

## SCIENCE EDUCATORS' PERCEPTION OF ENTREPRENEURSHIP OPPORTUNITIES IN SCIENCE EDUCATION CURRICULUM IN RIVERS STATE UNIVERSITIES

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### ABSTRACT

The study investigated how Science Educators perceives Entrepreneurship Opportunities of Science Education Curriculum among Rivers State government owned Universities. Four objectives and four corresponding null hypotheses were formulated and tested at 0.05 level of significance. Descriptive survey research design was adopted for the study. The population of the study comprised 27 science education lecturers selected among Rivers State owned universities. The population was studied using the census sampling technique. The instrument for data collection was a self-structured Science Educators' Perception of Entrepreneurship opportunities in Science Education Curriculum Questionnaire containing 20 item-statements. The questionnaire was designed on a 4-point rating scale of strongly agree, agree, disagree and strongly disagree. The instruments were subjected to both face and content validated by three experts. The reliability of the instrument was computed using Cronbach Alpha formula which yielded an aggregate reliability co-efficient of 0.82 for the two clusters. The mean and standard deviation were used to answer the research questions while t-test statistics was used to test hypotheses at 0.05 level of significance. Finding of the study revealed that science education curriculum in Rivers State universities provides creative, problem-solving skill for entrepreneurship opportunities in Rivers State owned universities. Based on the findings, it was recommended among others that science education curriculum should be reviewed so as to meet up with the growing entrepreneurial needs of university graduates.

***Keywords: Science Educators, Entrepreneurship, Education Curriculum, Problem solving, Creative opportunities, etc.***

### INTRODUCTION

An Entrepreneur is a person who creates a new business, bearing most of the risks and enjoying most of the rewards. (Ozkan, Gundogdu, Emsen & Aksu, 2003). Entrepreneurship is the process of putting together the financial, social, and psychological risks by combining the necessary time and effort together and introducing something that is different from the monetary and personal reward (Naktiyok, 2004). Entrepreneurship is influenced by education and training as it will be acquired through culture and experience. Entrepreneurship is also about creating or setting up a business not only for the purpose of generating profit but for a greater purpose of meeting human needs. Entrepreneurs are not only the problem solvers but the product developers. To be a successful entrepreneur, one should be people-oriented and have perseverance. One must have the ability to take risk, believe in his/her potential and have the courage to move forward in all circumstances. Most importantly, an entrepreneur must have the ability to take risk and can assess the risk. They can think about invention or innovation. Invention is to discover new thing whereas innovation is to use old things in a new way.

One of the most striking results of the Global Entrepreneurship Monitor (GEM) 2000 report is that entrepreneurship education is the most important element in the entrepreneurship process. According to Yildirim,2008, the development of the content and methods of the entrepreneurship education program is not an option but a basic requirement. Entrepreneurship training consists of numerous kinds of experiences about how students can combine talent,

vision and transform them into different opportunities. Entrepreneurship has been one of the most discussed topics in Nigeria as is the case in the world in recent years (Aydin & Celik, 2013).

Opportunity suggest a chance for advancement, progress or profit. Such chances can be obtained by an individual to accomplish set of goals and objectives if well-articulated. The Oxford Advanced Learners Dictionary (2015) defines opportunity as a time when a particular situation makes it possible to do or achieve something. It can also be seen as a favourable circumstance or occasion. Hansen et al. (2009), posits that for an opportunity to be meaningful, it must be recognized, discovered and identified. Entrepreneurial opportunities provide economic value to the entrepreneur after he must have attended to the identified need. That is why Shane and Venkaturam (2000) attributed those situations in which goods and services, raw materials and organized methods are introduced and sold at greater than their cost of productions, Hence Entrepreneurial opportunities enable the entrepreneur to discover new methods and techniques of harnessing goods, services, raw materials, personnel etc. in order to earn economic value (Junaidu and Aliyu, 2019).

For Science students, entrepreneurship is of specific importance and relevance as it helps them not just to be able to solve real life existing complications but to be able to recognise and identify emerging needs and glitches (Maryville University, 2021). It is on the basis of the above that Zhoul2022 advised that it is becoming increasingly apparent that in today's world, there is a need as well as desire for science education curriculum and entrepreneurship to work together. Based on the concepts in science education, science education students in tertiary institutions can integrate the knowledge of biology with technology, engineering and other fields, which can strongly promote students' operational ability, innovation and other noticeable improvements.

