Value Re-Engineering for Skills Acquisition and Sustainable Entrepreneurial Education in Public Senior Secondary Schools in Rivers State, Nigeria

Weke, Iheanyichukwu

University of Port Harcourt, Rivers State, Nigeria, Faculty of Education,
Department of Educational Management iheanyichukwuweke@gmail.com

Onuodu, Gloria Ugochi

University of Port Harcourt, Rivers State, Nigeria, Faculty of Education, Department of Educational Management

&

Festus, N. Obinna

University of Port Harcourt, Rivers State, Nigeria, Faculty of Education,

Department of Educational Management

errandchip1@gmail.com

Abstract

This study investigated the extent to which value re-engineering for skills acquisition predicts sustainable entrepreneurial education in public senior secondary schools in Rivers State, Nigeria. Three research questions and three hypotheses were raised to guide the study. A correlational design was adopted. The population of the study comprised 6,917 school administrators and teachers in the 335 public senior secondary schools in Rivers State. A sample of 378 respondents was drawn from the population using Taro Yamane's formula for minimum sample size. The instruments for data collection were researchers' designed instruments titled "Value Reengineering for Skills Acquisition Questionnaire and Sustainable Entrepreneurial Education Scale". The instruments contain 35-items and structured using four points rating scale. The instruments were validated by three experts. The reliability of the instrument was ascertained using Cronbach Alpha method, which yielded alpha values of 0.78, 0.82 and 0.88 respectively and overall reliability index of 0.83, while Sustainable Entrepreneurial Education Scale reliability index of 0.87. Simple regression was used to answer research questions 1 and 2, while multiple regressions was used to answer research question 2, t-test associated with simple regression was used to test hypotheses 1 and 2, while Analysis of Variance associated with multiple regressions was used to test hypothesis 3 at 0.05 alpha level. The findings of the study revealed that value reengineering for identifying skill gaps, aligning training with industry needs and the evaluation of the impact of existing skill acquisition programmes significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The study recommended that school administrators should partner with representatives from the industries to conduct an annual review of the entrepreneurship programmes to ensure it is regularly updated to reflect current industry practices and job demands.

Keywords: Value, Re-engineering, Value re-engineering, Skills Acquisition, Sustainable Entrepreneurial Education.

Introduction

The value is generally perceived as the benefit, worth, or importance attributed to something. Value is commonly described as a ratio of cost to functions in business organizations. This definition suggests that the increase in value can be achieved through either an increase in the quality of function without raising the cost or a decrease in the cost without raising the quality of the functions or even both methods. Re-engineering is a drastic redesigning and re-thinking of organizational operations with the view of realizing changes in performance measurements. According to Al-Wosabi and Houssaini (2024), re-engineering is a methodology of radical redesigning and conceptual rethinking of processes, to attain higher substantive changes in performance criteria including cost, quality, service, and speed. Value re-engineering thus is the extreme redesign of the organizational processes with a view to augmenting the worth of a product, service or process through the examination of its functions and costs of the process. The aim is to establish areas of enhancement regarding the functionality, quality, and performance in the organization by cutting down on the unnecessary costs. Value re-engineering skills acquisition is seen as the radical rethinking and redesigning of the process of skills acquisition, development and use, in order to realize severe performance indicators of cost, quality and service. It is maximizing the value of skill by determining that it is compatible with the present and future needs of the individual and industries and the overall economy.

Skilled acquisition is a process through which individuals learn, develop and perfect their competencies through practice and experience. Amadi and Eke (2022) argue that the programmes on skill acquisition are essential to provide youth with marketable skills that can minimize the unemployment rates and enable them to become independent. Therefore, the learning of skills prepares the youth with skills required to compete in the real world. To stay relevant in this process, one has to constantly learn and adopt new techniques and technologies. Sustainable entrepreneurial education is a revolutionary approach to education that prepares individuals with information, skills and attitude to develop and operate business enterprises in such a manner that they yield economic benefit and meets the demands of present stakeholder and provides long term investment and management approaches of future profitability. Dappa and Jumbo (2023) argue that entrepreneurial education must not work with profit-related principles only; instead, it must incorporate the principles of environmental stewardship and social equity, thus, making the case

that a business venture should bring benefit to host communities and the ecosystem at large. According to Okoroma and Peterside (2024), to make entrepreneurial education sustainable, educational interventions should be aimed at creating new ways of optimizing resources and at cultivating the attitude of creating value continuously to serve the present and the future generations. This view suggests that sustainable entrepreneur education creates an entrepreneurship that has the potential to adapt to the business environment to the changing market conditions and allocate resources effectively to be profitable in future.

