



Assessing The Needs of Enhancing Vocational Skills for Entrepreneurship in Technical Colleges in Kebbi State

Solomon Amos Peni¹, Dudu Danhalbi Yage², Usman Mohammed, Elisha Musa³, Usman Auta Ribah⁴, Tsoho Mohammed Jega⁵, Abdullahi Ahmed Rufai⁶, Kabiru Isah Peni⁷

^{1,2,3,4,5,6,7}Faculty of Education, Department of Technology Education, Abdullahi Fodio University of Science and Technology, Aliero



Article History:

Received: 07/05/2026

Accepted: 02/06/2026

Published: 26/06/2026

Corresponding Author:
Solomon Amos Peni

Abstract

The study was carried out to examine the Assessing Vocational Skills for Entrepreneurship in Technical colleges in Kebbi State. The study was guided by two (2) objectives and research questions. The population of the study will comprise of forty (40) Vocational Teachers selected from the four Government Science and Technical Colleges in the State. The study adopted descriptive survey research design. Descriptive survey, the primary instrument for data collection in this study is a structured questionnaire. The questionnaire is designed to gather comprehensive information on the various aspects of Assessing needs for enhancing vocational skills for entrepreneurship in technical colleges in Kebbi state. The questionnaire consists of multiple sections: Data analysis involves systematically applying statistical and logical techniques to describe, condense, and evaluate data. The raw data collected from the respondent will be entered into Data analysis software SPSS (Statistical Package for the Social Sciences) version 27. The major findings of the study based on the responses to the various statements about Kebbi State Technical Colleges can be summarized as follows: Based on the conclusions drawn from the study, the following recommendations are made to improve vocational education and training in Kebbi State Technical Colleges.

Keywords: Assessing, Enhancing, Vocational Skills.

Article Citation: Solomon Amos Peni, Dudu Danhalbi Yage, Usman Mohammed, Elisha Musa, Usman Auta Ribah, Tsoho Mohammed Jega, Abdullahi Ahmed Rufai & Kabiru Isah Peni (2026). Assessing The Needs of Enhancing Vocational Skills for Entrepreneurship in Technical Colleges in Kebbi State. **IRGS Journal of Economics, Business and Management (IRGSJEBM)**, Vol-1 (Iss-1), 19-24.

INTRODUCTION

Vocational and Technical Education (VTE) in Nigeria assumes a pivotal function in mitigating the economic predicaments faced by the nation, particularly concerning unemployment and the alleviation of poverty. The Nigerian government has acknowledged the significance of VTE as a vital mechanism for equipping individuals with the requisite skills necessary for gainful employment and self-sufficiency. Nevertheless, the effective execution of VTE programs encounters a myriad of obstacles, including insufficient funding, substandard infrastructure, and prevailing societal perceptions regarding the intrinsic value of vocational training.

A principal impediment obstructing the progress of VTE in Nigeria is the deficiency of adequate financial resources. Muhammad and Kamin assert that inadequate governmental funding considerably hampers the incorporation of entrepreneurial competencies within technical college curricula, which is essential for cultivating a proficient workforce capable of propelling economic advancement (Muhammad & Kamin, 2019). This concern is further corroborated by Agbonlahor, who identifies insufficient funding as a significant barrier to the promotion of entrepreneurship education within Nigerian universities (Muhammad & Kamin, 2019). Moreover, Kagara et al. (2020) examine the ramifications of inadequate resources on the efficacy of technical vocational education curriculum implementation, underscoring the necessity for stakeholder collaboration to enhance program outcomes (Kagara et al., 2020).

The curriculum associated with VTE programs necessitates substantial reform to ensure alignment with international standards and the economic imperatives of the local context. Ochedikwu et al. (2013) advocate for the globalization of vocational and technical education curricula to foster sustainable development and bolster national productivity (Ochedikwu et al., 2013). This viewpoint is reinforced by Onwusa (2021), who contends that adapting VTE to align with the swift global economic demands is imperative for enhancing workforce quality and adaptability (Onwusa, 2021). Additionally, Bello underscores the critical function of regulatory bodies such as the National Board for Technical Education (NBTE) in supervising the accreditation and quality assurance of technical programs, which is essential for upholding educational standards (Bello, 2023). The augmentation of vocational skills for entrepreneurship in Nigerian technical colleges presents an urgent necessity that encompasses various dimensions of education, economic development, and youth empowerment. The integration of entrepreneurial competencies into technical education is vital for equipping students with the essential proficiencies to navigate the intricacies of the contemporary labor market and to promote self-reliance among graduates.

