



SKILL GAPS AND TRAINING NEEDS OF TEACHERS FOR IMPLEMENTING FISHERY TRADE SUBJECT IN SECONDARY SCHOOLS IN DELTA STATE

Chukwudi Ogwu, Department of Vocational education, Agriculture unit Delta State University, Abraka, Nigeria
C.N. Ikeoji, Department of Vocational education, Agriculture unit Delta State University, Abraka, Nigeria
Nwakor E. K., Department of Agriculture & Bioenvironmental Engineering Technology
Delta State Polytechnic, Ogwashi-Uku

Abstract- This study investigated Fishery teachers' expressed knowledge gaps and training needs for the implementation of Fishery trade curriculum in public secondary schools in Delta State. The study is an ex-post facto research, in which two research questions were answered and 2 hypotheses tested. The population of the study comprised 375 Fishery teachers in public secondary schools in Delta State. The study adopted a multistage sampling procedure and the sample which was obtained with simple percentage was 196 Fishery teachers. The data collection instrument was structured questionnaire which was duly validated and the reliability was determined with split-half and Pearson product moment correlation coefficient and a coefficient of 0.76 was obtained. The data collection instrument was administered by the researcher with the aid of 3 research assistants and the statistical instruments used for data analysis were mean and standard deviation to answer research questions and t-test statistics for hypotheses testing. The result revealed that Fishery teachers have Fishery skills/ knowledge deficiencies it also showed the areas of Fishery where trainings are required. Equally revealed are the training modes preferred by the teachers. The study recommends that Fishery teachers in Delta State public secondary schools should be granted in-service training for effective implementation of trade curriculum in Fishery also competent new hands should also be recruited.

Keyword: Fishery trade curriculum, teachers skills, knowledge gaps, teachers training needs, in-service training

I. INTRODUCTION

Nigeria was an agrarian country; during which time agriculture was the mainstay of the economy and accounted for a large portion of its export earnings. According to Adekunle (2016) Nigeria was a great producer and exporter of many agricultural produce, such as groundnut, hides and skin in the North, cocoa, sheer butter in Western Nigeria, palm oil in the East and South-South regions. Some authors have reported in similar vein that agriculture was the main foreign exchange earner in Nigeria, the economy was stable, the conditions of living were good, the exchange rate was very favourable as Naira was at par with the pound and dollar exchanging for less value (Mabiaku, 2013; Gwer, 2014; Wombo, 2018).. Nigeria fared better, as an agricultural nation because the exchange rate was stable; there were employments for youths and adults, the industries were active, and rural urban drift was at its barest minimum (Izamgbo 2017; Adams 2014; Dangiwa 2012; Abimbola 2015).

However, Nigeria's economic woes began with the emergence of oil wealth and its dependence on oil pushed agriculture into irrelevance and increased tastes for foreign products and rural urban drift (Ketebu 2016; Nwafor 2015; Igone 2013; Hosfall 2012). As a consequence, Osugwo (2015), Betiku (2016) and Suraju (2017) declared that oil wealth has caused Nigeria more pains than blessings, engendering rural urban migration, with the cities becoming over-populated and the amenities over-stretched unemployment naturally held sway.

Nigeria Bureau of Statistics (2020) revealed that the country's unemployment rate, as at the last quarter of 2019 was 20.1 percent, International Labour Organization (ILO) (2020) puts the rate of Nigeria unemployment at the same period at 30.2 percent, while International Monetary Fund (IMF) (2019) stated that Nigeria unemployment rate was 25.3 percent. Atamako (2012), Ikechi (2013) Usman (2013) enjoined the Federal Government of Nigeria to reduce youths unemployment by engaging them in vocational training. This position was also canvassed by Saliu (2012), Abimbola (2012), Kojo (2011) who also recommended that the Federal Government should emphasize less of paper qualification but technical and vocational skills to rescue the country from its present youths unemployment and economic decline.

The federal government of Nigerians apparently in response to engaging the youths in vocational and technical skills, introduced the New Senior Secondary School Trade Curriculum (SSSTC) in senior secondary schools in 2013. Nigeria Educational Research and Development Council (NERDC) (2013) surmised that the philosophy of the trade curriculum is that at completion of the last three years of secondary education every recipient would have been well prepared for higher education as well as have acquired a vocational skill for wealth creation, and hunger eradication (SSSTC, p5).