Identification of skill gaps through value re-engineering is a pre-requisite towards sustainable entrepreneurial education. The secondary education in Nigeria does not equip graduates with entrepreneurial skills that match with the labour market needs. Agi and Adiele (2021) also found out that there is a lot of disengagement between the required skills in schools and the competencies required in the local economy. This observation implies that without a formal mechanism of identifying such skill gaps, entrepreneurial education programmes are run on guesses thus resulting in wastage of resources and graduates who are not well prepared to be self-reliant. Thus, sustainable entrepreneurial education hinges on value re-engineering by regularly and data-based analysis of the skill gap, as this will make the content of the curriculum to be relevant and focused. The re-engineering of educational services by schools can be achieved through a systematic discovery of market need, which will enable the schools to add direct value to the students, hence their ability to be entrepreneurial in the future.

Ibenegbu and Ezeugbor (2022) investigated evaluation of the implementation of entrepreneurship education programme in public secondary schools in Anambra State, Nigeria. The study found that implementation of the entrepreneurship education programme was to a low extent. They identified lack of qualified teachers with the requisite entrepreneurial skills, inadequate provision of essential physical facilities and instructional materials for practical learning, and the use of improper evaluation techniques that focused on theory over practice. In conclusion, that entrepreneurship education programme implemented is ineffective in achieving its core objective of equipping students with the skills needed for self-reliance after graduation. The researchers recommended that the government provide adequate funding for facilities, organize regular capacity-building workshops and seminars to retrain teachers, and establish a robust monitoring

and supervision system to ensure the programme is implemented as intended. Asare, Osei-Bonsu and Amankwah (2021) investigated needs assessment for entrepreneurship curriculum development in Ghanaian senior high schools. The study found that there is a significant need for a revised entrepreneurship curriculum that emphasizes practical skills, innovation, and direct industry relevance. Oginni, Afolabi and Erigbabo (2023) investigated skill mismatch and employability of technical and vocational education and training graduates in the Nigerian labor market. The findings that there is pervasive skill mismatch between the competencies of technical and vocational education and training graduates and the requirements of the Nigerian labor market, significantly impacting their employability. Also revealed that the skill mismatch arises from outdated curricula and insufficient exposure to modern industry practices. Oguejiofor and Okenwa (2022) investigated the role of industry-institution collaboration in enhancing quality vocational skills development among business education students in tertiary institutions in Enugu State. The study revealed that robust industry-institution collaboration plays a crucial role in enhancing the quality of vocational skills development among business education students.

Sustainable entrepreneurial education can be enhanced through value reengineering in order to match training to industry requirements. Working in close coordination with the local industries, educational institutions build symbiotic relationships that add value to students. Odeke and Nte (2025) argue that sustainable entrepreneurial education dictates going beyond the four classroom walls to forge tangible relationships with the industries students will later graduate or venture out of. It means that the lack of input of industry into entrepreneurial education programmes in secondary schools leads to the out datedness of the curricula and excessively abstract approach to the practical discipline.

Value reengineering will also require that administrators collaborate with the local business to design its curriculum, mentorships and internships to provide students with realistic experience and networking. This is a fundamental characteristic of sustainable entrepreneurial education since it is a practical application of knowledge (Ndem, 2020). Furthermore, as the training can be badly aligned with the requirements of the industry, graduating students can be offered outdated or irrelevant skills and be unprepared to face the difficulties they will meet in their professional life, as well as to experience high unemployment rates, underemployment, and a widespread gap

between graduate qualifications and the employment demands (Kayyali, 2025). This means that by having the training aligned to the industry needs, students can have the skills needed to establish their own businesses and maintain them after graduating.

