

Quality Entrepreneurship in Poultry Farming: The Need for Skills Acquisition among Youths in Rivers State, Nigeria

Owo, Offia Tugwell

Department of Vocational and Technology Education,
Rivers State University, Port Harcourt, Nigeria.
tugwellowo@yahoo.com, +2347035477126

Abstract

The study was conducted to ascertain the relationship between quality entrepreneurship in poultry farming and the need for skills acquisition among youths in Rivers State, Nigeria. Descriptive survey design was used in the study whose population consisted of 1200 unemployed youths from Andoni and Khana local governments areas of Rivers State. Accidental sampling technique was used to obtain a sample of 420 youths from the population. Three research questions were posed to guide the study. The instrument used for data collection was a 30-item questionnaire which was face-validated by two experts in agricultural education and entrepreneurship studies. The reliability of the instrument was established via Cronbach's Alpha method having yielded a reliability coefficient of 0.88. A total of 388 questionnaires were successfully retrieved and used for data analysis from the 420 distributed. Mean and standard deviation were used to analyze the research questions. The findings revealed among others that poultry farmers need interpersonal, problem solving, creative thinking, and effective communication skills among others to start, progress and succeed in poultry farm business. Consequently, it was recommended among others that unemployed youths in Rivers State should be encouraged to acquire entrepreneurship and vocational skills to succeed in poultry farm business.

Keywords: *Entrepreneurship skills, poultry farming, youths, unemployment.*

Introduction

One major challenge prevalent among youths in Nigeria is unemployment. Ekong and Ekong (2016) report that unemployment is one of the developmental problems that face every developing economy including Nigeria in this contemporary age. As earlier pointed out, the devastating effects of unemployment are more on the youths than any other human class. Youths are special people with excellent innovative skills crucial for the achievement of societal development (Owo, 2018). The youths in the words of Okwelle and Ayonmike (2014) form a formidable force for the achievement of meaningful development in any society. Furthermore, Akande (2011) describes youth as an age of adventure; a bridge between adolescence and adulthood. In Rivers State, Nigeria, many youths who are very active and willing to contribute their quota to the economic and political development of the state and the country at large could not do so due to poverty occasioned by unemployment. The issue of unemployment (which is closely linked with poverty) among Nigerian youths gives much concern to governments at all levels as well as the citizens of Nigeria because of the negative effects it poses on the socio-economic development of the nation. Presently, some youths in Rivers State and other parts of Nigeria channel their active energy negatively by venturing into criminal acts such as armed-robbery, prostitution, rape, human-trafficking, kidnapping, cultism, smoking among other vices in an attempt to overcome unemployment. The issue of unemployment is one that can be effectively tackled and subdued if the youths are willing to embrace skills acquisition in vocational careers and entrepreneurship.

According to Nwaobiala and Nzeakor (2016), the problem of lack of job among Nigerian youths can be addressed through quality entrepreneurship development.

Entrepreneurship as defined by Ogedi and Ukandu (2016) is the act of identifying, developing and employing new ideas aimed at creating new innovations for wealth-making. Entrepreneurship as defined by Monday (2012) is any dynamic prospect of creating incremental wealth. Similarly, Kaburi, Mobegi, Kombo, Omari and Sewe (2012) posit that the concept of entrepreneurship is a very crucial one as it leads to accelerated economic growth both in developed and developing economies through capital formation and wealth creation. Entrepreneurship could be seen as an attempt to create value through the recognition of business opportunity, effective management and risk-taking appropriate to the opportunity through the utilization of effective communication and management skills to mobilize human, financial and material resources necessary to bring a project to function (Tyolumun & Umogbai, 2008). According to Okwelle and Owo (2018), entrepreneurship entails the creation of something that can add value to the quality of life of the people as well as wealth creation for the economic development of the nation via innovation and creativity. Furthermore, David (2013) posits that entrepreneurship entails the acquisition of managerial skills needed to successfully start and run a profitable farm business such as poultry farming. David further stressed that these managerial skills development is possible through education and training. Thus, an entrepreneurial poultry farmer basically needs to possess an entrepreneurship mindset. His ability and willingness to take informed risks and quality business decision are key to effective management of resources for optimal productivity and profit maximization. Therefore, it becomes imperative for prospective poultry farmer-entrepreneurs to be technically sound, resourceful and result-oriented as well as being extremely creative to achieve success in poultry business. These entrepreneurship traits are developed through skill training.

