



MEDIUM-TERM PLAN FOR INTEGRATING TRADE SKILL ACQUISITION INTO SECONDARY SCHOOL EDUCATION IN OYO NORTH SENATORIAL DISTRICT OF NIGERIA

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Abstract:

The study focused on designing a plan for integrating trade skill acquisition into secondary school education in Oyo North Senatorial District, Oyo State, Nigeria for a medium-term of five years, that is the years between 2023 and 2027. The specific objectives were to enumerate the available trade skills in the secondary school environment that are in consonance with the prevailing employment skills in the study area; identify the relevant employment skills needed to be integrated into the curriculum of secondary school education, and determine the cost of integrating the required number of relevant employment skills into the curriculum. These were with a view to providing information on how to improve employment opportunities in Oyo North Senatorial District, Oyo State, Nigeria. The study employed a descriptive survey research design. Data were obtained, with the use of questionnaires. Enrolments for 2023 to 2027 were projected, using the projection formula as provided by the International Institute of Educational Planning (IIEP). The study revealed that Ofi clothes making (that is, traditional dresses), shea butter production and packaging, locust beans production and packaging, dressmaking and tailoring, foodstuff processing and packaging, and aluminum pot making should be integrated into the curriculum. The expected budget for the integration of these trade subjects for the base year is 163,370,992.00 naira.

Keywords: base year, curriculum, employment skills, skill acquisition

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1. Introduction

Secondary school education is a crucial stage for learners because it serves as a foundation on which choices to either make use of the skills received during the secondary school education and take a job; just as it is being practised in some developed countries of the world or to proceed to higher institutions of learning for further studies. According to the National Policy on Education (2014), the broad aims and objectives of secondary education in Nigeria are to provide entrepreneurial, technical, and vocational job-specific skills for self-reliance and for agricultural, industrial, commercial, and economic development and also preparation for higher education. At this level of education, learners are expected to acquire practical skills and knowledge relating to occupations in various sectors of economic and social life, most especially employment skills that are useful to their immediate environment. As observed in Gambo, Adelokun, Gambo, and Afolayan (2021), Paine, Bloemeke, and Aydarova (2016), and Schleicher (2011), quality education, especially in secondary schools should provide the needed platform conducive to successful learning, creativity, and the development of human capital necessary for the present and also for the future.

Despite the assertion of the Federal Government of Nigeria in the National Policy on Education (NPE) on the preparation of the youth for life outside the four walls of the classroom, it is important to mention that the majority of secondary school graduates are usually idle and confused after school due to the in-existence of relevant employment skills, especially when there is no desire or opportunity to further their education to the tertiary level. This makes many of them become thugs, a nuisance to society or involved in illegal businesses (Uno, Amenger & Adamgbe, 2019).

According to Howard, Howard, Howard, and Wall (2022), a good number of students who have completed their secondary education but failed to secure admission into higher institutions due to some factors, are in dilemma. This is because they are not equipped with the necessary and relevant skills for self or paid employment thus, increasing the rate of unemployment in Nigeria (Adebakin & Ajadi, 2022). This is so because skills can only be acquired effectively through quality learning and human capacity building by experts (Gambo, Adelokun, Gambo, and Ejalonibu, 2021).

In 2008, thirty-four employment skills known as trade subjects were integrated into the curriculum of Nigerian Senior Secondary education but implementation did not commence until year 2014. The subjects are listed in Table 1.

Today, there is a gradual decline in the implementation of the policy on these trade subjects in secondary schools in Nigeria, Oyo Senatorial district inclusive. Therefore, there is a need to resuscitate them and even add more relevant trade subjects or skill-acquisition subjects that will benefit the students after school. As a result of this decline in implementation, there is a shift from the industrial era where students graduate from secondary or university and secure jobs almost immediately. There are no readily available jobs for people due to the inability of the public sector to cater to the employment needs of the teeming population especially among youths which have

invariably posed significant challenges to the society in Nigeria. Therefore, the interest of the general public is shifting away from education that encourages just the acquisition of certificates to skill-based or employment skills education which centres more on what graduates can do with their hands and the ability to apply requisite skills in the real work environment.

