

Assessment of Competencies and Professional Knowledge Needed by Foods and Nutrition Teachers for Effective Implementation of the Catering Craft Practice Curriculum in Secondary Schools in Delta State, Nigeria

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ARTICLE INFO	Abstract
<p>Keywords: <i>Competencies, professional knowledge, catering craft practice, Foods and Nutrition, curriculum implementation.</i></p> <p>©2026 Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International</p> 	<p><i>The effective implementation of the Catering Craft Practice curriculum has been challenged by inadequate teacher competencies and professional knowledge in secondary schools. Addressing these gaps is essential for improving skill-based learning outcomes in Foods and Nutrition education. The study was conducted in Delta State using a descriptive survey and ex-post facto design. The population comprised 322 Foods and Nutrition and Home Economics teachers, with the entire population studied. Data were collected using a structured questionnaire validated by experts and tested for reliability (0.835). A total of 298 responses were analyzed using SPSS. Mean, standard deviation, t-test, and ANOVA were employed, with 2.50 as the decision benchmark at 0.05 significance level. The findings revealed that Foods and Nutrition teachers require a wide range of competencies for implementing the Catering Craft Practice curriculum, with all items having mean scores above 2.50 and a grand mean of 3.50 (SD = 0.50). Similarly, teachers were found to need strong professional knowledge, as all items also recorded mean scores above 2.50 with a grand mean of 3.50 (SD = 0.50). Furthermore, hypothesis testing showed no significant difference between rural and urban teachers' competencies ($t = 1.68, p = 0.09 > 0.05$), and no significant difference based on teachers' qualifications ($F = 0.66, p = 0.52 > 0.05$). This indicates that both location and qualification do not significantly influence teachers' competencies and professional knowledge. In conclusion, effective implementation of the curriculum depends on teachers' competencies and professional knowledge; therefore, continuous professional development and provision of adequate instructional facilities are essential.</i></p>

Introduction

Education remains a tool for bringing about desired changes, with respect to the laid out curriculum, which is recognized as a means for delivering educational aims and objectives. Food and nutrition education is critical in secondary school curricula, equipping students with essential knowledge and skills for healthy living and professional opportunities in the food industry (Spear, 2016). As dietary habits are established early in life, educating young people about nutrition can have long-lasting effects on their health and wellbeing (Story *et al.*, 2019). Moreover, with the increasing prevalence of diet-related health issues, such as obesity and diabetes, integrating comprehensive food and nutrition education in schools becomes even more crucial (Spear, 2016). The Catering Craft Practice Curriculum is designed to provide students with practical skills in food preparation, catering management, and entrepreneurial abilities. This curriculum aims to create a pathway for students to

pursue careers in the hospitality and food service industry, contributing to economic growth and personal development (Falade and Oluranti, 2015). Implementing this curriculum effectively requires teachers who are not only knowledgeable in food and nutrition but also skilled in catering and hospitality practices.

The competency needs of Food and Nutrition teachers are multi-faceted, encompassing pedagogical skills, subject matter expertise, and practical experience in catering and hospitality. Teachers must be adept at translating theoretical knowledge into practical skills, guiding students through hands-on activities that mirror real-world catering scenarios (Fletcher and Zuber-Skerritt, 2018). Moreover, they need to stay updated with industry trends and technological advancements in food preparation and safety (Mensah & Okyere, 2021). In Delta State, Nigeria, the effective implementation of the Catering Craft Practice Curriculum faces several challenges. These include inadequate teacher training, insufficient resources, and a lack of industry partnerships that could provide practical learning opportunities for students (Uko-Aviomoh *et al.*, 2017). Furthermore, the existing educational infrastructure often lacks the necessary facilities, such as fully equipped kitchens and modern catering equipment, which are vital for practical instruction (Okpala, 2021).