Skills can be described as special talents and abilities developed by an individual to execute tasks in a uniquely more impressive manner which are acquired through quality education, training and experience. Skills refer to human capacities to perform any activity with agility and competence (Okorie, 2000). In the same vein, Samuel (2017) opines that skill entails any special capabilities in a given occupation developed through learning and practice. Furthermore, Ogbuanya and Bakari (2014), posit that skill refers to individual's capacity to control element of behavior, thinking and feeling within specified contexts and within a particular task domain in order to excellently execute tasks. Hence, acquiring skills in vocational agriculture and entrepreneurship education for proficiency in any agribusinesses is key to achieving success in such vocational careers. According to Goni, Usman, Jahiya and Barma (2013), acquiring Agricultural skills and knowledge is crucial for realizing agricultural innovation and commercialization in Nigeria. Adequate skill training of youths can guarantee success in any agribusinesses of choice such as poultry farming.

Poultry according to Baliyan and Marumo (2016) entails a broad variety of domestic birds including chickens, ducks, geese, turkeys, guinea fowls, and ostriches. Poultry production include egg and broiler production which generally contributes to economic gains (Ezeibe, 2010). Poultry production presently occupies a place of pride among livestock businesses due to its rapid monetary income. According to Ezeibe, Okorji, Chah and Abudei (2014), poultry production has become an important aspect of the Nigerian Agriculture due to its dual purposes of supplying the populace with meat and egg as well as serving as a valid means of earning regular income. Poultry meat and egg offer considerable potentials for meeting human and societal needs for dietary animal supply (Folorunsho & Onibi, 2005). Previously,

poultry production was not counted as an important occupation in Nigeria due to ignorance. However, presently, the situation has changed as people begin to have awareness of the lucrative nature of poultry business. Benerjel (2005) submits that poultry keeping is a lucrative business venture which requires little capital to start. Seeing the monetary benefits accruing from poultry farming, poultry is now seen as an attractive enterprise and popular among small, medium as well as large scale poultry farmers. Poultry farming is a fast growing animal production that is very cheap and attracts both the employed and unemployed Nigerians due to the huge return on investment involved (Arowolo, Ogunrombi, Akpantaku, & Adeogun, 2017). According to Oluyemi and Roberts in (Diabuah & Oyana, 2017), the poultry industry has become so broad with a variety of business interests among which are egg production, broiler production, hatchery and poultry equipment supply. Ezeibe (2010) posits that poultry production is a very important arm of the livestock sector as poultry has high feed conservation rate, high fecundity and highly contributes to the economic development of Nigeria. The development of the poultry industry has also been described as the fastest means of bridging the protein deficiency gap prevailing in most of the developing countries. Quality poultry farming therefore hinges on the acquisition of requisite vocational, management and entrepreneurship skills. Nwaobiala, Nnamdi, and Ekumankama (2018) postulate that improved performance in poultry production is anchored on quality skills acquisition by farmers. Similarly, Coombs (2003) states that effective skill training increases productivity in any business or career choices. Quality skills acquisition in poultry farming lead to increased productivity (Nwaobiala, Ndukwe & Ekumankama, 2016). Thus, with adequate entrepreneurship development obtainable via education and training, the Nigerian youths especially those residing in the rural areas can do excellently in poultry farming thereby securing their future through sustainable revenue generation. This proves to be a sure way out from the menace of increased criminality in the Nigerian society caused by poverty and unemployment.