Table 1: Trade subjects in senior secondary curriculum

S/N	Subjects	S/N	Subjects	S/N	Subjects
i	Auto Body Repair and Spray Painting	xiii	Refrigeration and Air Conditioning	xxv	Fishery
ii	Cosmetology	xiv	Store Management	xxvi	Garment Making
iii	Book Keeping	xv	Printing and Decoration	xxvii	Metal Works
iv	Marketing	xvi	Woodwork	xxviii	Dyeing and Bleaching
v	Tourism	xvii	Machine woodworking	xxix	Block-laying, Bricklaying and Concrete Work
vi	Upholstery	xviii	Radio – Television and Electronics Works	xxx	Plumbing and Pipe Fitting
vii	Auto Mechanical Work	xix	Fabrication and Welding Craft, Engineering Craft Practice	xxxi	Electrical Installations and Repair
viii	Printing Craft	xx	Carpentry and Joinery	xxxii	Furniture Making
ix	Basic Electricity	xxi	Mining	xxxiii	Catering-Craft Practice
x	Leather Goods, Manufacturing and Repairs	xxii	Automobile Merchandising	xxxiv	Clothing and Textiles
xi	Data Processing	xxiii	GSM Maintenance and repairs		
xii	Photography	xxix	Animal Husbandry		

Source: NPE (2014).

Ademiluyi (2021) considered the issue of unemployment as endemic within Nigeria and other developing countries. This implies that unemployment has become a crisis that is difficult to get rid of in developing countries. As a result, the rising unemployment rate has helped to heighten the need to integrate employment skills into secondary school education. Nigerian Bureau of Statistics (NBS) reported the unemployment rate to be 27.1% in the early year of 2020 but rose to 33.3% in the first quarter of 2021 (NBS, 2021). The number of unemployed people has been projected to be around 27,300 before the end of 2022 and 26,800 by the year 2023 (NBS, 2021).

Ogar, Ezenwaji, and Zamani (2022) asserted that for the Nigerian youth to be empowered economically, they should acquire the necessary skills. Oli (2000) believed that to ensure a positive future for Nigeria, the youth who have always been referred to as the future leaders of the country ought to be equipped with the basic skills required to move the economy forward. In the same vein, Omotosho, Idowu, Esere, and Arewah (2009) posited that one of the developmental tasks of the youth; (secondary school graduates inclusive), is the attainment of economic independence. This can be made possible when the youth become gainfully employed.

Existing studies or designs on integrating employment skills into secondary school education concentrated on all trade subjects stated in the National Policy on Education. However, research on planning for a specific region to integrate employment skills, that is; learning of trade subjects suitable specifically for the region is rare. It seems that some youths in some areas in Oyo North senatorial district consider schooling as a waste of time but prefer illegal businesses since they do not have relevant skills to make ends meet. There was a need to make an estimation that would help in implementing the existing and even new employment skills, based on their specific needs in the region into secondary school education because it has the ability to curb the unemployment rate that leads youth to do illegal businesses. This study focuses on making adequate plans to domesticate appropriately the implementation of selected trade subjects in secondary schools in Oyo North Senatorial District of Oyo State.

The following are the research questions answered in this study:

RQ1: What are the relevant trade skills that need to be integrated into secondary school education in Oyo North Senatorial District of Oyo State?, and

RQ2: What is the cost of integrating the required number of relevant trade skills into the curriculum of secondary schools in the study area (2023-2027)?

2. Method

The design used for this study is the descriptive survey design. Two self-designed and one adapted research instruments were used for the study. These are Relevant Trade Skills for Integration Questionnaire (RTSIQ) and Cost Required to Integrate the Trade Skills Questionnaire (CRITSQ). The adapted questionnaire titled: The Questionnaire on Students' Flow in Secondary Schools in Oyo North Senatorial District, Oyo State (TQSFAS) was adapted from Adewole and Adelokun (2017). It was used to elicit data from principals on their students' flow from the 2016/2017 session to the 2020/2021 session which was useful in projecting the number of students that will be in the schools from year 2023 to 2027. ATSISEQ was used to elicit information from students on the available trade skills in secondary schools' environment that are in consonance with employment skills in Oyo North senatorial district. RTSIQ was used to elicit information from teachers and parents on the relevant employment skills needed to be integrated or designed with the curriculum of secondary school education in the study area. In the same vein, CRITSQ was used to provide data from artisans in the study area on the estimation of the cost required to integrate employment skills in secondary schools for the next five years.

