International Journal on Integrated Education (IJIE)

e-ISSN: 2620 – 3502
p-ISSN: 2615 – 3785

Volume: 8 Issue: 2 | February 2025

https://journals.researchparks.org/index.php/IJIE

Article

Undergraduate Entrepreneurial Intentions and Personal Attitude Towards Entrepreneurship in Natural Product Chemistry

Chinda Worokwu[*1]

1. Department of Chemistry, Ignatius Ajuru University of Education, Rumuolumeni, Rivers State, Nigeria
* Correspondence: wororolly@gmail.com

Abstract: This study was carried out to determine the relationship between personal attitude and undergraduates' entrepreneurial intentions towards entrepreneurship in natural product chemistry in Ignatius Ajuru University of Education Port Harcourt Rivers State, Nigeria. Correlation research design was adopted and the sample comprised 54 Final year undergraduate in Chemistry Education Undergraduates Department in Ignatius Ajuru University of Education, Rumuolumeni Port Harcourt, Nigeria. The instrument was a -17item questionnaire "tagged" Students' Entrepreneurial Intentions Questionnaire (SEIQ) with reliability coefficient of 0.87 determined by Alpha Cronbach formula. Research questions were answered using mean and standard deviation and hypothesis tested at 0.05 level of significance. Findings of revealed a positive correlation between entrepreneurial intentions and personal attitude as well as behavioural control. High extent of science education undergraduates' entrepreneurial intentions, attitude and entrepreneurial behavior of science education undergraduate towards entrepreneurship in natural product was obtained. It was recommended among others that natural products chemistry should be taught as a practical course to increase the entrepreneurial intention of students.

Keywords: Entrepreneurial Intentions, Personal Attitude, Entrepreneurship and Natural Product

Citation: Worokwu C. Undergraduate Entrepreneurial Intentions and Personal Attitude Towards Entrepreneurship in Natural Product Chemistry. International Journal on Integrated Education (IJIE) 2025, 8(2), 81-90.

Received: 20th Jan 2025
Revised: 25th Jan 2025
Accepted: 8th Feb 2025
Published: 26th Feb 2025

1. Introduction

Entrepreneurship is the ability to research envisage and shatter a course for a new business venture by combining information from discipline and from the external environment in the context of extraordinary uncertain and ambiguity which direct attention on the new business venture. It involves around substantial resource acquisition and development which leads to providing, sustaining, and coordination. entrepreneurship is the process of bringing together creative and innovative idea and exploring management and organization skill to combine people, money and resources to meet identified need authority create wealth [1]. The essence to create wealth, fund and employ labour. Wesbters Dictionary entrepreneurship is a process by which one undertakes to start and enterprise or business and full control and risk [2]. Based on these definitions, entrepreneurial skill acquisition is conceptualized as a training programme that geared toward equipping student teachers or recipient with creative or innovative that will enhance self-employee and job creation such training programme also equip student or receptive skill, knowledge, value, attribute, orientation and insight to analyse their environment in a more organized pattern.

Entrepreneurship education is defined as the means of promoting the transformation of ordinary people into entrepreneurs who are aware of future opportunities to make a career by creating profitable mini-companies. Entrepreneurship education prepares for involvement in business organization education provided to develop the individual in the skill, attitude competency belief and perspective of conceiving planning, starting and managing enterprise for sustained benefit. it is also a process of exposing learners to the essential skill for effective development and management of an enterprise at level.

Outline the objective of entrepreneurship education as follows [3]:

1. Provide meaning education for the youths which could make them self-relevant and subsequently encourage to derive profit and be independent or self-developed.
2. Provide small and medium size companies with the opportunity to secure quality graduate who will receive training and tutoring in the skills relevant\ to the management of the small and medium business centres.
3. Provide graduate with training and support necessary to help then establish a career in small and medium size business.
4. Provide graduate in training skills that will make them meet the manpower needs of the society.
5. Provide graduate with enough training in risk management to make uncertainty became possible and easy.
6. Stimulate industry and economic growth of rural and less developed areas
7. To provide graduate with enough training that will make them creative and innovative in identifying new business opportunities.