Gbadebo (2019), Gana (2019) Babajide (2020) described the trade curriculum as a paradigm shift from cognition to psychomotor, asIt is job creation and poverty eradication centered curriculum. Doherty (2019) opined that trade curriculum was designed to make Nigeria youths focus on job and wealth creation and thus reduce unemployment. Trade curriculum is a problem solving curriculum, it was adopted when youths entrepreneurship to check heightened unemployment has become a global mandate (Asuquo, 2019, Buba , 2020, Adeoti, 2020) while Abubakar (2019) Ayesa (2019) opined that SSSTC adoption is apt and timely because it is designed as job and wealth creation document geared towards achieving the United Nations sustainable development goals of poverty and hunger eradication.

The trade curriculum involves 34 skills areas including Fishery.

Fish is an important part and component of human diet. Fish contains protein, carbohydrate, vitamins mineral and fats (Oboyano 2017; Samiu 2015; Amaju 2018). Fish is highly cherished because it contains the highest metabolizable protein, good percentage of carbohydrate, fats, vitamins and minerals (Simeon 2018; Diallo 2017; Samaru 2018).

Nigeria fish demand is 2.7 million metric tons while its production is 0.8 million metric tons (Adesina 2014, Audu 2016) According to Food and Agricultural Organization (2018) Nigeria is the 4th greatest importer of fish globally. Adesina (2014) puts the volume of Nigeria fish import at 100 billion naira while United States Agency for International Development (USAID) (2016) states that Nigeria volume of fish importationis 625 million USD. Importation leads to unemployment in importing country and employment in country of import (Abdul 2018, Ugolo 2017, Nwankwo 2018).

The introduction of Trade curriculum is very laudable, but has elicited myriad of criticism. Adumgbo (2018), Adeyemi (2018), Okpe (2017) criticized the introduction of trade curriculum, without assessing the technical knowledge of the teachers in Fishery and without recruiting competent manpower for the implementation. This was also the position of Pelumi (2018), Abudu (2018) who stated that the introduction of trade curriculum without recruiting manpower for its delivery or equipping the existing teachers with fishery expertise through in-service training is antithesis to the implementation of the curriculum. It is against this background that this study seeks to assess the knowledge gaps and training needs of teachers for effective implementation of Fishery as a trade subject in secondary schools.

Purpose of the study/Specific Objective

The purpose of this study is to assess the skill and knowledge gaps and training needs of teachers for effective implementation of senior secondary school trade curriculum in fishery in Delta State.

The study was guided by the following research questions;

1. What skill gaps were expressed byFishery teachers in thierinstructional delivery in public secondary schools in Delta State?
2. What were the teachers'expressed training needs for effective implementation of Fishery as a trade subject in public secondary schools in Delta State?
3. What are the teachers preferred modes of training for their skills and knowledge improvement?

The hypotheses that guided the study were as follows;

Ho: There is no significant difference in the Fishery teachers expressed skill gapsin Fishery instruction between rural and urban teachers in Public secondary Schools in Delta state.

Ho: There is no significant difference in the expressed training needs between rural and urban Fishery teachersin Public secondary Schools in Delta state.

Ho: There is no significant difference in the teachers preferred mode of training between rural and urban Fishery teachers in Delta state pubic secondary schools

II. THEORETICAL FRAMEWORK FOR THE STUDY

The theories adopted for this study are Dekeyser (2007) skills acquisition theory and Kolbe (1984) experimental learning theory.

Dekeyser skill acquisition theory is adopted for this study because the policy thrust of senior secondary schools trade curriculum is skills acquisitionfor self-employment, wealth creation, poverty and hunger

eradication Dekeyser (2007). Skills acquisition theory centres on how progress are made in the process of learning various skills beginning from the primary stage to compound and complex stages. These skills according to the theory are both in the domain of cognitive and psychomotor. From classroom to its application in the field, it deals with how skills are sequenced for maximum learning in diverse areas from teaching the high School algebra skills to aircraft to pitching.

