Competency- Based Curriculum in Tourism and Hospitality: A Practical Model for Rwanda

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ABSTRACT

This study investigated implementation and perceived impact of competency-based curriculum in tourism and hospitality on the workforce preparedness in Southern Province, Rwanda. This study was guided by constructivism theory. The study used concurrent mixed methods and the respondents (graduates of VTCs) were purposively selected. The findings revealed that teaching-learning process, identification of competencies and assessment were the predictors of workforce preparedness. The study recommended that MBAROVE model be used to guide proper implementation of competency-based curriculum in VTCs offering tourism and hospitality courses in culinary arts in Rwanda. It also recommends that this model gets subjected to scrutiny to establish functionability in other environments. The study suggested that a similar work be done at national level in all TVETs and that the Ministry of Education provide training to national curriculum developers that enhance global competitiveness in competency-based curriculum.

Keywords: Competency Based Curriculum, Implementation, Tourism, Hospitality, Work force, Rwanda

1.0 INTRODUCTION

Technical and vocational education and training today faces huge demands, challenges and opportunities. Worldwide, governments and other stakeholders expect Technical and Vocational Education and Training using competency based curricula to address multiple social and economic development priorities, from poverty reduction, food security and social cohesion to economic growth and competitiveness. TVET is already high on international, regional and national agendas. Australia has put substantial reforms in place to its vocational education and training TVET system over the past 20 to 30 years in order to try to better meet a rapidly changing set of economic and social needs (Wikh , 2000). Considerable emphasis has been placed on the development of a TVET system that is able to develop the contemporary skills of the workforce to enable Australia to better adjust to the rapid technological change and the increasing globalisation of the world economy.

The Australian TVET system has been able, through a series of reforms, to become responsive to changing labour market needs. The Australian Government has also been active in assuring the quality of provision to international students, thereby bolstering the brand (Baldauf, Hogarth, & Hoyos, 2008). In China, the economic growth during recent years has been amongst the highest in the world, resulting in a marked transformation of both the economy and society (Pavlova, 2014). Education is seen as central not only to the continued growth of the economy but also to the change from an agrarian to a knowledge-based, hi-tech economy over a relatively short period of time. TVET is an important component of the Chinese education system that has been given more attention in the past years due to the crucial impact it has on enhancing national employment and on training a qualified labour force that necessary to boost the Chinese economy. TVET is mainly provided for in the Vocational Education Law of the People's Republic of China adopted in 1996. Vocational education and training (VET) in China comprises pre-employment training at schools, initial vocational training, on-the-job training and retraining of the unemployed, with training courses ranging from short courses to four years (Baldauf et al., 2008).

Placement rates of VET graduates are, however, reported to be significantly higher than those of graduates from higher education institutions, reflecting a high demand for intermediate skills. More detailed statistics indicate that 73 per cent of graduates from 'vocational schools' are employed, 10 per cent self-employed and 16 per cent embark on further studies (Baldauf et al., 2008).

During recent years, the Indian economy has experienced strong growth accompanied by structural changes, with the emergence of a much stronger demand for labour in sectors such as retail, tourism and health (Okoye & Isaac, 2015). India is also a country with a large youth population, almost a third of the population is aged 16 years or under. The Government of India

has identified a need to invigorate the TVET system. Historically, TVET has been a low status option for young people who generally prefer to take more academically focused courses upon completion of their compulsory education. However, the Government wants to remedy this situation because of emerging skill needed in the economy and to stimulate demand for TVET.

The Indian Government envisages increasing the percentage of people receiving a technical education from 5 per cent currently to 50 per cent over a thirteen year period. In South Africa, TVET, also known as Further Education Training, seeks to function as a high quality, transformed and responsive system (Arfo, 2015).

The government of South Africa uses this system to promote the integration of education and training, as well as the enhancement of learner mobility and progression, to ultimately meet human resource needs. TVET systems are built to address these needs and to further promote personal, social, civic and economic development in their country. Their mission is to provide people with intermediate to high-level skills that would lay a foundation for higher education, facilitate the transition from school to work and develop autonomous life-long learners.

TVET approach has gained a paradigm shift in Rwanda; land locked, situated centrally in Africa in one of the most troubled regions of the world, and is one of the most ambitious nations in contemporary Africa. Aiming to overcome the huge social and economic challenges, following the genocide of 1994, the government presented its ambitions to become a 'Singapore of Africa' in its 2000 document: Vision 2020. Poor in resources, its aim to become a knowledge society and the ICT hub of central Africa, while at the same time stimulating its agricultural sector to advance from subsistence to commercial production and more generally to stimulate entrepreneurship, requires a fundamental economic, social and cultural turnaround in which education, especially TVET is to play a crucial role (Nauta, 2014).