Entrepreneurship education offers benefits pertinent in today's society where there is an unprecedented rate of unemployment among Nigerian graduates. It is highly beneficial to students' teachers, businesses, and the government. Therefore, it is imperative for an entrepreneurial educator to possess the potential to use relevant pedagogical methodologies in preparing students to meet the economic demands of job creation to cope with the associated limited job opportunities for graduates in various disciplines. Resources and trainings are required for implementation of pedagogies that will challenge student values and build entrepreneurial intention Entrepreneurship education can be improved by increasing the external networks of the schools with local businesses to enable relevant economic issues to be addressed in schools.

Furthermore, entrepreneurship programs should gear towards learning for entrepreneurship, requires the use of active learning methods that enables students to take responsibility for learning to experiment, push boundaries and learn about themselves. Ingredients of entrepreneurial learning, include: experiential, social interactive, observational, and reflective learning. However, entrepreneurial skills and attitudes require new pedagogies. i.e. experiential learning, such as project-based activities, and active learning strategies. Reflection and generalizations stages in this kind of education are especially important, because without insight in experience, students may not be able to draw lessons from their experiences [4]. Entrepreneurship education is also focused on fostering students' positive and creative attitudes and intentions toward starting a new business venture. Underlined that entrepreneurial intention is the intention to engage in business activities and achieve self-employment, and it refers more to those who intend to conduct high-growth business [5]. It is a psychological process that predicts behavior and reveals attitudes, beliefs, and active actions.

Identified the intention of entrepreneurship as a mental state that directs the attention, energy, and behavior of entrepreneurs to specific business goals, and the realization of entrepreneurship must be inspired by the intention to do so [6], [7] defined entrepreneurial intention as the self-motivation to establish a new business enterprise and the conscious attainment of a certain level of entrepreneurship in the future [8]. For entrepreneurs, opting to start a business is not an accidental decision, nor is it the result of someone telling them to start a business. Entrepreneurial activity can be seen as a career choice, in which entrepreneurs choose a specific product or service around which they

organize resources to implement this choice. Opines that entrepreneurial intention is regarded as the product of personal self-efficacy, attitude, and subjective norms of entrepreneurial behavior [9]. Entrepreneurial intention is the key to understanding the entrepreneurial process, and it is the first step in the long and complex entrepreneurial process.

Affirms that studying Chemistry helps you to understand how materials behave, whether they are in the kitchen,in your clothes or in a builder's yard [10]. It helps us to understand how to make better materials, how to get the energy we need and how to protect the environment. It is interesting to note that chemistry can be found in the kitchen, restaurant/fast food, laundry, beauty salon (cosmetics), swimming pool, hospital, hotel and beer parlour, toilet and bathroom, air, bakery, water corporation, military formation/barrack, photo laboratory, paint and textile stores, business centre, house roof, cars, trains and air craft, waste dump among others in all human endeavours. Today, advances in chemistry in the areas of biochemistry, electrochemistry, computational chemistry, synthesis and analytical sciences, bio and solar fuels, supramolecular chemistry and nanoscience, and prosthetics sciences among others, have made human life more comfortable. There are obvious benefits that can be derived from qualitative and functional Chemistry entrepreneurship in Nigeria educational systems as discussed below.

Reducing the Unemployment Rate: Enrolment in tertiary institutions in Nigeria is on the increase hence the Government and organized private sectors do not have the capacity to absorb all the graduates of these institutions. The national Bureau of statistics put the unemployment rate in the first quarter of 2013 at 23.9% [11]. The situation of unemployment in Nigeria is indeed alarming [12]. The graduate unemployment problem has generated several other socio-economic problems in the country manifesting in the followings, militancy in the Niger Delta, Political thuggery among youths, increased rate of armed robbery and kidnappers and even the Boko Haram saga. The most potent way out of this problem is to develop our chemistry entrepreneurship to enable chemistry graduate to acquire practical skills resulting to self-employment or self-reliance.

