

Entrepreneurial Competency Needs of Motor Vehicle Mechanic Students in Government Science Technical Colleges of Gombe State

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ABSTRACT

The purpose of the study was to investigate the entrepreneurial competency needs of motor vehicle mechanic students in Government Science Technical colleges of Gombe State. The study adopted a descriptive survey research design. The study was conducted in Gombe State, the population of the study was all the 18 MVMW teachers drawn from all the technical colleges of Gombe state. The study was guided by three research questions. The instrument used for the study was an adopted structured questionnaire. Mean and standard deviation were the statistical tools used for answering the research questions; it was found out that Entrepreneurial competencies are highly needed by Motor Vehicle Mechanic Students in Government Science and Technical Colleges of Gombe State. Thus, it was recommended among others that, Motor Vehicle Workshops in Technical should be updated with modern tool and equipment of MVMW technology and the curriculum should be reviewed to meet modern MVMW technology innovations to improve students' competencies in the area of MVMW entrepreneurship.

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INTRODUCTION

Over the years many definitions of entrepreneurship have been acceptable however a proper and simple definition has been evolved as "the capacity and willingness of an individual to develop through competency need training", Petrin, T. (2016), defined competency as a measurable characteristic of a person in relation to efficient actions at work, organization and social culture. Competency is also used as general requirements of human beings in workplace/organizations and communities. If an automobile technology student is able to carry out a particular task at the target level of proficiency, he is said to be 'competent' in the tasks. A student who is able to interpret the situation in a context and to have a set of skills, abilities and experiences that shows a person is competent.

Entrepreneurial competency is defined as 'entrepreneurs having the capability to effectively face a critical situation by making sense

of environmental constraints and by activating relational and internal specific resources' (landoli, 2017). Entrepreneurial competency can also be defined as an underlying characteristic such as generic and specific knowledge, motives, traits, self-images, social roles and skills that result in creation of new venture or business, survival and/or growth (Bird, 1995). Entrepreneurial competencies are associated with the firm's performance and competitiveness, business growth and success (Mitchelmore and Rowley, 2010). Entrepreneurs are therefore permanently challenged to deploy a set of competencies to succeed in their entrepreneurial endeavours. Issues relating to the competencies development process of entrepreneurs have generally been neglected. Competencies plays an important role in any successful entrepreneurship.

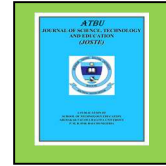
An entrepreneur is a person that searches for change, responds to change, and exploits change by converting change into

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business opportunity, such entrepreneurs could be found in automobile technology and all other aspect of technical education programs. Automobile technology is an option in technical education in technical college and tertiary education level. It is designed as a professional course in engineering or technical education. Hence the tools and equipment are therefore basic and indispensable to the teaching of the course, which is essentially practical, Ogwa (2018). . The national policy on Education (2013) place emphasis on the importance of competencies in science and technology.

Statement of the Problem

A number of development and long-standing issues have been observed by the researcher to have been affecting the acquisition of Entrepreneurial Competency Needs of Motor Vehicle Mechanic Students in Government Science Technical colleges in Gombe State. These key challenges include: technology dependence, deplorable state of art in training institutions and shortage of qualified teachers in MVMW that could lead to entrepreneurial competency needs development of students. Total dependence on imported technology has been one major challenge faced by entrepreneurial development.

Dawodu (2001), lamented that “the low patronage of indigenous and or locally made products and the low productivity of manpower in Nigeria is due to over reliance on imported knowledge which in its real sense does not give room for entrepreneurial development”. Institutions saddled with the responsibility of training manpower are faced with some challenges resulting from the inadequate funding and training facilities as well as unserious staff. Okorie, D. U. (2016), stated that Nigeria has not enough manpower expertise to handle the service and maintain the different types of more complex vehicles in the country, this gives reason why the researcher delve into trying to identify the Entrepreneurial Competency needs of Motor Vehicle Mechanics work students in Government Science Technical colleges of Gombe State.

Aim and Objective of the Study

The purpose of this study is to determine the entrepreneurial competency needs of Motor Vehicle Mechanic students in Government Science and Technical Colleges of Gombe State. Specifically, the study sought to achieve the following objectives:

1. Determine factors that could lead to stopping of technological dependency to improve entrepreneurial competency needs of MVMW students in government science technical colleges in Gombe state?
2. Find out challenges affecting deplorable state of art in training institutions for entrepreneurial competency needs of MVMW students in Government Science Technical colleges in Gombe state.
3. Establish the strategy(ies) that could be adopted to improve the level of qualified teachers in entrepreneurial competency needs of MVMW students in Government Science Technical colleges in Gombe state.

