

Statistical Analysis of Students' Perceptions on the Implementation of Entrepreneurship Education Programme in The Polytechnic Ibadan, Nigeria

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Abstract: The negative consequences of unemployment and increasing number of people living below poverty line are enormous on the individuals and the nation at large as youth unemployment constitutes a formidable challenge for national governments. The research studies the students' perception on the implementation of entrepreneurship programme in the Polytechnic, Ibadan. Two instruments (QUESIE and QUEFIE) were used to obtain relevant information from both the students and the lecturers/facilitators. The study found out that students were aware of the significance of entrepreneurship education and that the curriculum of the study was detailed to achieve the objectives of the study. However, it was revealed that the teaching facilities are inadequate and the environment was not conducive enough for entrepreneurship education. The hypothesis testing showed that, the correlation coefficient showed a positive strong correlation between the students' understanding of the significance of entrepreneurship education and its impact ($r=+0.824$) and a low positive correlation between the teaching facilities and its impact on the entrepreneurship education ($r=+0.287$). The available teaching facilities are not adequate enough for the entrepreneurship education programme. There is a strong positive correlation between the coverage of the curriculum and its impact on the entrepreneurship education ($r=+0.792$). The environment is not conducive enough for the entrepreneurship education programme as it shows low positive correlation ($r=+0.243$). Therefore, there is need to improve on the availability of the teaching facilities and the environment for conducive teaching and learning processes.

Keywords: Unemployment, Entrepreneurship, Curriculum, Teaching facilities, Environment, Poverty

1 Introduction

With decreasing stability in the economy, work environment, and growing needs for personal control and fulfilment at work, entrepreneurship has been proposed as a viable alternative career model to traditional employment. The growth in entrepreneurship education across the country and increasingly around the world has been well recognized (Kuratko, 2005; Torrance, 2013). The pace of change in technologies is so fast that it is very difficult or even impossible to predict how the labour market and the business world will evolve; therefore, the ability to adapt, to get new ideas and to put these ideas into action, to be pro-active and tolerant to failure will be equally as important as the ability to read, write and calculate what future will be from today. As

the society and the economy develop at an increasing speed, some types of knowledge become obsolete as they are replaced by new knowledge, and some skills, competences and traits, which are highly valued and advantageous to possess in previous times, are of minor value today (Lundvall, 1992). Today, where entrepreneurship and innovation are recognized as the main drivers of growth (Landstrom, 2005), most researchers and policy makers agree that another type of skill is needed. The skills needed and how these are best taught, have, however, been debated intensively (Neck & Greene, 2011). The increasing importance of entrepreneurship education and its ability to contribute to economic growth and job opportunities have inspired many institutions to offer entrepreneurship education subjects both in academic and non-academic programs. Although there are an increasing

number of students who are taking entrepreneurship education, the ability to refine entrepreneurship value with traditional teaching methods remains unclear and its possibility remains debatable. Nigeria is a developing country, but has a high rate of unemployment among the graduates emerging from the higher educational institutions. This is one of the main social development problems facing the Nigeria government. Graduates' preference for being paid employees over becoming self-employed is one of the contributing factors to the current problem (Muszafarsha & Woon, 2004; Fong, 2005). Entrepreneurship would help the graduates to develop their own careers and expand the job market by easing the current unemployment problem (Norasmah, 2004). Entrepreneurship was acknowledged by many researchers as a solution to the problem of unemployed graduates (Kamariah *et al.*, 2004; Salmah, 2006). The ability to create job, reduce the unemployment and create economic boom are among the main reasons why many countries are fostering and realizing the importance of entrepreneurship education. The creations of new business ventures by entrepreneurs generate jobs opportunities and help stimulate the economy and drive new industry of the country. McMullan (1988) emphasized the importance of entrepreneurship education to economic development and viewed it as one of the important elements of the community support infrastructure (Lekoko, 2012). Unemployed people contribute less to the economy because they are spending less and do not participate in paying tax due to lack of jobs. According to the National Bureau of Statistics report, the unemployment rate rose for the seventh straight quarter to 13.9% in the third quarter of 2016. It was the highest level since 2009, as the number of unemployed rose by 5.2% to 11.2 million. Meanwhile, youth unemployment rate increased to 25%. The negative consequences of unemployment and increasing number of people living below poverty line are enormous on the individuals and the nation at large. Among these are inability to secure basic necessities of life (food, clothing and shelter); alarming rate of social vices; increased number of dependants; poor economic growth due to reduction in investment; waste of manpower; brain-drain due to emigration of professionals and skilled labours. Entrepreneurship education has become a mandated course in the tertiary institutions curricula in Nigeria since 2007 with the aim to produce self-sustaining graduates towards enhancing national economic growth and development. Despite this development, the rate of unemployment and