National Economic Growth: Chemistry entrepreneurship will make a significant contribution to the national economy if laboratory research and innovation are converted into commercial gain of the individual and the society if the necessary funding is provided by Government and private sector partnership. Job and wealth creativity: Chemists well trained in chemistry entrepreneurship will definitely become employers thereby resulting to job and wealth creation. Natural product chemistry is an aspect of Chemistry that can increase entrepreneurship skill of our students. A natural product is a natural compound or substance produced by a living organism that is, found in nature. In the broadest sense, natural products include any substance produced by life. Natural products can also be prepared by chemical synthesis (both semi synthesis and total synthesis) and have played a central role in the development of the field of organic chemistry by providing challenging synthetic targets. The term natural product has also been extended for commercial purposes to refer to cosmetics, dietary supplements, and foods produced from natural sources without added artificial ingredients. Some of the entrepreneurial skills in chemistry content include: production of dyes from knowledge of colour chemistry; production of aluminum pots from knowledge of metallic chemistry; production of local drugs from knowledge of medicinal chemistry; treatment of water from knowledge of Environmental Hydro introduced chemistry entrepreneurship as a course and is making money through the sales of products including soaps, hair cream, shoe polish, mosquito repellants, herbicides, gum, sanitizers, after shave lotion and many more.

Studied identification of content areas for entrepreneurship and instructional strategies for effective delivery in chemistry [13]. Two research questions guided the study. The research was carried out in Ogidi education zone, Anambra State, Nigeria. All the 20 government employed chemistry teachers in the zone were used. The study adopted the

survey design. The study adopted the census comprises of Chemistry teachers in 20 government owned secondary school in Ogidi education zone. The instrument for data collection was a 35 item structured questionnaire titled Secondary School Chemistry Content and Instructional Strategies Questionnaire (SSCCIQ). The reliability was established using Cronbach Alpha and a reliability coefficient of 0.78 was established. Mean scores were used to answer the research questions. A mean score of 2.50 and above indicates that the particular content area is needed for the acquisition of entrepreneurial skills while a score below 2.50 shows that the content area is not needed for acquisition of entrepreneurial skills. It was observed that all the 35 content areas tested were found relevant to entrepreneurial skill acquisition, but different instructional strategies were identified for teaching the topics. It was recommended among others that laboratories should be well equipped and the laboratory technologists and assistants recruited and trained for our school laboratories.

Studied the impact of Entrepreneurial-Motivated-Approach in bridging gender disparities in achievement among senior secondary chemistry students [14]. Two research questions and four hypotheses guided the study. The study adopted pre-test, post-test nonequivalent quasi-experimental design. The sample size consists of 118 senior secondary 2 chemistry students with 58 students in the experimental group (30 males, 28 females) and 60 students in the control group (27 males,33 females) in two intact classes from two senior secondary schools in Education District V, Lagos State, Nigeria. The experimental group was taught using Entrepreneurial-Motivated-Approach while the control group was taught the same concepts for a period of six weeks using the conventional lecture method. The instruments for data collection were Chemistry Cognitive Achievement Test and Chemistry Practical Achievement Test validated by experts in test and measurement, and chemistry entrepreneurship. The reliability coefficients of the CCAT and CPAT were established using K-21 which yielded 0.87 and 0.76 respectively. The research questions were answered using mean and standard deviation while the hypotheses were tested using multiple analysis of covariance (MANCOVA) at 0.05 level of significance. Results revealed that gender had no significant effect on the students' cognitive achievement [$F(1,56)=.02$; $p>0.05$] and practical achievement [$F(1,56)=.48$; $p>0.05$] in chemistry when taught using Entrepreneurial-Motivated-Approach. The study therefore recommended among others that Chemistry teachers should make effective use of Entrepreneurial-Motivated-Approach in chemistry teaching and the Curriculum planners should ensure the integration of entrepreneurial modules in the learning experience of senior secondary chemistry curriculum and textbooks to enhance skills acquisition among chemistry students.

Studied overview of students' entrepreneurship in Indonesia [15]. It describes student entrepreneurship in terms of entrepreneurial intentions, level of entrepreneurial competence, and entrepreneurial self-efficacy and sees entrepreneurship education's impact. The data collection technique used is a questionnaire consisting of; Entrepreneurial intention questionnaire on a scale of 1-7. Research data was collected through a questionnaire sent to students through google form. The sample size used was 304 students from several universities. The research results, the level of entrepreneurial intention is 5.92; entrepreneurship competence is 5.75; entrepreneurial self-efficacy is 5.62; the impact of entrepreneurship education is 5.81, all of which are in the very high category (scale 1-7). Students' entrepreneurial intention outside Java is slightly higher than that of Java. The level of entrepreneurial competence of students outside Java is also slightly higher at 5.75, while in Java, it is 5.71. The level of entrepreneurial self-efficacy of students is relatively not different between islands. The efficiency of entrepreneurship education needs to be enriched so that the number of entrepreneurs continues to grow.