Addressing these challenges requires comprehensive professional development programs that enhance teachers' competencies in both food and nutrition education and practical catering skills. Training programs should focus on contemporary teaching methodologies, integration of technology in food education, and partnerships with local food businesses for experiential learning opportunities (Nwokike, 2013). Additionally, continuous professional development should be encouraged to keep teachers abreast of the latest developments in nutrition science and culinary arts (Ayeni, 2015). Educational policies in Delta State should prioritize the development of robust support systems for Food and Nutrition teachers, including regular training, adequate funding for educational resources, and incentives for professional growth (Akinyele, 2019). Curriculum development should also involve stakeholders from the food industry to ensure that the education provided aligns with industry standards and demands (Ekpenyong and Edokpolor, 2015).

Foods and Nutrition, one of the trade disciplines taught in Senior Secondary Schools, includes a section on catering craft practice. Foods and Nutrition, according to Ogbonyomi (2011), is a branch of Home Economics that focuses on the processing, preparation, management, and preservation of food as well as the related services. It explores the relationship between food and its nutrients. According to Ogbonyomi (2012), the practical skills learned through the study of foods and nutrition could be applied to start, own, build, and establish some businesses, including fast food, business, bakery and confectionery, food preservation and packaging, party planning, event planning, indoor and outdoor catering services, among others. Catering Craft Practice trade subject has been given special attention in order to meet the competency requirements for implementing foods and nutrition (NERDC, 2012; West African Examinations Council (WAEC) 2021).

A component of foods and nutrition created to fulfill the demands of Nigeria's rapidly expanding hospitality and tourism sector is the Catering Craft Practice trade subject. This trade subject improves the wealth of the country and prepares people for gainful employment (Ohia & Osah, 2018). Due to the increased demand at this level compared to the management level, the focus of the topic is generally on the training of craftsmen of both sexes. Graduates of the topic should be able to find work in the hospitality industry, transportation catering (aircraft, railroad, and ship), as well as institutions like schools and hospitals. The overall goal of the Catering Craft Practice Trade Curriculum is to give trainees the skills to recognize, get familiar with, and properly utilize and maintain minor equipment that will be used in the meal's preparation, production, and service. Additionally, it is to assist students in choosing, using, and identifying the methods of food preservation and storage; and to explain food nutrients, their sources, functions, and deficiencies in the planning of a simple menu with particular reference to manual and sedentary workers, children and adolescents (particularly students), and elderly people (Rufai, et al., 2015). Additional goals

include stating the significance of health, hygiene, and safety in the working environment of catering establishments, listing the fundamental culinary terms used in all branches of cooking, and practicing safety, fire prevention, and the operation of electrical appliances and equipment in catering establishments.

In Senior Secondary classrooms, students must learn one trade or entrepreneurial subject and register it to be graded in the National Certificate Examinations (NECO) or WAEC. According to the Nigerian Educational Research and Development Council (2008), schools are required to choose trade subjects based on factors such as the type of school, the availability of teachers and infrastructure, community and student interest, the accessibility of local resources, and socio-cultural preferences. Professional knowledge, according to Wrenn and Wrenn (2009), is the capacity to acquire profound and critically informed knowledge and understanding in theory and practice. Teachers of foods and nutrition undoubtedly need to be well-versed in their field. Luft (2020) defined subject matter knowledge as the knowledge in the discipline taught by a teacher, which frequently includes knowledge of how the discipline evolves in addition to what is known inside the discipline. Teachers must be well-versed in their subject matter and have a solid understanding of pedagogy, learning objectives, curriculum, student behavior, and results in order to effectively instruct students. According to Hotaman (2010), teachers who are well-versed in their subject matter allow their students to participate in class because they are aware of the difficulties that come up during the learning process and are prepared to answer any issues that may come up. Therefore, in order to properly apply the Catering Craft Programme in practice, food and nutrition teachers must possess a thorough understanding of the subject.

The importance of this study lies in its focus on identifying the competencies and professional knowledge required for effective implementation of the Catering Craft Practice curriculum, thereby addressing gaps in skill-based education. Previous studies have emphasized instructional strategies and academic achievement without adequately addressing teachers' practical competencies. For instance, Okafor (2019) highlighted problem-solving techniques in physics but did not consider vocational skill delivery. Similarly, Obikezie et al. (2023) focused on generative learning models, leaving gaps in practical teaching competencies. In a related study, Muogbo et al. (2025) emphasized experiential learning, yet did not specifically examine teacher preparedness in vocational subjects. Nnorum and Okafor (2011) discussed authentic assessment but overlooked the practical competencies required for implementation. Furthermore, Nneka and Okafor (2013) identified gaps in teachers' technological competence, which also affects vocational instruction. Studies on students' difficulties (Okafor, 2015) and process skills (Okafor, 2017) further reveal deficiencies in practical teaching approaches. Therefore, this study is significant as it bridges these gaps by focusing on teachers' competencies and professional knowledge necessary for effective skill acquisition in Foods and Nutrition.