The evaluation of skill- acquisition programmes continuously is mandatory to value reengineering, which leads to sustainable entrepreneurial learning. It is impossible to know whether a programme is on course or whether adjustments are necessary without constantly checking and analyzing it. According to Onyeozu (2022), there is disconnection between what happens after programme graduation and real self-employment, and a number of those who went through the programme cannot sustain their businesses after the training. It means that there is a programme design and support system failures that can be detected only with the help of strict checking. Value reengineering relies heavily on the evaluation process since it gives the feedback loop required in the continuous improvement process, allowing administrators to understand what is working, what is not working, and how resources can be reallocated to maximize effectiveness. It is believed that a programme that embraces regular and critical review will be more sustainable, since it is able to adjust to the fluctuating economic conditions, as well as the requirements of the students, whilst still achieving its goals of developing authentic entrepreneurial capacity.

Adebayo and Oladele (2020) examined the problems encountered by graduates of entrepreneurship skill-acquisition centres in southwest Nigeria in starting new businesses. The analysis showed that such graduates face serious challenges associated with insufficient funding, ineffective training staff, and absence of practical-learning equipment, thus preventing a transition between training and successful creation of an enterprise. Uwaezuoke and Obiekwe (2023) also assessed entrepreneurial topics in the public secondary schools in Anambra State to determine their role in the realization of sustainable development goals. It was found that the supply of the entrepreneurial school facilities was grossly insufficient, which makes it hard to deliver the subjects in an effective way with references to the sustainable development goals.

The research by Wike (2024) was concentrated on the building of creativity and entrepreneurship abilities in the public secondary schools in Rivers State. The results showed that the development of learning activities that enable students to creatively explore, the encouragement of creative

thinking by means of provocative questioning, and the availability of open-ended assignments are effective approaches to development of creativity in the learners. Moreover, the implementation of activity-based learning; mediation of school-industry connections; and orchestration of internship programmes to students are also feasible means of enhancing the process of entrepreneurial skills development. Other measures that were championed by the researchers included the fact that seminars and workshops should be regularly organized by the government to equip teachers with improved pedagogical skills. It is based on this background that the researchers seeks to investigate the extent to which value re-engineering for skills acquisition predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Statement of the Problem

Although there have been conscious attempts to incorporate entrepreneurial education and skill development into the learning process, there still remains a gap between the theoretic learning taught and the practical learning required of the creation of sustainable entrepreneurial businesses. Senior secondary level education system in Nigeria, which is meant to equip the learner with skills that are necessary in achieving self-reliance and economic contribution, often results in graduates who have academic qualifications but lack the necessary vocational competencies, critical analytical skills, and entrepreneurial acumen necessary to find gainful employment or to start and maintain their own business enterprise after graduating.

Common challenges facing the implementation of entrepreneurial education include the lack of quality educators, outdated or nonexistent equipment and facilities, inadequate funding, inappropriate curriculum, and curriculum that do not address industry needs or local economic conditions. Therefore, the educational programmes mostly fail to instill the competencies that should make the students self-reliant after their studies. Hence, in order to provide substantive value in the form of empowered, competent and independent graduates, there is an urgent need to re-engineer the whole process; curriculum design and pedagogical practices to resource allocation and school-industry partnerships. In line with this, there is an urgent necessity to examine the extent, to which value re-engineering for skills acquisition predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Aim and Objectives of the Study

The aim of this study was to investigate the extent to which value re-engineering for skills acquisition predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. Specifically, the study sought to achieve the following objectives:

- 1. Determine the extent to which value re-engineering for identifying skill gaps predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.
- 2. Examine the extent to which value re-engineering for aligning training with industry needs predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.
- 3. Investigate the extent to which value re-engineering the evaluation of the impact of existing skill acquisition programmes predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Research Questions

The following research questions guided the study:

- 1. To what extent does value re-engineering for identifying skill gaps predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria?
- 2. To what extent does value re-engineering for aligning training with industry needs predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria?
- 3. To what extent does value re-engineering for evaluating the impact of existing skill acquisition programmes predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria?