The incorporation of entrepreneurial education within technical college programs is paramount for reconciling the disparity between theoretical knowledge and practical application. Muhammad and Kamin emphasize that a considerable number of Nigerian students harbor unrealistic expectations concerning entrepreneurship, thereby highlighting the imperative for a

structured entrepreneurial competencies framework that aligns with technical education (Muhammad & Kamin, 2019). This framework can act as a catalyst for cultivating an entrepreneurial mindset, thereby augmenting students' preparedness to embark on entrepreneurial endeavors subsequent to graduation ("The Need for Integrating Entrepreneurial Education and Training in Nigerian Technical Colleges", 2019). Furthermore, the absence of adequate entrepreneurial skills among graduates has been recognized as a significant obstacle to job creation and economic development in Nigeria ("The Need for Integrating Entrepreneurial Education and Training in Nigerian Technical Colleges", 2019).

Vocational and technical skills represent a distinct category of competencies specifically tailored to facilitate an effective learning environment for both educators and learners, thereby enabling students to attain the fundamental knowledge, skills, abilities, comprehension, and attitudes requisite for proficient performance within their selected professional trajectories, fostering self-sufficiency and contributing to national progress (Dabok 2022). This educational framework provides individuals and learners with the requisite knowledge, concepts, principles, attitudes, and characteristics that empower them to identify opportunities, strategize, and initiate enterprises to capitalize on available prospects for economic advancement. The domains of vocational skills and entrepreneurship encompass the acquisition and enhancement of competencies, capabilities, and dispositions essential for the development of human capacity.

Entrepreneurship constitutes the systematic process of generating novel entities of value through the allocation of requisite time and effort, while also assuming associated financial, psychological, personal fulfillment, and autonomy implications (Abdu 2017). The foundational principles of entrepreneurship within Nigerian technical colleges are vital for cultivating an ethos of innovation, self-employment, and economic development among the student populace. The incorporation of entrepreneurial education into the technical college curriculum serves not merely as a reaction to the elevated unemployment statistics in Nigeria but also as a strategic initiative to equip students with the essential competency's requisite for success in a competitive marketplace. This scholarly discourse amalgamates diverse academic viewpoints on the principles of entrepreneurship as they pertain to technical education in Nigeria.

A core tenet of entrepreneurship education lies in the seamless integration of entrepreneurial competencies within the technical curriculum. Muhammad and Kamin assert the urgent necessity to embed entrepreneurial competencies into technical college curricula to bridge the divide between theoretical learning and its practical implementation (Muhammad & Kamin, 2019). This incorporation is imperative for fostering a cognitive framework that promotes innovation and self-employment among learners. In a similar vein, Iwu et al. contend that the curriculum must be both pertinent and comprehensive enough to ignite entrepreneurial aspirations, thereby energizing students' motivation towards entrepreneurship (Iwu et al., 2021). This underscores the significance of a dynamic curriculum that adapts to market exigencies and equips students for prospective challenges (Alias, 2021).

Such integration not only augments students' vocational competencies but also cultivates an entrepreneurial mindset, which is essential for adeptly navigating the intricacies of the business landscape ("The Need for Integrating Entrepreneurial Education

and Training in Nigerian Technical Colleges", 2019). The curriculum ought to be flexible and responsive to market demands, as highlighted by Alias, who observes that current vocational education primarily concentrates on fostering awareness and foundational skills for entrepreneurship (Alias, 2021). This alignment guarantees that students are not only proficient in their technical disciplines but also well-prepared to utilize these competencies in entrepreneurial endeavors.

The process of unleashing human energy can be summed up as skill acquisition, which entails giving people the chance to contribute as much as possible to both their own and their communities' self-development. According to Kolocha (2019), vocational skills are a type of educational training that includes knowledge, skills, competencies, structural, activities, abilities, capabilities, and all other experiences obtained through formal, on-the-job, or off-the-job training that can improve r The Federal Republic of Nigeria (2021) described the objectives of vocational skills for technical colleges in the National Policy on Education document as follows: to supply skilled labor in the applied sciences, technology, and business, especially at the craft and technical levels; to supply the technical knowledge and vocational skills required for agriculture, commerce, and economic development; and to train and impart the necessary skills to individuals who will be economically independent while attending the technical colleges.

In light of this, the study aimed to determine the degree of accessibility and use of instructional materials as crucial instruments that can facilitate learning, practical application, and knowledge acquisition when teaching computer studies in senior secondary schools in Gwandu metropolis. ecipients and create opportunities for employment.