Experimental learning theory Kolbe (1984) in the other hand is quite apt for adoption in this study because it also centres on learning of skills which will depend on initial skills to progress in the skill proficiency that may not require the teacher for further progress. According to Kolbe (1984) there are four stages of learning which are sequential and these are concrete experience, followed by reflection, then derivation of the general rules describing the experience or the application of known theories to it, (abstract conceptualization) and hence for the construction of ways of modifying the next occurrence of the experience (active experimentation) leading in turn to the next concrete experience (Kolbe, 1984).

This study being a need assessment study will also adopt Borich (1980) need assessment model. Borich (1980) need assessment model requires that a mean weighted discrepancy or activity be included in need assessment. Borich (1980) gave a vivid description of approach in conducting educational need assessment based on discrepancy model. Borich employed survey methodology that enable subjects to provide data that can be weighted and ranked in priority order. According to Borich (1980) need assessment model is a self-evaluation procedure which depends on teachers judgement about their own performances. The model is predicated on the assumption that the performer (teacher) is the best judge of his own performance and he is always an objective judge when asked to do so.

III. METHODOLOGY

This study is an ex-post facto research deploying descriptive survey method. The population of the study comprised 375 Fishery teachers in Delta State public senior secondary schools (Delta State Ministry of Education Asaba 2020). The study employed multi staged sampling procedure as shown in Table 1 to constitute a total of 196 Fishery teachers representing 52 percent of the population. The instrument for data collection was structured questionnaire constructed on Likert – type 5-point scale, validated by experts in Agricultural Education and measurement and evaluation in Delta State University Abraka. The reliability and internal consistency were determined with split half and Pearson Product Moment correlation coefficient and a coefficient of 0.76 was obtained and this was considered reliable for the study.

The data collection instrument was administered with the assistance of 3 research assistants and the statistical instruments adopted for data analysis were mean, standard deviation for answering the research questions and t-test statistics for testing the hypotheses.

Table 1 Sampling procedure for the study

Senatorial District	No of LGA	Proportion of LGA Sampled	No of Secondary School sampled	Population of Fishery teachers
Delta North	8	5	27	63
Delta Central	5	5	27	63
Delta South	7	6	30	70
Total	25	16	84	196

Table 2: Mean Responses of Fishery Teachers in Delta State Public Secondary Schools on Skill Gaps in the Implementation of Fishery as a Trade Subject

Items	Mean	SD	Remark
Rate the following skills in Fishery according to how much you agree or disagree with them as skills gaps in your implementation of the trade subject			
1. Operating cast net	2.77	2.67	7.11 Disagree
2. Operating a seine net		1.16	Disagree
3. Operating a gill net		2.68	1.21 Disagree