Research Questions

1. What are the competencies needed by Foods and Nutrition teachers for implementing the Catering Craft Practice Curriculum?
2. What are the professional knowledge Foods and Nutrition teachers need to organize the teaching of Catering Craft Practice for implementation in Secondary Schools?

Hypotheses

1. There is no significant difference between the mean ratings of rural and urban Foods and Nutrition teachers on the competencies needed for implementing the Catering Craft Curriculum.
2. There is no significant difference among the ratings of teachers with different qualifications on the professional knowledge needed to organize the teaching of Catering Craft Practice for implementation in Secondary Schools.

Methodology

The study was done in Delta State. The southeast geopolitical region of Nigeria is home to the Delta State, which bears the Niger Delta's name (Britannica, 2022). Along with the three senatorial districts of Delta South, Delta North, and Delta Central, it has 25 local governments. Youths can benefit from a wide range of opportunities in this oil- and agriculturally productive State. The three senatorial districts of Delta State were the locations of the survey. Ex-post facto research was used in this study along with the descriptive survey approach. Ex-post facto research involves gathering data from a subset of the population that is thought to be representative of the entire population. The study used it to identify the competency requirements for instructors of foods and nutrition to apply the catering craft practice trade curriculum. The population of the study was made up of all food and nutrition teachers and Home Economics instructors tasked with executing the catering craft practice trade curriculum in secondary schools in Delta State. According to the Delta State Post Primary Education Board in Asaba in 2022, there were 322 teachers in total, including 296 teachers of Home Economics and 26 teachers of foods and nutrition. Glen (2022) recommended using the entire population size for the study when the population size was modest. As the entire population of 322 teachers was used for the study, there was no sampling. This is because the population is a manageable size.

A structured questionnaire was designed and used to collect data from respondents. It was designed on a 4-point rating scale of: SA/HP = Strongly Agree Highly Possessed; A/MP = Agree/Moderately Possessed; D/SP = Disagree/Slightly Possesse; SD/NP = Strongly Disagreed/Not Possessed, which were represented by 4, 3, 2, and 1, respectively. Four professionals evaluated the questionnaire for validity. The supervisor, two professors from the Department of Vocational Education, and a member of the Department of Guidance and Counseling (Measurement and Evaluation Unit), all of the Delta State University, Abraka Faculty of Education, make up the group of experts. A document containing a letter, the research subject, the research questions, and a duplicate of the questionnaire was given to each participant. They were tasked with reviewing the questionnaire to ensure that the phrases used were clear, that the rating scales in each of the two parts of the questionnaire were appropriate, and that the items were relevant to the research questions and the subject matter being examined. The researcher instructed to include their feedback and suggestions in the questionnaire, which was then used for the study's final editing and data gathering. Ten (10) copies of the questionnaire were administered to Foods and Nutrition teachers in Edo State, which will not be included in the scope of the study. The questionnaires were retrieved, data were inputted in SPSS, Version 23, and was analyzed with Split-half reliability. This gave a Spearman-Brown coefficient of 0.835. Since the reliability coefficient are greater than 0.70, it therefore means that the questionnaire was reliable. Three hundred and twenty-two (322) copies of questionnaire were administered to Foods and Nutrition and Home Economics teachers in Secondary Schools in Delta State with the help of five research assistants who were briefed on administration and retrieval of questionnaires. Two research assistants each were deployed to Delta South and Delta Central Senatorial Districts, while the remaining research assistant was accompanied by the researcher to Delta North Senatorial District. This ensured full coverage of the area of study. Out of the 322 copies of questionnaire that were administered, 298 copies were adequately filled and retrieved, which represented 92.6% return rate.