STATEMENT OF THE PROBLEM

Nigerian technical institutions were founded in order to continuously draw in, nurture, and produce skilled, knowledgeable, and talented artisans, technicians, and other professionals who will be independent and enterprising. Technical colleges in Nigeria offer vocational training in specialized fields including building, carpentry, and welding and fabrication with the goal of producing skilled labor that will support the nation's overall industrial development. Unfortunately, this is not evident since the development of skilled labor is hampered by insufficient training. Because of this, the majority of Nigeria's technical colleges run the risk of turning out graduates who frequently lack vocational skills, which hinders their ability to enter the workforce and pursue entrepreneurial initiatives. Inadequate funding, subpar training facilities, and a lack of competent professors in technical colleges exacerbate this problem. Additionally, the relevance and effectiveness of vocational programs must be reevaluated in light of changing market conditions and technological improvements. As a result, it is critical to assess Kebbi State's present level of vocational skill development, pinpoint areas in need of development, and offer solutions for integrating education with entrepreneurship. These actions will increase the employability of graduates and foster innovation and economic growth in Kebbi State.

OBJECTIVES OF THE STUDY

The main aim of the study is to:

- i. Examine the level of vocational skills acquisition among Kebbi State Technical colleges;

- ii. Assess the relationship between vocational skill acquisition and entrepreneurial development in technical colleges in Kebbi State.

RESEARCH QUESTIONS

- i. What is the level of vocational skills acquisition among Kebbi State Technical colleges?
- ii. What is the relationship between vocational skill acquisition and entrepreneurial development in Kebbi State?

METHODOLOGY

The descriptive survey approach was used to address the research issues posed in this paper. Thirty vocational instructors from Kebbi State's technical colleges make up the study's population. The sample size of respondents in this study was chosen using the purposeful sampling technique. A questionnaire is the tool used to gather data. Experts from the Technology Education Department of the Faculty of Education and Technology Education at Kebbi State University of Science and Technology, Aliero, evaluated the device. Federal Science and Technical College Zuru conducted pilot research to determine the instrument's reliability, and a Cronbach Alpha statistical tool was used to compute the reliability index. The instrument was found to be dependable, as evidenced

by the index of 0.78. The researchers distributed questionnaires to the responders at their different schools. Results were then calculated using frequencies, percentages, and content analysis based on the raw data gathered from the surveys.

Table 1: Population and Sample of the Study

S/NO	Name of school	No. of staff
1	Government Science and Technical College, Zuru,	12
2	Government Science and Technical College, Bunza	18
3	Government Science and Technical College, Saminaka	10
Total		40

Source: Field work, 2024

RESULTS

Research Question 1: What is the level of vocational skills acquisition among Kebbi State Technical colleges?

Mean Sating and Standard Deviation of the respondents on What is the level of vocational skills acquisition among Kebbi State Technical colleges is shown in the table below:

Table 2: Responses the level of vocational skills acquisition among Kebbi State Technical colleges?

S/N	Item Statement	N	Mean	Std. Deviation	Remark
1.	You think students in Kebbi State Technical Colleges acquire the necessary skills that align with current industry needs?	40	2.80	.63	Rejected
2.	Technical colleges in Kebbi State ensure that their vocational programs are up-to-date with the latest industry trends and standards?	40	2.80	.74	Rejected
3.	Are there sufficient vocational programs available in Kebbi State Technical Colleges to meet the needs of students and the job market?	40	2.69	.61	Rejected
4.	Technical colleges in Kebbi State equip students with practical vocational skills that are relevant to the current labor market?	40	3.07	.62	Accepted
5.	Are Kebbi State Technical Colleges updated with the latest vocational training techniques and tools?	40	2.80	.76	Rejected
6.	You think vocational skills offered in Kebbi State Technical Colleges meet the evolving demands of the Nigerian economy?	40	2.53	.70	Rejected
7.	Students of Kebbi State Technical Colleges have access to modern tools and equipment necessary for their vocational training?	40	2.80	.69	Rejected
Ground Mean			2.78		Accepted