Dike and Avwiri, investigated enhancing entrepreneurship opportunities through chemistry education: implication for Nigerian youths empowerment in the 21st century using three instructional arrangements [16]. A quasi-experimental, pretest-posttest non-

randomized control group design was adopted in three intact groups. A sample of 120 students drawn from a population of 645 chemistry option using a purposive and simple random sampling. Three research questions and two hypotheses guided the study. A 25-item tagged "Chemistry Practical Skills Acquisition on Soap and Sodaash Processing (CPSASSP) instrument structured in 4-options (A-D) multiple choice. It was validated and Cronbach alpha was used to calculate the reliability index of 0.75, which was reliable for the study. All the groups were taught the same concepts, but with different instructional arrangement. The results showed the acceptance of the hypotheses, only differed in their mean score differences. It was concluded that chemistry teachers should focus on skills acquisition already embedded in the curriculum. The study recommends that science teaching should be entrepreneurial based, capable of empowering youths after graduation.

Studied developing students' entrepreneurial characters through down streaming research on natural product learning with ethnoscience integrated stem [17]. This research is a descriptive-qualitative study subjected to Chemistry education students who joined the Natural Products and Chemical Entrepreneurship course. The research subjects were introduced to the project-based learning integrated with Ethno-STEM concerning concepts related to terpenes, steroids, flavonoids, and alkaloids; also, the introduction of natural chemical isolation and distillation processes both in the community and laboratory The study was carried out in Gunungpati Semarang. The students were assigned a project of chemical batik production, i.e., batik with chemical structure patterns followed by evaluation and assessment to study under the traditional Zie makers. There were six best batik designs proposed to one of the traditional batik centres named "Zie" to be printed by using batik printing machine. These designs are said to be worthy of production; in other words, they are valued economically. The research results indicated that the Natural Product learning integrated with Ethno-STEM was able to well develop the students' mastery concept of chemistry, creative and innovative thinking, perseverance, and conservation of national culture.

Ezechinyere investigated entrepreneurship skills acquired by undergraduate chemistry students during the course of their studies in the university the study was carried out in Ilorin Nigeria. The study adopted the descriptive research of the survey type. Four research questions guided the study The instrument used for this study was an adapted questionnaire from the work of Bamidele (2019). Percentage, mean and standard deviation were used to answer the research questions. Two hundred (200) Chemistry undergraduates from University of Ilorin were sample for this study. The results of the study revealed that; Chemistry undergraduates had moderately positive attitude towards adoption of entrepreneurial activities; Chemistry undergraduates displayed moderately positive attitude towards adoption of entrepreneurial skills which can be started with little capital and require low technical know-how; The product most chemistry undergraduate proposed to produce after graduation is soap. More so, Chemistry undergraduates are business oriented and high percentage of them will probably pursue business upon completion of their study.

1.1 Objectives of the Study

This study was carried out to determine the relationship between attitude and undergraduates' entrepreneurial intentions towards entrepreneurship in natural product chemistry in Ignatius Ajuru University of Education. Specifically, the study tends to determine:

1. Undergraduates' entrepreneurial intentions towards entrepreneurship in natural product chemistry.
2. Undergraduates' personal attitude towards entrepreneurship in natural product chemistry.
3. Undergraduates' behavioral control towards entrepreneurship in natural product chemistry.

4. Relationship between undergraduates' entrepreneurial intentions and personal attitude towards entrepreneurship in natural product chemistry.
5. Relationship between undergraduates' entrepreneurial intentions and behavioural control towards entrepreneurship in natural product chemistry.

1.2 **Research Questions**

1. To what extent do undergraduates possess entrepreneurial intentions towards entrepreneurship in natural product chemistry.
2. What is the extent of Undergraduates' personal attitude towards entrepreneurship in natural product chemistry.
3. To what extent do Undergraduates possess behaviuoral control towards entrepreneurship in natural product chemistry.
4. What is the relationship between undergraduates' attitude and entrepreneurial intentions towards entrepreneurship in natural product chemistry.
5. What is the relationship between undergraduates' behavioural control and entrepreneurial intentions towards entrepreneurship in natural product chemistry.