According to the Organization for Economic Co-operation and Development (OECD) (2020), Science Education curriculum has been designed to help equip students with key competencies for the future which are likely to last in their future lives and work. Education in science makes up for the shortcomings of traditional education by being more student-needs-based, not just aiming at the short-term acquisition of knowledge, but with the ultimate goal of developing students into well-rounded and capable learners. Science education curriculum is geared towards enhancing students' scientific literacy and also helping students to change their test-taking mindset and apply what they have learned in solving real-world problems (OECD, 2020). In the quest to incorporate more science education into school curricula, a major selling point has always been that science learning leads to better jobs. It is true that on average, science related jobs pay more than liberal arts jobs, the gap in pay tends to narrow over time. First jobs in science discipline will almost certainly pay more than entry-level positions in teaching or social work, but fast-changing technology fields require ongoing education, which is an expensive investment. In pushing the importance of science education, the promise of high-paying work has become an enticing one for parents who want the best for their children. To be able to use science and technology effectively in a changing world, one needs to be aware and understand how to utilize the opportunities it presents. It is also worthy to note that the requirements for utilizing opportunities in science and technology in the 21st century differs. There is now a growing need for students who are thinking, producing, questioning, and contributing to economic and social developments according to the Federal Ministry of Education, 2016.

Entrepreneurs impact the economic and social growth of countries through creating new jobs, fostering innovation in markets, and boosting competition (Kritikos, 2014). In the realisation of promising benefits of entrepreneurship requires entrepreneurship education programs there is

need to increase entrepreneurship awareness and cultivate entrepreneurial attitude, mindset, behaviour, and intention among young people. Rivera and Li (2020) studied randomly sampled one thousand, one hundred and five respondents to investigate significant predictors of STEM college learning and career orientation through multiple regression analysis across high schools in Houston Texas. In the study, 42% variance was revealed as STEM college learning and career orientation among six outcome predicting variables, which include STEM related activities engagement, technology/facilities, parental influence, academic experience, self-esteem and effective teacher pedagogy. The study concluded that parent and teachers as support system for students is crucial to their development of the right attitude and interest towards STEM career. Blotnicky et al. (2018) researched among career interest, mathematics self-efficacy and career activities as correlate of STEM career choice among middle school pupils. The study sampled from grade 7 to 9 a total of 1,448 respondent from government owned schools in Atlantic Canada. An investigation of the knowledge of mathematics and science required by students to excel in STEM related career. An overall lack of knowledge of science and mathematics was reported with higher predominance among younger students. The study also found that higher mathematics self-efficacy to predict awareness about requirement in Science education is geared towards enhancing students' scientific literacy and also helping students to change their test-taking mindset and apply what they have learned in solving real-world problems. Career and are more likely to choose Science education is geared towards enhancing students' scientific literacy and also helping students to change their test-taking mindset and apply what they have learned in solving real-world problems. Furthermore, interest in scientific and technical know-how were likely to choose Science education is geared towards enhancing students' scientific literacy and also helping students to change their test-taking mindset and apply what they have learned in solving real-world problems.

Several studies on developing and integrating entrepreneurial skills into the field of science education have been carried out in Nigeria (Mbanefo and Eboka, 2022; Akani, 2015; Okafor, 2018). However, there seems to be a dearth of studies examining entrepreneurship opportunities in Science Education Curriculum in Rivers State. This paper therefore examines science educator's perception of entrepreneurship opportunities in Science Education Curriculum in Rivers State.

### **Statement of the Problem**

With the growing rate of unemployment in the country, there is need to identify the various entrepreneurial opportunities in science education curriculum in Rivers State. There is also a growing global awareness on the need for students to be self-reliant to mitigate the huge number of joblessness among graduates. Most countries have incorporated and utilized STEM programmes in their primary and secondary schools and even tertiary education curriculum. In Nigeria reverse is the case as there are minimal efforts by stakeholders in the educational sector to harnessing the entrepreneurial opportunities in science education curriculum. Hence this study set out to assess entrepreneurship opportunities in science education curriculum in Rivers State owned Universities.

The objectives of this study are;

- i. examine the various creative opportunities in Science Education Curriculum in Rivers State owned Universities;
- ii. examine the various problem-solving opportunities in Science Education Curriculum in Rivers State owned Universities;
- iii. Find out the various innovative opportunities in Science Education Curriculum in Rivers State owned Universities and
- iv. ascertain the various knowledge-based opportunities in Science Education Curriculum in Rivers State owned University

The following null hypotheses were formulated to guide the study at 0.05 level of significance.

