

Analysis of Curriculum Content of Technical and Vocational Education in Nigeria and the United Kingdom: Lessons for Nigeria

Jekayinfa, Oyeyemi Jumoke Department of Arts Education, Faculty of Education, University of Ilorin, Ilorin, Nigeria.

ABSTRACT

Technical and Vocational Education (TVE) has been recognised as a great instrument for national development in both developed and developing countries. However it appears that it has functioned better in the UK rather than in Nigeria. Therefore, the study investigated comparative analysis of the administration and funding of TVE at the senior secondary school level in Nigeria and the UK. The study employed a descriptive survey type of the adapted field study method and integrated with other methods which KEYWORDS include the historical, scientific and comparative approaches. population comprised all technical, vocational education stakeholders in the Education two countries. The target population comprised educational administrators from the Federal Ministry of Education in Abuja, Nigeria and Department of Education in the UK, as well as teachers of Technical Colleges in Nigeria and the UK. Out of 179 Technical Colleges in both countries, 16 Technical Colleges were purposively sampled and a total of 106 education stakeholders. Two instruments were used in the study, a questionnaire and a Structured Openended Interview Schedule (SOIS) with psychometric properties of content value of 0.72 reliability. The result of the study revealed that the curriculum content of TVE in Nigeria is robust in theory but not robust in practical terms (45.0%) while it is very robust in theory and in practical terms in the UK (80.4%). The study concluded that the administration and funding of TVE at the senior secondary school level is better administered and funded in the UK than in Nigeria. This implies that TVE needs more attention in Nigeria. The study recommended that Technical and Vocational Education should be well funded and better implemented in Nigeria.

ARTICLE INFO

Article History

Received: August, 2019

Received in revised form: September, 2019

Accepted: December, 2019 Published online: December, 2019

Curriculum Content, Technical, Vocational

INTRODUCTION

Every nation of the world strives to achieve greatness in all spheres of life including education. Many countries have been envisaging greatness for their respective countries especially through the acquisition of knowledge, attitude and skills needed for their rapid socio-economic development (Usman, Clement & Raihan, 2013). Education that is geared towards socio-economic development in any nation is Technical and Vocational Education (TVE). The role of education in general and TVE in particular, cannot be over-emphasised in launching a nation to greatness. Hence, the policy on TVE if well implemented is capable of transforming a society into a technological self- sufficient and reliant nation (Abimbade, 2008). Osam (2013) noted that in terms of TVE content, it is important to identify the principles that have been salient in shaping the TVE curriculum content in any nation. The World Data on Education (2012) emphasised that three principles which have been important in shaping education curriculum content in both

developing and developed countries of the world are: economic relevance, vocational relevance and a conception of liberal education emphasising the value of knowledge and understanding.

It is a common knowledge that the greatest investment a nation can make especially for national development is the one committed to the training of its citizens. In other words, investment in human capital is regarded as the key to national development (World Bank, 2014). Moreover, the important role of TVE in producing skilled and relevant manpower requirements for economic, political and industrial development of a nation cannot be overemphasized. TVE is a type of education which leads to the production of learners who will become productive in paid or in selfemployment in the society.

In the United Kingdom, high school level TVE played a crucial role in shifting their economy from labour- intensive to more advanced technology during the early phase industrialisation (Wu, 2003). One of the goals of



TVE in Nigeria is to provide trained manpower in the applied sciences, technology and business, particularly at the craft, advanced craft and technical levels to operate, maintain and sustain the Nigerian economic activities for rapid socioeconomic development among others (FRN, 2013).

Ajere and Akinbi (2017) indicated that many developed nations of the world have undergone series of reforms in TVE. For instance, the UK structured its TVE policy and practice proactively by using it as an instrument for revamping the social, political, cultural and economic life of the people (European Commission. 2007). In response to ongoing national and global reforms in the technological and economic contexts, the Federal Government of Nigeria through the Nigerian Educational Research and Development Council (NERDC) in 2009 introduced a new Senior Secondary Education Curriculum (SSEC) that emphasise 34 Trade/ Entrepreneurship curriculum aimed at meeting national and global dispositions (FRN, 2013).

