NAU Journal of Technology and Vocational Education
Volume 11, No. 2, April 2026

IMPACT OF VOCATIONAL STUDIES ON STUDENTS' CREATIVITY IN THE DUAL-OPERATIONAL CURRICULA APPROACH OF A UNIVERSITY EDUCATION FOR SUSTAINABLE DEVELOPMENT

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Abstract
In Nigeria, policy guidelines bordering on vocational and technical education have increased the attention on the field in the existing educational institutions. Focus on one course or double major course is uncommon in Nigerian higher institutions. However, the operation of a dual system of education with significant attention to specialised disciplines and vocational studies simultaneously in some countries of the world, including Nigeria, caught the attention of the researchers. The need therefore arises to examine the impact of vocational studies on students' creativity in the dual-operational curricula approach in a university education for sustainable development. Descriptive survey research design guided by three research questions was used for the study, and *five hundred final year students randomly selected across five out of the six Colleges in the then Tai Solarin University of Education, now Tai Solarin Federal University of Education situated in Southwestern Nigeria participated in the study. Vocational Studies Creative Impact Scale (VSCIS) (r=0.75) was used for data collection. Frequency count, percentages, mean and chart were used for data analysis. The results, showed that the implementation of the dual-operational curricula approach influences the creativity of the students. Among the recommendations put forward is the need to reinvigorate the dual-operational curricula approach with constant provision of resources and adequate practical delivery mode system for sustainable development prospects of Nigerian university students.*
Keywords: Creativity, Dual-Operational Curricula, Vocational Studies.

Introduction

Over the years in Nigeria, observations have shown a mismatch between societal demands and graduate productivity. The mismatch has often been attributed to poor curriculum implementation at institutional and policy levels. Although a close look at the curriculum matters in Nigeria showed that curriculum development in Nigeria in recent years has been quite dynamic and responsive to socio-economic as well as global educational demands, doubt is usually raised on how the creativity of the products of Nigerian institutions. Inability of schools to translate curriculum to practical realities remains a common challenge across the three levels of education in Nigeria (Okolocha, 2012). This observation continues to inform the public discourse on the need for students in Nigerian higher institutions to be empowered with hands-on-skills for job placement and job creation, and this demands for the need to expose them to the skills, and demonstrate same during their studentship. In a similar view, Cambridge International (2025) put it that creative projects in school inherently teach learners to experiment, work in teams, ask questions and connect ideas, which is exactly what modern workplaces need.

Both at home and at school, education is not just limited to academic attainment; it is an instrument for the development of open-minded creative attitudes to knowledge (Salaudeen, 2017). It should be made clear that creativity transcends intelligence, but works with intelligence. Intelligence suggests that a child has a particular potential in relation to a given field of endeavour. This is essentially distinct from creativity which represents a more generic set of abilities (Alade, 2018). The ability to demonstrate novel or a more generic creative thinking outside the specific area of knowledge makes a child a creative thinker. The frequency of participation in school activities impacts the development of creative thinking (Ramos & Araya (2025) Creative thinking is most effective when

the accumulated experience of relationships within different disciplines can be harnessed to work together on specific problems, particularly in the forming of new dimensions or concepts (Salaudeen, 2017). Creativity is the ability to bring something new into existence (Joseph & James, 2015). Ayob, Hussain and Majid (2013) opined that teacher creativity is crucial for the success of learning in the classroom. This, according to them, emphasises the ability and not the activity of bringing new things into existence.

Creativity thus holds a significant place in the educative process. Creativity means rational thinking which explores all possible logical options and opportunities to make choices in order to meet human needs. In a discourse by Alade (2018) on creativity and the child, creativity is described as the interaction among aptitude, process and environment through which an individual or group produces a perceptible product that is both novel and useful as defined within a social context. "We prefer students to be creative and developing things themselves" (Togsverd & Pedersen (2024). As a unique and an inventive activity, creative teaching is expected to breed creative learning. Perhaps this is one of the reasons why creativity has become a huge concern in the 21st century classroom. Meanwhile, in the geopolitical zone where this study was carried out, there is no available studies nor literature to the researchers, which have empirically examined how impactful the dual curricula approach in which vocational studies is concurrently offered has been on undergraduate students creativity for the labour market and self-employment needs.