- i:** there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various creative opportunities in Science Education Curriculum in Rivers State owned Universities;
- ii:** there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various problem-solving opportunities in Science Education Curriculum in Rivers State owned Universities;
- iii:** there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various innovative opportunities in Science Education Curriculum in Rivers State owned Universities and
- iv:** there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various innovative opportunities in Science Education Curriculum in Rivers State owned Universities.

The Descriptive survey research design was adopted for the study. The population of the study comprised twenty-seven (27) science education lecturers, thirteen (13) from the Rivers State University (RSU) while fourteen (14) were drawn from Ignatius Ajuru University of Education (IAUE) Port Harcourt, Rivers State. The entire population was studied because the population was manageable. The instrument for data collection was a self-structured questionnaire tagged "Science Educators' Perception of Entrepreneurship opportunities in Science Education Curriculum Questionnaire". The questionnaire was structured on a four point rating scale. The options to answer research question 1 are: Strongly Agreed (SA –4points), Agreed (A – 3 points), Disagreed (D – 2 points), Strongly Disagreed (SD – 1point). Three experts, one in Measurement and Evaluation and two in Science Education from Rivers State University validated the instrument. The Cronbach Alpha reliability test was used to determine the consistency of the instrument which yielded 0.79 for the first cluster and 0.84 for the second cluster with an overall coefficient value of 0.82.

The researchers with the help of two research assistants administered twenty-seven (27) questionnaires out of which (27) copies representing (100%)were retrieved and used for the study. Data collected were analysed using descriptive statistics of mean and standard deviation to answer the research questions and t-test inferential statistics to test the hypotheses formulated at 0.05 level of significance. Regarding the research questions, mean rating of 2.50 was used for decision. Items of mean value 2.50 and above were considered Agreed, while items with mean values below 2.50 were considered as Disagreed. Again, hypotheses is accepted when t-calculated value is less than t-critical value and rejected when t-calculated value is greater than t-critical value.

### Data Analysis and Discussion of Findings

#### Research Question 1: What are the various creative opportunities in Science Education Curriculum in Rivers State Universities?

**Table 1:** Mean and Standard Deviation on the various creative opportunities in Science Education Curriculum in Rivers State Universities

S/N	Questionnaire item	RSU13			IAUE 14			Average		
		$\bar{X}$	SD	RMK	$\bar{X}$	SD	RMK	$\bar{X}$	SD	RMK
1	Opportunity to think and create a new products.	3.57	0.81	SA	3.22	0.86	SA	3.40	0.84	SA

2	Opportunity to apply their creative abilities in setting up businesses.	3.25	1.06	SA	3.05	1.08	SA	3.15	1.07	SA
3	Opportunity to utilise their creative skills to develop new techniques in solving problems.	3.08	1.00	SA	3.56	0.86	SA	3.32	0.93	SA
4	Opportunity to identify needs or in the society.	3.36	0.87	SA	3.03	0.93	SA	3.20	0.90	SA
5	Opportunity to sell ideas to businesses and organisations.	3.30	0.73	SA	3.40	0.74	SA	3.35	0.74	SA
<b>Grand mean</b>		<b>3.31</b>			<b>3.25</b>			<b>3.28</b>		

**Source: Field Survey 2023**

Table 1 examined the various creative opportunities in Science Education Curriculum in Rivers State Universities. Results in Table 1 revealed that both Science Education lecturers in Rivers State University and Ignatius Ajuru University of Education strongly agreed to most of the items. With a mean average of 3.38 greater than the criterion mean of 2.50 implies that science educators strongly agree that science education curriculum provides creative opportunities in Rivers State Universities.

### **Research Question 2: What are the various problem-solving opportunities in Science Education Curriculum in Rivers State Universities?**

**Table 2:** Mean and Standard Deviation on the various problem-solving opportunities in Science Education Curriculum in Rivers State Universities?