Recently a general consensus had developed that Rwanda, as other countries, faces similar challenges, including the liberalization of the market, rapid innovation in technology, and the importance of knowledge to a country's competitive advantage. Against these pressures, many countries are turning to their education and training systems as a part of the solution for dealing with a whole range of social and economic issues. In light of this, and the previous class status of TVET, the Government of Rwanda has undertaken significant steps to strengthen TVET (MINEDUC, 2015).

At the forefront of these efforts are the Ministry of Education and the Workforce Development Authority, who both have recently made great efforts in promoting TVET and the labour market responsiveness of the education system. TVET has emerged as one of the most effective human resource development strategies that Rwanda has embraced in order to train and modernize the technical workforce development. The new direction of TVET is oriented towards the world of work and the emphasis is on the acquisition of competency based employable skills.

Competency based curriculum in TVET programs is becoming popular nowadays in the world and has gained a paradigm shift in Rwanda (Mbarushimana & Kuboja, 2016). It aims at making TVET much more relevant to meeting the needs of industry and user agencies. Regarding the relevance of competency based curriculum, Dakmara in Dadi (2014) emphasized that, there is a growing interest of community of educators and curriculum developers in enhancing competencies and competence based curriculum, because competency-based approaches are increasingly regarded as adequate solutions for reshaping the education system in its ability to empower educators and curriculum developers to adapt their roles to new circumstances and respond to constantly rising new situations in a rapidly changing world.

The tourism and hospitality industry is a fast growing industry, second after coffee, as a leading foreign currency earner for Rwanda with international booming investments in the sector. Tourism constitutes about 6 per cent of global goods and services exports, and about 30 per cent of global service exports alone. In 2007, there were over 900 million international tourist arrivals bringing receipts of $856 billion. Africa had a 5 per cent share of these arrivals at just over 44 million arrivals generating $28 billion in receipts. Rwanda is part of the East African regional market. This market receives around a quarter of sub-Saharan African tourism when South Africa is excluded, with tourism revenues at around $1 billion in Kenya in 2007 (accounting for around 10 per cent of Kenya's GDP), close to $1 billion of revenues in Tanzania and just under $500 million in Uganda (MINICOM, 2009).

With this remarkable growth of the industry, the government endeavoured to address the training component to match the manpower needs. Hospitality and tourism courses have been taught at national level in the TVET schools. Table 1 shows that at national level Rwanda has 173 Vocational Training Centres schools. Forty four (44) in Southern Province, thirty nine (39) VTCs in Eastern Province; thirty seven (37) VTCs operating in Western Province; twenty nine (29) in Kigali City and twenty four (24) VTCs in Northern Province. It shows that the total number of Vocational Training Centres offering tourism and hospitality curriculum in Rwanda are forty four (44).

Table 1

Accredited TVET Schools Offering Tourism and Hospitality

S/N	Province	Number of VTC Schools by Province	Number of VTC offering Tourism and hospitality
1.	Southern Province	44	12
2.	Eastern Province	39	8
3.	Western Province	37	10
4.	Kigali City	29	9
5	Northern Province	24	5
	Total	**173**	**44**

TVET qualification in all Vocational and Training Centres in culinary art, food and beverage services, front office and housekeeping are aimed to prepare individuals to integrate the hospitality sector and operate as a head steward. It offers the opportunity to work in a household and ensure that hygiene regulations are respected and food preparation is of quality. Work would be undertaken in various hospitality enterprises where food and beverages are prepared and served, including restaurants, hotels, lodges, airports, supermarkets, tour companies, catering operations, clubs, pubs, cafes, cafeterias and coffee shops (Authority, Ministry, & Empowering, 2013).

The Tourism and Hospitality Industry has been identified as a priority sector for Rwanda as it is expected to play a leading role in driving the economy forward. This sector has rapidly grown into a major foreign exchange earner for Rwanda, surpassing agriculture in the last two years. Travelling for a holiday or as a tourist has been made easy and affordable thanks to the sprouting tour and travel companies and deliberate efforts by government to encourage tourism Sharon Kantengwa (2017, March).