In Nigeria, Technical Colleges are at the level of the senior secondary school. For instance, there are 19 Federal, 137 State and 3 Local Government owned Technical Colleges coordinated by the National Board for Technical Education (Oloko, 2017). As provided in the National Policy on Education (FRN, 2013), these colleges cater for those who are identified early as having both aptitude and ability for technical and vocational orientation. Furthermore, Technical College graduates have three options: to secure employment either at the end of the whole course or after completing one or more modules of employable skills; set up their own businesses and become self-employed, and be able to employ others and pursue further education in advance craft/technical programmes and in post-secondary (tertiary) technical institutions such as Polytechnics or Colleges of Education (technical) and Universities (FRN, 2013). Despite all these, it appears the successive Nigerian governments have not approached TVE from a practical perspectives as many Nigerian school leavers are unemployed and are not self- reliant as it is anticipated in the National Policy on Education. This however, calls for a serious concern from all and sundry.

Wolf (2011) noted that TVE curriculum content is geared towards integrating theory and practice for better understanding of skills development processes and should keep abreast of technological development and changes for the provision of responsive knowledge and skills. However, Arfo (2015) observed that many Nigerian school graduates lack basic practical skills necessary

for self-reliance evident in their inability to demonstrate some basic practical skills expected of them. TVE curriculum content ideally should provide individuals with necessary knowledge, skills, competence and attitudes required for employment and further education. Abimbade (2008) notes that there is a need for improving the relevance and adequacy of TVE curriculum content in Nigeria in order to reflect the philosophy and goals of TVE at each level of provision.

. In the developed nations of the world, TVE has come to assume an indispensable status in national development (Smith, 1995 & Mishra: Sharma & Hansal, 2007). Wu (2003) and UK Statistics Portal (2017) noted that technology is increasingly becoming sophisticated in the industrialised societies of the world because each year, a substantial proportion of the national budget is set aside for education. The indispensable role of TVE in bringing about national development and progress is well recognised in advanced nations of the world (Agbonhale &Uddin, 2015). These nations have attained impressive heights in productivity. In fact, there is hardly any aspect of human life where these nations have not performed relatively well.

The quality of TVE offered at the high school level in developed countries such as the UK, makes an individual become self-reliant because education is mandatory to the end of secondary education (Strong, 1990 & Gov. UK, 2015). This practice is quite different in developing countries such as Nigeria where the formal statement on compulsory education terminates at the end of Junior Secondary School (FRN, 2013). Osam (2013) asserts that high rate of social insecurity in Nigeria is as a result of high rate of unemployment in the country. According to Obanya (2009), for Nigeria to respond to the changing needs of the world of work, formal education must move towards cultivating in learners knowledge, skills, attitudes and values for creativity and adaptability that will help facilitate individual's self-reliance. Thus, the need for this study on comparison of Technical and Vocational Education at the senior secondary school level in Nigeria and United Kingdom.

Furthermore, several studies have been carried out on comparative education. For instance, Angbulu and Olaitan (2002) conducted a research on comparative vocational and technical education in USA, Great Britain and Japan. The study was on TVE in the USA, the Great Britain and Japan which are some of the technologically advanced nations of the world. The study concluded that cross fertilization of lessons derived from the three countries can bring about improvement in the three



nations. Adeyinka (1994) also conducted a study on comparison of higher education in Nigeria and United Kingdom; Umunadi (2014) also conducted a study on comparison of technical education in Nigeria and Scotland. It is believed that studies in comparative education can help bring about improvement in the policy and practices of education in various countries of the world.

TVE is interested in making individuals selfemployed and self-reliant through technological and vocational oriented subjects taught in senior secondary schools and other levels of education (FRN, 2013 & British Council, 2015). While developed nations appreciate the importance of TVE for their socio-economic development, developing nations do not appear to appreciate its importance as much as the developed nations (UNESCO, 2014; British Council, 2015 & FRN, 2013; Umunadi, 2014).

Objectives of the Research

The general objective of this study was to find out the similarities and differences in TVE at the senior secondary school level in Nigeria and the United Kingdom. Specifically the study investigated the following:

- a. similarities in the curriculum content of Technical and Vocational Education at the senior secondary school level in Nigeria and United Kingdom;
- b. differences in the curriculum content of Technical and Vocational Education at the senior secondary school level in Nigeria and United Kingdom

Research Questions

The following research questions were posed to guide the study:

- a. What are the similarities in the curriculum content of TVE at the senior secondary school level in Nigeria and United Kingdom?
- b. What are the differences in the curriculum content of TVE at the senior secondary school level in Nigeria and United Kingdom?