Statement of the Problem

One of the factors which drive creative outputs is the type of curriculum delivery system exposed to the learners in a formal school system. With the pivotal role of vocational and technical education and training as an avenue to economic development of nations, it is not uncommon to see some nations operating a dual system of education with significant attention to specialised disciplines and vocational studies. The reflection of the above is quite gaining attention in Nigeria also, this is with a view to eliminating the mismatch between the world of education and the world of work.

In its effort to rise up to the challenges of Nigerian graduates seeking white collar jobs that are gradually getting out of reach, Tai Solarin University of Education has been offering specialised disciplines/courses concurrently with vocational and entrepreneurship studies since its inception as a full-fledged University of Education. However, the need arises to ascertain how the dual operation approach in programmes implementation have fared on the creative potentials, creative breakthrough and creative output of the University undergraduates, the emphasis on skills acquisition for self-reliance and self-sustenance notwithstanding. The above informed the study which explored the impact of vocational studies on students' creativity in the dual-operational curricula approach of a University Education for sustainable development.

Purpose of the Study

The main purpose of the study was to explore the impact of vocational studies on students' creativity in the dual-operational curricula approach of a University Education for sustainable development. The specific purposes of this study were to:

1. Find out the approaches used in developing creativity among undergraduate students through the vocational studies offered in the University.
2. Examine the influence of vocational studies in the implementation of the dual-operational curricula approach on creativity of undergraduate students in the University.
3. Assess the undergraduate students' level of mastery of their vocational studies option towards self-reliance for sustainable development.

Research Questions

The following research questions were generated to guide the study:

1. What are the approaches used in developing creativity among undergraduate students through the vocational studies offered in the University?
2. Do the vocational studies in the implemented dual-operational curricula approach influence creativity of undergraduate students in the University?

3. What is the undergraduate students' level of mastery of their vocational studies option towards self-reliance for sustainable development?

Review of Related Literature

In the review of Wibowo and Saptono (2018), the characteristics contained in creativity include flexibility, authenticity and adaptability, and are not only crucial for the demands of life but also for the sustainability of the business (Wilowo & Saptono, 2018). Many countries include creativity as a core aim for their learners in national curricula. Even Singapore has recognised the need for more of creativity in its schools. Early 21st century primary education in England was characterised by growth in creativity practices, and the learner remains at the center of teaching and learning processes, with an active role in the production of knowledge and skills. Creativity thus becomes an important aspect of the learning process. Beghetto and Kaufman (2014) in their own classroom context of creativity submitted that creativity is needed for modern society as a character of improving their business.

The pivotal role of vocational programmes, which are indeed practical-based, on influencing creativity have increased the attention given to it in educational institutions around the world. For instance, in Nigeria, the real test of success of vocational and technical education is the employability of graduates, personal development, opportunities for further development, public acceptability and image (Joseph & James, 2018). Observations even showed that it is not uncommon to see some nations operating a dual system of education with significant attention to specialised disciplines and vocational studies.

Dual system of education, tagged the dual-operational curricula approach in this paper, implies that students are trained in their specialised course options simultaneously with some vocational courses. This prevents the restriction of a tertiary institution student or trainee to only his or her chosen course of study throughout the duration of the programme without any vocational course option that is likely to add value to their field of specialisation nor their creative-build up. A reflection of a dual-operational curricula approach at the international level is seen in Brazil as a country that operates the dual system of educational training in which case, students are trained concurrently in both Technical and Vocational Education and Training (TVET) and the general education curricula throughout their primary and post-primary levels. The curriculum contents feature a sequential technical and vocational training with emphasis on knowledge and practice, technologies and related sciences, as well as acquisition of specialised skills available in stages of module orientation, al for social and economic life. Similarly, Thailand runs the dual education system of general education training, provides programmes of work education and the skill acquisition programmes in dual form. In Germany, its dual system of education also emphasises technical and vocational education and training programmes. These programmes are consistently funded by respective governments, and the intensive apprenticeship in technical and vocational training done in specialised industries under qualified vocational professionals are well motivated (Okoye & Okwelle, 2013; Abolade, 2016).

