# Comparative Evaluation of Human and Material Resources Use in the Implementation of Undergraduate Entrepreneurship-Education-Curriculum in North-Central Universities, Nigeria

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#### **Abstract**

Entrepreneurship education is a curriculum designed to equip learners with 21<sup>st</sup>-century labour market-required skills and to become job creators upon graduation. The actualization of these laudable objectives largely depends on the adequate provision and utilization of both human and material resources needed to effectively implement the curriculum. This study therefore aimed to find out and compare the adequacy of human and material resources used in the implementation of entrepreneurship education curricula in private and public universities in North-central Nigeria. The study adopted mixed-method research. All the 28 management boards of Entrepreneurship Education Centres as well as 102 lecturers of Entrepreneurship Education in the study locale formed the study's population. 48 lecturers and 10 members of the boards, who are major stakeholders in the field of entrepreneurship education were sampled for the study. The sample was drawn through proportional and random sampling techniques. Data were collected through a researcher-designed instrument. This instrument was validated and tested for reliability with 0.78 and 0.75 obtained respectively. Frequency count, percentage, and ratio were used to analyze the data gathered. The findings of the study from both quantitative and qualitative methods revealed that the majority of the respondents in both institutions attested that both human and instructional resources provided and used for the implementation of the entrepreneurship curriculum were inadequate. The study therefore recommends that the relevant stakeholders need as a matter of urgency to employ more experts in the field of entrepreneurship. Also, the government and proprietors of the universities need to initiate a special intervention programme and budget for entrepreneurship education in the higher institution as it is a capital-intensive programme.

**Keywords:** Entrepreneurship education, Human resources, Material resources Curriculum, Private and Public universities.

## Introduction

Entrepreneurship education is a curriculum designed to equip learners with 21<sup>st</sup>-century labour market-required skills and to become job creators upon graduation. It is a curriculum aimed at equipping young people with relevant and practical education that will enable them to become self-sufficient and develop the skills needed to satisfy the workforce requirements of society, particularly in the twenty-first century. These skills include critical thinking, creativity, cooperation, information literacy, media literacy, technology literacy, flexibility, leadership abilities, and social skills are just a few of these qualities (Osuala, 2010).

It is worth noting that the importance of entrepreneurship in the global economy has been recognized on a worldwide scale. This is due to its potential for addressing issues such as economic growth, the ability to create jobs, and the reduction of unemployment which seems to be a serious challenge facing all nations of the world, particularly the less developed ones. Despite the potential benefits of the course, the implementation of this curriculum, however, faces several challenges. Apart from implementation challenges, the field itself is beset by a slew of issues, including what the term "entrepreneurship" connotes, its "teachability," what should be its contents, the methodologies to be used in teaching it, the appropriate method of assessment, and the lack of any theoretical background to support its teachability, to name a few (Pittway & Cope, 2007).

In a school setting, there are teaching and non-teaching staff employed to promote and facilitate effective teaching and learning processes as a means to the realization of the curriculum aim. The success of any organization including education depends largely not only on the quantity and quality but, also on the adequacy of human resources. According to Wodi (2018), human resources (teaching and non-teaching) determine the effective use of the available facilities, select appropriate methods of delivery, the curriculum and programs and the yardstick for evaluation of teaching and learning in the school.

Material resources are non-human resources used by human resources or personnel to enhance the realization of organizational goals. Amie-Ogan1 and Uwamankhor (2016) stated that material resources are the tangible resources that can easily be seen and observed in any educational institution, such as classrooms, staff offices, vehicles, health centres, libraries,

laboratories, instructional facilities and so on which directly or indirectly contribute to the achievement of educational goals and objectives.

Other issues include a lack of manpower, insufficient finances for the acquisition of necessary facilities, a high teacher-to-student ratio, insufficient training duration and time, a weak entrepreneurial culture, and a hostile business climate. Other issues include difficulties communicating with the outside world as required by the program, as well as a negative public attitude toward the development of technical and vocational education (Asiyai et al., 2019; Mando, 2016).