Research Questions

This study will provide answers to the following research questions:

1. What are the entrepreneurial competency needs by MVMW students that could lead to stoppage of technological dependency in government science technical colleges in Gombe state?
2. What are the challenges affecting entrepreneurial competency needs of MVMW students in Government Science Technical colleges of Gombe state?
3. What is the adoptable strategy to improve entrepreneurial competency needs of MVMW students in Government Science Technical Colleges in Gombe state?

Significance of the Study

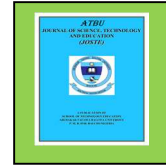
The outcome of the study entrepreneurial competency needs of MVM Students upon its completion is expected to be useful to the teachers, students, federal and state

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ministries of Education as well as Commerce industry.

Teachers they will understand what is expected of them in the delivery of entrepreneurship skills to students by directing their energy towards practical competencies and skills development. Students they will also understand the importance of the knowledge of entrepreneurship skills and pay more attention to the training program thereby graduating as highly competent skilled MVMW workers ready for employment and or self-reliant/employment.

Government (Federal and States) by educating the This study will also go a long way at informing both Governments the need to invest in technology education particularly at technical college level to reduce the rate of unemployment among graduates of MVMW program thereby making them well-adjusted individuals who will contribute to the sustainable development of the economy and also increase productivity in MVMW sector of Gombe State and the Country at large.

Scope of the Study

The study was limited to all students of MVMW on entrepreneurial competency needs in service station, engine maintenance and refurbishing and auto-electricity at National Technical Certificate II (NTC II) level, otherwise Senior Secondary School Certificate Examination (SSSCE) in particular and MVMW general in technical colleges of Gombe.

LITERATURE REVIEW

Related Works

Olaitan, Eze, and Ogonnaya (2009), conducted a study on entrepreneurial competencies needs by secondary school graduates for entering into palm oil processing enterprise in South Eastern States of Nigeria. The study adopted survey research design; three research questions were developed and answered in line with the purpose of the study. Survey and function of industry design were adopted for the study. They are tested at 0.05 level of significance. The study was carried out in South Eastern states of Nigeria. The population was 459; all of the population was taken as the sample. A

30-competency needs item questionnaire was developed, a four-point rating scale of Highly Needed (HN), Needed (N), Not Needed (NN), and highly Not Needed (HNN). The questionnaire was validated by three experts from agricultural education department of Abubakar Tafawa Balewa University Bauchi. The reliability of the questionnaire was determined through split half technique, a coefficient of 0.84 was obtained, difficulty index of 0.80 and discrimination index at 0.87 highest and the poorest was 0.77.

The average discriminating index was 0.84. The questionnaire was administered on 459 respondents. All the copies of the questionnaire were retrieved and mean and standard deviation was used to answer the research questions. The result of the study revealed that 11 competencies needs in planning, 16 competencies needs in processing of palm oil and 18 competencies needs in marketing of palm oil where needed for successful work in palm oil processing enterprise. The study relates to the present study. They are all carried out to identifying entrepreneurial competency skills needed to empower youths. Survey research design was adopted for the two studies.

Medugu and Dawha (2015), conducted research on perceived entrepreneurial competencies required by automobile technology students in technical colleges in Bauchi and Gombe States, Nigeria. The purpose of the study was to investigate the perceived entrepreneurial competencies required by Automobile Technology students in Technical Colleges in Bauchi and Gombe states of North Eastern Nigeria. The study adopted a survey research design. The population of the study was 265 Automobile Technology Entrepreneurs. The study was guided by three research questions and three hypotheses, formulated and tested at 0.05 level of significance. The instrument used for the study was a structured questionnaire which was validated by three experts. Cronbach Alpha reliability method was adopted to determine the internal consistency of the instrument which yielded a reliability coefficient of 0.82. The data collected were analyzed using mean, standard deviation and z-test statistic. The new contents of automobiles

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technology to be included into the curriculum of technical colleges. It was revealed from related literature that entrepreneurial competencies were perceived to be highly required in the development of competencies needs by MVMW Students.

METHODOLOGY

This study used descriptive survey design. This study focused on all Government Science and Technical Colleges in Gombe. Gombe. The State is located in north east geopolitical zone of Nigeria. According to Sambo (2005), population is referred to as the totality of items or object which the researcher is interested

in an area of study. Hence, the population of this study was all teachers of MVMW Trade in Government science technical colleges in Gombe state. Sample and sampling technique is all the teachers, teaching MVMW in Government Science Technical Colleges in Gombe state were considered in this study, this is because the number is manageable range and therefore, there was no sampling. In the opinion of Sambo who noted that, when the population of a study is small, it is advisable to use the entire population for a better representation.

Table 1: Population distribution of MVMW Teachers in Government science technical colleges Gombe State, stands as presented in the table below.