In an attempt to bridge the gap between the world of education and the world of work, the Tai Solarin University of Education, now Tai Solarin Federal University of Education established on 29th January, 2005 by His Excellency, Otunba (Dr) Gbenga Daniel, the then Executive Governor of Ogun State, thus became the Premier University of Education in Nigeria that operates the dual-operational curricula approach in its educational delivery for undergraduates. In line with global trend and in realisation of the fact that white collar jobs were gradually getting out of reach, the University decided to establish the Centre for Entrepreneurship and Vocational Studies (CENVOS) to further equip the students against employment challenges by imparting in them entrepreneurship spirit and vocational skills (Amusan, 2013: 3). The Centre, CENVOS, was established in June 2005, with the following vision and mission statements respectively: To make Tai Solarin University of Education (TASUED) the preferred education University in the 21st Century. "Its graduates who must compulsorily attend the Centre courses will excel as educators and be leaders in all spheres of their disciplines. They will also be skilled in at least one vocation" (CENVOS, 2013:5) (The Vision Statement); To produce

graduates who, in addition to their academic achievement, will be skillful in one vocation on which they will rely for self-sustenance and empowerment. This, in future, can make them employers of labour rather than job seekers (CENVOS, 2013; 5) (The Mission Statement).

The six objectives of CENVOS, expected to be achieved through the various courses designed and approved by National Universities Commission (NUC) are:

i. Make the students master at least one vocation that can guarantee self-reliance.
ii. Equip the students with the needed knowledge to make them successful entrepreneurs.
iii. Create in the students necessary awareness, understanding and appreciation of Nigerian culture and politics and hence guarantee responsible citizenship.
iv. Provide the students the opportunity to acquire necessary knowledge in English Language that will make them highly proficient in communication skills for their present and future academic pursuit and the world of work.
v. Inculcate in the students, knowledge of the modern information, communication and technology (ICT) that will enable them to interact effectively with their immediate and distant environment.
vi. Develop in the students ability to observe and study the environment to which they belong and hence be able to adjust accordingly.

In pursuant of the realisation of the identified objectives, the vocational studies courses from which undergraduates from all the Departments in all the Colleges of the University must pick from 100 level and take throughout the 4-year programme or 3-year programme (in case of direct entry) include Fashion Design, Food and Nutrition and Poultry Production, Textile Studies, Computer System and Safety Production, Woodwork, Workshop and Wood Processing, Fruit Juice Production, Food Additive and Preservation, Fish Farming, Pond Construction, Fish Feeding and Nutrition, Rabbit Production, Bee Keeping, Bakery, Fruit and Vegetable Salad Production, Dye and Applied Dying Techniques, Basic Electronics Software Installation, Wood Joints and Techniques in Joint Formation, Beverages and African Dishes, Embroidery and Exhibition, Installation and Repair of Computer, Furniture Construction, Continental Dishes, Catering Service and Exhibition, Multi-media Computer, Trouble Shooting and Exhibition, Construction of Upholstery, Furniture and Exhibition and Entrepreneurship among others.

As laudable as the CENVOS programme of the University is in the dual-operational curricula approach with a view to equipping the undergraduates with both the certificate to teach and the vocational skills and entrepreneurship knowledge to be self-reliant, its influence on their creative ambience for future sustainable development remains obscured. It is expected that a viable dual-operational curricula approach should drive creativity output. In fact, Clark (2008) reported that individuals who ultimately make creative breakthrough tend, from their earliest days to be explorers and innovators and are never satisfied to follow traditional paths. Despite the opportunity given to the undergraduate students in Tai Solarin University of Education (TASUED) to partake in vocational studies added to their course specialisations, do they discover their world creatively in a comfortable exploring way? The need therefore arises to examine whether the dual-operational curricula approach fostering vocational studies along with specialised courses in TASUED are responsive to students' creativity, all for sustainable development.