The Tourism and Hospitality Industry sector in its unique nature of a service sector has seen increased international investment in the recent past. International hotel brands have made a stake in the Rwandan market. These include regional giants in hospitality such as: The Serena Hotels, the Marriot, Kempiski, Radisson Blue and Mantis group (Rwanda Development Board, 2012). Despite this remarkable growth in the industry, there is a big deficiency of the human resources to match these needs. Customer satisfaction is an important aspect of every successful business including the hotel industry. However, many hotels and restaurant managers face problems trying to satisfy their customers and end up experiencing high levels of customer dissatisfaction because of food and drinks served with low quality and sometimes waiters don't tell exactly when service will be provided (Mubiri, 2016). This scenario raises a concern.

This gap between the growth of the industry and qualified workforce, calls for government intervention toward matching the industry growth by introducing competency-based curricula in TVET program on tourism and hospitality (WDA, 2014).

The primary objective of competency based TVET program is to enable trainees to acquire relevant and effective knowledge, practical skills and attitude for gainful employment in a particular trade or occupational area. Therefore, competency based TVET delivery systems aim at producing the skilled and entrepreneurial workforce that the country needs to create wealth and emerge out of poverty (Watson, 2017).

This study evaluated whether the competency-based curriculum in TVET program implemented in Vocational Training centres prepare graduates for the Tourism and hospitality industry workforce. It also looked at a model which, if adopted and implemented, it can become a tool for

TVET training institutions road map to disseminating necessary competencies to the tourism and hospitality trainee.

2.0 METHODOLOGY

2.1 Research Design

Concurrent mixed methods research approach was employed in this study. According to Gall, Gall, and Borg (2010), mixed approach applied to studies that concurrently employ both quantitative and qualitative methods rather than two or more methods that are purely quantitative or qualitative. They also maintain that to be classified as mixed method research, the study must have design elements that reflect some or all of the features of both qualitative and quantitative research.

While quantitative approach was used to measure relationship and differences among variables in question (Punch, 2009), qualitative approach was used to explain phenomena more deeply and exhaustively, attempting to make sense of it in terms of the meaning people bring. The qualitative data was in the form of open-ended information and documents (Merriam, 2006).

Concurrent mixed approach was used to increase validity and reliability of research instrument. Mixed approach is considered by Briggs, Coleman and Marrison (2012) as the paradigm that systematically combines aspects of quantitative and qualitative research methods into a single study to take advantage of each paradigm's strengths.

2.2 Population and Sampling Techniques

The population of this study was 12 VTCs offering tourism and hospitality courses in Southern Province as shown in Table 2.

Purposive sampling techniques were used to select the sample VTC from the population. In each District one VTC offering tourism and hospitality was picked. The southern Province has 8 districts this means that the total sample was supposed to be composed by 8 VTCs. The focus was given to public VTCs. It was found that only 6 Districts have Publics VTCs offering tourism and hospitality courses, therefore The VTCs that was involved in the study were: Integrated Polytechnic Regional Center (IPRC) South VTC, Mushubati VTC, Cyanika VTC, Kiyonza VTC, Kigese VTC and Mpanda VTC

Cluster sampling technique was used such that graduates who finished their studies for Level 3 in the sampled VTCS were involved in the study. Moreover, the managers of different hospitality institutions who have employed them were also involved in each District one was selected.

Table 2

List of Accredited VTC Offering Tourism and Hospitality Courses in Southern Province

s/n	Names	District	Trades
1	Notre Dame Bon Esperance (NDBE) Gisagara VTC	Gisagara	Culinary Arts, Hairdressing-Aesthetics , Welding
2	Don Bosco Centre De Formation De Jeunes Rango VTC	Huye	Carpentry, Culinary Arts, Masonry,
3	Rwabuye Vocational Technical center (VTC)	Huye	Culinary arts, Domestic Electricity, Hairdressing-
4	Integrated Polytechnic Regional Center (IPRC) South VTC	Huye	Carpentry, Culinary Arts, Domestic Electricity, Food and Beverage, Front Office, Housekeeping, masonry, Welding, Plumbing
5	Muhanga Technical Center (MTC) / VTC	Muhanga	Culinary Arts, Hairdressing-Aesthetics ,Masonry, Moto Vehicle Engine Mechanics
6	Mushubati VTC	Muhanga	Culinary Arts, Hairdressing , Masonry, Moto Vehicle Engine Mechanics, Tailoring
7	JAM FRED NKUNDA VTC	Muhanga	carpentry, Culinary Arts, Hairdressing, Masonry, Moto Vehicle Engine Mechanics, Welding, tailoring
8	Cyanika VTC	Nyamagabe	Culinary Arts, Food processing, leather craft, Tailoring
9	Kiyonza Vocational Technical center (VTC)	Nyaruguru	Carpentry, Culinary Arts, Masonry, Tailoring
10	VTC Kigese	Kamonyi	Carpentry, Culinary Arts, Masonry, Welding, Tailoring
11	Ecole Scolaire Gitisi /VTC	Ruhango	Culinary Arts, Hairdressing , Masonry, , tailoring
12	Mpanda VTC	Ruhango	Carpentry, Culinary Arts, Domestic Electricity, masonry, Welding, Tailoring