Statement of the Problem

Every business requires some specific skills for it to function effectively. Poultry farming as a vocational career requires certain vocational and entrepreneurship management skills from the farmers. In Nigeria, most of the youths who wish to engage in poultry production business lack requisite knowledge and skills to start and succeed in the business. Consequently, they remain unemployed and suffer in abject poverty. According to Ekezie (2019), an average Nigerian youth is very active and willing to contribute to the economic and political development of the nation but unemployment and poverty become the obstacles to this noble dream. The unemployment rate in Nigeria is increasing geometrically as fresh graduates are being churned out of the universities yearly which further add to the number of the unemployed people. According to National Population Commission (NPC) (2007), about 80 percent of Nigerian youths are unemployed. Similarly, Owo (2017) posits that youth unemployment in Nigeria gives rise to several societal ills among which are hooliganism, thuggery, rape, ritual, armed robbery, prostitution, kidnapping, cultism and serial killing. The Federal Government of Nigeria in an attempt to stimulate and create jobs for the rural youths as well as ensuring their sustainable development, had previously set up numerous developmental projects in the rural areas for the youths to enable them acquire relevant entrepreneurship and vocational skills for sustainable development (Nwaobiala, *et al*, 2018). In the same vein, the National Directorate of Employment (NDE) (2012) reports that one of its major goals is to encourage youths to explore numerous agricultural opportunities such as poultry production for wealth creation and employment generation. Adesope, Agumagu and Nwankwo (2007), report that youths need adequate mobilization through skill training to successfully start and manage their own businesses in order to achieve sustainable

development. Uloko and Ejinkonye (2010) posit that when youths are empowered through the acquisition of entrepreneurial skills, they may likely use the acquired skills for wealth creation through self-employment. Empowering the youth to set up their own businesses involves proper acquisition of skills through education and training. The threat of poor skills acquisition by prospective entrepreneurs in any vocational areas informed the researcher's quest to conduct this study titled "Quality Entrepreneurship in Poultry Farming: The Need for Skills Acquisition among Youths in Rivers State, Nigeria".

Purpose of the Study

The study sought to ascertain the skills required of youths for quality entrepreneurship in poultry farming in Rivers State, Nigeria. Specifically, the study was conducted to:

1. Determine the entrepreneurship skills required of youths for quality entrepreneurship in poultry farming in Rivers State, Nigeria.
2. Determine the entrepreneurship challenges of poultry farming in Rivers State, Nigeria.
3. Determine the possible remedies to the challenges of poultry farming in Rivers State, Nigeria.

Based on these specific objectives of the study, the following three research questions were posed by the researcher to guide the study:

1. What are the entrepreneurship skills required of youths for quality entrepreneurship in poultry farming in Rivers State, Nigeria?
2. What are the entrepreneurship challenges of poultry farming in Rivers State, Nigeria?
3. What are the possible remedies to the challenges of poultry farming in Rivers State, Nigeria?

Methods and Materials

The study adopted descriptive survey design. A population of 1200 unemployed youths from Andoni and Khana local government's areas of Rivers State was used for the study. Accidental sampling technique was adopted to obtain a sample of 420 youths selected from 12 communities which are Ngo, Agwut-Obolo, Ataba, Unyeada, Asarama, Ekede, Ebukuma, Bori, Kaa, Wiyakara, Zaapkon and Boue respectively. Three research questions guided the study. The instrument for data collection was the researcher's self-constructed 30-item questionnaire titled "Entrepreneurship Skills Required for Poultry Farming Questionnaire (ESRPFQ)". ESRPFQ was constructed on a 5-point Likert Scale of Strongly Agree (SA), Agree (A), Undecided (U), Disagree (DA) and Strongly Disagree (SD) which have numerical values of 5, 4, 3, 2 and 1 respectively. The instrument was face validated by two experts in Agricultural education and entrepreneurship studies from the Universities of Uyo and Port Harcourt, Nigeria, respectively. The reliability of the instrument was ascertained through pilot testing using 38 unemployed youths randomly selected from 4 communities in Andoni and Khana local government areas of Rivers State, Nigeria who were not part of the study sample. A reliability coefficient of 0.88 was obtained which proves the internal consistency of the instrument via Cronbach's Alpha method. Out of the 420 questionnaires distributed to the respondents by the researcher and two other research assistants, a total of 388 questionnaires representing 92.4 % of the total number of questionnaires distributed were successfully retrieved and used for data analysis. Mean and standard deviation were descriptive statistical tools used to analyze the research questions. Decision on whether to accept or reject any item on the questionnaire was based on the criterion Mean value of 3.00. Any item whose Mean value is greater than or equal to 3.00 was accepted while all items below the criterion mean of 3.00 was rejected.