Research Methods

Descriptive survey research design was used for the study. The on-campus students' population was estimated to be over 20,000 students in the 2024/2025 academic session when this study was conducted including 400 level students of five Colleges out of the six Colleges in the Tai Solarin University of Education, now, Tai Solarin Federal University of Education. The Colleges are: College of Humanities (COHUM), College of Science and Information Technology (COSIT), College of Social and Management Studies (COSMAS), College of Specialised and Professional Education (COSPED), and College of Vocational and Technology Education (COVTED). The sample was drawn randomly from the purposively selected 400 level students who had offered vocational courses of their choice at the 100 level, 200 level and 300 level. The same chosen vocational courses selected

differently by them were still being offered in their 400 level. Simple random sampling techniques based on the students availability during their vocational courses practical and their readiness to participate culminated to a total number of 500 final year students as the study sample size. The breakdown of the sample size on college basis are stated thus - COHUM = 110; COSIT = 65; COSMAS = 55; COSPED = 120; and COVTED = 150). In all, there were 220 male and 280 female participants.

The research instrument used for data collection was named Vocational Studies Creative Impact Scale (VSCIS) developed by the researchers. The VSCIS consists of the bio-data Section A while Section B has three parts each containing items on each of the three research questions. There were 37 items in all. The rating identified for the 13 items in part 1 are Always Used (AU), Occasionally Used (OU), and Not Used (NU). High Influence (HI), Average Influence (AI) and Minimal Influence (MI) are the responses presented for the ratings of the 8 items in Part 2 while the 16 items (Vocational course options) identified in Part 3 were to be rated with any of Very Good (VG), Fair (F) and Poor (P) based on their mastery by the students.

The research instrument was validated in terms of adequacies and inadequacies with respect to the specific purposes of the study by giving three copies to two vocational lecturers who are experts in their vocational/technical trades. Their comments on the relevance of the content, language clarity, content coverage, the face value and the modifications suggested led to the final draft of the VSCIS. The instrument was further subjected to pilot testing and reliability by administering thirty copies once on undergraduate part-time students who are not on the regular degree programme of the University. The Cronbach Alpha reliability value (r=0.75) obtained was considered quite satisfactory for this study. The researcher with the assistance of some technologists in the University surveyed administered the instrument to the target sample using their periods of vocational studies lectures for easy collection within three weeks. Descriptive statistics using frequencies of opinions and ratings of the items were quantified into percentages along with average mean and charts as relevant to each part of Section B of the research instrument. The quantities of opinions were rated on percentages with mean values and use of bar chart as the basis for discussion of results as appropriate.

Ethical Measures

In order to ensure ethical and legal compliance in conducting this research, the consent of each of the vocational course lecturers was sampled in their individual offices, and the officers in charge of the Centre for Entrepreneurship and Vocational Studies were adequately sought. Permission was given for the data collection having been convinced that the researchers maintained the appropriate anonymity of the participants and the significance of the study to university education and the entire society in due course.

Results

Research Question 1

What are the approaches used in developing creativity among undergraduate students through the vocational studies offered in the University?

Table 1: Approaches Used in Developing Creativity among Undergraduates through Vocational Studies (VOS)

S/N	Item	Always Used	Occasionally Used	Not Used
1	Freedom to build up my own creative skills during vocational studies lectures.	190 (38.0)	180 (36.0)	130 (26.0)
2	Provision of creative environment with facilities.	140 (28.0)	250 (50.0)	110 (22.0)