Hypotheses

The following null hypotheses were tested at 0.05 alpha level.

- 1. Value re-engineering for identifying skill gaps does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.
- 2. Value re-engineering for aligning training with industry needs does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

 Value re-engineering for evaluating the impact of existing skill acquisition programmes does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Methodology

The design for this study was a correlational design. The design was appropriate for the study because of its ability to predict the value of the independent variables based on the value of dependent variable. The population of the study comprised 6,917 school administrators and teachers in the 335 public senior secondary schools in Rivers State, Nigeria. (Source: Planning, Research & Statistics Development, Rivers State Senior Secondary Schools Board, Port Harcourt, Rivers State, 2025). There are 1,005 school administrators (335 principals and 670 vice principals), and 5,912 teachers in the 335 public senior secondary schools in Rivers State, Nigeria. A sample of 378 respondents was drawn from the population using Taro Yamane formula for minimum sample size. Percentage was used to draw 55 school administrators and 323 teachers as representative of the sample. The instruments for data collection were researchers' designed instruments titled "Value Re-engineering for Skill Acquisition Questionnaire (VRSAQ) and Sustainable Entrepreneurial Education Scale (SEES)". The instruments were structured using four points rating scale. The instruments contain 35-items. The instruments were validated by three experts from in the Department of Educational Management of the University of Port Harcourt. The reliability of the instrument was ascertained using Cronbach Alpha method. The reliability coefficients (r) for Value Re-engineering for Skills Acquisition Questionnaire (VRSAQ) with subsections; Value Re-engineering for Identifying Skill Gaps, Value Re-engineering for Aligning Training with Industry Needs and Value Re-engineering for Evaluating the Impact of Existing Skills Acquisition Programmes of 0.78, 0.82 and 0.88 respectively and overall reliability index of 0.83, while Sustainable Entrepreneurial Education Scale (SEES) reliability index of 0.87, indicating good internal consistency of the instruments. Simple regression was used to answer research questions 1 to 3, and t-test associated with simple regression was used to test hypotheses 1 to 3 at 0.05 alpha level.

Coefficient Determination (R-squared)

Interpretations

76 - 100% 51 - 75%

Very High High

26 - 50% 0 - 25%

Moderate Low

Results and Discussion

Research Question 1: To what extent does value re-engineering for identifying skill gaps predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria?

Table 1: Simple Regression on the Extent Value Re-engineering for Identifying Skill Gaps Predicts Sustainable Entrepreneurial Education in Public Secondary Schools in Rivers State, Nigeria

Model Summary						
				Std. Error of the		
Model	R	R Square	Adjusted R Square	Estimate		
1	.706ª	.499	.497	.19575		

a. Predictors: (Constant), Value Re-engineering for Identifying Skill Gaps

Table 1 shows the results of a linear regression carried out to investigate on the extent value reengineering for identifying skill gaps predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The regression coefficient (R = 0.70), which indicate to a high positive relationship between value re-engineering for identifying skill gaps and sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The coefficient of determination (R-squared) associated with the linear regression coefficient (R) of 0.70 was 0.499. This coefficient of determination (R-squared) indicates that, value re-engineering for identifying skill gaps accounted for 49.9% of sustainable entrepreneurial education in public senior secondary schools in Rivers State, Nigeria. This is an indication that other factors affect value re-engineering for identifying skill gaps and sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria predicted for 50.1%. Therefore, to a moderate extent, value re-engineering for identifying skill gaps predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Research Question 2: To what extent does value re-engineering for aligning training with industry needs predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria?