METHODOLOGY

This study focused on comparative analysis of Technical and Vocational Education (TVE) at the

senior secondary school level in Nigeria and the United Kingdom. A descriptive survey type of the adapted field study method and integrated with other methods which include the historical, scientific and comparative approaches was used for the study. The population for the study comprised all TVE stakeholders in both countries, while the target population comprised the Director(s), Deputy Director(s) and Inspector(s) of Technical and Vocational Education as well as Policy Makers in Nigeria and United Kingdom were part of the target population. Not only that, a total of 120 educational administrators and teachers of Technical Colleges purposively sampled from Nigeria and United Kingdom. 60 educational administrators and teachers of Technical Colleges were sampled from Nigeria (20 educational administrators and 40 teachers); while 60 educational administrators and teachers of Technical Colleges were also sampled from the UK (20 educational administrators and 40 teachers). Sixteen Technical Colleges were purposively sampled from the North, South, West and East of Nigeria and United Kingdom (8 from Nigeria; 8 from United Kingdom). Finally, quantitative and qualitative methods of data analysis were used to analyse the data gathered. The quantitative data gathered for the study were analysed using the percentage, while the qualitative data gathered for the study were analysed using thematic and content analyses.

DATA ANALYSIS AND RESULTS

The data collected for the study were analysed using the percentage, thematic and content analyses

Research Question 1: What are the similarities in the curriculum content of TVE at the senior secondary school level in Nigeria and the United Kingdom?

Table 1 and figure 2 below present the analysis of respondents' opinions on the items on curriculum content of TVE at the senior secondary school level in Nigeria and United Kingdom to show the similarities and differences in both countries; from where the similarities can be extracted separately from the differences.



Code	Items	Country	To a large extent (%)	To a fairly large extent (%)	To a little extent (%)	Not at all (%)	Total (%)
B1	The curriculum content of TVE at the	Nigeria	20(36.4)	12(21.8)	17(30.9)	6(10.9)	55(51.9)
	senior secondary school level is more theoretical than practical.	United Kingdom	20(39.2)	22(43.1)	6(11.8)	3(5.9)	51(48.1)
B2	TVE curriculum content at the senior	Nigeria	11(20.0)	19(34.6)	20(36.4)	5(9.1)	55(51.9)
	secondary school level is relevant to the need of the society.	United Kingdom	17(33.3)	23(45.1)	10(19.6)	1(2.0)	51(48.1)
В3	There are adequate tools and well	Nigeria	0(0.0)	17(30.9)	26(47.3)	12(21.8)	55(51.9)
	equipped workshops relevant for the implementation of TVE curriculum at the senior secondary school level	United Kingdom	14(27.5)	28(54.9)	8(15.7)	1(2.0)	51(48.1)
В4	Products of TVE at the senior secondary	Nigeria	6(10.9)	14(25.5)	27(49.1)	8(14.5)	55(51.9)
	school level contribute adequately to the economic growth of the country.	United Kingdom	18(35.3)	22(43.1)	9(17.7)	2(3.9)	51(48.1)

Source: Author's computation from survey, 2018

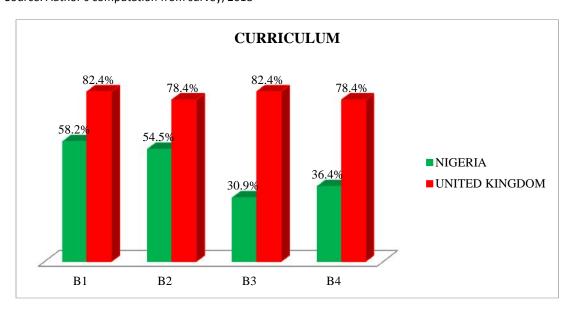


Figure 1: Opinions on curriculum of TVE at the senior secondary school level in Nigeria and United Kingdom.