3	Encouragement in constructing my own creative idea in practical VOS classes.	230 (46.0)	170 (34.0)	100 (20.0)
4	Allowing me to play an active role for creative development.	150 (30.0)	220 (44.0)	130 (26.0)
5	Opportunity for independent expression of skills, originality and innovation.	140 (28.0)	240 (48.0)	120 (24.0)
6	Allowing me to use raw materials to produce relevant VOS items.	180 (36.0)	220 (44.0)	100 (20.0)
7	Display of art and craft projects by the VOS lecturer for creative development.	150 (30.0)	250 (50.0)	100 (20.0)
8	Displaying varieties of VOS materials for creative work.	180 (36.0)	220 (44.0)	100 (20.0)
9	Exposure of VOS students to diverse creative activities.	210 (42.0)	280 (56.0)	10 (2.0)
10	Sparking VOS students' imaginations through varieties of practical VOS projects.	170 (34.0)	240 (48.0)	90 (18.0)
11	Step-by-step format teaching and acknowledging students' creative ideas.	240 (48.0)	240 (48.0)	20 (4.0)
12	Brainstorming by VOS students' involvement as a way to bring out creativity.	130 (26.0)	290 (58.0)	80 (16.0)
13	Encouraging risk-taking in VOS students when they engage in creative pursuits.	170 (34.0)	180 (36.0)	150 (30.0)
	Average/Mean	**35.1% (X=2.11)**	**45.9% (X=2.75)**	**.23% (X=1.38)**

Source: Field Work (2025). **Note:** Items in parentheses are in percentages (%) (X=Mean)

The results presented in Table 1 on the approaches used in developing creativity among undergraduate students through vocational studies (VOS) courses taught by their lecturers show that a step-by-step formal teaching and acknowledging students' creative ideas rated 48.0% is always used compared with the remaining other approaches. On the average, 35.1% (X=2.11) of the respondents agreed that the thirteen (13) approaches to developing creativity is always used while 45.9% (X=2.75) was rated for the creative approaches as being occasionally used. Only 23% (X=1.38) denied adequate usage of the creative approaches by their vocational studies lecturers.

Research Question 2:

Do the vocational studies in the implemented dual-operational curricula approach influence creativity of undergraduate students in the University?

Table 2: Influence of Vocational Studies in the Dual-Operational Curricula Approach on Students' Creativity

S/N	Item	High Influence	Average Influence	Minimal Influence
14	Ability to produce products that are unique.	230(46.0)	160(32.0)	110(22.0)
15	Generation of new and creative ideas.	240(48.0)	200(40.0)	62 (12.0)
16	Problem-solving ability for creativity development.	210(42.0)	190(38.0)	100(20.0)
17	A never giving up mind-perseverance	220(44.0)	190(38.0)	90 (18.0)
18	Development of a winning attitude to productivity.	280(56.0)	200(40.0)	20 (4.0)
19	Ability to open up creative solutions	280(56.0)	210(42.0)	10 (2.0)
20	Nurturing of creative potentials to survive.	260(52.0)	190(38.0)	50 (10.0)
21	Development of creative thinking skills.	270(54.0)	170(34.0)	60 (12.0)

Average/Mean	**49.8% (X=3.00)**	**37.8% (=2.27)**	**12.4% (X=0.74)**

Source: Field Work (2025). **Note:** Items in parentheses are in percentages (%) (X=Mean).

The results in Table 2 on the influence of vocational studies offered in the implemented dual-operational curricula approach on undergraduate students' creativity reveal a 49.8%(X=3.00) for high influence, 37.8%(X=2.27) for the average influence and 12.4%(X=0.74) for minimal influence. Specifically, the high influence of the implemented dual-operational curricula approach is recorded for the development of a winning attitude to productivity (56.0%), ability to open up creative solutions (56.0%); development of creative thinking skills (54.0%), and nurturing of creative potentials to survive (52.0%). The minimal influence of the dual-operational curricula approach is lowest for the ability to open up creative solutions.

Research Question 3:

What is the undergraduate students' level of mastery of their vocational studies option towards self-reliance for sustainable development?