S/N	Questionnaire item	RSU 13			IAUE 14			Average		
		$\bar{X}$	SD	RMK	$\bar{X}$	SD	RMK	$\bar{X}$	SD	RMK
6	Opportunity to develop their problems solving skills	3.33	0.74	SA	3.42	0.84	SA	3.38	0.79	SA
7	Opportunity to setup businesses that solves societal problems.	2.91	1.06	A	2.84	1.08	A	2.88	1.07	A
8	Opportunity to implement solutions in real-world scenario.	3.04	0.95	SA	3.49	0.79	SA	3.27	0.87	SA
9	Opportunity to complete any self-driven task.	3.29	0.89	SA	3.49	0.87	SA	3.39	0.88	SA
10	Opportunity to develop best solutions to existing products.	3.40	0.84	SA	3.33	0.80	SA	3.37	0.82	SA
<b>Grand mean</b>		<b>3.19</b>			<b>3.31</b>			<b>3.26</b>		

**Source: Field Survey 2023**

Table 2 examined the various problem-solving opportunities in Science Education Curriculum in Rivers State Universities. Results in Table 2 revealed that Science Education lecturers in Rivers State University and Ignatius Ajuru University of Education strongly agreed to most of the items. With a mean average of 3.26 greater than the criterion mean of 2.50 implies that science educators strongly agree that science education curriculum provides problem-solving opportunities in Rivers State Universities.

**Research Question 3: What are the various innovative opportunities in Science Education Curriculum in Rivers State Universities?**

**Table 3:** Mean and Standard Deviation on the various innovative opportunities in Science Education Curriculum in Rivers State Universities

S/N	Questionnaire item	RSU 13			IAUE 14			Average		
		$\bar{X}$	SD	RMK	$\bar{X}$	SD	RMK	$\bar{X}$	SD	RMK
11	Opportunity of making existing products to be more efficient.	3.32	0.89	SA	<b>3.35</b>	0.95	SA	3.34	0.92	SA
12	Opportunity to create alternative solutions to emerging societal problems.	3.33	0.81	SA	<b>3.56</b>	0.86	SA	3.45	0.84	SA
13	Opportunity to exploration of new horizons in business	3.43	0.64	SA	<b>3.09</b>	1.01	SA	3.26	0.83	SA
14	Opportunity to create more value to existing products.	3.24	0.89	SA	<b>3.39</b>	0.89	SA	3.32	0.89	SA
15	Opportunities to produce things that will have competitive advantage.	3.58	0.60	SA	<b>3.53</b>	0.73	SA	3.55	0.67	SA
<b>Grand mean</b>		<b>3.38</b>			<b>3.38</b>			<b>3.38</b>		

**Source: Field Survey 2023**

Table 3 examined the various innovative opportunities in Science Education Curriculum in Rivers State Universities. Results in Table 3 revealed that Science Education lecturers in Rivers State University and Ignatius Ajuru University of Education strongly agreed to most of the items. With a mean average of 3.38 greater than the criterion mean of 2.50 implies that science educators strongly agree that science education curriculum provides innovative opportunities in Rivers State Universities.

**Research Question 4:What are the various knowledge-based opportunities in Science Education Curriculum in Rivers State Universities?**

**Table 4:** Mean and Standard Deviation on the various knowledge-based opportunities in Science Education Curriculum in Rivers State Universities

S/N	Questionnaire item	RSU 13			IAUE 14			Average		
		$\bar{X}$	SD	RMK	$\bar{X}$	SD	RMK	$\bar{X}$	SD	RMK
16	Opportunities to setup tutorial business	3.28	0.94	SA	3.25	1.06	SA	3.26	1.00	SA
17	Opportunity of creating of new products	2.98	0.99	A	3.56	0.86	SA	3.27	0.93	SA
18	Opportunity of improving on existing products	3.45	0.82	SA	3.36	0.87	SA	3.41	0.84	SA
19	Opportunity to identify market trends and what to venture into.	3.33	0.99	SA	3.03	0.93	SA	3.18	0.96	SA
20	Opportunity of converting solutions in science curriculum into profitable businesses	3.09	1.00	SA	3.57	0.81	SA	3.33	0.90	SA
<b>Grand mean</b>		<b>3.23</b>	<b>0.94</b>		<b>3.35</b>	<b>0.85</b>		<b>3.29</b>	<b>0.93</b>	

**Source: Field Survey 2023**

Table 4 examined the various knowledge-based opportunities in Science Education Curriculum in Rivers State Universities. Results in Table 4 revealed that both Science Education lecturers in Rivers State University and Ignatius Ajuru University of Education strongly agreed to most of the items. With a mean average of 3.29 greater than the criterion mean of 2.50 implies that science educators strongly agree that science education curriculum provides knowledge-based opportunities in Rivers State Universities.