4.	Operating a hook and line		3.52	1.43	Agree
5.	Identification of culturable species	3.46	1.34		Agree
6.	Earth pond construction	3.49	1.24		Agree
7.	Construction of concrete ponds	3.62	1.54		Agree
8.	Making of fish cage		3.12	1.46	Agree
9.	Construction of fish pen	2.93	1.26		Disagree
10.	Measurement of dissolved oxygen	2.49	1.26		Disagree
11.	Measurement of dissolved oxygen				
	Using wrinklers kit	2.31	1.41		Disagree
12.	Measurement of dissolved oxygen				
	Using Hach's kit	2.42	1.31		Disagree
13.	Measurement of water temperature	2.71	1.31		Disagree
14.	Measurement of pond turbidity	2.48	1.21		Disagree
15.	Measuring pond pH		2.78	1.12	Disagree
16.	Pond fertilization		3.24	1.51	Agree
17.	Liming of pond	3.12	1.23		Agree
18.	Stocking of fish pond	3.79	1.29		Agree
19.	Formulation of fish feed	3.22	1.22		Agree
20.	Identification of male brood shock		3.50	1.62	Agree
21.	Hypophysation (Injecting fish with hormone)		3.51	1.31	Agree
22.	Sacrificing the male		3.00	1.41	Agree
23.	Extracting the milt		2.94	1.41	Disagree
24.	Stripping the female	3.01	1.24		Agree
25.	Artificial spawning		3.11	1.21	Agree
26.	Feeding the hatchlings	3.41	1.23		Agree
27.	Managing the hatchlings water	3.24	1.61		Agree
28.	Identification of jumpers/shooters		3.52	1.13	Agree
29.	Feeding the yolk sacfrys	2.98	1.51		Disagree
30.	Managing the yolk sacfrys pond water	2.99	1.61		Disagree
31.	Managing the grow out fry pond water	2.83	1.31		Disagree
32.	Feeding of the grow out fry	3.02	1.12		Agree
33.	Pond water management for grow out fry		3.02	1.11	Agree
34.	Identification of animal pests of fish	3.42	1.13		Agree
35.	Identification of insect pests of fish	3.62	1.41		Agree
36.	Identification of crustacean pests of fish	2.81	1.20		Disagree
37.	Identification of amphibian pests of fish	3.06	1.41		Agree
38.	Physical control methods of pests of fish	3.19	1.34		Agree
39.	Biological control methods of pests of fish	3.29	1.61		Agree
40.	Chemical control of pests of fish	3.18	1.41		Agree
41.	Identification of fungal pests of fish	2.89	1.43		Disagree
42.	Identification of bacterial disease of fish	2.92	1.61		Disagree
43.	Identification of viral disease of fish	2.78	1.12		Disagree
44.	Carrying out partial cropping of pond	3.42	1.11		Agree
45.	Carrying out total cropping of pond	3.42	1.13		Agree
46.	Preservation of fish by smoking	4.08	1.24		Agree
47.	Preservation of fish by freezing and chilling		4.33	1.56	Agree
48.	Preservation of fish by salting	3.92	1.31		Agree
49.	Preservation of fish by fermentation	3.27	1.57		Agree
50.	Preservation of fish by drying	4.18	1.34		Agree
	Grand mean	3.70			
	Grand SD		1.43		

Fishery teachers rated 50 skills on a 5-point scale according to how much they considered themselves as having skill gaps in implementing of Fishery trade subject in schools. The mean scores ranged from 2.31 to 4.18 with standard deviations of 1.41 and 1.38 respectively. The top most rated skills were fish preservation by chilling and freezing with a mean score of 4.33. fish preservation by drying 4.18 and preservation by smoking 4.08. Other skills with high mean rating are fish preservation by salting 3.92, qualities of culturable species 3.68, construction of concrete pond 3.62, culture systems 3.62, operating

hook and line 3.52. The low rated items were operating cast net with a mean of 2.67, operating seine net attracted a mean of 2.77, operating gillnet, 2.68, measurement of dissolved oxygen 2.49, construction of fish pen, 2.93, Wrinkler method of "DO" measurement of 2.31, Hatch's kit measurement of "DO" 2.42, measurement of pond temperature, 2.78, pond turbidity measurement 2.48, identification of crustaceans pests, 2.87 while the identification of fungal, bacterial and viral diseases garnered means of, 2.89, 2.78 and 2.93 respectively.

The grand mean is 3.70 with a grand deviation of 1.43. The items with low mean rating are where skill gaps exist.

Table 3: The mean responses of Fishery teachers on the areas training is needed (n=196)

SN	Items	Mean	SD	Remark
	To what extent do you agree or disagree to the following items as your expressed training need			
1.	Methods of Fishery	3.48	1.13	Agree
2.	Equipment for artisanal fishery	3.13	1.34	Agree
3.	Industrial fishing equipment	2.57	1.23	Disagree
4.	Culturable species of fish identification	3.21	1.26	Agree
5.	Qualities of culturable species	3.66	1.22	Agree
6.	Earth pond construction	3.27	1.41	Agree
7.	Cage culture procedure	2.88	1.14	Disagree
8.	Pen fish farming	2.78	1.60	Disagree
9.	Culture systems	3.62	1.13	Agree
10.	Turbidity assessment	2.62	1.13	Agree
11.	Dissolved oxygen determination	2.59	1.71	Disagree
12.	Measurement of "DO" with Wrinkler Analytical methods	2.18	1.41	Disagree
13.	Measurement of "DO" with Hatch's Kit	2.01	1.12	Disagree
14.	Pond liming procedures	3.42	1.61	Agree
15.	Pond fertilization procedures	3.35	1.14	Agree
16.	Fish stocking process	3.50	1.31	Agree
17.	Ration formulation	3.42	1.21	Agree
18.	Brood stock selection	3.14	1.21	Agree
19.	Hypophysation	2.88	1.14	Disagree
20.	Stripping procedure	3.18	1.11	Agree
21.	Hatchlings management	2.48	1.17	Disagree
22.	Yolk sac fry management	2.41	1.10	Disagree
23.	Management of grow out fry	2.71	1.12	Disagree
24.	Fish pest control	3.08	1.20	Agree
25.	Management of fish health	3.45	1.46	Agree
26.	Cropping gear operation	2.88	1.14	Disagree
27.	Cropping methods	3.06	1.21	Agree
28.	Methods of fish preservation	3.49	1.12	Agree
	Grand mean	2.96		
	Grand SD	1.28		

