

THE NEED FOR THE INTRODUCTION OF ENTREPRENEURSHIP PROGRAMME AMONG AUTOMOBILE STUDENTS IN MECHANICAL TECHNOLOGY EDUCATION

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ABSTRACT

The study looked into the need for the introduction of entrepreneurship programme among automobile students in mechanical technology education. Two research questions and hypotheses were used for the study. The survey research design was used for the study. The population for the study was made up of 43 students and 5 instructors in mechanical option in Technical Education in Rivers State University of Science and Technology. The entire population was used for the study and as such, there was no sample. The instrument used for the study was a questionnaire structured by the researchers from literature. The questionnaire had two sections titled: Availability of Entrepreneurship Programmes for Automobile Technology Students (AEPATS) and Interest on Automobile Technology Entrepreneurship Programmes (IATEP). The data were collected and analyzed using mean and standard deviation for the research questions, while Z-test was used to analyse the hypotheses. The study revealed that entrepreneurship programmes are moderately available for automobile students in mechanical technology education. Also there is high interest rate by students and instructors for the introduction of entrepreneurship programme in automobile technology. The result also shows that there is no significant difference in the mean ratings of students and instructors on entrepreneurship programmes available for automobile students in Mechanical Technology education, and that there is no significant difference in the level of interest that students and instructors have for the introduction of entrepreneurship programme in automobile students in Mechanical Technology. It was recommended that entrepreneurship education should be taught and included in the Mechanical Technology Education curriculum.

KEYWORDS: *Entrepreneurship programme, Mechanical Technology Education and Automobile Technology.*

INTRODUCTION

Students in vocational institutions do not just require only the knowledge to repair and service parts of machines. They also need the skill to trade their profession to the world. Entrepreneurship education offers opportunities for technical students to market such skills and techniques to the outside world. Entrepreneurship education is a tool for securing employment and emancipation of people through the provision and acquisition of necessary knowledge and skills to make a living (Ementa, 2013). Entrepreneurship education and training entails the philosophy of self-reliance such as creating a new cultural and productive environment, promoting new set of attitude and culture for the attainment of future challenges (Arogundade, 2011). Entrepreneurship education seeks to prepare people, especially youths, to be responsible, enterprising individual who become entrepreneurs or entrepreneurial thinkers and who contribute to the economic development and sustainable communities.

The need for entrepreneurship literacy started in 1980's. In the mid 80's, the Nigerian economy collapsed while the youths and graduate unemployment rate hit the roof (Jimah & Unvigbokhal, 2011). Observations show that tertiary education has not properly included the philosophy of self-reliance such as creating a new cultural and productive environment that will promote pride in primitive work and self-discipline, encouraging people to actively and freely take part in discussion and decision affecting their general welfare, promoting new set of attitudes and culture for the attainment of future challenges (Arogundade, 2011). The failure of tertiary education to imbibe the above philosophy in students has led to wastages in terms of both human and natural resources (Nwangwu, 2007). This is due to the fact that youths that graduate from higher institutions are not well equipped with the skill with which to exploit the natural resources that abound in Nigeria (Jimah & Unvigbokhal, 2011).

Some general basic skills need to be applied in entrepreneurship education and they include; personal skill, communication skill, negotiation skill, leadership skill and sales skill. The first skill you develop as an entrepreneur is your personal skill. Personal skill refers to that skill that is attached to your personality, more likely habits. An automobile technologist must possess good manner of approach to customer and must not feel inferior before his client. Self-confidence developed by auto technician by way of communication, will build trust and good relationship with their customers. In course of building a relationship, good negotiation deal will follow suit. Leadership skill entails uniting people with different backgrounds, beliefs and skill to common course. It entails motivating people with different skills and ideologies into business team. The ability to sale ideas must be fully incorporated in the business. Proper marketing of the goods and items require good salesman ability.