The retrieved copies of questionnaire were collated and inputted in SPSS, Version 23. Frequency counts, percentages and bar-charts were used to analyze items on the biodata of teachers. For the Part 2 aspect of the questionnaire that was designed on a 4-point rating scale, Mean (\bar{x}) and Standard Deviation (SD) were used to analyze the data. A benchmark of 2.50 was used for agreement or disagreement for each of the items. Hypotheses 1, 2, and 7 were tested with t-test, while hypotheses 3, 4, 5, and 6 were tested with ANOVA at 0.05 level of significance. The null hypothesis was accepted

when the table value is greater than 0.05, and rejected when the table value is less than or equal to 0.05.

Results

Research Question 1: What are the competencies needed by Foods and Nutrition teachers for implementing the Catering Craft Practice Curriculum?

Table 1: Mean (\bar{x}) Standard Deviation and Scores of the Competencies Needed by Foods and Nutrition Teachers (n=298)

S/N	Competencies Needed	\bar{x}	SD	Decision
1	Meal preparation for different occasions	3.49	0.50	Agreed
2	Meal planning	3.52	0.50	Agreed
3	Cooking of jawa (sorghum) using various methods	3.49	0.50	Agreed
4	Using standard scale in measurement	3.47	0.50	Agreed
5	Serving in public/private bar	3.53	0.50	Agreed
6	Preparing milk shake for an invalid patient	3.52	0.50	Agreed
7	Handling large equipment like gas cooker, washing machine, and so on	3.46	0.50	Agreed
8	Demonstrating buffee services	3.48	0.50	Agreed
9	Demonstrating ala carte menu	3.54	0.50	Agreed
10	Demonstrating fondant icing	3.54	0.50	Agreed
11	Demonstrating table d'hote menu	3.49	0.50	Agreed
12	Demonstrating different folding of serviette	3.48	0.50	Agreed
13	Demonstrating different styles of folding flower in table laying	3.49	0.50	Agreed
14	Demonstrating grilled herring fish	3.48	0.50	Agreed
15	Preparing roasted chicken with tomato sauce	3.51	0.50	Agreed
16	Demonstrating the use of potato peelers	3.45	0.50	Agreed
17	Preparing vegetable salad	3.57	0.50	Agreed
18	Preparing strict vegetarian menu	3.50	0.50	Agreed
19	Demonstrating portion control	3.51	0.50	Agreed
20	Using correct covers like table cloths, mats, flower vase, among others, to lay tables	3.47	0.50	Agreed
21	Preparing refreshing drinks	3.56	0.50	Agreed
22	Preparing nourishing/stimulating drinks	3.46	0.50	Agreed
23	Discussing the function of nutrients	3.47	0.50	Agreed
24	Discussing the stage of event preparation	3.47	0.50	Agreed
	Grand Mean (\bar{x})	3.50	0.50	Agreed

Source: Field Work (2023)

Table 1 showed that all the items 1-24 each had a mean (\bar{x}) score above the criterion mean (\bar{x}) of 2.50. This implied that all the items 1-24 were regarded by the Foods and Nutrition teachers as the competencies that they need for implementing the Catering Craft Practice Curriculum in Secondary Schools in Delta State.

Research Question 2: What are the professional knowledge Foods and Nutrition teachers need to organize the teaching of Catering Craft Practice for implementation in Secondary Schools?

Table 2: Mean (\bar{x}) Standard Deviation Scores on the Professional Knowledge of Foods and Nutrition Teachers Needed in Organizing the Teaching of Catering Craft Practice (n=298)