Fishery teachers rated 28 items on specific areas where training is needed for the implementation of senior secondary school trade curriculum in Fishery. The mean rating ranged from 2.01 to 3.66. The items with highest rating are qualities of culturable species which has a mean rating of 3.66, culture systems 3.62, fish stocking process has a mean of 3.50, methods of fish preservation 3.49, management of fish health 3.45. The items with least rating are measurement of dissolved oxygen which has a mean rating of 2.01, yolk sac fry management 2.41, hatchlings management 2.48, hypophysation 2.88, cropping gear operation 2.88, Wrinkler analytical methods industrial fishing equipment handling have means of 2.18 and 2.57 respectively. The grand mean of all the items is 2.96 while the grand standard deviation is 1.26. The skills with a high mean rating are the skills where the teachers need training.

Table 4: Response of Fishery teachers on the preferred mode of training for improved skills and knowledge for the implementation of SSSTC in Delta State (n = 196).

S/N	ITEMS	MEAN	SD	REMARK
	To what extent do you agree or disagree with these training mode for your skills and knowledge improvement			
1.	On-the job training	4.32	1.06	Agree
2.	In-service training	4.22	0.72	Agree
3.	Workshops	4.21	0.82	Agree
4.	Seminar	3.98	0.53	Agree
5.	Conferences	3.77	0.81	Agree
6.	Distance learning	2.65	1.33	Disagree
	Grand mean	3.85	0.87	

Fishery teachers rated six items on five points Likertscale on the preferred mode of training for skills and knowledge improvement for the implementation of SSSTC in Delta State. The mode that were highly rated include on job training with a mean of 4.32, in-service training 4.22, workshops 4.21, seminar and conferences attracted means of 3.98 and 3.77 respectively. The only mode of training that has low score rating is distance learning (ICT) with a mean of 2.65.

Hypothesis 1

There is no significant difference in the skills and knowledge gaps expressed by rural and urban Fishery teachers in Public Secondary Schools in Delta State

Table 5: t-test statistics of the responses on the skills and knowledge gaps expressed by the rural and urban Fishery teachers in Delta State.

Mean	SD	n	df	t-call	t-crit	p	Significance	Remark
Rural	3.97±1.212	96	94	5.82	7.41	0.05	Not Significant	Accept
Urban	3.88±1.44							

The mean differences on the knowledge gaps expressed by the Fishery teachers in rural and urban public secondary schools at n=96 df 94 p> 0.05 level of significance resulted in t-test calculated at 5.42 and t-test crit of 7.41 thus accepting Ho and rejecting Ha. There is no significant difference in the mean responses of rural and urban Fishery teachers on expressed skills and knowledgegaps for the implementation of Fishery trade curriculum in Delta State.

Hypothesis 2

There is no significant difference in expressed training needs between rural and urban Fishery teachers in Delta State public secondary schools.

Table 6: t-test statistics on the mean responses of Fishery teachers on expressed training needs between rural and urban Fishery teachers in public secondary schools in Delta State

Location	Mean±SD	n	df	t-cal	t-crit	p	Significance	Remark
Rural	2.91±1.226	196	194	5.06	7.22	0.05	Not significant	accepted
Urban	2.98±1.42							

The t-test statistics on the mean differences of rural and urban teachers on expressed training needs at n=196 df 194, p>0.05 level of significance. The calculated t is 5.06 while t-crit is 7.22 thus accepting Ho that there is no significant difference in the training needs expressed by the rural and urban Fishery teachers in public secondary schools in Delta State.