Segun and Josephine (2014) stated that some of the challenges of automobile technology in entrepreneurship development in Nigeria are technology dependence, deplorable state of training institution, lack of dynamic curriculum, negative attitude, shortage of qualified personnel in automobile technology education and inadequate funding of technical education institution. Observation shows that practical lessons in the curriculum are not allocated with more time for the students to comprehend lessons. Also, business courses associated with auto mechanic work is not fully introduced in the curriculum. Students are not exposed to training with modern automobile vehicles and equipment used in general services and operation (Segun & Josephine, 2014). There is therefore the need to introduce entrepreneurship education programme among automobile students in Rivers State University of science and technology for self-reliant in their vocation.

PURPOSE OF THE STUDY

The aim of the study is to;

1. Determine the entrepreneurship programmes that are available for automobile students in Mechanical Technology.
2. Determine the students' level of interest in the introduction of entrepreneurship programmes in automobile curriculum in Mechanical Technology.

RESEARCH QUESTIONS

The following research questions guided the study;

1. What are the entrepreneurship programmes available for automobile students in Mechanical Technology?
2. What level of interest do students and instructors have in the introduction of entrepreneurship programmes in automobile curriculum in Mechanical Technology?

HYPOTHESES

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in the mean ratings of students and instructors on entrepreneurship programmes available for automobile students in Mechanical Technology.
2. There is no significant difference in the level of interest that students and instructors have in the introduction of entrepreneurship programme in automobile students in Mechanical Technology.

SCOPE OF THE STUDY

The study is limited to instructors and year four students in mechanical option in the department of technical education in Rivers State University of Science and Technology, Port Harcourt.

METHODS

The survey research design was used for the study. The population for the study was made up of 43 students and 5 instructors in mechanical option in Technical Education in Rivers State University of Science and Technology. The entire population was used as sample for the study. The instrument used for the study was a questionnaire structured by the researchers from literature. The questionnaire had two sections namely *Availability of Entrepreneurship Programmes for Automobile Technology Students (AEPATS)* and *Interest on Automobile Technology Entrepreneurship Programmes (IATEP)*. The instrument was used for evaluating research question 1 and 2 respectively. The questionnaire had fourteen (14) items which were used to answer questions in research question 1 and 2. The AEPATS was structured on a five-point scale of *highly available (HA)*, *available (A)*, *moderately available (MA)*, *not available (NA)* and *undecided (UN)* which are weighed as 5,4,3,2, and 1 respectively.

The IATEP was structured on a four-point rating scale of *highly interested (HI)*, *interested (I)*, *not interested (NI)* and *undecided (UN)* which are weighed as 4,3,2, and 1 respectively. The instruments were face validated by two experts from mechanical option in Technical Education department in Nnamdi Azikiwe University, Awka. The experts checked the language content of the questions if it was in line with the curriculum need of automobile technology programme. The researchers made some corrections observed by the experts before the final copy was produced for distribution. To the test the reliability of the instrument, copies of the instrument were administered to Instructors and students in year 4 in automobile unit of Vocational Education in Nnamdi Azikiwe University, Awka. Split-half method was used for the reliability and Pearson Product Moment Correlation Coefficient was

used to analyse data collected. The result yielded 0.84 and 0.83 respectively for AEPATS and IATEP items. The questionnaires were administered and collected personally by the researchers. The entire questionnaire items were retrieved by the researchers. The data were collected and analyzed using mean and standard deviation to answer the research questions, while Z-test was used to test the hypotheses. The hypotheses were tested at 0.05 level of significance. The decision rule is to reject the hypothesis if the Calculated Z is greater than or equal to the Critical Z and to retain/accept the hypothesis if the Calculated Z is less than to the Critical Z.

RESULTS

RESEARCH QUESTION 1

What are the entrepreneurship programmes available for automobile students in Mechanical Technology?