Table 2: Simple Regression on the Extent Value Re-engineering for Aligning Training with Industry Needs Predicts Sustainable Entrepreneurial Education in Public Secondary Schools in Rivers State, Nigeria

Model Summary						
				Std. Error of the		
Model	R	R Square	Adjusted R Square	Estimate		
1	.552ª	.304	.302	.23060		

a. Predictors: (Constant), Value Re-engineering for Aligning Training with Industry Needs

Table 2 shows the results of a linear regression carried out to investigate on the extent value reengineering for aligning training with industry needs predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The regression coefficient (R = 0.55), which indicate to a moderate positive relationship between value re-engineering for aligning training with industry needs and sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The coefficient of determination (R-squared) associated with the linear regression coefficient (R) of 0.55 was 0.304. This coefficient of determination (R-squared) indicates that, value re-engineering for aligning training with industry needs predicted for 30.4% of sustainable entrepreneurial education in public senior secondary schools in Rivers State, Nigeria. This is an indication that other factors affect value re-engineering for aligning training with industry needs and sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria accounted for 69.6%. Therefore, to a moderate extent, value re-engineering for aligning training with industry needs predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Research Question 3: To what extent does value re-engineering for evaluating the impact of existing skill acquisition programmes predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria?

Table 3: Simple Regression on the Extent Value Re-engineering for Evaluating the Impact of Existing Skill Acquisition Programmes Predicts Sustainable Entrepreneurial Education in Public Secondary Schools in Rivers State, Nigeria

Model Summary							
				Std. Error of the			
Model	R	R Square	Adjusted R Square	Estimate			
1	.465ª	.216	.214	.24480			

a. Predictors: (Constant), Value re-engineering the evaluation of the impact of existing skill acquisition programmes

Table 3 shows the results of a linear regression carried out to investigate on the extent value reengineering for evaluating the impact of existing skill acquisition programmes predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The regression coefficient (R = 0.46), which indicate to a moderate positive relationship between value reengineering for evaluating the impact of existing skill acquisition programmes and sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The coefficient of determination (R-squared) associated with the linear regression coefficient (R) of 0.46 was 0.216. This coefficient of determination (R-squared) indicates that, value re-engineering for evaluating the impact of existing skill acquisition programmes predicted for 21.6% of sustainable entrepreneurial education in public senior secondary schools in Rivers State, Nigeria. This is an indication that other factors affect value re-engineering for evaluating the impact of existing skill acquisition programmes and sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria accounted for 78.4%. Therefore, to a low extent, value re-engineering for evaluating the impact of existing skill acquisition programmes predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Hypothesis 1: Value re-engineering for identifying skill gaps does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Table 4: t-test Associated with Simple Regression on the Extent Value Re-engineering for Identifying Skill Gaps Predicts Sustainable Entrepreneurial Education in Public Secondary Schools in Rivers State, Nigeria

Coefficients ^a							
				Standardized			
Unstandardized Coefficients			Coefficients				
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	1.308	.067		19.418	.000	
	Value Re-engineering for Identifying Skill Gaps	.525	.027	.706	19.183	.000	

a. Dependent Variable: Sustainable Entrepreneurial Education

Table 4 shows the results of t-test associated with simple regression to test whether value reengineering for identifying skill gaps does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The Regression coefficient (R = 0.70), but value re-engineering for identifying skill gaps contributed significantly to the model with $\beta = 0.525$ and the significant value of 0.00 was less than p = 0.05, which show that value reengineering for identifying skill gaps significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The t-test value 19.183 associated with linear regression was statistically significant at 0.00 when subjected to 0.05 alpha level of significance. By implication, the null hypothesis was rejected and we accept the alternative hypothesis that value re-engineering for identifying skill gaps significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Hypothesis 2: Value re-engineering for aligning training with industry needs does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Table 5: t-test Associated with Simple Regression on the Extent Value Re-engineering for Aligning Training with Industry Needs Predicts Sustainable Entrepreneurial Education in Public Secondary Schools in Rivers State, Nigeria.

Coefficients ^a							
		Unstandardized		Standardized			
		Coefficients		Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	1.622	.077		21.150	.000	
	Value Re-engineering for	.402	.032	.552	12.719	.000	
	Aligning Training with						
	Industry Needs						

a. Dependent Variable: Sustainable Entrepreneurial Education

Table 5 shows the results of t-test associated with simple regression to test whether value reengineering for aligning training with industry needs does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The Regression coefficient (R=0.55), but value re-engineering for aligning training with industry needs contributed significantly to the model with $\beta=0.402$ and the significant value of 0.00 was less than p=0.05, which show that value re-engineering for aligning training with industry needs significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The t-test value 12.719 associated with linear regression was statistically significant at 0.00 when subjected to 0.05 alpha level of significance. By implication, the null hypothesis was rejected and we accept the alternative hypothesis that value re-engineering for aligning training with industry needs significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Hypothesis 3: Value re-engineering for evaluating the impact of existing skill acquisition programmes does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Table 6: t-test associated with Simple Regression on the Extent Value Re-engineering for Evaluating the Impact of Existing Skill Acquisition Programmes Predicts Sustainable Entrepreneurial Education in Public Secondary Schools in Rivers State, Nigeria