With these data, an enrolment for the year 2023 was calculated while the number of enrolments for the year between 2024 to 2027 was projected, when further computed with the projection formula as provided by the International Institute of Educational Planning (IIEP).

$$P_{N\ t+1}^{k+1} = S_{t+1}^{k-1} + R_{T+1}^{k-1} - D_{t+1}^{k+1} + U' \tag{i}$$

Where:

$P_{N_{t+1}^{k+1}}$ is the projected enrolment to the succeeding class in the succeeding year,

S_{t+1}^{k-1} is the survivors from the preceding class in the year,

R_{t+1}^{k-1} is the repeater in the succeeding year,

D_{t+1}^{k+1} is the dropout from the succeeding class in the succeeding year,

U is the error term.

The cost of establishing each selected trade skill, that is: employment skills for the years 2023, 2024, 2025, 2026, and 2027 were computed, using the compounding formula.

This is expressed in equation (ii):

$$F = P (1 + r)^n \tag{ii}$$

Where,

F = Future amount,

P = Present amount,

r = Rate of interest,

n = Number of years.

This was done because the rates of interest for all the years under investigation are not zero and because money has a net productivity over time. After calculating the cost for 2023, to determine how much it will cost from year 2024 upward, the cost was further calculated with the compounding technique since the rate of interest in the base year may not be the same for subsequent years.

3. Results

This section presents the results of this research:

RQ1: What are the relevant trade skills that need to be integrated into secondary school education in the study area?

Figure 3.1.1 shows the relevant trade skills that need to be integrated into secondary school education in the study area, based on the data elicited from the respondents of this research.

As regards the integration of Ofi clothes-making into the curriculum, 86.2% of the students strongly agreed that it should be integrated, 4.3% of the sampled students agreed while 8.5% of the students disagreed while 1% strongly disagreed. This expresses the readiness and enthusiasm of the students to learn Ofi clothes-making in the study area. On Aluminum pot making, 21.3% of the secondary school students in the area strongly agreed that such employment skills should be incorporated into the curriculum, 44.7% agreed, 29.8% of the study disagreed while 4.2% of the students strongly disagreed. The majority of the sampled students, that is; 58.5% strongly agreed that garment making should be integrated into the secondary school curriculum, 12.8% agreed to the integration of the trade skill, 20.2% of the students disagreed while 8.5% of the students

strongly disagreed. As regards Bricklaying and concrete work, 45.7% of the respondents strongly disagreed with the integration of such trade subject into the curriculum, 29.8% of the sampled students disagreed though 6.4% of the student agreed while 18.1% of the sampled students strongly agreed that it should be integrated in the secondary school curriculum.