Hypothesis 3

There is no significant difference in the mean rating of preferred training modes between rural and Urban Fishery teachers in Delta State public secondary schools.

Table 7: t test statistics on the mean responses on the preferred training mode between rural and urban feature teachers in public secondary schools in Delta State

Location	Mean±SD	n	df	t-cal	t-crit	Significance	Remark
Rural	3.82±0.61	196	194	5.32	6.12	Not significant	accepted
Urban	3.78±0.72						

The t test statistics on mean difference on the responses on the preferred training modes between rural and urban Fishery teachers in public secondary schools in Delta State at n = 196 df 194, p>0.05 level of significance. The t calculated value is 5.32 while t-test crit is 6.12 thus accepting Ho, and rejecting Ha. There is no significance on the preferred training modes for skills and knowledge improvement between rural and urban Fishery teachers in public secondary schools in Delta State.

IV. DISCUSSION OF FINDINGS

The study revealed that fishery teacher in Delta State public secondary schools possess knowledge and skills for instruction delivery in Fishery in so many areas, however, there are skills and knowledge gaps in some vital areas. The areas with skills and knowledge deficiencies as shown in Table 2 are operating cast net, operating seine net, gill net operation, measurement of dissolved oxygen with Wrinklermethods, measuring dissolved oxygen with Hatchskit, pond temperature measurement, measurement of pond turbidity, identification of crustacean, identification of fungal bacterial and viral diseases of fish. This result is in tandem with the concerns expressed by Adumgbo (2018). Adeyemi (2018), Osakwe (2020) that the trade curriculum in Fishery may be faced with the pitfalls that bedeviled Nigeria 6-3-3-4 system of education because manpower audit, recruitment and training were not carried out before the commencement of the implementation.

The result also revealed where training is needed by the teachers for effective implementation of the SSSTC. The Fishery skills and knowledge where teachers require training as shown in Table 3 are methods of capture fishery, equipment for artisanal fishery operation, culturable species identification, qualities of culturable species, pond liming procedures, pond fertilization, ration formulation, broodstock selection, stripping of the gravid female, pests control and fish health management. This result is similar to the reports of Twer (2019) who reported teachers poor knowledge and skills and areas where teachers need training for Fishery trade curriculum in Benue State. It is also in agreement with the findings of Bello and Sagir (2020) who equally reported teachers deficient skills and knowledge and training needs of

teachers for trade curriculum implementation in Fishery in public secondary schools in Sokoto State, Nigeria.

The result of the study equally showed that teachers preferred very many skills and knowledge training modes to bridge their skills and knowledge gaps. Almost all the training modes were highly rated as shown in Table 4. These were on the job training, workshops, in-service training, seminar and conferences. They were however averse to distant learning through ICT as this mode was rated low. This result is in consonance with the reports of Ajanaku&Olayinka, (2019) who reported that Fishery teachers in Ogun State Public Secondary Schools are prepared for skills improvement in Fishery instruction through seminars, workshops and conferences. Also, revealed by the study is that there are no differences in the skills and knowledge gap between rural and urban teachers, there are no differences in the skills and knowledge training need of both rural and urban teachers and that both rural and urban teachers preferred similar training modes.

V. CONCLUSION

Trade curriculum is designed to equip the recipients with skills to enable them make living, to eradicate poverty and hunger and create wealth as enshrined in sustainable development goals 1 and 2. The findings of this study have revealed that skills and knowledge gaps exist among the teachers; it also showed the skills and knowledge areas in Fishery trade subject where training is required and the preferred mode of training by the teachers. It is pertinent that these issues are addressed for proper implementation of the laudable SSTC so as to achieve its mandate of youths empowerment, wealth creation, poverty and hunger eradication in Nigeria.

VI. RECOMMENDATIONS

Consequent upon the result of this investigation, the study recommends as follows:

1. Delta state government should henceforth recruit teachers with relevant expertise to teach Fishery trade subjects.
2. The existing teachers should be given the necessary skills and knowledge improvement through in-service training, workshops, seminars and conferences.

