in the Department of English at the time of conducting this study (Ambassade de France au Burundi, 2014).

Research Question 3: What are the causes of the endangered Arts and Humanities in East African Universities?

In table 2, the study established perceived causes of the Arts and Humanities endangerment. Reported causes appear according to universities and countries to enable the comparison.

Table 2: Perceived Causes of Endangerment

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UGANDA				
Makerere University	Islamic University of uganda			
 The new education policy recommends three instead of four subjects at A (advanced) level. Students are therefore supposed to drop one subject. The easiest subject to drop falls in the category of languages. Job market limits for languages. Private-sponsored students do not like languages. Languages are associated with teaching. 	 There is poor marketing by universities and no aggressive advert to promote the subjects. University admission requirements are still rigid for applicants in the arts and humanities subjects. Students perceive languages as secondary subjects. No private sponsorships; universities rely on government scholarships. Political discourse that fuels negative perceptions about studying some arts and humanities subjects. 			
RWANDA				
University of Rwanda	University of Kibungo			
 Public opinion in the country is that if you do not study sciences, you have no future; your future opening is closed. Languages do not create shortcuts to wealth. No role models in languages No bestsellers to encourage students; only few isolated cases of people who write some books but which do not procure them eugh money. Lack of motivation from education stakeholders. Very high cut off mark in admission of students 	 Most of the students go to economics and management-oriented subjects hoping to get jobs in banks. Government policy promotes STEM subjects only. General perception that people who study arts do not study anything tangible. They only deal with the science of words, which cannot offer them any job. Limited job opportunities for arts and humanities graduates within EAC. 			
T/	ANZANIA			
University of Dar es Salaam	Open University of Tanzania			
 Most people focus on studies that can quickly open them to jobs. Shortage of lecturers; aged lecturers retire and the young generation is no longer interested to take their place and this contributes to acute shortages in these courses. 	 Arts and humanities programs are not directly linked with practical and professional aspects i.e., they are too theoretical and do not reflect real life situations, particularly labour market demands. Labour market trend has changed and there is a need of more scientific and technological courses than arts subjects. 			

BURUNDI			
University of Burundi	Université Lumière de Bujumbura		
 Government does not provide enough scholarships to Arts and Humanitiesrelated subjects, especially languages. Majority of Arts and Humanities graduates get employed only in the teaching profession, which is not well paying in the country. 	 Very few parents can accept to sponsor studies in the Arts and Humanities subjects. Lack of diversified job openings for graduates in arts and humanities. 		
KENYA			
University of Nairobi	The East African University		
 Very limited job openings for Arts and Humanities graduates. 	Teaching is the only job opening for graduates in these disciplines		

A closer look at perceived causes in Table 2 demonstrates that most of the perceived causes rotated around two factors: Misconceptions held by the public towards Arts and Humanities disciplines as well as reduction of government support to the endangered disciplines compared to the STEM subjects. For example, in Rwanda, when most parents encountered challenges in securing government scholarships for their children to study Arts and humanities, they forced students to choose STEM subjects even when the students disliked the subjects. This situation appears in the following quote from one of the students: "Though I was interested in learning music, I went for sciences because the program had scholarship opportunities."

Another student reported, "I did sciences and after my secondary school, I took Maths at the university education. ... Although I was somehow skilled in Maths and I performed well, I continued to write and perform comedy. In the process, I was even tempted to drop out of Maths and study music, dance and drama, which was a new program expected to be launched by the university. Unfortunately, the program never started.

An official from Rwanda's National Curriculum Development Centre stressed the importance of encouraging university students to participate in making their own choices: "The best way is by exploiting the student's own potential. Some people force themselves on some courses and end up with embarrassing and disastrous results. Others spend

all their time studying medicine, which they may never practise at all."

In addition, lecturers and students reported some perceived causes. In the case of Rwanda, a senior official in the Ministry of Education admitted the issue of endangerment at the University of Rwanda and held university leadership accountable:

UR has kept an old-fashioned system, the semester system instead of the modular system which is more flexible and appealing to students. Our university still relies on government funds with limited scholarships. It has poor quality of infrastructure (old computers, chairs, tables, etc.) which cannot attract private students. There is also a higher rate of lecturers who are moonlighting in private universities, which has undermined the university's performance. As a result, the university has failed to compete with private universities, whose academic packages and conditions seem to be more flexible, modernised and appealing to students.

In the same vein, another official from the Rwanda Development Board identified two other major causes: "Unattractive programs and the government policy that over-supports science and technology at the expense of arts and humanities."