**Hypothesis**

**H<sub>1</sub>:** There is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various creative opportunities in Science Education Curriculum in Rivers State Universities.

**Table 5: T-test Analysis of Difference between the mean rating of RSU and IAUE Science Education lecturer’s responses on the various creative opportunities in Science Education Curriculum in Rivers State Universities.**

Group	N	$\bar{X}$	SD	Df	t-calc	t-critical	Remark
RSU	13	3.31	0.89	25	0.41	±1.96	Accept null
IAUE	14	3.25	0.89				

**Source: Field Survey 2023**

From Table 5 above, the calculated t-value of 0.41 is less than the t-critical value of 1.96, the null hypothesis is therefore upheld. This implies that there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various creative opportunities in Science Education Curriculum in Rivers State Universities.

**H<sub>2</sub>:** There is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various problem-solving opportunities in Science Education Curriculum in Rivers State Universities.

**Table 6: T-test Analysis of Difference between the mean rating of RSU and IAUE Science Education lecturer’s responses on the various problem-solving opportunities in Science Education Curriculum in Rivers State Universities.**

Group	N	$\bar{X}$	SD	Df	t-calc	t-critical	Remark
RSU	13	3.19	0.90	15	0.82	±1.96	Accept null
IAUE	14	3.31	0.88				

**Source: Field Survey 2023**

From Table 6 above, the calculated t-value of 0.82 is less than the t-critical value of 1.96, the null hypothesis is therefore upheld. This implies that that there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various problem-solving opportunities in Science Education Curriculum in Rivers State Universities.

**H<sub>3</sub>:** There is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various innovative opportunities in Science Education Curriculum in Rivers State Universities.

**Table 7: T-test Analysis of Difference between the mean rating of RSU and IAUE Science Education lecturer's responses on the various innovative opportunities in Science Education Curriculum in Rivers State Universities.**

Group	N	$\bar{X}$	SD	Df	t-calc	t-critical	Remark
RSU	13	3.38	0.65	25	0.08	±1.96	Accept null
IAUE	14	3.39	0.89				

**Source: Field Survey 2023**

From Table 7 above, the calculated t-value of 0.08 is less than the t-critical value of 1.96, the null hypothesis is therefore upheld. This implies that that there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various innovative opportunities in Science Education Curriculum in Rivers State Universities.

**H<sub>4</sub>:** There is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various innovative opportunities in Science Education Curriculum in Rivers State Universities.

**Table 8: T-test Analysis of Difference between the mean rating of RSU and IAUE Science Education lecturer's responses on the various innovative opportunities in Science Education Curriculum in Rivers State Universities.**

Group	N	$\bar{X}$	SD	Df	t-calc	t-critical	Remark
RSU	13	3.23	0.94	25	0.81	±1.96	Accept null
IAUE	14	3.35	0.85				

**Source: Field Survey 2023**

From Table 8 above, the calculated t-value of 0.81 is less than the t-critical value of 1.96, the null hypothesis is therefore upheld. This implies that that there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various innovative opportunities in Science Education Curriculum in Rivers State Universities.

### Summary of Major Findings

The study revealed that:

- i. Science Education Curriculum has enhanced creative opportunities in Rivers State Universities.
- ii. Science Education Curriculum has enhanced problem-solving opportunities in Rivers State Universities.
- iii. Science Education Curriculum has provided innovative opportunities in Rivers State Universities.
- iv. Science Education Curriculum has provided knowledge for opportunities in Rivers State Universities.

### Discussion of Findings

Results in table 1 has shown that science education curriculum has enhanced creative opportunities in Rivers State Universities. Both categories of respondents agrees that science education curriculum is capable of providing the students with the opportunity to think and create a new products, the opportunity to apply their creative abilities in setting up businesses,

opportunity to utilize their creative skills to develop new techniques in solving problems, opportunity to identify needs or in the society and opportunity to sell ideas to businesses and organizations. On the test of hypothesis 1, table 5 showed that showed that t-calculated which 0.41 is less than t-critical  $\pm 1.96$  at 0.05 level of significance. The null hypothesis was therefore accepted. It was therefore concluded that there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various creative opportunities in Science Education Curriculum in Rivers State Universities. This findings is in line with Kpaji and Ibrahim (2015) where it has been stated that creativity and inventions in science education for Nigerian Institutions is an attempt to x-ray how Science Education programme can prepare science students to be useful to themselves as well as better the society after graduation. Kpaji and Ibrahim (2015) also noted that creativity Science learning and teaching in Nigeria institutions have not measured to an internationally accepted standards because of the endemic traditional nature of teaching and learning science. According to them to make science teaching and learning better, emphasis should shift from the teacher domination and custodian of knowledge as is currently practiced to that of creative, innovative and inventive learners or students centered programme.