Table 1 shows the analysis of opinions on items on curriculum content of TVE at the senior secondary school level in Nigeria and United Kingdom. Figure 1 presents opinions on the items. It could be seen that 58.2% of Nigerian respondents accept that the curriculum content of TVE at the senior secondary school level is more theoretical than practical while 82.4% of respondents in the UK affirm this. On the issue of relevance, 54.5% of Nigerian respondents admit that TVE curriculum at the senior secondary school level is relevant to the need of the society while 78.4% of their counterparts in the UK affirm it. Only 30.9% of Nigerian respondents submit that there are adequate tools and well equipped workshops relevant for the implementation of TVE curriculum at the senior secondary school level, while in the UK, 82.4% of the respondents attest to it. In Nigeria, 36.4% of the respondents affirm that products of TVE at the senior secondary school level contribute adequately to the economic growth of the country while 78.4% of the respondents in the UK attest to

In an open ended question, some of the respondents in Nigeria are of the opinion that the curriculum should be made more practical than theoretical. Another respondent is of the opinion that there should be adequate provision of tools and equipment for effective implementation of the curriculum. Also, some respondents in the UK are of the opinion that "regular curriculum review, development of a "train the trainer" model, and follow up are needed to ensure proper implementation of TVE curriculum"(Interviewee 4,Male, Appendix IV).

This was supported through the opinions of respondents in the interview session: For instance, in Nigeria, a respondent said that "the curriculum content looks relevant as it will enable students to acquire further knowledge and develop skills" (Interviewee 4, Male Appendix III). In the UK, a respondent said that "the curriculum content is relevant because it allows the provision of learning experiences in general education, which will enable the student to take his place in life and fulfill the life needs as an enlightened citizen and worker" (Interviewee 6, Female, Appendix IV).

On the issue of similarities in the curriculum content of TVE at the senior secondary school level in Nigeria and the United Kingdom, the results from the respondents reveal that:

a. Education stakeholders in both countries feel that the curriculum content of TVE at the senior secondary school level is more theoretical than practical (however, this is for different reasons). Education stakeholders in both counties feel that the curriculum content of TVE at the senior secondary school level is relevant to the needs of the society (Nigeria, 54.5% & UK, 78.4%).

Research Question 2: What are the differences in the curriculum content of TVE at the senior secondary school level in Nigeria and the United Kingdom?

Table 1 and figure 1 present the analysis of respondents' opinions on the items on the curriculum content of TVE at the senior secondary school level in Nigeria and United Kingdom to show the similarities and differences in both countries; from where the differences will now be presented.

On the issue of differences in the curriculum content of TVE at the senior secondary school level in Nigeria and the United Kingdom, the results from the respondents reveal that:

- a. Education stakeholders feel that there is more provision of adequate tools and well equipped workshops relevant for the implementation of TVE curriculum at the senior secondary school level in the UK than in Nigeria (82.4%; 30.9% respectively);
- b. Education stakeholders feel that products of TVE at the senior secondary school level contribute adequately to the economic growth of the country more in the UK than in Nigeria (78.4%; 36.4% respectively).

DISCUSSION OF FINDINGS

Similarities in the Curriculum Content of TVE at the Senior Secondary School Level in Nigeria and United Kingdom

The findings of this study have shown that the curriculum content of TVE at the senior secondary school level is more theoretical than practical in both countries. However, it is more theoretical in Nigeria than in the UK. TVE curriculum in any country should be based on planned and unplanned experiences; and for the purpose of comparison, it is necessary to identify the ideologies and societal cultures that influence the curriculum, the processes and products of curriculum development, as well as the modes of delivery of teaching and learning experiences. The ideologies and societal cultures that influence curriculum emphasise the relevance of curriculum to the need of the society; the processes and products of curriculum development emphasise the provisions for implementation as well as relevance of the product to the society; the modes of delivery



of teaching and learning experiences emphasise the method of implementation of the curriculum (Adamson & Morris, 2007). The major aim of TVE in any country is to provide technical and vocational orientation to each child so as to be able to solve personal and national economic problems. Therefore, knowledge and skills gained must be functional and applicable to the problems of the individual and the society (Nzorkurum & Obi, 2015). These imply that the curriculum content of TVE at the senior secondary school level should be more practical than theoretical in both countries. It follows that the happenings in terms of curriculum content of TVE in Nigeria and the UK are not consistent with expectations in the aforementioned literature (in terms of theory and practice).