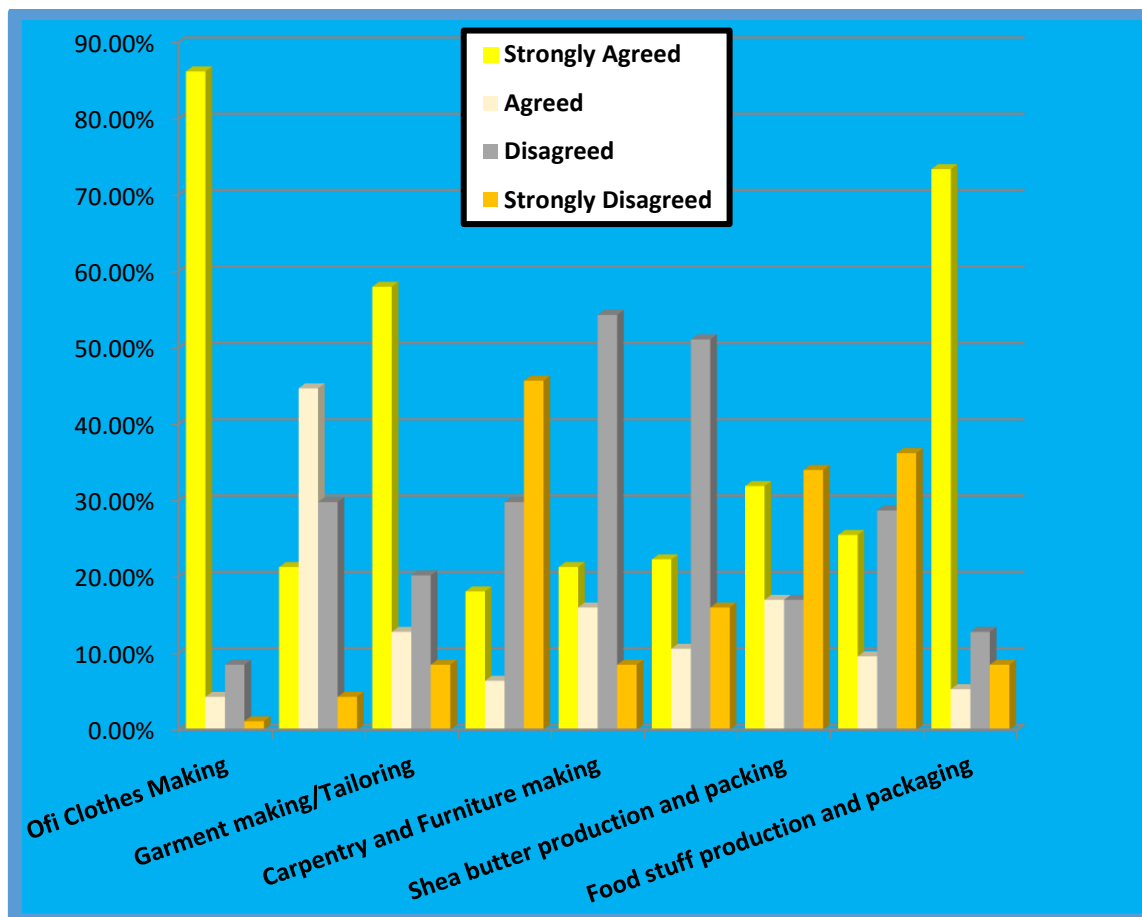


Figure 3.1.1: Relevant Trade Skills that need to be integrated into Secondary School Education in the Study Area

Meanwhile, most of the respondents disagreed that carpentry and furniture making should be integrated into the curriculum and those who asserted this fact accounts for 54.3% of the total sampled students in Oyo North Senatorial District, 8.5% of the students strongly disagreed, 16.0% of the secondary school student agreed that it should be integrated while 21.2% of the sampled students strongly agreed. As regards dyeing and bleaching 51.1% of the sampled students disagreed with its integration into the secondary school curriculum, 16.0% of them strongly disagreed while 10.6% agreed to its integration into the curriculum and 22.3% strongly agreed. As regards the integration of Shea butter production and packing into the curriculum, 31.9% of the sampled students strongly agreed, 17.0% of the students agreed, 17.1% of the students also disagreed while 34.0% of the sampled students strongly disagreed.

For the integration of locust beans production and packaging, 36.2% of the students strongly disagreed, 28.7% of the students disagreed with the integration of locust bean production and packaging in the school curriculum while 9.6% and 25.5% of the students agreed and strongly agreed respectively. 73.4% of the respondents strongly agreed to the integration of foodstuff processing and packaging into their curriculum, 5.3% of the students agreed, 12.8 of them disagreed while 8.5% of the students strongly disagreed.

The result showed that the students want more integration of Ofi clothes-making, Garment making and tailoring, foodstuff processing, and packaging as well as aluminum pot making to be integrated into the school curriculum. This is because these employment skills are indigenous to the people of Oyo North senatorial district.

RQ2: What is the cost of integrating the required number of relevant trade skills into the curriculum of secondary schools in the study area (2023-2027)?

Data on the cost for each trade subject was obtained through questionnaire administration to artisans of different trades in the study area. Hence, the data provided by the artisans were subjected to some mathematical and statistical operations to determine the cost of training each student per annum will cost. This was further multiplied by the projected number of students for each of the projected years.

Table 1: Flow Chart of Students in the Study Area

Previous Years	Enrolment of Students	Promoted Students	Repeated Students	Drop-out Students	Graduated Students
2017/2018	6,313	5,820	226	242	5,820
2018/2019	6,635	6,082	245	332	6,082
2019/2020	6,741	3,248	265	340	3,248
2020/2021	6,655	6,043	248	386	6,043
2021/2022	6,829	6,275	257	295	6,275

Source: Extracted from School Register in the Sampled Secondary Schools

Table 1 shows the flow chart of students in sampled secondary schools in the study area between 2017/2018 and 2021/2022 sessions.

During the 2017/2018 academic session, the flow charts show that the number of enrolled students was, 313, the number of promoted students was 5,820 students, the number of repeaters was 226 and the number of drop-out students was 242.

In the 2018/2019 session, the number of enrolments was 6,635, the number of promoted students was 6,082 and the number of repeated students was 245 while the number of drop-outs constituted 332.