1.3 Hypotheses

1. HO_1. There is no significant relationship between undergraduates' entrepreneurial intentions and personal attitude towards entrepreneurship in natural product chemisty
2. HO_2. What is the relationship between undergraduates' behavioural control and entrepreneurial intentions towards entrepreneurship in natural product chemistry?

2. Materials and Methods

This study adopted correlation research design. The sample comprised chemistry education undergraduates in Ignatius Ajuru University of Education, Iwofe, Port Harcourt, Nigeria. The instrument was a -17item questionnaire "tagged" Students' Entrepreneurial Intentions Questionnaire (SEIQ) rated on a four -point scale sentences Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree. The instrument was adapted from Liñán and Chen (2020). and modified to be in line with the present study. The instrument was subjected to Face and content validation with two lecturers in Science Education Department. The reliability coefficient of 0.89 was calculated using Alpha Cronbach. Research questions were answered using mean and standard deviation while the hypotheses were tested using Pearson Product Moment Correlation at 0.05 level of significance. Items with mean rating of 2.5 and above were considered high level while those with mean rating below 2.5 were considered low. Also, null hypothesis was accepted when the calculated value of r is less than the table or critical value and rejected when the calculated value of t is greater than the table or critical value. The instruments were administered by the researcher and the analysis done using SSPSS Statistical Package.

3. Results

3.1 Research Question 1

To what extent do undergraduates possess entrepreneurial intentions towards entrepreneurship in natural product chemistry.

Table 1. Mean and standard deviation of responses on the extent of undergraduates' entrepreneurial intentions towards entrepreneurship in natural product chemistry.

S/N	Item	Mean	S.D	Remark
	Entrepreneurial Intention			
1	I am ready to do anything to be an entrepreneur	3.19	0.729	Agree
2	My professional goal is to become an entrepreneur	2.98	0.858	Agree

3	I will make every effort to start and run my own firm	2.54	0.794	Agree
4	I am determined to create a firm in the future	3.17	0.72	Agree
5	I have very seriously thought of starting a firm	2.83	1.129	Agree
6	I have the firm intention to start a firm some day	3.63	0.487	Agree
	GRAND MEAN	3.06		

From table 1, the mean responses of undergraduates' intentions towards entrepreneurship in natural product chemistry is higher than 2.5 and a grand mean of 3.06. therefore, their intentions towards entrepreneurship in natural product chemistry are high extent.

3.2 Research Question 2

What is the extent of Undergraduates' personal attitude towards entrepreneurship in natural product chemistry.

Table 2. Mean and standard deviation of Undergraduates' personal attitude towards entrepreneurship in natural product chemistry.

S/N	Item	Mean	S.D	Remark
	Attitude			
1	Being an entrepreneur implies more advantages than disadvantages to me	2.89	0.664	Agree
2	A career as entrepreneur is attractive for me	3.00	0.869	Agree
3	If I had the opportunity and resources, I'd like to start a firm	3.31	0.843	Agree
4	Being an entrepreneur would entail great satisfactions for me	3.26	0.975	Agree
5	Among various options, I would rather be an entrepreneur	3.19	0.726	Agree
	GRAND MEAN	3.13		

Table 2, shows the mean responses of the extent of Undergraduates' personal attitude towards entrepreneurship in natural product chemistry. All items were greater than 2.50 and a grand mean of 3.13. This implies that the extent of Undergraduates' personal attitude towards entrepreneurship in natural product chemistry is to a high extent.

3.3 Research Question 3

To what extent do Undergraduates possess behavioral control towards entrepreneurship in natural product chemistry.

Table 3. Mean and standard deviation of Undergraduates' behavioral control towards entrepreneurship in natural product chemistry.

S/N	Item	Mean	S.D	Remark
	Perceived Behavioral Control			
1	To start a firm and keep it working would be easy for me	2.98	0.858	Agree
2	I am prepared to start a viable firm	2.54	0.794	Agree
3	I can control the creation process of a new firm	3.17	0.72	Agree
4	I know the necessary practical details to start a firm	2.83	1.12	Agree
5	I know how to develop an entrepreneurial project	3.63	0.487	Agree
6	If I tried to start a firm, I would have a high probability of succeeding	2.89	664	Agree
	GRAND MEAN	3.01		

Table 3, shows the mean responses of the extent of Undergraduates' behavioral control towards entrepreneurship in natural product chemistry. All items were greater than 2.50 and a grand mean of 3.01. This implies that the extent of Undergraduates' behavioral control towards entrepreneurship in natural product chemistry is to a high extent.