people living below poverty line are continuously on the increase. Hence, this prompts the researcher to investigate the perceptions of students and their facilitators on the implementation of entrepreneurship education on the students of The Polytechnic Ibadan, Ibadan as an integral part of Nigerian graduates.

2 Literature Review

The past two decades have witnessed significant growth in entrepreneurship education in most industrialized countries (Matlay & Carey, 2006). The number of entrepreneurship courses offered in our higher institutions of learning and investment in entrepreneurship programme is still on the increase (Gwynne, 2008). The growth, "can be seen as indicative of widespread governmental belief in the positive impact that entrepreneurship can have on the socio-economic and political infrastructure of a nation" (Matlay, 2008). Public policy makers recognise the importance of entrepreneurship as promoter of economic development and hence, support instruments like entrepreneurship education to increase entrepreneurial activity (Fayolle *et al.*, 2006). Linan (2004) found that there are four different kinds of entrepreneurship education programmes.

Robinson *et al.*, (1994) documented in their study that there was a strong relationship between education and the probability of becoming an entrepreneur and the probability of having success as an entrepreneur. However, they did not differentiate between the various kinds of education and disregarded the possibility of specifically designed entrepreneurship education programmes. Von Graevenitz *et al.*, (2010) therefore argued that an entrepreneurship education programme is a foremost way for students to test their aptitude for an entrepreneurial career choice. According to the authors, the decline in entrepreneurial intention is not necessarily negative or a failure of the programme but potentially a socially desirable effect as students may discover that they have no aptitude for an entrepreneurial career and change course. Oosterbeek *et al.*(2010), and Von Graevenitz *et al.*, (2010) examined compulsory entrepreneurship programmes on the school and university levels, the role of voluntary, university level education, especially in combination with methodologically sound research designs, is under-researched.

Knight (1987) suggested that opportunity identification, strategy development, and resource allocation are key

elements of entrepreneurship and all these should be emphasized in entrepreneurship courses or programs. Zeithaml & Rice (1987) argued that education in entrepreneurship should cover the entire scope of business administration. In the same line, Block & Stumpf (1992) proposed that entrepreneurship education should contain typical business management knowledge, including market analysis and planning, pricing strategies, financial analysis, leadership, human resources, and other management theories and skills. Entrepreneurship course is different from typical business courses (Henry *et al.*, 2005; Hindle, 2007; Kuratko, 2005) and it should address the issues related to business entry (Gartner, Bird, & Starr, 1992). McMullan & Long (1987) proposed that entrepreneurship has different stages and thus education of entrepreneurship should include the knowledge and skills needed at these stages. Based on this, Gartner & Vesper (1994) claimed that skills and knowledge required for entrepreneurial start up is different from the conventional business management. By comparing the learning focus of business school and entrepreneurship education, Gibb (1993) stressed that it is not appropriate to adopt the whole business curriculum in entrepreneurship education. Zeithaml & Rice (1987) posted the warning that it is improper to teach entrepreneurship without touching upon the knowledge about business management given a strong relationship between the two domains. In this sense, entrepreneurship education should include both business management and new business entry knowledge and skills. Ronstadt (1987) argued that entrepreneurship education should include barriers to starting a new business and possible solutions. In this way, entrepreneurship education should equip students with different skills, including leadership skills, communication skills, new product development, innovation (Plumly *et al.*, 2008) and information communication technology (Richardson & Hynes, 2008). Donckels (1991) contended that entrepreneurship education should focus on introducing entrepreneurship as an alternative career while others stressed that entrepreneurship education should center around the sources of venture capital (Vesper & McMullan, 1988), the challenges associated with the venturing process (Plaschka & Welsch, 1990), and business opportunity exploitation (Heinonen Poikkijoki, 2006). Ronstadt (1990), students should be trained to make decisions in the "unstructured and uncertain nature of entrepreneurial environments" and hence the entrepreneurship education should focus on the practical training on how to set up and