Result of analysis shown in table 2 revealed that science education curriculum has enhanced problem-solving opportunities in Rivers State Universities. The results further showed that science education curriculum provides students the opportunity to develop their problems solving skills and also opportunity to setup businesses that solves societal problems. The result also showed that science education curriculum provides students the opportunity to implement solutions in real-world scenario and also opportunity to complete any self-driven task while developing best solutions to existing products. On the test of hypothesis 2, table 6 showed that t-calculated which is 0.82 is less than t-critical  $\pm 1.96$  at 0.05 level of significance. The null hypothesis was therefore accepted. It can therefore be concluded that there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various problem-solving opportunities in Science Education Curriculum in Rivers State Universities. The study also corresponds with that of Sukontawaree et al (2022) where it was identified that the 21st century, learning management focuses on enhancing the competitiveness of learners in producing innovations that could solve problems in the next era of human civilization. It is therefore imperative that science education curriculum can be utilized to improve problem solving skills among students.

Result of analysis shown in table 3 revealed that science education curriculum provides students in Rivers State universities opportunities of making existing products to be more efficient and also opportunity of creating alternative solutions to emerging societal problems. Students are also given the opportunity to explore new horizons in business while also given the opportunity to create more value to existing products. It was further revealed that science education curriculum provides students in Rivers State universities opportunities to produce things that will have competitive advantage. On the test of hypothesis 3, table 7 showed that t-calculated which is 0.08 is less than t-critical  $\pm 1.96$  at 0.05 level of significance. The null hypothesis was therefore accepted. It was therefore concluded that there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various innovative opportunities in Science Education Curriculum in Rivers State Universities. This findings aligns with that of Udu (2018) where innovations in Science Education was described as new, creative ideas which are meant to bring effectiveness and change to the educational sector. Innovation pose a lot of opportunities to science education students. Students can utilize science education curriculum to develop skills in trying new things in the educational sector and this in a long run improve their efficiency and effectiveness.

Results of analysis shown in table 4 has revealed that Science Education Curriculum is capable of providing students with opportunities to setup tutorial businesses, opportunity of creating of new products, opportunity of improving on existing products, opportunity to identify market trends and what to venture into and also opportunity of converting solutions in science curriculum into profitable businesses. On the test of hypothesis, table 8 showed that t-calculated which is 0.81 is less than t-critical  $\pm 1.96$  at 0.05 level of significance. The null hypothesis was therefore accepted. It can therefore be concluded that there is no significant difference in the mean rating of RSU and IAUE Science Education lecturers on the various innovative opportunities in Science Education Curriculum in Rivers State Universities. This result corresponds with that of the Interacademic Partnership (2023) report where it was stated that science education provides students with opportunities to investigate a problem, search for possible solutions, make observations, ask questions, test out ideas, and think creatively and use their intuition. In this sense, students have opportunities to explore possible solutions, develop explanations for the phenomena under investigation, elaborate on concepts and processes, and evaluate or assess their understandings in the light of available evidence.

### CONCLUSION

Based on the findings, it was revealed that there are a lot of entrepreneurial opportunities in Science Education Curriculum which can be utilized by Science education Students in Rivers State universities so as to become self-reliant even after their education. The research revealed that science education curriculum is capable of providing science education students with creative opportunities, problem solving opportunities, innovative opportunities and knowledge-based opportunities.

### RECOMMENDATIONS

- i. Science Education Curriculum should be reviewed so as to meet up with the growing entrepreneurial needs of university graduates
- ii. Facilities needed for full implementation of the science education curriculum should be put in place so as to improve student's utilization of the opportunities therein.
- iii. Lecturers should endeavor to blend learning with practical examples so that students will be able to identify entrepreneurial opportunities in what they are taught.
- iv. Science Education Curriculum should be utilized by institutions to enhance creative opportunities among Science Students in institutions of learning across the country.

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