To answer the research questions, the mean ratings of the respondents were calculated and the results are presented in Table 1 below:

Table 1: Mean Responses on the Entrepreneurship programmes available for automobile students in Mechanical Technology Education

N =

48

S/N	ENTREPRENUERSHIP PROGRAMMES	HA	A	MA	NA	UN	MEAN	SD	REMARK
1	Automobile business trade.	-	2	2	44	-	2.13	2.15	Moderately Available
2	Business communication.	2	2	2	41	1	2.23	2.33	Moderately Available
3	Market development of automobile electrical Parts.	-	3	5	35	5	2.13	2.21	Moderately Available
4	Establishment of small scale enterprise of engine parts, repair and car electronics.	-	-	7	38	3	2.08	2.11	Moderately Available
5	Business publicity.	-	-	5	33	10	1.90	1.95	Not Available
6	Customer relationship.	-	-	-	48	-	2.00	1.98	Not Available
7	Career development in automobile technology.	10	11	14	13	-	3.38	3.51	Available
Total							15.83		
Grand Mean							2.26		Moderately Available

The result of table 1 revealed that four out the seven entrepreneurship programs are moderately available. They include: automobile business trade, business communication, market development of automobile electrical parts and establishment of small scale enterprise of engine parts, repair and car electronics. Two other entrepreneurship programs (Business publicity and customer relationship) are not available while only one program (career development in automobile technology) is available. The grand mean of 2.26 shows that the entrepreneurship programs are moderately available for automobile students in Mechanical Technology Education.

RESEARCH QUESTION 2

What level of interest do instructors and students have in the introduction of entrepreneurship programmes in automobile technology curriculum in Mechanical Technology?

Table 2: Mean Responses of Instructors and Students level of interest in the introduction of entrepreneurship programmes in automobile technology curriculum.

N=48								
S/N	ENTREPRENEURSHIP PROGRAMME	HI	I	NI	UN	MEAN	SD	REMARK
1	I love to run a course on business trade.	44	3	1	-	3.90	3.87	High Interest
2	Automobile business communication should be taught in the class.	31	16	-	1	3.60	3.62	High Interest
3	Automobile market development should be included in the curriculum.	25	22	-	1	3.48	3.50	High Interest
4	I love to be trained on how to start a small scale automobile enterprise.	23	22	3	-	3.42	3.43	High Interest
5	Business publicity should be taught in automobile technology class.	29	10	8	1	3.40	3.46	High Interest
6	Customer relationship should be taught in our classes.	36	6	5	1	3.60	3.65	High Interest
7	Students should be taught on carrier development in automobile technology.	34	13	-	1	3.67	3.68	High Interest
Total						25.06		
Grand Mean						3.58		High Interest

The results in Table 2 show that the respondents have high interest in the introduction of entrepreneurship education automobile technology education curriculum. The mean score to all the Seven items on the table showed that the respondents had High interest and the grand mean of 3.58 also points to the same fact.

HYPOTHESIS 1

There is no significant difference in the mean ratings of students and instructors on entrepreneurship programmes available for automobile students in Mechanical Technology.

To test the hypothesis, the responses were analysed using z-test and the results are presented in table 3 below.

Table 3: Z- test analysis of respondents on the availability of entrepreneurship programme.

Respondent	Mean	Standard Deviation	Number of Respondent	Degree of Freedom	Z- cal.	Z- tab.	Remark
Students	2.3	1.6	43				
Instructors	2.1	1.7	5	46	0.2	2.013	Accept

The data presented in table 3 showed that the Z- calculated value of 0.2 is less than Z- tabulated value of 2.013 at 0.05 level of significance. This has resulted in the acceptance of the null hypothesis which means that there is no significant difference in the mean ratings of students and instructors on entrepreneurship programmes available for automobile students in Mechanical Technology Education.

HYPOTHESIS 2

There is no significant difference in the level of interest that students and instructors have in the introduction of entrepreneurship programme in automobile students in Mechanical Technology.

To test the hypothesis, the responses were analysed using z-test and the results are presented in table 4 below.

Table 4: Z- test analysis of respondents on the interest level of entrepreneurship programme.