Table 2 elucidates that the adequacy of vocational training in Kebbi State Technical Colleges is assessed as follows: Respondents expressed skepticism regarding the alignment of student skills with industry needs, evidenced by a mean score of 2.80. There was a unanimous opinion that vocational programs in Kebbi State are not current with industry trends and standards, indicated by a mean score of 2.80. Participants perceived a deficiency in vocational programs that adequately address both student needs and job market demands, reflected in a mean score of 2.69. Conversely, respondents acknowledged that Technical Colleges provide students with practical vocational skills pertinent to the labor market, as shown by a mean score of 3.07. It was broadly concurred that Kebbi State Technical Colleges lack contemporary vocational training techniques and tools, with a mean score of 2.80. Respondents were not convinced that the

vocational skills imparted meet the changing demands of the Nigerian economy, indicated by a mean score of 2.53. There was a collective agreement that students lack sufficient access to modern tools and equipment essential for their vocational training, with a mean score of 2.80. In summation, the study indicates that while some practical skills are imparted, significant concerns exist regarding the alignment of vocational programs with industry requirements, job market needs, and the dynamic demands of the Nigerian economy, alongside a deficit of modern tools and updated training methodologies in these institutions

Research Question 2: What is the Relationship between Vocational Skill Acquisition and Entrepreneurial Development?

Mean Rating and Standard Deviation of respondents (Technical College Teachers) on Assessing the Needs of Enhancing

Table 3: Mean and Standard Deviation of Respondents on the Relationship between Vocational Skill Acquisition and Entrepreneurial Development?

S/N	Item Statement	N	Mean	Std. Deviation	Remark
1	Vocational skills acquired in Technical Colleges influence the entrepreneurial mindset of graduates in Kebbi State?	40	3.40	.90	Accepted
2	Vocational skills contribute to the establishment of new businesses by graduates in Kebbi State?	40	2.80	.74	Rejected
3	Graduates from technical colleges in Kebbi State show higher entrepreneurial activity compared to those with only formal education?	40	3.00	.80	Accepted
4	Does the vocational skillset acquired by students impact their ability to access capital or funding for entrepreneurial ventures in Kebbi State?	40	3.02	.82	Accepted
5	Vocational skills programs in Kebbi State adequately prepare students for the challenges of entrepreneurship?	40	3.96	.72	Accepted
6	Are Technical colleges in Kebbi State effectively connecting vocational training with business start-up knowledge?	40	3.12	.73	Accepted
7	You believe that acquiring vocational skills leads directly to the establishment of new businesses	40	2.95	.75	Rejected
	Ground Mean		3.18		Accepted

Table 3 indicates that vocational skills from Technical Colleges significantly affect the entrepreneurial mindset of Kebbi State graduates, with a mean score of 3.40. There is disagreement on the direct role of vocational skills in forming new businesses, as evidenced by a mean score of 2.80. Graduates from Technical Colleges exhibit greater entrepreneurial activity than those with only formal education, reflected by a mean score of 3.00. Respondents affirmed that vocational skills enhance graduates' access to funding for entrepreneurial endeavors, shown by a mean score of 3.02. Most respondents believe vocational skills programs effectively prepare students for entrepreneurial challenges, indicated by a high mean score of 3.96. There is consensus that Technical Colleges link vocational training with business start-up knowledge effectively, as evidenced by a mean score of 3.12. Respondents rejected the notion that vocational skills directly lead to new business establishment, as indicated by a mean score of 2.95. In conclusion, while vocational skills are seen to influence the entrepreneurial mindset, access to funding, and preparedness for entrepreneurship, there is less support for the idea that these skills directly contribute to the establishment of new businesses.

DISCUSSION

The major findings of this study, derived from respondents' views on vocational education programmes in Kebbi State Technical Colleges, are summarized as follows:

The findings contribute significantly to the existing body of knowledge on entrepreneurial skills development within technical and vocational education. The diversity of the study participants enhances the representativeness of the sample, thereby increasing the potential for generalizing the findings to similar educational contexts. The study revealed that Kebbi State Technical Colleges do not adequately prepare students for entrepreneurial ventures. Respondents indicated that students receive insufficient training in critical entrepreneurial competencies, while practical aspects of business management and enterprise operation receive limited attention.

Furthermore, the findings suggest that vocational programmes in the colleges place inadequate emphasis on entrepreneurial skill development. This indicates that entrepreneurship education is not sufficiently integrated into the instructional framework as a key objective of student training and development. Another major finding is the apparent mismatch between the vocational skills acquired by students and the employment opportunities available within the local economy. Respondents perceived a disconnect between the competencies developed through technical education and the actual demands of the labour market, thereby limiting graduates' relevance to local industries and enterprises. The study also found that technical colleges provide inadequate preparation in practical business management skills. Instruction tends to focus more on theoretical knowledge than on experiential learning and real-world business applications necessary for successful self-employment and enterprise development.