Aside from the aforementioned concerns, there is the question of who is qualified to teach entrepreneurship education. There is no disagreement that unique skills and expertise are required for effective entrepreneurship education instruction around the world. Akpama, et al. (2009) take a similar stance, stating that teaching of entrepreneurial studies should be handled with a high level of professionalism by specialists in the program's key fields. To effectively teach entrepreneurship education, teachers and facilitators must be provided with the required training so that they may gain the relevant information, skills, and competence needed for the effective implementation of entrepreneurship education (Ogedengbe, et al. 2015). Indeed, the importance of adequate provision and supply of needed human and material resources for the effective implementation of any curriculum cannot be overemphasized.

There is also an agreement among students according to a study conducted by Akpama, Etor, Akpan, and Etor (2009) that insufficiently skilled lecturers, laboratory facilities, and conducive classrooms for practical work, as well as inadequate training materials and textbooks, are some of the problems affecting effective teaching and learning of entrepreneurship education. In addition, Ugwoke, Basake, Diara, and Chukwuma (n.d.) and Mando, (2016), noted that there is a manpower shortage in the teaching of entrepreneurship education. In contrast, Agboola (2014) found that there are adequate lecturers for the effective teaching and learning of entrepreneurship education in Nigeria.

Similarly, Nwangwu (2007) in a related study found that there is a severe shortage of experts in entrepreneurship education in the country's institutions. He also emphasized that the task of producing entrepreneurial graduates necessitates the use of specialists in the field, such as

teachers with a practical orientation in entrepreneurship. This viewpoint is consistent with the findings of Akpama, et al. (2009), who found that entrepreneurship studies must be taught with a high level of professionalism by professionals in relevant program areas.

According to Mando (2016), the equipment required to implement entrepreneurship education effectively is insufficiently provided, and the library resources are in most cases outdated. To this end, it can be said that, due to a lack of materials, entrepreneurship education in Nigeria has generally stayed the same as other disciplines in terms of delivery. In addition, when attempting to incorporate entrepreneurial education into any culture, the issue of capacity-building centers should be examined. This is where the aspiring entrepreneur will be given hands-on experience to better acquire the necessary skills.

Identifying and recruiting qualified teachers with content and pedagogical knowledge as well as practical entrepreneurial training and consciousness to effectively impart entrepreneurial skills and competencies in students is another challenge facing entrepreneurship education teaching and learning in Nigeria (Banabo & Ndiomu, 2011; Ikeme, 2012; Olorundare & Kayode, 2014). This is because, Entrepreneurship education, requires the use of active learning approaches that position learners at the centre of teaching-learning processes, allowing them to take control of their learning, the learning environment, and the manner they wish to study.

Furthermore, insufficient school finance, which is the primary source of insufficient facilities and equipment required for the efficient execution of the course in schools, has frequently harmed the teaching and learning of the course. To back this up, a study by Akpan and Etor (2013); and Ugwoke, Basake, Diara, and Chukwuma (n.d.) discovered that there was insufficient financing for the procurement of instructional materials, as well as in-service teacher training. This is a significant hurdle since it will inevitably result in entrepreneurship that is under-equipped due to a lack of essential practical work, as well as inadequate training and instructional resources (Agboola, 2014; Nwekeaku, 2013).

Meanwhile, Olorundare et al (2014) asserted that entrepreneurship education is a capitalintensive course because both lecturers and students require funds to put theory into reality when it comes to starting, creating, and running businesses. This, without a doubt, creates obstacles to the efficient implementation of entrepreneurship education programs at Nigerian universities. However, the findings of Wordu and Adeeyo (2019) in a study on entrepreneurship programmes in higher institutions in Nigeria: The extent of implementation in Rivers State contradicted these earlier findings, revealing that funds are available for the implementation of entrepreneurship studies in Rivers State, Nigeria. The inconsistencies in these findings could be due to the study's location.