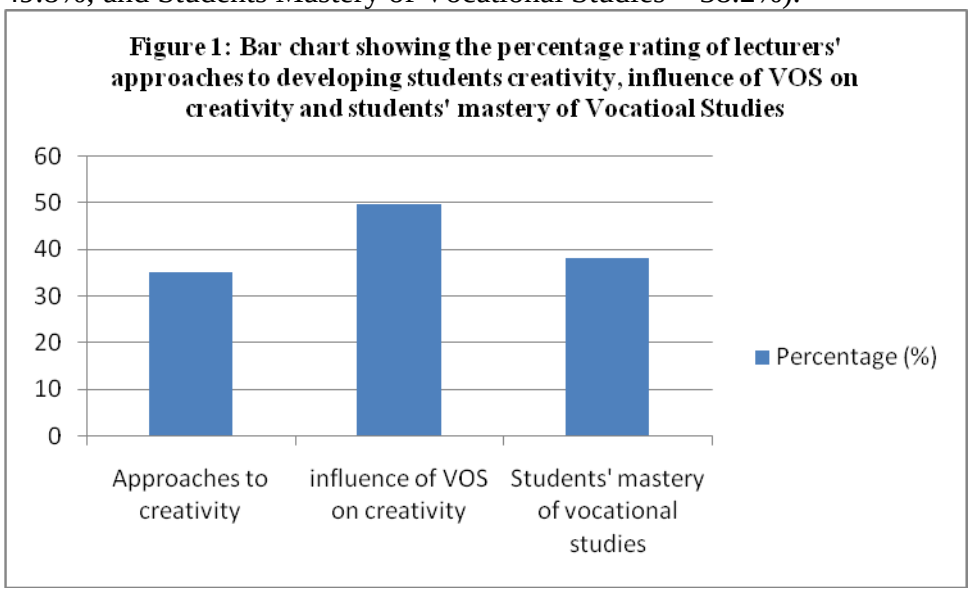
Table 3: Undergraduate Students' Level of Mastery of their Vocational Studies (VOS) Option towards Self-reliance for Sustainable Development

S/N	Item	V. Good	Good	Fair	Poor
22	Fashion Design/Textile Studies	300(60.0)	150(30.0)	50(10.0)	-
23	Food and Nutrition/Catering Services	250(50.0)	180(36.0)	70(14.0)	-
24	Poultry Production	150(30.0)	250(50.0)	70(14.0)	30 (6.0)
25	Computer Studies and Repairs	110(22.0)	170(34.0)	150(30.0)	70 (14.0)
26	Woodwork Construction/Upholstery	200(40.0)	250(50.0)	50 (10.0)	-
27	Fruit Juice Production	200(40.0)	260(52.0)	40 (8.0)	-
28	Fish Farming	214(42.0)	215(43.0)	41 (8.2)	20 (4.0)
29	Rabbit Production	160(32.0)	210(42.0)	100(20.0)	30 (6.0)
30	Bee Keeping	150(30.0)	110(22.0)	120(24.0)	120(24.0)
31	Bakery	210(42.0)	180(36.0)	70 (14.0)	40 (8.0)
32	Tie and Dye	250(50.0)	180(36.0)	70 (14.0)	-
33	Basic Electronics	210(42.6)	120(24.0)	111(22.2)	56 (11.2)
34	Shoe Making	190(38.0)	230(46.0)	80 (16.0)	-
35	Barbing/Hair Dressing	219(43.8)	201(40.2)	80 (16.0)	-
36	Creative Arts	240(48.0)	210(42.0)	40 (8.0)	10 (2.0)
	Average /Mean	**38.2% (X=2.29)**	**36.5 (=2.19)**	**14.4% (X=0.86)**	**10.9%(X=0.65)**

Source: Field Work (2025). **Note:** Items in parentheses are in percentages (%) (X=Mean).

The results of the field work presented in Table 3 show clearly that the level of mastery of undergraduate students of their vocational studies is highest with a very good score of 60.0% for those in the fashion design/textile studies. This is followed by the students who choose food and nutrition/catering services (50.0%); and the tie and dye students (50.0%). On the average, the level of mastery of undergraduate students in their vocational studies are 38.2% (X=2.29) (very good), 36.5%9X=2.19) (good), 14.4% (X=0.86) (fair), and 10.9% (0.65) (poor).