2.3 Research Instruments

The following research instrument was used to gather data from graduates, and managers from hospitality institutions who receive graduates for employment. These are:

> **Questionnaire:** One self-administered questionnaire was used for graduates. The questionnaires were constructed by the researchers with the help of research supervisors and the university statistician.

> **Focus Group Discussion (FGD):** Two round table Focus Group Discussion with graduates in Culinary Art who have finished Level 3 in Tourism and Hospitality in Vocational Training centres Southern Province, Rwanda, in order to establish their views on the implementation of competency based curriculum and workforce preparedness.

Interview Schedules (IS): This involved managers from hospitality institutions who employed graduates from VTCs offering Culinary Art in order to find out their attitudes on their preparedness and the quality of the curriculum they went through.

Observation Schedules: The researcher entered in class where teaching and learning was taking place to observe the extent to which the competency based curriculum was implemented.

Document Analysis: With the help of Headmasters, the researcher looked into a number of modules to see how competency based in curriculum is delivered and its impact on workforce preparedness.

2.4 Validity and Reliability of Research Instruments

Validity means the individual's score from an instrument makes sense, are meaningful and enable the researcher to draw a good conclusion from the sample being studied (Creswell, 2008). Reliability, on the other hand, is considered to be the extent to which the research findings can be replicated, meaning, if the study is repeated, it will yield the same result (Merrian, 2009). With this regards, several procedures were used to increase acceptable validity and reliability of research instrument.

First, through expert judgment, the experienced professors at the University of Eastern Africa, Baraton looked into the research instruments against research questions. Where necessary adjustment was deemed necessary. Collections were made accordingly by adjusting the content of questionnaire, interview schedules and Focus Group Discussion contents to suit the need of research questions. This was done before the pilot study and the final data collection.

Secondly, a pilot study was conducted in Eastern Province, IPRC East which was not part of the study sample. Cronbach's alpha coefficients obtained for each section of the questionnaire are as follows: Competence - .852, Future Prospects - .924, Work Ethics - .839, Time Management - .891, Identification of Competencies - .710, Teaching-learning Process - .910, Learning Resources - .864, and Assessment - .850. All reliability coefficients are above the set cut-off point of .70.

2.5 Data Gathering Procedures

Before actual data collection, the researchers visited the Ministry of Education with a letter from University of Eastern Africa, Baraton, seeking for permission to collect data from TVET institutions in Southern Province in Rwanda. Upon receiving the permission, the researchers moved from one District to another to administer data collection procedures. The researcher reported to the School Heads' Office for permission to collect data through observation in class from respective schools for the period of two weeks. The researchers started by collecting data through questionnaire from graduates who graduated in Level 3 in their respective workplaces. Upon reception of contacts of managers of institutions employing graduates, the researchers secured the interview and appointment. One manager from each District in Southern Province was interviewed.

2.6 Statistical Treatment of Data

According to Mugenda and Mugenda (2003), data collection and analysis in qualitative research go hand in hand and are done simultaneously. Data from interview schedules and Focus Group Discussion was coded, analysed and arranged using thematic approach.

3.0 RESULTS AND DISCUSSION

This study purposed to investigate the relevance of TVET program on tourism and hospitality to the workforce needs of the industry. The question was guided by a proposition that a well prepared workforce from TVET schools cannot be found without a quality implementation of Competency- Based Curriculum. This question was answered by the use of data from the interview schedules from focus group discussions and documents. According to (Cochran & Ferrari, 2009), education has a vital role for character building and every education system needs to integrate in its curriculum elements aiming at having a well prepared workforce for the industry.