Idibie (2004) also states that teaching and learning without textbooks would entail a lot of memory as well as making the teacher's words the final authority, which does not allow for the acquisition of essential entrepreneurship skills (Idibie, 2004). Inadequate provision of facilities and equipment to cope with the increasing enrolment of pupils in schools is another factor affecting the efficient implementation of entrepreneurship education. This, according to Ewubare, (2010); Banaba, and Ndiomu (2011), is a major barrier to effective Entrepreneurship education implementation. This is because the area is still relatively young in the academic arena, and there is a lack of relevant textbooks in the field (Ewubare, 2010).

In conclusion, the following elements have been identified as impediments to the effective implementation of entrepreneurship education in Nigeria: a lack of well-trained entrepreneurs and qualified teachers, inadequate infrastructural facilities, teaching-learning materials, and required equipment; a lack of enterprising culture as well as an unfriendly business environment; a lack of funding; a cultural attitude toward technical and vocational education growth, as well as a student mindset; government insensitivity to business formation and expansion strategies; Curriculum preparation and implementation are lacking; assessment and associated procedures are also lacking (Brown & Denny 2009; Gabaden & Raimi, 2012; Ukoha, 2017). However, it should be mentioned that the Federal Government of Nigeria, through its various agencies, is steadily addressing several of these issues (Gabaden & Raimi, 2012).

## **Research Questions**

- i. How adequate are the instructional resources used for the implementation of the entrepreneurship education curriculum in private and public Universities in Nigeria?
- ii. How adequate are the human resources used in the implementation of the entrepreneurship education curriculum in private and public universities in Nigeria?

## Methodology

This research adopted a mixed-methods approach. Quantitative and qualitative approaches were used as a cross-sectional survey and an instrumental case study, respectively. The study employed an explanatory mixed-method approach. All lecturers of entrepreneurship education in private and public universities in the study locale formed the study population. 12 out of 29 and 36 out of 92 lecturers were sampled from private and public universities respectively. This was done through a proportional quota and a simple random sampling technique. Also, 10 members of the management board of entrepreneurial education or centres from private and public universities were purposively sampled. These entrepreneurship centres are saddled by the universities to coordinate the implementation of Entrepreneurship education curricula. The sampled members of the management board are either in the position of a director or deputy director from each of the three public universities. And four coordinators from each of the four private universities, as the case may be. The sampling was also done through proportional quota and random sampling techniques. The instrument used for the study was a researchers' degined instrument. This instrument was validated and tested for reliability with 0.78 and 0.75 obtained respectively. Frequency and percentage were used to analyze the data gathered.

#### **Results**

**Research Question 1:** How adequate are the instructional resources used to implement the entrepreneurship education curriculum in private and public Universities in Nigeria?

This research question was answered quantitatively and qualitatively. Table one revealed the quantitative results while figure one revealed the qualitative results. The responses of the members of the management board of entrepreneurship centres' on the adequacy of instructional resources provided for the implementation of entrepreneurship education curriculum were subjected to percentage analysis. Given that the instrument contained 15 quantitative items structured in a four-response-type, participants with the scores 4, 3, 2, and 1 signified that the objective was 'Very Adequate' 'Adequate', 'Inadequate' and Grossly Inadequate' respectively. In the qualitative analysis, four sub-themes were highlighted for participants to give in-depth responses on the adequacy of instructional resources. The four sub-themes are collaboration with other universities, adequacy of practical equipment, getting needed funds, and involvement in

knowledge sharing. These were analyzed using a structural equation model derived from Nvivo 10 qualitative data analysis software. The quantitative summary of the statistics is presented in Table 1 while the qualitative summary is presented in Figure 1

Table 1: Adequacy of the Instructional Resources Used for the Implementation of Entrepreneurship Education Curriculum

Adequacy of	School Type		
Instructional Resources	Private	<b>Public</b>	Total
Grossly inadequate	1(25.0)	1(16.7)	2(20.0)
Inadequate	2(50.0)	3(50.0)	5(50.0)
Adequate	1(25.0)	2(33.3)	3(30.0)
Total	4(100)	6(100)	10(100)

As revealed in Table 1, the majority (70%) of the respondents (from private and public) attested that the instructional resources provided for the implementation of the entrepreneurship curriculum were inadequate. Also, the qualitative responses of respondents are shown in Figure 1 below.