Findings of this study have also shown that the curriculum content of TVE at the senior secondary school level is relevant to the need of the society in both countries. This implies that TVE curriculum content in both countries cater for the needs of both individual and the society such that each individual can function effectively in the world of work and be prepared for higher education. Arfo (2015) also found that the curriculum content of TVE in any nation should emphasise understanding in addition to acquisition of practical skills. This implies that an effective TVE curriculum should be able to equip students with the basic scientific and technological foundations of the skills component relevant to the need of the society. Generally, the thinking about TVE in both countries is that it should be quantitative, qualitative, comprehensive, functional and relevant to the needs of the society (FRN, 2013 & British Council, 2015).

Differences in the Curriculum Content of TVE at the Senior Secondary School Level in Nigeria and United Kingdom

The findings of this study have shown that there is more provision of adequate tools and well equipped workshops relevant for the implementation of TVE curriculum at the senior secondary school level in the UK than in Nigeria. This implies that the efforts made by the government in the UK in the provision of adequate tools and workshop relevant to the implementation of TVE curriculum at the senior secondary school level is more than that of Nigerian government; consequently, TVE at the senior secondary school level is more productive in the UK than in Nigeria (Abimbade, 2008 & Nuffic, 2015).

Moreover, findings of this study have shown that the products of TVE at the senior secondary school level contribute adequately to the economic growth of the country more in the UK

than in Nigeria. This implies that TVE at the senior secondary school level equips individual with productive skills that will enable them to contribute effectively to the economic growth of the nation more in the UK. It also implies that TVE at the senior secondary school level equips individual with productive skills that will enable them to contribute effectively to the economic growth of the nation less in Nigeria. The latter is consistent with Nzorkurum and Obi (2015) who also found that TVE content curriculum is either minimally implemented or completely neglected in some schools in Nigeria. They added that TVE curriculum content is not adequately tailored towards the economic growth of the nation.

Thus, issues of curriculum content of TVE feature more prominently in the UK than in Nigeria. The expectations that TVE at the senior secondary school level would help in the improvement of the economy of the Nigerian and UK societies materialise more in the UK than in Nigeria. The government and the people of the UK direct a lot of energy into the pursuit of TVE than the government and the people of Nigeria. The results are that the beneficiaries and products of TVE in Nigeria perform less in terms of realisation of selfemployment and social life development than beneficiaries and products of TVE in United Kingdom. Therefore, there is the need for more government and people's efforts in the pursuit of TVE at the senior secondary school level in Nigeria.

LESSONS FOR NIGERIA

The education of a country should be sensitive to the political and cultural environment because education cannot be divorced from politics and it is important for countries to employ strategies that would help overcome challenges such as inadequate funding and poor supervision. The Policy makers must realise that the education system should be sensitive to the economic environment, for instance if the economy is buoyant, the country will be able to drive policies and enforce conscientious implementation of TVE curriculum content at all levels of the education system.

CONCLUSION

The study concluded that the curriculum content of TVE at the senior secondary school level is better implemented in the UK than in Nigeria. The focus of TVE in the UK and Nigeria at the senior secondary school level is the same but the implementation of the expectations of TVE in both countries is different. This is because part of the personal values in relation to TVE is to inspire



learners to become self-employed and self-reliant in the society. In order to achieve this, the content of TVE need to be relevant to the needs of the students and the society. The acquisition of appropriate knowledge and skills is required for learners to cope with the challenges in the society. Hence, Nigeria must rise above these challenges in order to overcome the growing unemployment and poverty in the society. This implies that TVE needs more attention in Nigeria.

RECOMMENDATIONS

The study recommended that the Nigerian education system should be sensitive to the political, economic and cultural environment by funding Technical and Vocational Education in order to enhance better implementation at the senior secondary school level in Nigeria. This will help developing countries like Nigeria realise the goals of TVE in curbing youth unemployment and poverty in the 21st century.