The main purpose of this research question was to develop a model that would guide in having relevant workforce for the needs of the industry from TVET program on tourism and hospitality. In this study workforce preparedness means being prepared for the workforce it refers to the level of aptitude for beginning employment. Respondents mentioned some weaknesses of graduates from VTCs offering Tourism and Hospitality courses in culinary Art and suggested the way forwards in Competency-Based Curriculum implementation for the future graduates. For instance, one Hotel Manager said: ''These TVET schools need to involve us in identifying competencies to be achieved by graduates because when those graduates finish their studies they come to us for the employment. They need also to buy equipment for the kitchen and learning materials. This will help graduates to be familiar with what is happening in the real.

Another one added: ''these schools are still lagging behind on the side of equipment. It is true, some of our employees who graduated from those VTCs sometimes they don't know how to manipulate cooking machines and some materials in the kitchen, I have ordered to give them some trainings before they start working. Some headmasters are requesting partnership with my hotel to do practical in my Hotel''

Another weakness TVETs have to face is on the side of communication skills. The hospitality industry needs workers who can attract customers and swiftly handle their concern in service delivery. Competencies are identified in occupational standards; comprehensively describe the competence a person has to achieve in order to be considered qualified in a certain field. It specifies the standards of performance that the trainees are expected to achieve in their work, and knowledge and skills needed to perform their duties effectively.

One of the characteristics of competency based instruction is that whatever students learn, it is based on specific, precisely stated outcomes that have been recently identified as being essential for successful employment in occupation for which the trainee is being trained. This suggests that Tourism and Hospitality industry, especially Hotel Managers, need to be involved in identifying competencies to be achieved by students. At the same time, student must know the kind of skills, knowledge and attitudes he will acquire during the training. This will have a positive impact on the workforce preparedness.

On the side of teaching-learning process, there is a need for teachers to teach in English as the curriculum stipulates. Teachers in VTCs have to revise the way of teaching languages especially English, French and Swahili.

There is a need to avail and organise cooking machines and equipment for kitchen for students in VTCs offering culinary arts. Their hands on skills will not be demonstrated without practical material. In view of this (Thompson et al., 2013) considers learning materials to be well appropriate for the tasks and available for every task to be relevant to the occupation in the world of work. Even if learning resources are not among the best predictors of workforce preparedness, it leads to competence as a specific aspect of workforce preparedness. Assessment in competency based curriculum must assess competencies to be achieved, this has been mentioned by graduates during the focus group discussion, for instance one graduate said: ''where I graduated from, we have spent almost one trimester and the assessment was only theory. Our school had financial problems''. After a long discussion a second graduate emphasized that: ''2/4 of our teachers told us that each assessment prepared us to the workforce'' he added that ''I'm sending you according to my experience I went through now go and tell those teachers to assess our little brothers according to what is needed in the workforce''

In view of this, Mcclarty and Gaertner (2015) considers CBT assessment as the process of collecting evidence of a learner's performance and the extent to which a learner has met the performance requirements of the learning outcome laid in a particular unit.