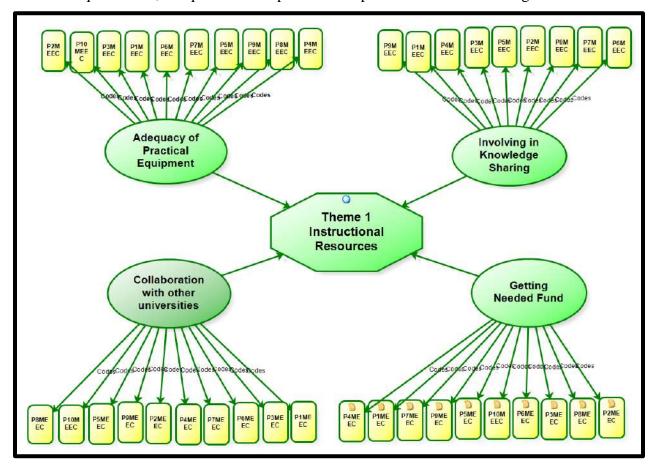


Figure 1: Qualitative Results on Adequacy of Practical Equipment.

The results from qualitative analysis based on the responses given by 10 respondents from both private and public universities as shown in Figure two also revealed that the practical equipment to be used for the effective teaching-learning of entrepreneurship education by tutors and skills acquisition trainees was not adequate based on the responses given by the majority of the participants. The responses given by some participants are quoted as follows "They are not adequate at all' (P6MEEC) and 'not really' (P9MEEC). On the issue of collaboration with other universities which was to assist the universities in the sharing of equipment, very few of the participants responded that their universities have been doing that. However, the majority of the participants noted that they had not been doing it. Some of the responses given by participants are as follows: 'No, we have not done that' (P7MEEC). 'No, we have not been doing that' (P8MEEC).

On the third sub-theme, which is getting needed funds, the responses given by nearly all the participants revealed that entrepreneurship education centers do not always get the needed funds to procure necessary instructional resources. Below are some responses given by the participants: at times, the fund may not be enough because many things are needed' (**P2MEEC**). 'No, the centre does not always get the needed funds' (**P4MEEC**)

Comparatively, the results shown in Table 1 revealed that 25.0% and 50.0% of respondents from private universities attested that the instructional resources used for the implementation of the curriculum were grossly adequate and inadequate respectively. While from public universities, 16.7% and 50.0% of the respondents noted the resources were grossly inadequate and inadequate respectively. Also, the qualitative results as shown in Figure 1 revealed that the majority of respondents noted that the instructional resources were inadequate. This implies that in both private and public universities in North-Central Nigeria, the instructional resources provided for the implementation of the entrepreneurship curriculum were not adequate.

**Research Question 2.** How adequate are the human resources used in the implementation of the entrepreneurship education curriculum in private and public universities in Nigeria?

Table 2: Lecturer/trainers-students Ratio in Private Universities

	Private			Public			
School	Lecturers/ trainers	Students	Ratio	Lecturers /trainers	Students	Ratio	
A	12	910	1:75	150	11,782	1:79	
В	11	424	1:38	74	7443	1:100	

C	11	245	1:22	51	5271	1:103	
D	14	603	1:43	-	-	-	
Total	48	2,182	1:45	275	24,496	1:89	

Results from Table 2 revealed that only one of the private universities has a teacher-student ratio of 1:22 which is below the set standard of 1:30 in the BMAS. Others have a ratio higher than the recommended. From public universities, the school with the lowest ratio has 1:79 while the ratios of others are above 1:79. Meanwhile, the BMAS recommended the ratio to be 1:30 for entrepreneurship education courses. Going by this set standard and the results revealed in these tables, it implies that human resources used in the implementation of the entrepreneurship education curriculum in the sampled universities are inadequate in both private and public universities.