Coefficients ^a							
				Standardized			
		Unstandardized Coefficients		Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	1.837	.075		24.409	.000	
	Value Re-engineering the evaluation of the impact of existing skill acquisition programmes	.307	.030	.465	10.093	.000	

a. Dependent Variable: Sustainable Entrepreneurial Education

Table 6 show the results of t-test associated with simple regression to test whether value reengineering for evaluating the impact of existing skill acquisition programmes does not significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The Regression coefficient (R = 0.46), but value re-engineering for evaluating the impact of existing skill acquisition programmes contributed significantly to the model with $\beta = 0.397$ and the significant value of 0.00 was less than p = 0.05, which show that value re-engineering for evaluating the impact of existing skill acquisition programmes significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. The t-test value 10.093 associated with linear regression was statistically significant at 0.00 when subjected to 0.05 alpha level of significance. By implication, the null hypothesis was rejected and we accept the alternative hypothesis that value re-engineering for evaluating the impact of existing skill acquisition programmes significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Discussion of Findings

The findings of the study revealed that to a moderate extent, value re-engineering for identifying skill gaps predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. Value re-engineering for identifying skill gaps significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. This finding is in line with Oginni, Afolabi and Erigbabo (2023) who revealed that there is pervasive skill mismatch between the competencies of technical and vocational education and training graduates and the requirements of the Nigerian labor market, which significantly impacting their employability. Also revealed that the skill mismatch arises from outdated curricula and insufficient exposure to modern industry practices. Furthermore, Asare, Osei-Bonsu and Amankwah (2021) found that there is a significant need for a revised entrepreneurship curriculum that emphasizes practical skills, innovation, and direct industry relevance.

The findings of the study also revealed that to a moderate extent, value re-engineering for aligning training with industry needs predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. Value re-engineering for aligning training with industry needs significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. This finding is in line with Oguejiofor and Okenwa (2022), who revealed that robust industry-institution collaboration plays a crucial role in enhancing the quality of vocational skills development among business education students. The study concluded that partnerships are vital for providing students with relevant practical experiences and up-to-date knowledge. In addition, Wike (2024) found that use of activity- based teaching method; through school-industry linkage and by organizing internship programmes for students are ways to educate students for entrepreneurship skills develop.

Finally, the findings of the study revealed that to a low extent, value re-engineering for evaluating the impact of existing skill acquisition programmes predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. Value re-engineering for evaluating the impact of existing skill acquisition programmes predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria. This finding is in line with Adebayo and Oladele (2020), who found significant challenges in creating new businesses due to inadequate funding, a

lack of qualified training personnel, and insufficient equipment for practical learning. The study by Uwaezuoke and Obiekwe (2023) revealed that there is gross inadequate provision of entrepreneurial school facilities to effectively teach these subjects for achieving sustainable development goals. This implies that without value re-engineering for evaluating the impact of existing skills acquisition programmes, the programmes may continue to fail in meeting their set out objective of for self-reliance after graduation.

Conclusion

Based on the findings of the study, it was concluded that value re-engineering for identifying skill gaps, value re-engineering for aligning training with industry needs and value re-engineering the evaluation of the impact of existing skill acquisition programmes significantly predicts sustainable entrepreneurial education in public secondary schools in Rivers State, Nigeria.