REFERENCES

1. Abimbola C.T. (2005 June 6) Rural urban migrational problem in Nigeria, 1980s where are the industries? Vanguard News pp 46-economy
2. Abimbola N.N. (2012 8 January) Vocational and technical education: an antidote to Nigeria unemployment problem. Guardian News pp 49-Education.
3. Abudu N.C. (2018 15 February) Nigeria trade curricular where are the equipment, where are the manpower. Guardian News pp 40 – Education
4. Abudul S.N. (2018) 4 December) Fish importation and local production. Vanguard News pp. 46-Economy.
5. Adamu B.Q. (2014) rural-urban migration in Nigeria and the cities infrastructures. <https://nigeriaruralurbanmigration.com>
6. Adekunle A.A. (2016) Nigeria economy of the 1970s. <https://www.nigeriaeconomy.com> Retrive October 2020
7. Adeotu, S. S. (2020). An assessment of trade curriculum implementation in Ogun State public secondary schools. *Journal of Technical Education Association* 7(3), 102-109.
8. Adesina A. (2014) Nigeria fish demand and production. A ministerial briefing Federal Ministry of Agriculture. Abuja – Nigeria.
9. Adumgbo A.U. (2018). The Pitfalls of the Nigeria trade curricular. <https://www.tradecurricular.pitfall.co.uk>
10. Afamako S.A. (2012 6 May) Nigeria youths unemployment with vocational and technical education and training. Vanguard News pp 43-Education
11. Amaju P.C.A (2018) The value of African tilapia (*Tilapia zilli*) *Journal of Marine Science and Aquaculture* 32 (4) 202-209

12. Asugo, S. C. (2019 7 August). Youths empowerment and trade curriculum in Nigeria. *Punch News* pp. 38 – Education.
13. Audu O. (2016). Nigeria animal fish demand and production capacity.A ministerial press briefing.Federal Ministry of Agriculture Abuja Nigeria.
14. Ayesa, T. O. (2019). Regiging trade curriculum for youths employment in Ondo state Nigeria. *Journal of Vocational and Technical Education* 23(4), 207-213.
15. Bello, J. N. &Saqir, P. C. (2020).Trade curriculum adoption and implementation in Sokoto State.*FutminaJournal of Science and Education* 6(3), 91-96.
16. Buba, M. C. (2020). Trade curriculum and United Nations sustainable development goals: No poverty, zero hunger.<https://www.tradecurruculumandsustainabledevelopment.com>.
17. Dangyiwa S.N. (2004 6 May) The rural urban movement in Nigeria and petro-dollars *Punch News* pp. 45-economy
18. Detiku P.C. (2016) Nigeria lost glory: agriculture <https://www.nigerialostglory.com>
19. Diallo C.B. (2017) Effects of Organocuture in the population of fish and other aquatics organization in Areal River Iran. *Journal of Toxicology and Pollution* 62 (5) 301-308
20. Doherty, A. A. (2019, 6 May). Trade curriculum and youths employment in Nigeria.*Vanguard News* pp. 42 – Education
21. Food and Agriculture Organization (FAO) (2018) Nigeria fish impartation FAO Publication Rome Italy.
22. Gana, C. N. (2019). An evaluation of the trade curriculum adoption and in implementation in north central Nigeria.*African Journal of Curriculum Studies* 20(5), 142-148.
23. Gbadebo, G. A. (2019). Trend in Nigeria education curriculum: a critique of senior secondary trade curriculum in fishery. *Journal of Curriculum Studies* 16(4), 91-96.
24. Giwer C.S. (2004) Nigeria economy in down turn, agriculture to rescuer. <https://www.nigeriaeconomyindownturn.com>
25. Hosfall P.A. (2012) Oil wealth: a cure or blessing to Nigeria. <https://www.oilwealthcurseorblessing.com>-RetrievedOctober2020
26. Idiage M.O (2015). The weaklink in Nigeria economy. <https://nigeriaeconomyweaklink.com>
27. Igoni C.B. (2013) 6 April) the problems with oil economy.*Punch News* pp 43-Economy.
28. Ikechi S.C. (2013) Vocational and technical education in Nigeria: a recipe for youth unemployment. *Journal of Technical and Vocational Education* 16(3), 91-98
29. International Labour Organization (ILO) (2019) Nigeria unemployment rate.An ILO publication. Geneva Switzerland
30. International Monetary Fund (IMF) (2019) Un-employment in Nigeria.IMF Publication Washington DC USA.
31. Izangbo A.N. (2007) Nigeria rural urban drift and the economic recession <https://www.nigeriaeconomicrecession.com>
32. Ketubu T.N. (2016 7 August) The error of commission in Nigeria economy. *Guardian News* pp 48-economy
33. Kojo A.C. (2011) Nigeria should rejig the education curricular. <https://www.nigeria.education.rejig.com>
34. Lawansen, S.O. (2016) Where Nigeria got it wrong in our economy. <https://www.wherenigeriagotitwrong.com>
35. Mfonobong, D. (2020). Delta State: List of Local Government Areas & Towns. Retrieved 10/11/2020 from <https://nigerianinfopedia.com.ng/delta-state-local-government-areas-towns/>
36. Miabiaku C.N. (2003) Where are the cocoa groundnut pyramids and palm oil of the Nigeria boom era? <https://www.agriculture.nigeria>uk.co>RetrievedSeptember2020
37. Mofor D.N. (2017 6 March) Nigeria oil crisis: Host communities and others. *Guardian News* pp. 50 Economy.
38. Mombo N.A. (2019) The problems with Nigeria economy. <https://www.nigeriaeconomyproblem.com>
39. National Bureau of Statistics (NB) (2020) Unemployment in Nigeria.An NBS release.Abuja Nigeria.
40. Nigeria Educational Research and Development Council (NERDC) (2013) Nigeria Trade Curricular in Senior Secondary Schools.NERDC Publication Abuja Nigeria.
41. Nwafor J.C. (2015) Nigeria economy of the 70s. <https://www.nigeriaeconomy.com>
42. Nwankwo J.N. (2018 7 July) the problems with Nigeria as import dependence.*Vanguard News* pp 48-Economy.
43. Oboyano S.T. (2017) Proximate analysis of Africa cat fish (*clariasganepnus*) of *Asian Journal of Food Science* 41(5) 126-71