Result

The findings of the study were presented in accordance with the research questions as follows:

Research Question 1: What are the entrepreneurship skills required of youths for quality entrepreneurship in poultry farming in Rivers State, Nigeria?

Table 1: Entrepreneurship Skills required of Youths for Successful Poultry Farming in Rivers State, Nigeria.

S/N	Item	Mean	SD	Decision
1.	The youths require problem-solving skills for successful poultry farming in Rivers State, Nigeria.	4.13	0.88	Agree
2.	The youths need to be ambitious for successful poultry farming in Rivers State, Nigeria.	3.13	0.92	Agree
3.	The youths need to be creative for successful poultry farming in Rivers State, Nigeria.	4.02	0.87	Agree
4.	The youths need to possess effective communication skills for successful poultry farming in Rivers State, Nigeria.	2.96	1.11	Disagree
5.	The youths need to be resourceful for successful poultry farming in Rivers State, Nigeria.	3.92	0.81	Agree
6.	The youths need to possess networking skills for successful poultry farming in Rivers State, Nigeria.	4.22	1.13	Agree
7.	The youths must be willing and always ready to learn and apply new skills for successful poultry farming in Rivers State, Nigeria.	3.98	0.78	Agree
8.	The youths must be willing to take informed risks for successful poultry farming in Rivers State, Nigeria.	3.18	0.97	Agree
9.	The youths need to acquire and develop interpersonal skills for successful poultry farming in Rivers State, Nigeria.	4.02	0.65	Agree
10.	The youths need to be flexible for successful poultry farming in Rivers State, Nigeria.	2.92	1.18	Disagree

Source: *Researcher's Field Survey, 2020.*

Table 1 revealed that the respondents are of the opinion that all the items in the table are entrepreneurship skills required by youths for successful poultry farming in Rivers State, Nigeria with exception of items 4 (2.96) and 10 (2.92) whose Mean values fell below the criterion mean of 3.00. Standard deviation values ranging from 0.65 to 1.18 indicated homogeneity in the responses of the respondents.

Research Question 2: What are the entrepreneurship challenges of poultry farming in Rivers State, Nigeria?

Table 2: Entrepreneurship Challenges of Poultry Farming in Rivers State, Nigeria

S/N	Item	Mean	SD	Decision
1.	Poor/lack of basic infrastructural facilities.	4.42	1.07	Agree

2.	Product marketing constraints.	4.36	0.98	Agree
3.	Inadequate professional support services.	3.94	0.81	Agree
4.	Poor access to fund and credit.	4.02	0.74	Agree
5.	Poor training facilities.	2.88	1.12	Disagree
6.	Poor accessibility to quality career information.	3.66	0.89	Agree
7.	Vulnerability to unfavourable economic policies.	2.92	0.77	Disagree
8.	Unfavourable environmental conditions.	4.48	1.06	Agree
9.	Poor supply of technical equipment needed for poultry farming.	3.76	0.82	Agree
10.	Poor professional development of poultry farmers.	4.22	0.93	Agree

Source: *Researcher's Field Survey, 2020.*

From Table 2, it was observed that all the items constitute common challenges of poultry farming in Rivers State, Nigeria. Thus, it was obvious that the respondents believe these are the issues in poultry farming as indicated in the Mean values of the items as all are above the criterion Mean value of 3.00 except items 5 (2.88) and 7 (2.92) whose mean values fell below the criterion mean of 3.00. Standard deviation values ranging from 0.74 to 1.12 show closeness in the responses of the respondents.