During the 2019/2020 academic session, the number of enrolled students was 6,741, the number of promoted students was 3,248, the number of repeated students was 265, and 340 of the students dropped out the school. in the 2020/2021 session, 6,655 students were enrolled in various schools during that period, 6,043 students were promoted, 248 students were repeated and 386 students dropped out.

In the 2021/2022 academic session, 6,829 were enrolled in the schools, 6,275 were promoted, and 257 were repeated while 295 students dropped out of school.

From this flow chart, the survival rate, repetition rate, and drop-out rate were computed. With these data, an enrolment for the year 2023 to 2027 was projected, when further computed with the projection formula as provided by the International Institute of Educational Planning (IIEP):

$$P_{N_{t+1}^{k+1}} = S_{t+1}^{k-1} + R_{T+1}^{k-1} - D_{t+1}^{k+1} + U \tag{iii}$$

Similarly, the cost of integrating and training each student per annum and all the projected number of students for selected trade skills (employment skills) for the years 2023, 2024, 2025, 2026 and 2027 were computed using the compounding formula which is expressed as:

$$F = P(1 + r)^n \tag{iv}$$

Table 2: Cost of Integrating the Required Number of Relevant Employment Skills into the Curriculum of Secondary Schools in the Study Area (2023-2027)

Year	Projections	Projected Number of Students	Cost of Integrating the Skills per Student in a Year (#)	Cost by Projected Number of Students in a Year	Cost Estimate in Each Year (#)
2022/2023	5,820+226-242+0	5,804	28,148	5,804*28,148	163,370,992
2023/2024	6,082+245-332+0	5,995	31,948	5,995*31,948	191,528,260
2024/2025	3,248+265-340+0	3,173	36,261	3,173*36,261	115,056,153
2025/2026	6,043+248-386+0	5,905	41,156	5,905*41,156	243,026,180
2026/2027	6,275+257-295+0	6,237	46,712	6,237*46,712	291,342,744
Total					1,004,324,329

Source: Field Work.

Table 2 shows that the cost of integrating the trade skills per student in 2022/2023 was estimated to be N28,148, this figure was further multiplied by the number of projected students (5,804). Hence, for the 2022/2023 academic session, the cumulative cost of training the students for that session amounts to N163,370,992. In 2023/2024, the cost of training one student is thirty-one thousand, nine hundred and forty-eight naira (N31,948) and hence training 5,995 projected students per annum will amount to N191, 528,260. In 2024/2025 the cost of integrating and training one student per annum was computed to be N36,261 while training 3,173 projected students will cost N115,056,153.

As regards the year 2025/2026, the cost of training a single student for an employment skill per annum will cost N41,156 while training the projected number of students will cost N243, 026,180 while in 2026/2027, the cost of integrating the trade subject was estimated to cost N146,712 while training 6,237 projected students will amount to N291,342,744.

The estimated budget for the integration of trade subjects between 2022 and 2023 and 2026 and 2027 altogether is N1,004,324,329.

Table 3: Compounded Cost of Integrating the Required Number of Relevant Trade Skills into the Curriculum of Secondary Schools in the Study Area (2023-2027)

Year	Cost Estimate in Each Year (#)	Compounded Cost (#) $F=P(1 + r)^n$
2022/2023	163,370,992	163,370,992.00
2023/2024	191,528,260	216,426,933.80
2024/2025	115,056,153	146,915,201.18
2025/2026	243,026,180	350,661,746.04
2026/2027	291,342,744	475,026,655.56

Source: Field Work.

Table 3 shows the compounded cost of integrating the required number of relevant employment skills into the curriculum of secondary schools in the study area for five years. The cost for the year 2022/ 2023 remains the same because it is the base year and also because the cost was computed based on the present value of money that is year 2023. The cost for the other four years was further calculated, using the compounding formula because the value of money may not be the same for all five years. The compounded cost for 2023/2024 is N216,426,933.80; N146,915,201.18 for the year 2024/2025; N350,661,746.04 for the year 2025/2026 while it is N475,026,655.56 for the year 2026/2027.

4. Conclusion

The results of the findings show that the respondents want more integration of Ofi clothes making, locust beans production and packaging, garment making and tailoring, foodstuff processing and packaging as well as Aluminum pot making. This may be attributed to the fact that these employment skills are indigenous to the people of Oyo North senatorial district.