manage a new business. Sexton & Upton (1984) argued that individual activities should be highlighted more than group activities in entrepreneurship education. Collin *et al.* (2006) encouraged collaborative learning approaches between students. Co & Mitchell (2006), based on different teaching approaches, explained that it is necessary to examine whether the current teaching methods achieve the course objectives. They advised using "more interactive methods such as role playing and simulation for students to practice analytical and decision making skills". Solomon *et al.* (2002) noted that traditional lecturing methods are popular in entrepreneurship education. However, some commentators criticized using the traditional methods and argued that the teaching of entrepreneurship should be based on innovation and practice (Mwasalwiba, 2010). The researchers argued that traditional methods which focus on theory and concepts are not appropriate to teach entrepreneurship, and instead the learning should be more proactive with teachers acting as guides or facilitators. This is supported by Young (1997) who argued entrepreneurship education required experienced-based and practical learning settings and these are difficult to be obtained through traditional teaching attempts. Nonetheless, Shepherd & Douglas (1996) criticized the less traditional methods for entrepreneurship, such as case study, role play, simulation and problem solving, arguing that these methods actually promote logical rather than creative or entrepreneurial thinking. Shane (2003) documented that entrepreneurship process consist of capability to identify opportunity, collect resources, organize them and adapt strategy so that opportunity can be exploited. The knowledge, skills and information he obtained through education will likely improve the expected returns for exploiting the opportunity. Entrepreneurship education not only improves knowledge skill and information which needed to pursue an opportunity but also equip individual with analytical ability and knowledge of entrepreneurial process which improve the entrepreneurial judgment (McMullen & Shepherd, 2006).

Abubakar, (2010) noted that the shift from general education to specifically entrepreneurship education becomes necessary in the present realities of the need to develop and empower particularly the youths in the society. There is seeming consensus on the importance of entrepreneurship in ameliorating some socio-economic problems especially poverty, unemployment, and all sort of social vices in the society. Akpomi, (2009), Adejimola & Olufunmilayo (2009),

Dickson, *et al* (2008) and Vincett & Farlow (2008) have jointly consented that developing entrepreneurial skills among students at all levels has become an issue of priority to both educational policy makers and practitioners. This has resulted to sustained efforts through researches and introduction of entrepreneurial programs and courses in institutions of learning and other entrepreneurship based centers for the purpose of inculcating the culture and spirit of entrepreneurship. The Centennial Global Business Summit (2008) identified the causes of educational crisis include unaccountable teachers, dysfunctional schools, and systemic barriers like lack of political and economic will to drive changes.

3 Problem Statement

Entrepreneurship has a positive effect on the economy due to the growth innovation and competition accompanied (Zimmerer & Scarborough, 2005). In the competition intensified global economy, entrepreneurship is recognized as an effective tool to deal with the economic dynamism, by introducing innovative products and services, exploiting technological frontiers, providing new jobs, and creating new markets (Nandram & Samsom, 2006). Entrepreneurial spirit and abilities are critical for nurturing entrepreneurial activities. These elements are the driving force of business enthusiasm and growth, innovation and competition. Honig (2004) and Robinson & Sexton, (1994) indicated a positive impact of entrepreneurship education and training on entrepreneurial activity through strengthening students' attitudes, behavioral characteristics and desirability (Peterman & Kennedy, 2003; Hansemark, 1998) as well as their entrepreneurial and small business management skills (Clark *et al.*, 1984; Charney & Libecap, 2000; 2003). Therefore, entrepreneurship education is important to facilitate entrepreneurial activities and performance and hence the economic development. However, how to design an effective entrepreneurship education program is still challenging for educators because there is a lack of consensus on the contents or methods to teach the subject (Bennett, 2006). Understanding the impact of entrepreneurship education on students' intention is the key to designing an effective entrepreneurship education program. An effective entrepreneurship education program should be developed based on a model describing how the specific education components influence entrepreneurial attitudes and intention. Therefore, this study aims at studying the impact of

entrepreneurship education on the students of The Polytechnic, Ibadan.

4 Research Questions

In order to achieve the specific objectives above, the following research questions are required to be addressed:

RQ1: Do students understand the significance of entrepreneurship education?