Research Question 3: What are the possible remedies to the challenges of poultry farming in Rivers State, Nigeria?

Table 3: Possible Remedies to the Challenges of Poultry Farming in Rivers State, Nigeria.

S/N	Item	Mean	SD	Decision
1.	Improved environmental conditions.	3.98	0.73	Agree
2.	Accessibility to quality entrepreneurship information.	4.06	0.92	Agree
3.	Easy access to funds and credit.	4.26	0.79	Agree
4.	Reduction of business exposure to risks.	3.92	1.11	Agree
5.	Adequate professional training in poultry production.	4.11	0.86	Agree
6.	Adequate provision of infrastructural facilities by Government.	3.98	1.21	Agree
7.	Availability of quality processing and storage facilities.	3.08	0.91	Agree
8.	Good supply of technical equipment and support services.	3.22	0.77	Agree
9.	Adequate provision of quality training facilities.	3.82	1.03	Agree
10.	Quality research and development in poultry production.	4.02	0.88	Agree

Source: *Researcher's Field Survey, 2020.*

Table 3 revealed that the respondents saw all the items as possible ways of overcoming the numerous challenges bewildering poultry farming in Rivers State, Nigeria. This was indicated by the mean values of all the items which are above the criterion mean of 3.00. Standard deviation values ranging from 0.73 to 1.21 reveal that there is homogeneity in the responses of the respondents.

Discussion

The finding of the study as shown in Table1 revealed that unemployed youths in Rivers State, Nigeria need interpersonal, problem solving, creative thinking, effective communication skills among others to start, progress and succeed in poultry farming. This finding agrees with Coombs (2003) who postulates that effective skill training and acquisition by potential farmers lead to increased productivity in any business such as poultry production. Similarly,

this finding corroborates the views of Nwaobiala, Ndukwe and Ekumankama (2016) who submit that quality entrepreneurship skills acquisition in poultry farming increases the productivity of farmers thereby yields more return on investment. In the same vein, the finding supports the views of David (2013) who stated that entrepreneurship entails the acquisition of managerial, marketing, and leadership skills needed to successfully start and run a profitable poultry farming business.

The finding of the study as shown in Table 2 revealed that inadequate basic infrastructures, marketing constraints, inadequate professional support, poor funding among others are some of the challenges of poultry farming in Rivers State, Nigeria. This finding is in line with the views of David (2013) who stated that poor access to fund and credit, poor training facilities, poor career information, unfavourable environmental conditions, lack of technical equipment and basic amenities among others are issues affecting poultry farm entrepreneurship across the globe.

The finding of the study as presented in Table 3 indicated that improved environmental conditions, accessibility to adequate fund and credit, adequate entrepreneurship training, availability of training facilities in universities, quality research in poultry production, adequate processing and storage facilities, quality professional support services among others are ways of proffering solutions to the numerous challenges of poultry farming in Rivers State, Nigeria. This finding agrees with Nwaobiala et al, (2018) who report that continuous professional training of farmers enhances their expertise which subsequently leads to increased productivity. Similarly, this finding is in agreement with David (2012) who posits that effective collaboration among poultry farmers, adequate funding, professional training, quality entrepreneurship information among others are ways of overcoming the challenges in poultry farming. Furthermore, this finding agrees with Nwaobiala, Nnamdi and Ekumankama (2018) who posit that one major way of improving poultry production in Nigeria is the provision of right information to farmers. Thus, for youths to become successful entrepreneurs in poultry farming, they need adequate entrepreneurship and vocational skills obtainable through quality agricultural and entrepreneurship education. Therefore, quality entrepreneurship in poultry farming is a sure way of creating employment for the jobless youths in order to ameliorate the negative effects of poverty and unemployment in Rivers State, Nigeria.