Respondent	Mean	Standard Deviation	Number of Respondents	Degree of Freedom	Z- cal.	Z- tab.	Remark
Students	3.6	1.4	43				
Instructors	3.3	1.3	5	46	0.5	2.013	Accept

The data presented in table 4 shows that the Z- calculated value of 0.5 is less than Z- tabulated value of 2.013 at 0.05 level of significance. This has resulted in the acceptance of the null hypothesis which means that there is no significant difference in the level of interest that students and instructors have in the introduction of entrepreneurship programme in automobile students in Mechanical Technology.

DISCUSSION OF FINDINGS

The results of the study for research question 1, as contained in Table 1, revealed that automobile business trade, business communication, market development of automobile electrical parts and establishment of small scale enterprise of engine parts, repair and car electronics are moderately available. Two other entrepreneurship programs (Business publicity and customer relationship) are not available while only one program (career development in automobile technology) is available. The grand mean of 2.26 shows that the entrepreneurship programs are moderately available for automobile students in Mechanical Technology Education. This result collaborates the position of Jimah and Unuibgokhai (2011), that youths and graduates from tertiary institutions are not equipped with the skills

with which to exploit the natural resources that abound in Nigeria. There is therefore the need to introduce these available entrepreneurship programs as the present and future advancement of any Nation lies in the dynamism and growth of entrepreneurship business in that country (Amesi, 2015). Also, Okoye (2013) advocated that the adoption and practice of effective technical and vocational education and training using the currency of entrepreneurial skills would not only bring about national transformation but also engender sustainable development.

The results of the study for research question 2, as contained in Table 2, revealed that the respondents have high interest in the introduction of entrepreneurship education automobile technology education curriculum. Both the instructors and the students pointed out that they had high interest in the introduction of the entrepreneurship programs listed. The results are in line with those of Ikeanyionwu and Ekwue (2013), who, though studied the introduction of entrepreneurship education in Business Students curriculum, found out that that there is high need and interest for the introduction of entrepreneurship education.

The results for Hypothesis 1, presented in Table 3, showed that that the Z- calculated value of 0.2 is less than Z- tabulated value of 2.013 at 0.05 level of significance. The null hypothesis is therefore accepted which means that there is no significant difference in the mean ratings of students and instructors on the entrepreneurship programmes available for automobile students in Mechanical Technology. Both students and instructors agree that the entrepreneurship programs were moderately available. These programs should be introduced in the curriculum to ensure that the needed entrepreneurial skills are possessed by the students. Gbenedio in Osinachi and Chinweoke (2013) posited that there should be a total restructuring and integration of skill-based educational system into the educational curriculum for self-reliance and capacity building.

The results for Hypothesis 2, presented in Table 4, showed that the Z- calculated value of 0.5 is less than Z-tabulated value of 2.013 at 0.05 level of significance. The null hypothesis is therefore accepted and that means that there is no significant difference in the level of interest that students and instructors have in the introduction of entrepreneurship programme in automobile students in Mechanical Technology. Both students and instructors of mechanical technology education have high interest in the introduction of entrepreneurship programmes for automobile students. Nnama in Okoye (2013) pointed out that entrepreneurship education is a tool for economic survival which is about acquiring skills for self-development through job creation. This is why there is high interest level from both students and instructors for the introduction of entrepreneurship education in mechanical technology education curriculum.

CONCLUSION

The study revealed that entrepreneurship programmes are moderately available for automobile students in mechanical technology. Also there is high interest rate by students and instructors for the introduction of entrepreneurship programme in automobile technology.

RECOMMENDATION

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

1. Curriculum planners for Mechanical Technology Education should implement the introduction of the following entrepreneurship programs in the curriculum: automobile business trade, business communication, market development of automobile electrical parts and establishment of small scale enterprise of engine parts, repair and car electronics.

2. Students and instructors of Mechanical Technology Education should undergo trainings in various entrepreneurship training programs as this will build up that interest which they already have.

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