S/N	Professional Knowledge	\bar{x}	SD	Decision
25	Various concepts associated with Catering Craft Practice	3.52	0.50	Agreed
26	Principles and theories related to Catering Craft Practice	3.57	0.50	Agreed
27	Analyzing the problems concerning the teaching of Catering Craft Practice	3.48	0.50	Agreed
28	Explaining Catering Craft Practice in multiple perspectives	3.54	0.50	Agreed
29	Producing new ideas about the teaching of Catering Craft Practice	3.49	0.52	Agreed
30	Reflecting theories into practice	3.50	0.50	Agreed
31	Allowing students actively participate in the lessons using specific tools and equipment	3.48	0.50	Agreed
32	Being aware of the values of Catering Craft Practice	3.44	0.50	Agreed
33	Relating the subject to other disciplines	3.53	0.50	Agreed
34	Applying the subject matter to real world situation	3.49	0.50	Agreed
35	Using new emerging concepts of latest trends at national and international level	3.51	0.50	Agreed
36	Using theories at national and international level	3.44	0.50	Agreed
	Grand Mean (\bar{x})	3.50	0.50	Agreed

Source: Field Work (2023)

Table 2 showed that all the items each had a mean (\bar{x}) score above the criterion mean (\bar{x}) score of 2.50. This indicated that the teachers need the professional knowledge to organize Catering Craft Practice for implementation in Secondary Schools in Delta State. These include explaining Catering Craft Practice in multiple perspective, relating the subject to other disciplines.

Hypothesis 1: There is no significant difference between the mean ratings of rural and urban Foods and Nutrition teachers on the competencies needed for implementing the Catering Craft Curriculum.

Table 3: Summary of t-test Analysis on the Competencies Needed by Teachers in Rural and Urban Areas for Implementing Catering Craft Practice

Location	N	Mean (\bar{x})	SD	df	T	P	Decision
Rural	140	3.62	0.49	296	1.68	0.09	Not Significant
Urban	158	3.53	0.50				

$P > 0.05$

Key: N = Number of respondents; SD = Standard Deviation; df = degree of freedom, t = calculated value of t; p = critical value of t

Source: Field Work (2023)

Table 3 summarized a t-test analysis on the competencies needed by teachers in rural and urban areas for implementing Catering Craft Practice. A t-value of 1.68 and a p-value of 0.09 were obtained from the table at 0.05 alpha level. Since the p-value of 0.09 was greater than the 0.05 alpha level, the null hypothesis was therefore retained, showing that there was no significant difference between the mean ratings of rural and urban Foods and Nutrition teachers on the competencies needed for implementing the Catering Craft Curriculum.

Hypothesis 2: There is no significant difference among the ratings of teachers with different qualifications on the professional knowledge needed to organize the teaching of Catering Craft Practice for implementation in Secondary Schools.

Table 4: Summary of ANOVA Analysis of Teachers with Different Qualifications on their Professional Knowledge to Organize the Teaching of Catering Craft Practice

Source of Variance	Sum of Squares	Df	Mean (\bar{x}) Square	F	p	Decision
Between Groups	0.32	2	0.16	0.66	0.52	Not Significant
Within Groups	72.70	295	0.25			
Total	73.02	297				

Significant Level = ($P > 0.05$); df = degree of freedom

Source: Field Work (2023)

The summary of ANOVA analysis in Table 4 revealed an F-value of 0.66 and a p-value of 0.52 at 0.05 alpha level. The null hypothesis was accepted since the p-value was greater than the alpha value. This further shows that there was no significant difference among the ratings of teachers with different qualifications on the professional knowledge needed to organize the teaching of Catering Craft Practice for implementation in Secondary Schools.

Discussion

The findings of this study revealed that Foods and Nutrition teachers require a wide range of competencies for effective implementation of the Catering Craft Practice curriculum, with a grand mean of 3.50. These include meal planning, food preparation, equipment handling, and service skills. This finding agreed with Nwokike (2013), who emphasized that competency in practical and instructional skills is essential for effective teaching of Food and Nutrition. In a related study, Ekpenyong and Edokpolor (2015) also highlighted the importance of practical skill acquisition in vocational education. However, in contrast, Ayeni (2015) stressed broader teacher quality factors beyond practical competencies.

Similarly, the study showed that teachers require strong professional knowledge, including understanding concepts, applying theories, and relating content to real-life situations. This finding is in line with Hotaman (2010), who noted that subject matter knowledge is fundamental to effective teaching. In a related study, Wrenn and Wrenn (2009) emphasized integrating theory with practice for meaningful learning. However, Luft (2020) argued that subject knowledge alone is insufficient without pedagogical skills.