Conclusion

Entrepreneurship skills are needed to float and sustain poultry production business. Some of the skills required of youths for effective poultry farming are networking, creativity, resourcefulness, leadership, problem-solving abilities among others and as such, they need to develop these skills. Again, poultry farming like any other farm practices is not without challenges. Unfavourable environmental conditions, poor infrastructural facilities, poor funding, inadequate storage and processing facilities among others are key challenges of poultry farming in Nigeria. However, overcoming these challenges requires the government to provide adequate funding, strengthen institutional capacities for quality training and research, and supply quality training facilities to poultry farmers among others. Thus, the economic development of Nigeria depends on the ability of youths to focus more on ways of creating jobs for themselves to overcome the prevalent poverty and criminality in the nation occasioned by unemployment.

Recommendations

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

1. Unemployed youths in Rivers State should be encouraged to acquire entrepreneurship and agricultural skills to succeed in poultry farm business.
2. Government should support hardworking youths in Rivers State to enable them set up small and medium scale businesses for their self-employment.
3. Poultry farmers should be encouraged to seek professional guidance from Agricultural experts for increased productivity.
4. Oil and gas companies operating in Rivers State should try to improve the environmental conditions in their areas of operation to encourage poultry farming and other agricultural practices.

References

- Adesope, O. M., Agumagu, A. C. & Nwankwo, C. (2007). Importance of youths in community development perspectives for Agricultural extension. In Agumagu, A. C. et al (Eds). *Contemporary Issues in Agricultural Extension and Development Studies*, series 1. Port Harcourt: Molysfem United Services.
- Akande, T. T. (2011). Youth Empowerment and Technical and Vocational Education and Training (TVET) in Nigeria. *The Journal of Nigerian Association of Teachers of Technology*, 7(3), 63-68.
- Arowolo, O. O., Ogunrombi, A. A., Akpantaku, S. O. & Adeogun, S. O. (2017). Perception of farm succession planning by poultry farmers in southwestern Nigeria. *Journal of Agricultural Extension*, 21 (1), 83-98.
- Benerjel, G. C. (2005). *Animal Husbandry*. New Delhi: oxford and IBH Publishing PVt Ltd.
- Coombs, P. N. (2003). New path to learning for rural children and youths. *International Council of Education Research*, pp. 14-15.
- David, K. (2013). *Entrepreneurship in Faming*. Rome: Food and Agriculture Organization.
- Diabuah, S. C. & Victor, O. (2017). Entrepreneurial skill required by youths in poultry production for poverty eradication in Delta State. *Multidisciplinary Journal of Academic Excellence*, 17 (1), 1-9.
- Ekezie, A. I. A. (2019). Skills acquisition in snail farming: A panacea for entrepreneurship development of graduate youths in Rivers State, Nigeria. *Journal of Education and Practice*, 10 (33), 111-118.
- Ekong, U. M. & Ekong, C. U. (2016). Skills Acquisition and Unemployment Reduction in Nigeria: A Case Study of National Directorate of Employment (NDE) in Akwa Ibom State. *International Journal of Economics and Management Sciences*, 5 (4), 1-10.
- Ezeibe, A. B. C. (2010). Profitable analysis of pig production under intensive management system in Nsukka Local Government Area of Enugu State. *International Journal of Economic Development Research and Investment*, 1 (2), 16-24.
- Ezeibe, A. B. C., Okorji, E. E., Chah, J. M. & Abudei, R. N. (2014). Impact of entrepreneurship training on rural farmers' adoption of improved management practices in Enugu State, Nigeria. *African Journal of Agricultural Research*, 9 (20), 1604-1609.
- Folorunsho, O. R. & Onibi, G.E. (2005). Assessment of the Nutritional Quality of Eviscerated Waste from selected chicken types. In Onibi, G. E., Agele, S. O. and Adekunle, V. A. J. (eds). *Proceedings of the 1st Annual Conference on Developments in Agriculture and Biological Science*. School of Agriculture and Agricultural Technology, Federal University of Technology, Akure, Nigeria. 27th April, 2005. pp.300.
- Goni, M., Usman, S., Jahiya, M. M. & Barwa, E. (2013). Improving Nigerian's Agricultural productivity through human capacity building: A Review. *Proceedings of the 18th*