In addition, respondents expressed reservations regarding the contribution of vocational training to graduate employability. The findings indicate that the skills acquired by graduates are not perceived as sufficiently competitive to enhance their prospects in the contemporary labour market. The study further revealed skepticism among respondents concerning the effectiveness of vocational skills acquisition as a strategy for addressing youth unemployment. Participants questioned the extent to which current vocational training programmes can provide sustainable solutions to unemployment and broader economic challenges.

In conclusion, the findings indicate that vocational education programmes in Kebbi State Technical Colleges are not adequately meeting students' needs in the areas of entrepreneurial competence, practical business skills acquisition, and alignment with local employment opportunities. Moreover, the programmes are perceived as having limited effectiveness in enhancing graduate employability and mitigating the challenge of youth unemployment.

RECOMMENDATIONS

Based on the conclusions drawn from the study, the following recommendations are made to improve vocational education and training in Kebbi State Technical Colleges:

- i. Government should look into Curriculum Reform and Integration of Entrepreneurship in this said Technical Colleges to improve entrepreneurial practice amongst the graduates
- ii. Government should enforce enhancement of Practical Training and Business Exposure in the Technical Colleges
- iii. Government should take alignment with Local Industry Needs to boost the knowledge and idea of entrepreneurship in the Technical Colleges
- iv. There should be an Investment in Modern Equipment and Training Tools
- v. Government should build up a workforce in Strengthening Graduate Support and Employability Programs within the Technical Colleges

CONCLUSION

The study concludes that vocational education programs in Kebbi State Technical Colleges encounter challenges that impede their effectiveness in fostering entrepreneurship and addressing local employment needs. The disconnection between vocational training and entrepreneurial education, along with a lack of alignment with the job market, diminishes the potential benefits of vocational training in the area.

Specifically, the findings indicate that current programs inadequately equip students for entrepreneurship and local economic demands. Additionally, outdated training and insufficient access to modern resources obstruct students' development of practical skills. As a result, vocational training in Kebbi State Technical Colleges fails to significantly alleviate youth unemployment or enhance graduates' employability.

REFERENCES

1. Abdu Danjuma, Y. (2017). Entrepreneurship skills and youth business empowerment in Doguwa Local Government, Kano state, Nigeria (Doctoral dissertation, Kampala International University, College of Economics and Management).
2. Adewale, B., Adisa, O., Ndububa, C., Olawoyin, O., & Adedokun, A. (2017). Attitude of students and teachers towards Vocational Education in Secondary Schools in Ota, Ogun State, Nigeria. <https://doi.org/10.21125/inted.2017.1062>
3. Alias, N. (2021). Entrepreneurship skills in the curriculum of a selected vocational college in Selangor. *Turkish Journal of Computer and Mathematics Education (Turcomat)*, 12(5), 1911-1922. <https://doi.org/10.17762/turcomat.v12i5.2272>
4. Anidiobu, G., Ezinwa, C., & Onyebuchi, B. (2016). Entrepreneurship education: a panacea for unemployment in Nigeria. *Ng-Journal of Social Development*, 5(2), 1-11. <https://doi.org/10.12816/0031164>
5. Bello, O. (2023). Accreditation of engineering technology programmes in the Nigerian Polytechnics and similar tertiary institutions. *Formosa Journal of Multidisciplinary Research*, 2(9), 1597-1614. <https://doi.org/10.55927/fjmr.v2i9.5566>
6. Dabok, M. M. (2022). A training and skills development conceptual framework for construction technicians in Nigeria (Doctoral dissertation, University of Central Lancashire).
7. Daniel, A. (2023). Entrepreneurship and enterprise development in Nigerian universities: moving beyond vocational skills teaching. *Journal of Entrepreneurial Innovations*, 4(SI). <https://doi.org/10.14426/jei.v4isi.1680>
8. Elliott, C., Mavriplis, C., & Anis, H. (2020). An entrepreneurship education and peer mentoring program for women in stem: mentors' experiences and perceptions of entrepreneurial self-efficacy and intent. *International Entrepreneurship and Management Journal*, 16(1), 43-67. <https://doi.org/10.1007/s11365-019-00624-2>
9. Fatoki, O. and Oni, O. (2014). Students' perception of the effectiveness of entrepreneurship education at a South African University. *Mediterranean Journal of Social Sciences*. <https://doi.org/10.5901/mjss.2014.v5n20p585>
10. Gana, D., Ubale, C., & Armaya'u, B. (2023). Facilitating entrepreneurship interest among bricklaying, block laying and concreting students in technical colleges in katsina state. *Journal of Production Operations Management and Economics*, (32), 42-52. <https://doi.org/10.55529/jpome.32.42.52>
11. Igbinedion, V. and Ojeaga, I. (2012). Use of career education and occupation information services in boosting enrolment into Vocational and Technical Education programs in Nigeria. *International Education Studies*, 5(4). <https://doi.org/10.5539/ies.v5n4p229>
12. Iwu, C., Opute, P., Nchu, R., Eresia-Eke, C., Tengeh, R., Jaiyeoba, O., ... & Aliyu, O. (2021). Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention. *The International Journal of Management Education*, 19(1), 100295. <https://doi.org/10.1016/j.ijme.2019.03.007>
13. Kagara, A., Ibrahim, D., & B., N. (2020). Bridging the missing links in the implementation of technical Vocational Education and training curriculum in Nigeria. *Open Journal of Science and Technology*, 3(2), 110-117. <https://doi.org/10.31580/ojst.v3i2.1471>
14. Motsoeneng, M. (2021). Unpacking pedagogical content knowledge and content knowledge: assessing technical vocational education training college lecturers' pedagogical content knowledge on topic specific knowledge. <https://doi.org/10.47696/adved.202161>
15. Muhammad, A. and Kamin, Y. (2019). Challenge of integrating entrepreneurial competencies into technical college programs. *International Journal of Engineering and Advanced Technology*, 8(5c), 379-383. <https://doi.org/10.35940/ijeat.e1054.0585c19>
16. Nwachukwu, G. O. (2024). Human capital development: A driver for educational improvement in Nigeria. *British journal of education*, 12(6), 30-39.
17. Nwaimo, E. K. (2023). Impact evaluation of the national open apprenticeship scheme of the National Directorate of Employment (NDE) in the South-West, Nigeria (2008-2017) (Doctoral dissertation).
18. Ochedikwu, J., Ukuma, S., & Attah, M. (2013). Globalizing vocational and technical education curriculum for sustainable development in Nigeria.