Also, the following bar chart presents further a clear representation of the results on the approaches used in developing creativity, influence of vocational studies on students' creativity, and undergraduate students' level of mastery of their vocational studies (VOS) option towards self-reliance for sustainable development (Approaches to Creativity = 35.1%; Influences of VOS on Creativity = 49.8%; and Students Mastery of Vocational Studies = 38.2%).



The bar chart implies that the approaches always used by lecturers in developing creativity among students rated 35.1% influence the students' vocational studies (VOS) with 49.8% rating that is about an average. The approaches and the influence of vocational studies led to 38.2% level of mastery of students' vocational studies options. And there are still opportunities for better impact of the dual-operational curricula approach on undergraduate students' creativity and mastery of vocational studies courses for sustainable development.

Discussion

The results of the data analysis of Research Question One shows that the following approaches in use by vocational studies lecturers for developing creativity among undergraduate students make impact to an extent viz: encourage them in constructing their own creative ideas in practical vocational studies, (VOS) classes (46.0%); step-by-step approach to teaching, and acknowledging students' creative ideas among others, table 1). The study further found out that students are usually exposed to diverse creative activities (42.0% - Item 9, table 1) among others. Though, Salaudeen (2017) had earlier asserted that creative practice provides open contexts for both teacher and learners to be creative, the report of Cambridge International (2025) corroborated this study that creative projects in school inherently teach learners to experiment, work in teams, ask questions and connect ideas, which is exactly what modern workplaces need. Also, North West College's model published in 2025 shows that it is possible to blend high academic standards with rich creative opportunities, to the benefit of students and the whole community. As learners play active role, they are free to build-up their own creative skills during vocational studies instructional practices, and these are opportunities for independent expression of skills, originality and innovation within the school and in the wider society.

In a related way, the results of the second research question show that the approaches used in developing the creative potentials of undergraduate students in the dual-operational curricula approach influence their creativity. As shown in table 2, the influence of it felt relatively on the ability to produce products that are unique (46.0%), generation of new and creative ideas (48.0%), problem-solving ability for creative development (42.0%), a never giving up mind (44.0%), development of a winning attitude to productivity (56.0%), ability to open up creative solutions (56.0%), nurturing of creative potentials to survive (52.0%) and development of creative thinking skills (54.0%). These findings imply that the objectives for the dual-operational curricula approaches in the University of Education surveyed stated earlier in the background of this study by Amusan (2013) and also recorded in the handbook of CENVOS (2013) are gradually being achieved. No doubt, the dual-operational curricula

approach is gradually promoting realistic functional undergraduates who would eventually be self-reliance for sustainable development of the society in due course. Meanwhile, Ramos and Araya (2025) reported that the frequency of participation in school activities impacts the development of creative thinking. The critical thinking promoted by creativity of students makes the availability of the vocational skill-based trades enshrined in the dual curricula approach in the University system to be relevant to the contemporary society.

On the undergraduate students' level of mastery of their vocational studies (VOS) option towards self-reliance for sustainable development, this study has found out that students' mastery is very good in fashion design/textile studies, food and nutrition/catering services, woodwork construction/upholstery, fruit juice production, fish farming, bakery, tie and dye, basic electronics barbing/hair dressing and creative arts among others (table 3). The highest rating of undergraduate students' mastery of fashion design/textile studies confirms the observations made by the researcher in the University that the fashion design/textile unit of the University, at various times, is involved in the sewing of regalia/academic gowns for the University, and Vocational Studies students in the option play active role. In support of this finding of students creative involvement in vocational trades, Togsverd and Pedersen (2024) declared, "We prefer students to be creative and developing things themselves". Similarly, the finding and observation of Abolade (2016) recorded that Thailand students are currently responsible for the production of many industrial wares and toys.