- Annual Conference of Agricultural Extension Society of Nigeria*. 5th- 9th May. pp. 89-95.
- Kaburi, S. N., Mobegi, V. O., Kombo, M. A., Omari, A., & Sewe, T. (2012). Entrepreneurship challenges in developing economies: A case of Kenyan Economy. *International Journal of Arts and Commerce*, 1 (4).
- Monday, O. (2012). Entrepreneurial development and interventionist agencies in Nigeria. *International Journal of Business and Social Science*, 3 (8).
- National Directorate of Employment (2012). Annual Report. *The Job Creator* 10 (1).
- National Population Commission (2007). Report of Nigeria's National Population Commission on 2006 Census. *Population and Development Review*, 33 (1), 206-210.
- Nwabiola, C. U., Ndukwe, I. & Ekumankama, O. O. (2016). Assessment of training needs of cocoa farmers in Bende Local Government Area of Abia State, South-East Nigeria. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Journal*, 16 (4), 239-245.
- Nwaobiola, C. U., Nnamdi, U. S. & Ekumankama, O. O. (2018). Performance analysis of National Directorate of Employment graduate poultry farmers in Imo State, Nigeria. *Nigerian Journal of Rural Sociology*, 18 (1), 15-21.
- Nwaobiola, C. U., Nzeakor, F. C. (2016). Effectiveness of Agricultural Students involvement in seed yam production technologies in Ishiagu Ivo Local Government Area of Ebonyi State, Nigeria. *International Journal of Biotechnology Agriculture and Environmental Technology Research*, 2 (2), 1-9.
- Ogbuanya, T. C. & Bakari, J. (2014). Mechatronic skills required for integration into electronic engineering technology programme in polytechnics for sustainable employment of graduates in contemporary Nigeria. *Nigeria Vocational Association*, 19 (1), 190-197.
- Ogedi, P. O. & Ukandu, C. U. (2016). Planning activities involving policy implementation on practical entrepreneurship education at basic education level towards industrial expansion and sustainability in Nigeria. *Proceedings of the 29th Annual Conference of the Nigerian Association of Teachers of Technology*, pp. 279 - 289.
- Okorie, J. U. (2000). Developing Nigeria's workforce. Calabar: Page Environs Publishers.
- Okwelle, P. C. & Ayonmike, C. S. (2014). Towards value re-orientation of youths on the role of technical vocational education and training (TVET) for sustainable development in Nigeria. *Journal of Education and Practice*, 5 (8), 186-191.
- Okwelle, P. C. & Owo, O. T. (2018). Skills Acquisition in Technical Vocational Education Training: Tool for Sustainable Entrepreneurship Development of Electrical/Electronic Students in Polytechnics, Rivers State. *Science and Industrial Technology Education Journal*, 5 (2), 73-83.
- Owo, O. T. (2018). Juvenile delinquency among Nigerian youths: Causes and remedies. *Ujama Obolo Magazine*, p.79.
- Owo, O. T. (2017). Perception of technical education undergraduate students on TVET achievement in sustainable youth empowerment in Rivers State. *Journal of Nigerian Association of Teachers of Technology*, 12 (1), 41-47.
- Samuel, O. E. (2017). Skills required by farmers in cocoa production for sustainable living and industrial development. *Journal of Nigerian Association of Teachers of Technology*, 12 (1), 157-164.
- Tyolumun, Z. J., & Umogbai, M. E. (2008). *Entrepreneurship Education: A new Millennium Concern*. In Denga, D. I. & Ekoja, A. A. (Eds.) Education for the new millennium. Calabar: Rapid Education Publishers Ltd.
- Uloko, M. C. & Ejinkonye, U. B. (2010). Entrepreneurial education and training for job creation. *Journal of Teacher Perspective*, pp.308-314.