S/n	Technical College	Location	LGA	Teachers.
1.	Government Science Technical colleges	Kumo	Akko	4
2.	Government Science Technical colleges	Tula	Kaltungo	2
3.	Government Science Technical colleges	Barunde	Gombe	3
4.	Government Science Technical colleges	Gombe	Gombe	4
5.	Government Science Technical colleges	Kwami	Kwami	2
6.	Government Science Technical colleges	Amada	Akko	3
			Total	18

The instrument used for data collection was a thirty items structured questionnaire that was developed by the researcher. The items in the questionnaire was developed in accordance with the three guiding research questions for the study, to seek the opinion of the respondents (teachers) on the entrepreneurial Competency needs of MVMW students in Government science technical colleges in Gombe state. The structure of the questionnaire was four-point rating scale of Strongly Agree (SA) 4 points, agree (A)3 points, disagree (D)2 points, strongly disagree (SD)1 point. The reliability of the instrument was determine using test re-test approach, and was administered on ten (10) teachers in four technical colleges Bauchi State, since Bauchi is outside the study area as a pilot case study. Cronbach's Alpha in Pervez, (2015) Coefficient formula was used to determine the consistency of the instrument. This is because the research questions have different points on rating scale (4 - 1). Since the reliability coefficient of cronbach alpha ranges from 0-1 the

closer the reliability value is to 1, the greater the items' consistency of the instrument and vice versa. The instrument was validated by experts in MVMW in Abubakar Tafawa Balewa University. Their experience and input was used to improve the structure of the instrument The researcher employed the services of six trained research assistants for easy administration of the questionnaire and the retrieval of same within a period of three (3) days Data collected was analyzed using mean and standard deviation The decision rule for the study was that, any item with the mean of (2.50 and above) was considered needed, and item with a mean (2.49 and below) was considered not needed.

RESULT AND DISCUSSION

Research Question One: What are the entrepreneurial competency needs of MVMW students that could lead to stoppage of technological dependency in government science technical colleges in Gombe State?

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Table 2. Mean responses of MVMW teachers in government science technical colleges in Gombe State.

S/N	ITEMS	\bar{X}	REMARK
1.	Recruiting teachers that understand both mechanical, electrical and electronics of motor vehicle with	3.50	Agreed
2.	Performing simple fault diagnosis by using diagnostic tools and code interpretation	3.10	Agreed
3.	Ability to perform routine maintenance/checking of vehicles	3.10	Agreed
4.	Training and update of students' knowledge on latest and modern vehicles	3.20	Agreed
5.	Ability to carry out services and standard repairs/maintenance of vehicle and observe safety precautions	3.30	Agreed
6.	Ability to read and understand engine trouble by their sound	2.90	Agreed
7.	Understanding general electrical fault-finding skills	2.90	Agreed
8.	Ability to think critically when handling complex issues in a vehicle	3.30	Agreed
9.	Interpersonal relationship skills	3.00	Agreed
10.	Communication ability	3.40	Agreed

From the analyses of data collected in the table above, the respondents of the 10 items of research question one show that all the items are leads to the stoppage of technology dependency that is affecting entrepreneurial

competencies needed of motor vehicle mechanic students

Research Question Two: What are the challenges affecting entrepreneurial competency needs of MVMW students in Government Science Technical colleges of Gombe State?

Table 3. Mean responses of MVMW teachers on the challenges affecting the entrepreneurial competency needs of students of government science technical colleges in Gombe state.

S/N	Item	X	Remark
11	Low levels of tools and equipment provision by the Government is affecting MVM students' competency	3.40	Agreed
12	Lack of provision of tools and equipment for training on the competencies needed by MVMW students to reduce dependency on imported technology in entrepreneurship	4.00	Strongly Agree
13	Lack of political willingness for continuity in State Government activities	3.30	Agreed
14	Misconception of the importance of MVMW education at the technical college level affects potential for higher development	3.30	Agreed
15	Shortage of qualified teaching staff	3.20	Agreed
16	Quality of students gaining entry into technical colleges is not based on interest or merit	2.90	Agreed
17	Insufficient funding of technical education at the college level	3.30	Agreed
18	Obsolete MVM training materials, tools, and equipment in these colleges	3.50	Agreed
19	Poor implementation of MVMW curriculum by the Government	3.20	Agreed
20	Lack of technical know-how by MVMW workshop technicians	2.50	Agreed

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Research question two revealed that all the items are factors affecting the entrepreneurial competencies needed of MVM students in government science and technical colleges in Gombe state.

Research Question Three: What is the strategy adoptable to improve entrepreneurial competency needs of MVMW students in Government Science Technical Colleges in Gombe state?