3.4 Research Question 4

What is the relationship between undergraduates' attitude and entrepreneurial intentions towards entrepreneurship in natural product chemistry.

Hypothesis 1

There is no significant relationship between undergraduates' attitude and entrepreneurial intentions and personal attitude towards entrepreneurship in natural product chemistry.

Table 4. Correlation of undergraduates' attitude and entrepreneurial intentions towards entrepreneurship in natural product chemistry.

Correlations		Personal Attitude	Entrepreneurial Intentions
Personal Attitude	Pearson Correlation	1	.257
	Sig. (2-tailed)		.061
	N	54	54
Entrepreneurial Intentions	Pearson Correlation	.257	1
	Sig. (2-tailed)	.061	
	N	54	54

There is low but positive relationship between undergraduates' entrepreneurial intentions and personal attitude towards entrepreneurship in natural product chemistry. This relationship was not significant.

3.5 Research Question 5

What is the relationship between undergraduates' behavioural control and entrepreneurial intentions towards entrepreneurship in natural product chemistry.

Hypothesis 2

What is the relationship between undergraduates' behavioral control and entrepreneurial intentions towards entrepreneurship in natural product chemistry?

Table 5. Correlation of Undergraduates' behavioral control entrepreneurial intentions towards entrepreneurship in natural product chemistry.

Correlations		Behavioural Control	Entrepreneurial Intentions
Behavioural Control	Pearson Correlation	1	.932**
	Sig. (2-tailed)		.000
	N	54	54
Entrepreneurial Intentions	Pearson Correlation	.932**	1
	Sig. (2-tailed)	.000	
	N	54	54

**. Correlation is significant at the 0.01 level (2-tailed).

There is very high and positive relationship between undergraduates' behavioral control and entrepreneurial intentions towards entrepreneurship in natural product chemistry. Which was statistically significant.

4. Discussion

The findings of the study revealed the relationship between undergraduate entrepreneurial intention and personal attitude toward entrepreneurship in natural products. The finding of the study shows that the undergraduate intention towards natural product chemistry is high. There is a low but positive relationship between undergraduate entrepreneurial intention and personal attitude toward entrepreneurship in natural product chemistry. This shows that the undergraduates have good intention in entrepreneurship in natural product chemistry. Natural product chemistry is an area of chemistry that has much opportunities for undergraduate to start a business enterprise and make profits. The result of this study is in agreement with the studies of shapero Ezechinyere [17] that entrepreneurship intention help students to engage in business activities and achieve self-employment. Their intention helps them to be business oriented and purse business that they can engage after the completion of their studies in natural product chemistry and other chemistry courses. The result of this study corroborates with the finding Ikokwu [12] that some contents in chemistry curriculum help undergraduates to acquire to entrepreneurial skills. Furthermore, the result agrees with Dike and Avwiri [15] enhancing entrepreneurship opportunity through chemistry education using practical skill acquisition in soap and soda ash processing reveals that soap and soda ash processing are capable of empowering youth after graduating in this 21st century.

The result of the study on the extent undergraduates possess behavioral control toward entrepreneurship in natural product chemistry is to a high extent. On further statistically finding there is a high and positive relationship between undergraduate behavioral control and entrepreneurial intention toward entrepreneurship in natural product chemistry is significant. The result of the is in consistent with Sudarmin Dwi and Zaenuri [16] that when natural product learning is integrated ethno-stem helps students in mastery concept, make them creative, innovative thinkers and also preserve our national heritage. The findings also agree with Saibu, Oludipe and Owolabi [13] that asserts that effective use of entrepreneurial motivated-approach in chemistry teaching helps them to achieve skills that will make them self-employed in the future.

5. Conclusion

The study investigated the relationship between undergraduate entrepreneurial intentions and personal attitude towards entrepreneurship in natural product. Result shows positive relationship between undergraduate entrepreneurial intention and personal attitude toward entrepreneurship in natural product Chemistry. The introduction of entrepreneurship in natural products chemistry is imperative. The numerous skills in natural chemistry if fully taught and acquire by student will increase their entrepreneurial intention and control their behavior toward starting a business that will generate profit. This will curb the high rate of unemployment among chemistry graduate thereby making them creative, innovative, job creators and independent.