In conclusion, a question of concern that follows this long discussion is how can graduates from VTCs offering tourism and hospitality courses be prepared for the workforce? In response to this question, this study developed a model, which will guide proper process to workforce preparedness. Bust this can be done effectively based on the availability of school curriculum developers, the industry, learning resources and professional development of the teachers.
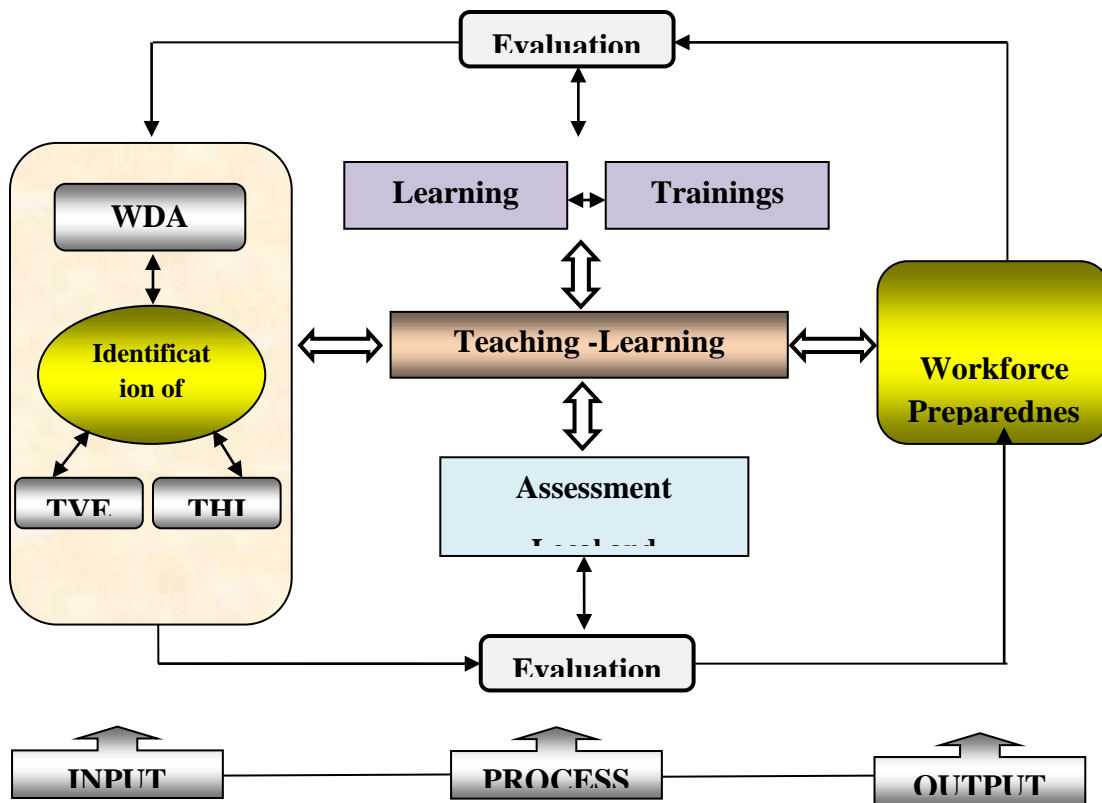
Figure 1 MBAROVE model of TVET Curriculum

MBAROVE model

This model contends that students from VTCs offering tourism and hospitality courses in Culinary Arts can be well prepared for the workforce after identification of competencies through WDA, TVETs, Tourism and Hospitality Industry have been identified. This means Government through WDA will contribute with regards to national level. Agents from Tourism and Hospitality Industry like Hotel Managers, tour companies and other bodies related to tourism will add their inputs. Together, they will identify right competencies to be achieved at the end of the program. TVETs schools represented by teachers and entire school administration will contribute too; teachers are the ones who implement the curriculum they will advise on how these identified competencies can be implemented.

Teaching-learning process is a crucial part where the teacher will use different methods, instructional strategies, learning resources and assessment (formative and summative) towards workforce preparedness. Teachers will need to be trained on the new equipment and learning resources. An evaluation will be done after a certain period of time to find out if the Input and output processes are done in accordance with Competency-Based curriculum implementation

standards. Local and international accreditation Agencies will also be involved for constructive feedback.

This MBAROVE's model was developed to guide proper implementation of competency-based curriculum in VTCs in Rwanda. The model will be disseminated to curriculum developers and policy makers in Rwanda, especially Workforce Development Authority with recommendations from this study to enable them make necessary policies on implementing the Competency-Based curriculum in VTCs offering tourism and hospitality course in Culinary Arts.

This model has three major parts namely input, process and output.
- **Input**: This has to do with the identification of competencies from different institutions which are government, TVTs, represented by teachers and Head Teachers and others involved in Tourism and Hospitality Industry.
- **Process**: This revolves around the teaching learning transactions. Teachers and students are fully involved. Summative and formative assessment will be done to find exactly whether competencies are being mastered by students. Teachers will be given training on how they can use and manipulate new equipment and different learning resources.
- **Output:** This has to do with workforce preparedness. Students at the end of their program will be well prepared and ready for the workforce.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Considerable emphasis has been placed on the development of a TVET system that is able to develop the contemporary skills of the workforce. While that is true, governments have had no strategic empowerment to develop curriculum that could switch power to workforce preparedness of graduates from VTCs. Rwanda is not an exception. This study has established that there is need to work on preparedness to engagements in curriculum development that pave the way to creation of relevant skills, which could be used in the hospitality industry. The study has also suggested a model, which if followed as suggested, could add value to the said proposed curriculum development.

The MBAROVE model will guide the preparation of a competency-based curriculum implementation towards workforce preparedness of graduates from VTCs in terms of being competent and confident to face the world of work, being honest, reliable, and responsible at work and good time managers.

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