19. Okolie, U., Igwe, P., & Elom, E. (2019). Improving graduate outcomes for Technical Colleges in Nigeria. *Australian Journal of Career Development*, 28(1), 21-30. <https://doi.org/10.1177/1038416218772189>
20. Okolie, U., Nwajiuba, C., Binuomote, M., Osuji, C., Onajite, G., & Igwe, P. (2020). How careers advice and guidance can facilitate career development in technical, vocational education, and training graduates: the case in Nigeria. *Australian Journal of Career Development*, 29(2), 97-106. <https://doi.org/10.1177/1038416220916814>
21. Okolie, U., Nwajiuba, C., Binuomote, M., Osuji, C., Onajite, G., & Igwe, P. (2020). How careers advice and guidance can facilitate career development in technical, vocational education, and training graduates: the case in Nigeria. *Australian Journal of Career Development*, 29(2), 97-106. <https://doi.org/10.1177/1038416220916814>
22. Olawale, O. (2023). Assessment and validation of facilities for implementing employability skills module in Aluminum fabrication: a study in Nigerian Technical Colleges. *Journal of Mechanical Engineering Education*, 10(2), 67-76. <https://doi.org/10.17509/jmee.v10i2.61882>
23. Onwusa, S. (2021). The issues, challenges and strategies to strengthen Technical, Vocational Education and Training in Nigeria. *International Journal of Research and Innovation in Social Science*, 05(05), 48-59. <https://doi.org/10.47772/ijriss.2021.5502>
24. Oviawe, J. (2017). Fostering students' enrolment in technical education programmes through career guidance and occupational awareness. *Education Journal*, 6(4), 125. <https://doi.org/10.11648/j.edu.20170604.11>
25. Shuaibu, H., Kamin, Y., & Haruna, R. (2019). Integrating entrepreneurship skills across radio, television and electronic work trade curriculum in technical colleges in North-Western Nigeria. *International Journal of Recent Technology and Engineering*, 8(3), 4294-4302. <https://doi.org/10.35940/ijrte.c5171.098319>
26. Yun-yu, Z. and Ko, J. (2020). How do teaching quality and pedagogical practice enhance vocational student engagement? a mixed-method classroom observation approach. *International Journal of Educational Management*, 34(6), 987-1000. <https://doi.org/10.1108/ijem-11-2019-0393>