# **Discussion of the Findings**

The first finding of the study revealed that the instructional resources and practical equipment used in the implementation of entrepreneurship curricula in both private and public universities in North-central Nigeria were inadequate. This finding is in agreement with the findings of Oriazowanlan (2013) which revealed that the required materials used for the implementation of entrepreneurship education in the South-south geo-political zone of Nigeria are grossly inadequate. The finding also agrees with the findings of Mando (2016) in different studies which revealed equipment used for the implementation of entrepreneurship education in Nigerian higher institutions is grossly inadequate.

Because the two studies are similar in many ways, the similarities and differences in the findings of this study can be compared to the findings of Orizonwanlan 2013. Both studies were carried out on entrepreneurship education and they were both descriptive. Aside from that, instructors in charge of entrepreneurship education in universities were employed as respondents in the study. Descriptive statistics were also utilized to analyze the data in the studies. However, the two studies did not use the same research location; instead, they both used a single but distinct geopolitical zone in Nigeria. Meanwhile, it is worth noting that this study used the management of the entrepreneurship center as respondents on the adequacy of human and material resources used in the implementation of the curriculum, in addition to the lecturers in charge of the course. On this basis, comparing the areas of agreement and disagreement in the findings of the two research is a reasonable comparison. Aside from that, the results of this study and that of Mando (2016) can be compared. This is because the two research methodologies were comparable. The two

studies were descriptive, with lecturers and coordinators as respondents and data analysis using the same statistical procedures.

Apart from this, the study also revealed that the human resources used in the implementation of the curriculum in both private and public universities were grossly inadequate. These are judged grossly inadequate as the teacher-student ratio revealed by the study is far above the recommendation given in the BMAS. This finding is in line with the earlier finding of Akpama, et al (2009) which revealed that students agreed that there are inadequately skilled lecturers to handle entrepreneurship education. The finding also agreed with Mando's (2016) study. His study also showed that there is a shortage of manpower for the teaching of entrepreneurship education in the North-Central states of Nigeria.

A comparison of the study's findings with that of Akpama et al 2009 is equally applicable. This is because the current study evaluated the adequacy of human resources used in implementing entrepreneurial education curricula using lecture-student ratios. Students were used as respondents in Akpama et al 2009's study to examine the adequacy of human resources used. To this purpose, the outcomes of this study corroborated what students enrolled in the course had said regarding the state of human resources used in the course's implementation. However, the agreement can be said to be by chance. This is because students who judged human resources adequacy in Akpama et. al (2009) are not in a position to judge. After all, they may not know what the policy says about the lecturer-student ratio. The two studies were also conducted at universities.

However, this finding disagrees with the finding of Agboola (2014) in a study that revealed that there are an adequate number of lecturers used in teaching entrepreneurship education. The discrepancy between the current study's findings and that of Agboola (2014) may be because Agboola used students to assess the appropriateness of human resources used in curriculum implementation. The current study assessed the sufficiency of human resources used in the implementation by comparing the lecturer-to-student ratio to the NUC benchmark suggestion. Meanwhile, in curricular jargon, students are unable to assess the adequacy of human resources employed in the implementation of a curriculum. This is because students may not be aware of the benchmark recommendation for lecture-to-student ratio.

## Conclusion

The findings of this study concluded that the human and material resources used in implementing the entrepreneurship education curriculum in private and public universities located in North-central Nigeria are inadequate.

#### Recommendation

Based on the findings of this study, it is therefore recommended that the relevant stakeholders saddled with the responsibilities of university education in the country urgently raise and ensure the adequate human and material resources needed for the effective implementation of the entrepreneurship education curriculum if the curriculum's aims are to be actualized.

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