On a different note, a highly placed official in Rwanda's Ministry of Education equally

acknowledged the endangerment these of disciplines. He held policy-makers and researchers as being responsible for endangering the Arts and Humanities by stating, "People give little attention to the Arts and Humanities because they do not understand their importance." When asked what he meant by "people," he identified policy-makers in the first position and researchers came in the second position. Researchers are key players in introducing a paradigm shift because they are key partners in "bringing about change" in the people's mind-set by "providing scientific proof and evidence" of how the Arts and Humanities are endangered, their relevance to society and how to address the impact of the endangerment.

Though mind-set challenges seemed to override the narrative of most respondents, no one established the exact origin of the negative perception of many Rwandans towards the study of Arts and Humanities. According to one official in Rwanda's Ministry of Labour, the negative perception towards these subjects was the main factor responsible for endangering the arts and humanities. He had this to say: "Traditionally, the perception towards arts and humanities in Rwanda have been negative. People like subjects that have tangible; they think that whoever studies Arts and Humanities has very low intellectual capacity." Another respondent reported, "In Rwanda, studying Arts and Humanities is locally characterised as rugambology, a concept that views language-related studies as disciplines of empty talk or mere words with no practical value that compares with STEM disciplines."

Likewise, another official in the same ministry argued: "Many people argue that nobody needs to go to school to learn languages. A language is something that someone can pick from the street. Language studies simply impart communication skills that can be acquired in a matter of months." Another respondent shared a similar view that "people are not interested in studying languages because they can learn them informally."

In general, all the causes expressed by different stakeholders throughout the East African countries converge towards the following three themes: competition for limited job opportunities in Arts graduates, people's negative mind-set towards the Arts and Humanities, and lack of government sponsorship and support for the Arts and Humanities.

Question 4: What is the best approach to save arts and humanities from endangerment?

By exploring all the recommendations formulated by respondents and triangulating both primary and secondary data, this paper proposes a paradigm shift to tackle the endangerment of arts and humanities. The approach involves five major strategies: as follows:

Strategy 1: Reorganising courses by having majors, minors and double-major combinations: The study recommends universities to reorganise courses by minors and double-major having majors, combinations. The most practical example in this case is History combined with Environment studies (that is to say a less attractive subject + an attractive subject) or Economics and History. This strategy was tried at Makerere University and the University of Nairobi (Admissions Office, University of Nairobi, 2019). According to the educationists interviewed in both universities, the approach proven to be successful. However, while developing such combinations, it is important to consider the weight of each of the disciplines to avoid diluting the value of the humanities-related subjects. In addition, it is more sustainable and practical to cater for some knowledge disciplines that may be needed for the survival of humanity. In this case, History can be combined with Literature both considered majors (i.e. double-major combinations) or one as major another a minor.

Strategy 2: Embedding science in culture: The recommendation of embedding science in culture corroborates the idea of integrating several holistic tenets of science (Lederman & Lederman, 2014): "the tentative nature of scientific knowledge, its empirical nature, its inferential, imaginative and creative nature, its subjective and theoretical laden nature, and its sociocultural embeddedness."

As indicated in one of the tenet of science, all scientific knowledge is produced within a larger society and culture. This means that social and cultural elements such as "social values, power structures, politics, socioeconomic factors, philosophy and religion" (Lederman et al., 2013) affect how scientific knowledge is produced. This also means that the direction and products of science are greatly impacted by society coupled with the culture in which science is practiced.

The irrefutable need for interaction between sciences is reflected in a statement advanced by National Advisory Committee on Cultural and Creative Education (1999, p. 48): "through technology, science has also directly changed the practical circumstances of the human life and culture." To demonstrate this symbiosis between the sciences and culture, the National Advisory Committee on Cultural and Creative Education provides the following examples:

From harnessing electricity to the new frontiers of bio-genetics; from the steam engine and motor cars to nuclear fission; from antibiotics to birth control; from railways to the internet, science and technology have changed how we think, what we think about, what we do and what we are able to do. Another example in point is how developments in contraceptives techniques, notably the Pill, have revolutionised patterns of sexual morality and behaviour and deeply affected roles and relationships between men and women.

Strategy 3: Improving marketing and admission approaches: The stakeholders interviewed in this study provided the following recommendations:

- should objectively 1. Universities select students to admit into their programs taking into account the areas they are most apt in. This would help to avoid enrolling students who choose arts and humanities thinking that these disciplines are easy to study and easy to pass by anyone who does not necessarily like them, or someone who has failed other subjects. This strategy would help universities to make their arts and humanities-related programmes more competitive and viable.
- Universities should adopt a modern way of conducting business. This consists of marketing the programs offered by advertising using different media platforms, community outreach programmes and induction sessions to entrants. This strategy would explain to the community, and specifically admitted students, the relevance of arts and humanities-related programmes and their societal benefits.
- Organising a national dialogue on the fate of arts and humanities to raise the awareness of all stakeholders. This would culminate into an immediate affirmative action by governments as is the case with STEM

disciplines. This forum would help all education stakeholders to have a common understanding of the concept of the role and importance of holistic knowledge in society.