REFERENCES

- Abimbade, A. (2008). Technical and vocational education for sustainable national development. In Boucouvalas, M. & Aderinoye, R. Education for Millenium Development. United Kingdom: Safari Books (Export) Limited.
- Adeyinka, A. A. (1994). Popular topics in comparative education for Nigerian tertiary education students. Ilorin: Success Education Services.
- Adamson, B. & Morris, P. (2007). Comparing
 Curricula. In Bray, M., Adamson, B. &
 Mason, M. (Eds.). Comparative Education
 Research Approaches and Methods. Hong
 Kong, China: Comparative Education
 Research Centre. The University of Hong
 Kong.
- Agbonhale, G. O. &Uddin, P. S. (2015). Analysis of problems militating against the teaching and learning of technical subjects in technical colleges in Nigeria. *Studies in Education*, *15*(1) 189-199.
- Ajere, O. & Akinbi, Y. A. (2017). Policy analysis of the reviews of Technical and Vocational Education in Nigeria. *African Journal of Historical Sciences in Education*. 13, 1, 42-58.
- Angbulu, O.N. & Olaitan, S.O. (2002). Comparative vocational and technical education in U.S.A., Great Britain and Japan: Lessons for Nigeria. Makurdi: Aboki Publishers.
- Arfo, E.B. (2015). A comparative analysis of Technical and Vocational Education and

- training policy in selected African countries. (*Published Ph.D thesis*) *University of KwaZulu- Natal Durban, South Africa*.
- British Council (2015). *The UK skills system: An introduction*. London: British Council Press.
- European Commission (2007). The education
 system in England, Wales, Northern
 Ireland 2006/07, Eurybase The
 Information Database on Education
 Systems in Europe. Retrieved from
 http://www.eurydice.org/resources/Eurydice/pdf/eurybase/Eurybase_UN_VO.pdf/
- Federal Republic of Nigeria (2013). *National policy* on education. Abuja: Nigerian Educational Research and Development Council Press.
- Government of United Kingdom (2015). White paper on the report of the education reform review committee. UK:

 Department of Education and Skill.
- Mishra, R. C., Sharma, P. &Hansal, H. (2007).

 International encyclopeadia of education:
 History of education administration. New
 Delhi: APH Publishing Corporation.
- Nuffic, U. (2015). The British education system compared with the Dutch system [e-book]. Retrieved from http://www.nuffic.nl/en/home/copyright
- Nzorkurum, J.C., & Obi, E.C. (2015). Assessment of the implementation of vocational and technical education programme in Rivers State. *Journal of Education in Developing Areas*, 23(2), 482-493.
- Obanya, P. (2009). *Dreaming, leaving and doing education*. Ibadan: Education Research and Study Group.
- Oloko, O.O. (2017). Assessment of discipline-based Technical and Vocational Education components necessary for entrepreneurship and sustainable development in Rivers State. African *Journal of Historical Sciences in Education*, 13(1), 133-156.
- Osam, I. (2013). Implementing vocational and technical education programmes in South-south Nigeria: A case of Rivers State. International Journal of Scientific Research in Education, 2, 3
- Smith, D. (1995). *The national curriculum in England and Wales*. British Council: Crown Press.
- Strong, M. E. (1990). Administrative leadership issues in vocational education. In A.J.



JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 7(4), DECEMBER, 2019 ISSN: 2277-0011; Journal homepage: www.atbuftejoste.com

- Paultler, (Ed.). *Vocational education in the* 1990s: *Major issues*. Ann Arbor: Prakken.
- Umunadi, E. K. (2014). Relational study of technical education in Scotland and Nigeria for sustainable skill development.

 International Journal of Higher Education, 3(1), 49–57.
- UNESCO (2014). *Promising practices in TVET*.

 Retrieved February 13th, 2017, from

 http://www.unevoc.unesco.org/go.php?q
 =promising+practices+list.
- Usman, I., Celement, C. K. & Raihan A. M. (2013). A study of problems for development of TVE in Katsina State, Nigeria. *Journal of Engineering*, *3*(11), 38-45
- World Bank (2014). Youth employment a major challenge for African countries. Retrieved

- from
- http://web.worldbank.org/website/external/countries/africa
- World Data on Education (2012). Education in the United Kingdom. International Bureau of Education, 7th edition. UNESCO: United Kingdom.
- Wolf, A. (2011). *Review of vocational education:*the Wolf report. London: Department for Education.
- Wu, T. Y. (2003). A comparative study of the trends in Technical and Vocational Education among European countries, USA and the Republic of China. *Journal of Industrial Teacher Education*, 40, 3.