Recommendations

1. Natural products chemistry should be taught as a practical to increase the entrepreneurial intention of students.
2. The curriculum of natural product chemistry in school should be business oriented.
3. The implementation of entrepreneurship education program in natural product chemistry will control the behaviour of undergraduate to become entrepreneurs.

REFERENCES

[1] I.J. Ayeni, "Chemistry entrepreneurship: a panacea for economic recession in Nigeria," *Journal of Assertiveness*, vol. 13, no. 1, pp. 68-74, 2018.

[2] C. Fang and L. Chen, "Exploring entrepreneurial intentions of science and engineering students in China: AQ methodology study," *Journals of Sustainability*, vol. 11, no. 10, pp. 2751-2760, 2019.

[3] C. Dick-Sagoe, Y. Lee, O. Boakye, K. N. Mpuangnan, P. A. Asare-Nuama, and A.D. Dick-Sagoe, "Facilitators of tertiary students' entrepreneurial intentions: Insight for Lesotho's national entrepreneurship policy," *Access Keys NCBI Homepage*, 2023.

[4] I. Deveci and M. Seikkula-Leino, "A review of entrepreneurship education in teacher education," *Malaysian Journal of Learning and Instruction*, vol. 15, no. 1, pp. 105-148, 2018.

[5] F. Liñán and Y. Chen, "Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions," 2020.

[6] B. Bird, "Implementing entrepreneurial ideas: The case for intention," *Acad. Manag. Rev.*, vol. 13, pp. 442-453, 1988.

[7] E.R. Thompson, "Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric," *Entrep. Theory Pract.*, vol. 33, pp. 669-694, 2009.

[8] F. Liñán and A. Fayolle, "A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda," *Int. Entrep. Manag. J.*, vol. 11, pp. 907-933, 2015.

[9] J. Nbina, B. Viko, and S.T. Birabil, "Developing improvisation skills for alleviating poverty in Nigeria: The place of Chemistry in entrepreneurship education," *Academic Leadership: The Online Journal*, vol. 8, no. 4, pp. 18-25, 2010.

[10] J.O. Odia and A.A. Odia, "Developing entrepreneurial skills and transforming challenges into opportunities in Nigeria," *Journal of Educational and Social Research*, vol. 3, no. 3, pp. 1-10, 2013.

[11] U. Aja-Okorie and O. Adali, "Achieving youth empowerment through repositioning entrepreneurial education in Nigerian universities: Problems and prospectors," *European Scientific Journal*, vol. 9, no. 28, pp. 113-132, 2013.

[12] I.I. Ikokwu, "Identification of content areas for entrepreneurship and instructional strategies for effective delivery in Chemistry," *South Eastern Journal of Research and Sustainable Development (SEJRSD)*, vol. 3, no. 1, pp. 10-19, 2020.

[13] O.S. Saibu, O.S. Oludipe, and T. Owolabi, "Bridging gender disparities in senior secondary Chemistry: What magic can entrepreneurial-motivated-approach," *World Journal of Advanced Research and Reviews*, vol. 16, no. 3, pp. 1032-1043, 2022.

[14] S. Hutasuhut and R. Aditia, "Overview of students entrepreneurship in Indonesia," *Advances in Economics, Business and Management Research*, vol. 204, pp. 87-90, 2021.

[15] J.W. Dike and E. Avwiri, "Enhancing entrepreneurship opportunities through Chemistry education: implication for Nigerian youths empowerment in the 21st century," *International Journal of Innovative Social & Science Education Research*, vol. 8, no. 3, pp. 101-107, 2020.

[16] W.S. Sudarmin, D. Y., and S. Zaenuri, "Developing students' entrepreneurial characters through downstreaming research on natural product learning with ethnoscience integrated STEM," *International Conference on Education, Science and Technology Journal of Physics, Conference Series*, vol. 1387, 2019.

[17] C.H. Ezechinyere, "Entrepreneurship skills acquired by undergraduate Chemistry students during the course of their studies in the university," *Covenant Journal of Entrepreneurship*, vol. 3, no. 2, pp. 15-30, 2019.