44. Odeinde D.U. (2016) Nigeria youths rural urban drift and the crisis in cities. <https://www.nigeriarural-urban-drift-crisis-cities.com>
45. Ojoye S.N. (2016 4 October) Agriculture and Nigeria economy. Punch News pp 41
Agriculture
46. Okpe S.A.P (2017) Trade curricular and Nigeria youth empowerment. *Journal of Curriculum Studies* 14 (3) 92-97
47. Osugaro M.A. (2015 8 November) Oil the bane of Nigeria economy. Vanguard News pp 40
– Economy
48. Pelumi O.O. (2018) Manpower the bane of Nigeria new trade curriculum. <https://www.manpowre.tradecurricular.bane.com>
49. Saliu B.N. (2012) Technical and vocational training and education in Nigeria secondary schools. <https://www.tretinigeria.school.com> Retrieved October 2020.
50. Samara O.A. (2018) Fish lendings in Kainjilattle and rural economy. *African Journal of Economics* 25 (3) 132-138
51. Simeon Z.N. (2018) The nutrient components of Africa head (*chana obscura*) *Asian Journal of Aquaculture* 50(5) 203-209
52. Somade C.A. (2015) Fish and the rural economy of the Southern Ijanus. *Journal of Social Science* 18 (3) 142-149.
53. Suraju A.A. (2017 8 July) Revamping the agricultural sector in Nigeria <https://revampingagricultureinNigeria.com> Retrieved September 2020.
54. Ugolo J.C. (2017) Importation and youths unemployment in Nigeria <https://www.importation.unemployment.com>
55. United States Agency for Information Development (USAID) (2016) Fish. In Nigeria. USAID Publication Paris France.
56. Usman J.T. (2013 6 November) Vocational and technical education in Nigeria and youths unemployment. Punch News pp. 40-Education