Furthermore, the hypothesis revealed no significant difference between rural and urban teachers' competencies. This finding agreed with Uko-Aviomoh et al. (2017), who found that effective curriculum implementation depends more on resource management than location. In contrast, Okpala (2021) noted disparities in instructional facilities between rural and urban schools. There was no significant difference in professional knowledge based on teachers' qualifications. This finding is consistent with Fletcher and Zuber-Skerritt (2018), who emphasized continuous professional development over formal qualifications. However, Falade and Oluranti (2015) argued that higher qualifications enhance curriculum delivery.

Conclusion

This study assessed the competencies and professional knowledge required by Foods and Nutrition teachers for the effective implementation of the Catering Craft Practice curriculum in secondary schools in Delta State. The findings revealed that teachers possess and require a wide range of practical competencies, including meal planning, food preparation, equipment handling, and service skills, which are essential for effective curriculum delivery. In addition, teachers demonstrated a high level of professional knowledge, including understanding core concepts, applying relevant theories, and relating instructional content to real-life situations.

Furthermore, the study established that there is no significant difference in the competencies and professional knowledge of teachers based on location (rural and urban) or qualification. This implies that teachers, irrespective of their background, share similar levels of preparedness for implementing the curriculum. The study concludes that both practical competencies and sound professional knowledge are critical for effective teaching of Catering Craft Practice. Therefore, continuous professional development, provision of adequate instructional facilities, and emphasis on practical-based teaching approaches are essential for improving the quality and effectiveness of Foods and Nutrition education in secondary schools.

References

- Akinyele, I. O. (2019). Ensuring food and nutrition security in rural Nigeria: An assessment of the challenges, information needs, and analytical capacity. *Nigeria Strategy Support Program*.
- Ayeni, A. J. (2015). Improving the Quality of Teacher Education in Nigeria: The Perspectives of Serving Teachers. *Journal of Education and Learning*, 4(3), 25-34.
- Britannica (2022). Niger Delta geographical region, Africa. Retrieved on 4th March, 2022 from <https://www.britannica.com/place/Niger-Delta>
- Ekpenyong, L. E., and Edokpolor, J. E. (2015). Integrating practical entrepreneurship skills in the education of vocational and technical education students in Nigeria. *International Journal of Education Learning and Development*, 3(7), 55-66.
- Falade, O. A., and Oluranti, A. O. (2015). Integrating vocational technical education in food and nutrition curriculum in secondary schools in Nigeria. *African Educational Research Journal*, 3(2), 78-82.
- Fletcher, M., and Zuber-Skerritt, O. (2018). Professional development for teachers and trainers. *Quality Assurance in Education*, 16(4), 319-329.
- Glen, S. (2022). Total population sampling. Elementary statistics for the rest of us! Retrieved on 19th January, 2023 from <https://www.statisticshowto.com/total-population-sampling/>
- Hotaman, D. (2010). The Teaching Profession: Knowledge of subject matter, teaching skills and personality traits. *Procedia Social and Behavioral Sciences*, 2, 1416–1420.
<http://wudpeckerresearchjournals.org/WJER/pdf>
[http://www.vkmaheshwari.com/WP/?p=1894#:~:text=According%20to%20Taylor%20\(1990\)%20there,learning%20organizing%20experiences%2C%20and%20evaluation](http://www.vkmaheshwari.com/WP/?p=1894#:~:text=According%20to%20Taylor%20(1990)%20there,learning%20organizing%20experiences%2C%20and%20evaluation)
<https://edis.ifas.ufl.edu/publication/wc306>
https://edtechbooks.org/id/standards_and_competencies
- Luft, J. (2020). Subject matter knowledge is important! Retrieved on 5th May, 2022 from <https://cadrek12.org/resources/blogs/subject-matter-knowledge-important#:~:text=For%20us%2C%20we%20see%20subject,is%20known%20within%20the%20discipline>
- Mensah, R. O., and Okyere, M. (2021). Enhancing food safety through the training of food handlers: A case study of the hospitality industry in Accra. *Journal of Culinary Science and Technology*, 19(3), 197-210.
- Muogbo, U. F., Okafor, T. U., & Okafor, C. F. (2025). Experiential Learning Strategy as a Predictor of Male and Female Students Interest in Computer Studies in Nnewi Education Zone, Anambra State, Nigeria. *IRASS Journal of Arts, Humanities and Social Sciences*, 2(5), 112-116.
- Nigeria Educational Research and Development Council (NERDC) (2008). *The new senior secondary education curriculum at a glance (Pamphlet)*. Abuja: Author.
- Nigerian Educational Research and Development Council (NERDC) (2012). The new senior secondary education curricula: Trade/entrepreneurship. Presented at a Sensitization & Advocacy Workshop for Teachers in Taraba State from 23rd – 24th August.