Recommendations

Based on the findings and conclusion, the following recommendations are made:

- 1. School Administrators should partner with representatives from the industries to conduct an annual review of the entrepreneurship programmes in their school to ensure it is regularly updated to reflect current industry practices and job demands.
- 2. School administrators should organize local apprenticeship and mentorship programme that will actively building partnerships with local businesses, artisans, and entrepreneurs in the school immediate community.
- 3. School administrators should creation entrepreneurial clubs in the school where students interacts and identify a real-life problem in their community and work as a teams to develop a viable business concept to solve the identified problem.

References

- Adebayo, A. A., & Oladele, R. (2020). Challenges facing graduates of entrepreneurship skill acquisition centres in creating new enterprises in Southwest, Nigeria. *International Journal of Entrepreneurship*, 24(1), 1-13.
- Agi, U. K., & Adiele, E. E. (2021). Repositioning technical and vocational education and training (TVET) for skill acquisition and sustainable development in Rivers State. *International Journal of Innovative Education Research*, 9(2), 110-118.
- Akpan, C. A., & Etor, C. R. (2021). Teaching methods in entrepreneurship education: A review of literature. *Journal of Business and Management*, 8(4), 56-67.
- Amadi, C. O., & Eke, U. I. (2022). Skill acquisition and youth empowerment in Rivers State: A focus on vocational training initiatives. *Rivers State Journal of Vocational Studies*, 7(2), 40-55.
- Asare, S., Osei-Bonsu, C., & Amankwah, F. (2021). Needs assessment for entrepreneurship curriculum development in Ghanaian senior high schools. *Journal of Vocational Education* & *Training*, 73(4), 651–669.
- Dappa, G. F., & Jumbo, O. P. (2023). Sustainable entrepreneurship education: A pathway for inclusive development in the Niger Delta. *Niger Delta Entrepreneurship Review*, 4(1), 75-90.
- Edenkwo, C., & Eshiet, N. I. (2025). Adoption of digital tools and teachers' management of entrepreneurial responsibility in public secondary schools in Rivers State. *International Journal of Educational Research & Practice*, 12(1), 103-115.
- Ibenegbu, C. V., & Ezeugbor, C. O. (2022). Evaluation of the implementation of entrepreneurship education programme in public secondary schools in Anambra State, Nigeria. *International Journal of Integrated Education*, 5(11), 1-10.

- Kayyali, M. (2025). Aligning vocational education with industry needs: Successful partnerships and practices. Innovative Approaches in Vocational and Regional Education (pp. 1-48). IGI Global. https://doi.org/10.4018/979-8-3693-9496-0.ch001
- Ndem, J. U. (2020). *Entrepreneurship education in Nigeria: From policy to practice*. University of Calabar Press.
- Odeke, V. I., & Nte, N. D. (2025). Conquering leadership and entrepreneurship education challenges in public secondary schools in Rivers State for goal attainment and sustainable development. *Rivers State University Faculty of Education Journal*, 12(1), 1-13.
- Oginni, O. S., Afolabi, A. S., & Erigbabo, G. (2023). Skill mismatch and employability of technical and vocational education and training graduates in the Nigerian labor market. *International Journal of Vocational and Technical Education Research*, 9(1), 16-26.
- Oguejiofor, C. J., & Okenwa, G. O. (2022). Role of industry-institution collaboration in enhancing quality vocational skills development among business education students in tertiary institutions in Enugu State. *Nigerian Journal of Business Education*, *9*(1), 110-120.
- Okoroma, S. K., & Peterside, V. T. (2024). Fostering sustainable business models through entrepreneurial education: *Insights from Rivers State. Rivers University Business Journal*, 9(1), 195-210.
- Onyeozu, A. M. (2022). Value re-engineering and post-training outcomes: An evaluation of skills acquisition programmes for sustainable entrepreneurship. *Nigerian Journal of Educational Research and Evaluation*, 15(2), 88-105.
- Uwaezuoke, M. I., & Obiekwe, K. K. (2023). Evaluation of entrepreneurial subjects for achieving sustainable development goals in public secondary schools in Anambra State. *Unizik Journal of Educational Research and Policy Studies*, 15(3), 67 76.
- Wike, R. E. (2024). Educating students for creativity and entrepreneurship skills development in public secondary schools in Rivers State. *European Journal of Management, Economics and Business*, 1(1), 21-32.