In recent times, there has been a noticeable shift in educational goals toward equipping students with a broad range of skills which is being recognized through education and curricular reform efforts. Research-based evidence has shown that secondary school students in Nigeria and in the study area to be specific, have not been sufficiently exposed to practical employment skills to allow them to be self-reliant and self-employed despite the massive and increased rate of unemployment in our society. Hence, this study evolved and a design of a medium-term plan for integrating employment skills into secondary school education in Oyo North senatorial district of Oyo State was made so as to rise to the challenge of equipping the youth with the necessary entrepreneurial knowledge, skills, values and attitude for them to live as a competent member of the society and contribute to nation building.

Based on the findings of the study, the following recommendations were made:

- 1) The government should ensure the integration of geographically unique employment skills into the secondary schools' curriculum rather than the arbitrary courses that do not resonate with students' interests.
- 2) The planning and integration of employment skills for schools in any given area should involve all stakeholders (Community Heads, Parents, Teachers, Students Associations, NGOs, etc.) in the area. This will enable the holistic contribution of those stakeholders that know the needs of the environment and the common trade subjects in the area and hence this will enhance comparative advantage among geographical regions.
- 3) The government should ensure the provision of required funds as well as the creation of an enabling environment necessary for the integration of trade skills into the secondary school curriculum. This can be done through the creation of an employment skills funding scheme (ESFS) which will oversee the funding and payment of remunerations of employed artisans.
- 4) Real practical work of the trade skills should be made compulsory for secondary school students as one of the requirements for their graduation. Each student should be encouraged to produce at least one marketable product or service, and such products should be put up for exhibition. This will further create innovation.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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References

- Adebakin, A. B., and Ajadi, O. T. (2022). Entrepreneurship Education in Nigerian Universities: Implications for Pedagogical Modification. *Journal of Teaching and Teacher Education*, 10(01).
- Adelokun, A. S. and Adewole, I. B. (2017). Designing a School Map for Expanding Public Primary Schools in Osun State, Nigeria (2018-2022). *US-China Education Review B*, 7(7), 329-344.

- Ademiluyi, A. B. (2021). Employability Skills Needed by Office Technology and Management Graduates for Entrepreneurship and Gainful Employment in Nigeria. *International Journal of Education, Learning, and Development*, 9(9), 32-42.
- Education and Training (TVET) Worldwide: An initial statistical survey Retrieved on 03/12/2019 from http://unevoc.unesco.org/fileadmin/user_upload/pubs/UNEVOCSUISreport.pdf
- Federal Government of Nigeria (2014). *National Policy on Education*, Lagos: NERDC.
- Gambo, O., Adelokun, A., Gambo, I., and Afolayan, A. (2021). Planning effective learning for the visually impaired in Federal University in Osun State, Nigeria: technology perspective. *Malaysian Online Journal of Educational Technology*, 9(1), 80-96.
- Gambo, O., Adedapo, A., Gambo, I., and Ejalonibu, D. (2021). Planning and Designing Online Vocational Skill Showcasing Platform: From an Educational Perspective. *Journal of Technical Education and Training*, 13(1), 22-34.
- Howard, K. E., Howard, N. R., Havard, D. D., and Wall, A. F. (2022). Career and Technical Education's Unequal Dividends for High School Students: The Stratification of a New Generation. *Urban Education*, 00420859211073890.
- Ogar, P. O., Ezenwaji, I. O., and Zamani, H. Y. (2022). Supervision of trade skills and effectiveness of entrepreneurship programme in universities in Cross River State, Nigeria: Trade skills and effectiveness of entrepreneurship programme. *International Journal of Curriculum and Instruction*, 14(1), 126-137.
- Oli, S.O. (2000). *Curriculum development and management in vocational-technical education*. Onitsha: Cape Publishers International Ltd.
- Omotosho, J. A., Idowu, A. I., Esere, M. O, and Arewah, M. C. O. (2009). Problems and counselling needs of unemployed youth in Nigeria. *The Open Area Studies Journal*, 2(1), 23-27.
- Paine, L., Bloemeke, S., and Aydarova, O. (2016). Teachers and teaching in the context of globalization. *Handbook of research on teaching*, 717-786.
- Schleicher, A. (2011). Lessons from the world on effective teaching and learning environments. *Journal of Teacher Education*, 62(2), 202-221. <https://doi.org/10.1177/0022487110386966>.
- Uno, J. K., Amenger, H. S., & Adamgbe, K. (2019) Key Issues in Revitalising Education for Sustainable Security and Economic Development.

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