4. National policy should articulate and balance both arts and science disciplines.

Strategy 4: Computation of the contribution of arts and humanities to EAC economies. Though it is not always easy to capitalise the input of the arts and humanities into our national GDPs, the majority of the respondents considered it as a worthwhile strategy. A few selected accounts from respondents on this issue are provided below:

- Though no complete statistical figures are available, the arts and humanities hold a significant share in the regional countries' GDPs, revenues in cultural tourism both in Rwanda and other EAC countries.
- The Arts and humanities still bear huge raw materials in culture, and other arts are still underexploited in the majority of countries, especially in Africa.
- 3. In our country Kenya, the arts industry is booming and a significant amount of revenue is collected from publishing houses, music and film producers. Without experts in the arts and languages, these areas cannot develop.

The statements by the respondents above are corroborated by the information provided in the report by National Advisory Committee on Cultural and Creative Education (1999) on the role of the arts and humanities industry in USA:

Whereas the dominant global companies used to be concerned with industry and manufacturing, the key corporations today are increasing in the fields of communications, information, entertainment, science and technology. In the USA, the 'Intellectual Property' sectors, those whose value on the ability to generate new ideas rather than to manufacture commodities are now the most powerful element in the US economy. The Intellectual Property Association in Washington has estimated these sectors to be worth \$360 billion a year, making them more valuable than automobiles, agriculture or aerospace.

In the same line of argument, National Advisory Committee on Cultural and Creative Education (1999) describes the contribution of the "creative" industries" into the UK's economy. This sector thrives on most of the disciplines included in the scope of this paper, namely advertising, architecture, arts and antiques, crafts, design, designer fashion, film, leisure software, music, performing arts, publishing, software/computer services, television and radio. In 2015, the creative industry provided 1 in every 17 jobs in the United Kingdom, making a total of 1.9 million jobs (Department for Culture, Media and Sports, 2016). According to the 2016 report by the National Audit Office (2016), the Department of Culture, Media and Sports contributed more than 13% of the gross value added to the wider UK economy.

However, it is very difficult to access similar data in most countries, especially in Africa where ungrounded information from different agents, including policy-makers, state that these disciplines are not beneficial to society. Thus, there is a need for researchers to adopt a viable model of computing in more tangible terms the contribution of different arts/humanities disciplines to national economies. This strategy conforms to the plan envisaged by the Arts and Humanity Research Council (2008) which aims to "develop a methodology for assessing the economic impact of the arts and humanities, particularly in terms of the quality of life and policy dimensions and considering the role of arts and humanities research in the national innovation system."

Strategy 5: Adopting a competence and marketbased approach: According to National Advisory Committee on Cultural and Creative Education (1999), the choice to enrol in sciences or arts and humanities is motivated by a number of factors beyond the person's innate ability and talents. Access to employability is one of the major aspects that controls student enrolment to university programmes. This therefore justifies the need for education agents to adopt a paradigm shift according to which the program of job openings determines the way any discipline is preferred at the expense of another. The current job-market trend is marred by an unprecedented dilemma where employers are becoming too demanding. As stressed in National Advisory Committee on Cultural and Creative Education (1999, p. 13), today's employers "want people who can adapt, see connections, innovate, communicate and work with others." On the other hand, as countries get engulfed in rapid economic and social change, education remains the only means to meet these

changes. Hence, the need to design the teaching of arts and humanities in a way that makes graduates competent enough to meet the prevailing market requirements.

This strategy should also be reinforced by creating space for constant interactions between the arts and humanities' students and the professional world. This interaction would help the students to share their experiences of the world of work and serve as the right means to stimulate students about their chosen fields and prospects for their future job opportunities. Through their interaction with the tenets of their future careers, they would open up their minds for meaningful prospects.

Conclusions and Recommendations

The study concludes that most universities of the region enrolled very few numbers of students in the arts and humanities during the period covered. This situation calls for education policies favouring the subjects concerned. Arts and humanities are endangered in most of the EAC universities. The major causes of the endangerment include public misperceptions, reduction of support by governments, unattractive programs and lack of marketing strategies and involvement of key stakeholders in the university education.

To save these disciplines from endangerment, a paradigm shift approach needs to be adopted while developing, packaging and managing these disciplines. Within this approach, it is recommended that the following five strategies be specifically applied: organising courses by adopting majors and minors or double-major combinations, embedding sciences in culture, improving marketing and admission approaches, computing the contribution of arts and humanities to the economies of EAC countries and adopting a competence and market-based approach.

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