Table 4. Mean responses of motor vehicle mechanic teachers on the strategies that could be adopted to improve motor vehicle mechanic students' entrepreneurial competency needs in government science and technical colleges in Gombe State

S/N	ITEMS	\bar{X}	REMARK
21.	An economic friendly political environment should be created by allocating fund to these colleges	3.70	Agreed
22.	Some form of practical will be incorporated as part of economic development strategies by recruiting qualified teachers	3.30	Agreed
23.	Motor vehicle mechanic teachers should be trained and retrained from time to time to keep abreast with current trend in MVMW world of technology	3.30	Agreed
24.	Establishment of small business schools where interested students can participate and improve their competency through practice of MVMW entrepreneurship	2.70	Agreed
25.	Develop entrepreneurial internship programs matching students with successful motor vehicle mechanic entrepreneurs with clear established educational programs	3.10	Agreed
26.	School-based enterprises should be established	3.00	Agreed
27.	Put together public and private funds to create a small venture capital	3.10	Agreed
28.	Self-management	3.20	Agreed
29.	Develop positive attitudes in recognizing business opportunities	3.30	Agreed
30.	Encourage students that business techniques is essential to launching a new venture	3.30	Agreed

Research question three showed that all the items are needed to improve the entrepreneurial competency needed by MVMW students in Government Science Technical Colleges of Gombe

FINDINGS OF THE STUDY

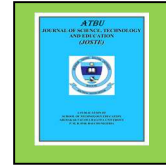
The findings from the study revealed that all the itemized entrepreneurial competencies are needed by MVMW students these include: Recruitment of competent teachers that understand both mechanical, electrical and electronics component and their functions, with

ability to perform routine checking and or maintenance of modern vehicles as well as training and update of students' knowledge on latest and modern vehicles. This agreed with Schumpeter, (2017), who posited that for students to acquire the needed competencies, the teacher(s) to be recruited should be competent themselves in the construction and functions of the mechanical, electrical and electronics component.

Low level of tools and equipment provision by the Government is affecting MVMW students' competency. Lack of provision of tools

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and equipment for training on the Competencies need of MVMW students to avoid total dependency on imported technology in entrepreneurship Lack of provision of tools and equipment for training on the Competencies need of MVMW students to avoid total dependency on imported technology in entrepreneurship needs, but be able to Perform simple fault diagnosis and code interpretation. An economic friendly political environment should be created by recruiting qualified teachers Ability to perform routine maintenance/checking of vehicle. Develop entrepreneurial internship programs matching students with successful motor vehicle mechanic entrepreneurs with clear established educational programs

DISCUSSION OF FINDINGS

The findings from research question one of this study revealed that understanding the mechanical, electrical and electronics component and functions, diagnostic tools and use, performing simple fault diagnosis and code interpretation, ability to perform routine maintenance/checking of vehicle, observe safety precautions, ability to carry out services and standard repairs/maintenance, ability to read and understand engine trouble by their sound, understanding general electrical fault finding skills, ability to think critically when handling complex issue on a vehicle, interpersonal relationship skills, are the entrepreneurial competencies needed by MVMW students in government science technical colleges of Gombe State. This finding above agreed with that of Dickson, Solomon & Weaver, (2015), in research on perceived entrepreneurial competencies required by automobile technology students in technical colleges in Bauchi and Gombe States, Nigeria.

The findings from research question two revealed that low level of provision of tools and equipment by government is affecting MVMW students competency needs in entrepreneurship development, lack of continuity in political programs of the state, misconception of the importance of MVMW education, shortage of qualified staff, quality of students who gain admission into technical colleges is not based on

interest, insufficient funding of technical colleges (education), obsolete MVMW training tools and equipment and poor implementation of MVMW curriculum are the challenges affecting the entrepreneurial competency needed of MVMW students in Government Science Technical Colleges of Gombe State .

The findings from research question three revealed the strategies that could be adopted to improve the entrepreneurial competency needs of MVMW students in government science technical colleges of Gombe state. The strategies include: an economic friendly political environment should be created, some form of practical school work incorporated in the study as part of the national economic development strategies, MVMW curriculum should be reviewed to include entrepreneurial competency needs for the students, establishment of small business schools where interested students can develop entrepreneurial internship management skills, put together funds to create a small venture capital, self-management, develop positive attitudes in recognizing business opportunities and encourage students that have business techniques is essential to launching a new venture. This finding is in agreement with Fadaïro (2018), who carried out a research work on the strategies for improving the interest of automobile technology students in technical colleges.

CONCLUSION AND RECOMMENDATIONS

Base on the findings of the study, it was concluded that the identified competencies be looked into with a view to improve the quality of the teacher through training and retraining, provision of all the required tools and equipment and an enabling environment for MVM students to venture into various motor vehicle repair and maintenance businesses for self-empowerment after school.

IMPLICATION OF THE STUDY

The findings of this study revealed that there are certain automotive skills needed by MVMW students to be self-reliant instead of depending on white collar job, reduce the level of

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dependency on imported technology and unemployment among the teeming students that graduate from technical colleges in Gombe State, and improve the economy and raise the level of self-employment and improve the living standard of fresh graduates of technical colleges.

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