- Nneka, R. N., & Okafor, T. U. (2013). Assessment of Science Teachers' Level of Computer Literacy and Usage in Colleges of Education: Implication for Global Competitiveness. *African Journal of Education, Science and Technology (AJEST)*, 1(1), 250-258.
- Nnorom, N., & Ukafor, T. (2011). Authentic assessment method in science: Study of issues for teachers. *ANSU Journal of Integrated Knowledge*, 1(1), 202-209.
- Nwokike, F. O. (2013). Strategies for Improving the Competency of Food and Nutrition Teachers in Secondary Schools in Nigeria. *International Journal of Education and Research*, 1(11), 1-14.
- Obikezie, M. C., Ezeliolah, B. A., & Okafor, T. U. (2023). EFFECT OF GENERATIVE LEARNING MODEL ON SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN CHEMISTRY. *UNIZIK Journal of Educational Research and Policy Studies*, 15(3), 45-55.
- Ogbonyomi, O.B. (2011). *Basic nutrition for the tropics*. Benin: Masega Publishers.
- Ogbonyomi, O.B. (2012). Entrepreneurship skills in Home Economics: A bed-rock for achieving pre-vocational sustainable national economy. *Nigerian Vocational Association Journal*, 17(1), 62-70.
- Ohia, A.N. & Osah, S.O. (2018). Assessment of trade subjects for curriculum relevance in Senior Secondary Schools in Rivers State. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, 5(10), 138-143.
- Okafor, T. U. (2017). Physics process skills and its acquisition on secondary school physics students in Aguata and Nnewi Education Zones of Anambra state. *American Academic & Scholarly Research Journal*, 9(3).
- Okafor, T. U. (2019). Effect of Polya's Problem Solving Technique on the Academic Achievement of Senior Secondary School Student in Physics. *European Journal of Physics Education*, 10(1), 38-48.
- Okpala, A. (2021). Assessment of the Availability and Use of Instructional Facilities for Effective Teaching of Food and Nutrition in Secondary Schools in Delta State, Nigeria. *Journal of Education and Practice*, 2(6), 1-8.
- Rufai, A., Bakar, A.R. & Rashid, A. (2015). Developing a sustainable practical model of graduate employability for higher education. *International Journal of Education and Literacy Studies*, 3, 42-51.
- Spear, B. A. (2016). *Nutrition in Public Health: Principles, Policies, and Practice*. Jones and Bartlett Learning.
- Story, M., Nannery, M. S., and Schwartz, M. B. (2019). Schools and Obesity Prevention: Creating School Environments and Policies to Promote Healthy Eating and Physical Activity. *The Milbank Quarterly*, 87(1), 71-100.
- Ugonwa Okafor, T. (2015). Difficulties Encountered by Secondary School Physics Students in Answering Mathematical Related Physics Questions. *American Academic & Scholarly Research Journal*, 7(6).
- Uko-Aviomoh, E. E., Okoh, E., and Omatseye, B. O. J. (2017). Managing school resources for effective curriculum implementation in Nigeria. *Journal of Social Sciences*, 15(1), 95-100.
- WAEC (2021). WAEC syllabus for catering craft practice. Retrieved on 4th November, 2021 from <https://infoguidenigeria.com/waec-syllabus-for-catering-craft-practice/>
- Wrenn, J. & Wrenn, B. (2009). Enhancing learning by integrating theory and practice. *International Journal of Teaching and Learning in Higher Education*, 21(2), 258-265.