The lesson here is that dual-operational curricula approach is not out of place if the Nigerian government can pay more attention to it and, as a matter of policy, ensure that tertiary institutions largely operate a dual-operational curricula approach. With this, many graduates would be able to fit into the labour market and become functional because their quality of practical know-how and creative potentials obtained from their respective institutions would be more suitable to qualify them for job positions and wealth creation, all for sustainable development. In the light of these findings, UNESCO (2013) has once suggested that Nigeria could emulate and adopt the impressive work done in education by other countries by upgrading vocational and technical institutions and forge closer relations between companies and schools and bridge the gap between the world of education and the world of work (UNESCO, 2013).

Conclusion

From the findings of this study, it is concluded that the dual-operational curricula approach which is in operation in the University surveyed is appropriate because of its value for vocational-based studies, influence on students' creativity and its impact on students' practical know-how and mastery for eventual job creation in the labour market. The foregoing indicate that the more Nigerian stakeholders embrace dual-operational curricula approach in education policies and curricula matters, the better for the individual learners and the sustainable future of the emerging society.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Dual-operational curricula approaches should be fostered in the floating of higher education programmes in Nigeria to prepare learners for a better placement in the world of work.
2. There is the need to reinvigorate the dual-operational curricula approach in the few Nigerian educational institutions that practice it and there should be constant provision of resources and adequate creative-based delivery mode system for a sustainable future.
3. Many existing Nigerian higher institutions that are yet to operate dual-operational curricula approach are encouraged to review their programmes and integrate the novel dual-operational curricula structure into their institutional practices.

References

Abolade, S.B. (2016). Promoting functional citizenry in Nigeria through technical and vocational education and training (TVET): Implications for national development. *African Journal of Historical Sciences in Education, 12*(1), 193-201.

Alade, I.A. (2018). *The building blocks in children education curriculum process*. Ibadan: Bisi Best (Nig.) Printers, 194 pgs.

Amusan, O. (2013). From the center director. Centre of entrepreneurship and vocational studies (Centre brochure). Tai Solarin University of Education (TASUED), Ijagun Ijebu-Ode: TASUED Press.

Ayob, A; Hassan, A. & Majid, R.A. (2013). A review of research on creative teachers in higher education. *International Education Studies*, 6(6), 61-65.

Beghetto, R.A. & Kaufman, J.C. (2014). Classroom contexts for creativity, (March).

Cambridge International (2025). *The Case for Creativity: Our Learning Model in Practice in 2025*.Auckland: North West College.
North West College: Auckland.

Centre for Entrepreneurship and Vocational Studies (2013). *Centre brochure*. Ijagun: Tai Solarin University of Education Press.

Clark, B. (2008). *Growing up gifted. Develop the potential of children at home and at school*. London: Merrill Publishing Company.

Joseph, E.B. & James, N. O. (2015). Creativity and innovation in vocational technical education: Key to the 21st century transformation of the global economy in Nigeria. *ASPROAEDU, 1*(1), 1-16.

Mason, C. & Arshed, N. (2013). Teaching entrepreneurship to university students through experiential learning: A case study. *Industry and Higher Education, 7*(1), 449-463.

Okohocha, C.C. (2012). Vocational technical education in Nigeria: Challenges and the way forward. *Business Management Dynamics, 2*(6), 1-8.

Ramos .H, & Araya, R.(2025).Do School Activities Foster Creative Thinking? An Analysis of PISA Results. *Education Science, 15*(2), 133; https://doi.org/10.3390/educsci15020133

Salaudeen, O.O. (2017). Towards creative thinking: The pre-school years. *International Journal of Early Childhood Care, Primary, Adult and Non-Formal Education (IJECPAE), 1*(1), 349-356.

Topsverd, L, & Pedersen, O. (2024).We prefer students to be creative and developing things themselves—narratives of student engagement when learning becomes playful. Scandinavian journal of educational research, 69, Issue 3,466-477.

UNESCO (2013). Revitalizing TVET in Nigeria. Available at http://portal.unesco.org/education/en/ev.Accessed 22nd March, 2015.

Wibowo, A. & Saptono, A. (2018). Do teachers' creativity impact on vocational students' entrepreneurial intention? *Journal of Entrepreneurship Education*, 21(3), 1-8.