RQ2: Are there adequate facilities for effective teaching and learning of entrepreneurship Education courses?

RQ3: Does the curriculum cover major aspects of entrepreneurship?

RQ4: Is the environment conducive for learning of entrepreneurship education?

5 Methods

Research Design

This study adopted a descriptive and correlation survey research design in which questionnaires were employed in collecting data from the respondents on the variables studied.

Sample and Instrumentation

The geographical scope of the study is The Polytechnic Ibadan, Ibadan, South-Western part of Nigeria. The Polytechnic Ibadan has five different Faculties and twenty-eight Departments. Two different questionnaires were designed to obtain information relevant to the objectives of the study. The first questionnaire for the students: Questionnaire for the Impact Assessment of Entrepreneurship Education on the Tertiary Students (QUESIE); and the second questionnaire for the lecturers/facilitators which was also tagged, A Questionnaire on the Teaching of Entrepreneurship Education Course in The Polytechnic, Ibadan (QUEFIE). The first set of samples is the HNDII students who were selected through a multi-stage sampling method. The choice of multi-stage sampling was based on the population of The Polytechnic, Ibadan that comprises five different Faculties and twenty eight different Departments across the various Faculties. The HND II students were purposively selected as target population. Two hundred questionnaires were administered to the students such that twenty (20) students were equally drawn from each of the selected Departments for consideration. The Cronbach's Alpha reliability test for QUESIE, showed that the value of Cronbach's Alpha for

significance of entrepreneurship education programme was 0.810; the value of Cronbach's Alpha for impact of curriculum on entrepreneurship education programme was 0.836; the value of Cronbach's Alpha for impact of teaching facilities on entrepreneurship education programme was 0.836 and the value of Cronbach's Alpha for impact of environment on entrepreneurship education programme was 0.733. The Cronbach's Alpha reliability test for QUEFIE, the value was 0.609.

6 Results and Discussion

Table 1: A Table Showing the Demographic Analysis of QUESIE

Items	Frequency	Percentage (%)
Faculties		
FBCS	100	50
FSC	100	50
Sex		
Male	78	39
Female	122	61
Age		
16 – 20	11	5.5
21 - 25	141	70.5
26 - 30	47	23.5
31-35	1	0.5
Marital Status		
Unmarried	183	91.5
Married	17	8.5

Table 1 showed that the number of respondents was equally distributed between the two selected Faculties and the number of respondents was equally distributed between the selected Departments. There were more females (61%) than males (39%) among the respondents. The age group 21 – 25 years had the highest number of respondents that covered 70.5% of the population. And this was followed by the age group 26 – 30 years with 23.5% of the population. From the Table, the majority of the students (91.5%) were not married. Majority of the students (86.5%) were Yoruba and those that were Igbo were 8.5% of the distribution. The Table also revealed that among the respondents Christians were the

majority (67.5%) while the Muslims (32.5%) were almost half of the Christian population.

Table 2: A Table showing the Results the Students' Perception on the Impact of Entrepreneurship Education

Statements	No. of Strongly Agreed/ Percentage (%)	No. of Agreed/ Percentage (%)	No. of Disagreed/ Percentage (%)	No. of Strongly Disagreed/ Percentage (%)
S1	93 (46.5)	94 (47)	8 (4)	5 (2.5)
S2	67 (33.5)	111 (55.5)	12 (6)	10 (5)
S3	82 (41)	104 (52)	8 (4)	6 (3)
S4	76 (38)	89 (44.5)	21 (10.5)	14 (7)
S5	81 (40.5)	101 (50.5)	8 (4)	10 (5)
S6	51 (25.5)	100 (50)	42 (21)	7 (3.5)
S7	74 (37)	92 (46)	26 (13)	8 (4)
S8	78 (39)	109 (54.5)	9 (4.5)	4 (2)
S9	56 (28)	113 (56.5)	25 (12.5)	6 (3)

According to Table 2, statement 1, 'I have known the importance of Entrepreneurship education during my National Diploma programme', statement 2: 'The Entrepreneurship course increases my understanding of generating innovative ideas', statement 3: 'Entrepreneurship education gives me a sense that entrepreneurship is achievable', statement 4: 'Entrepreneurship education inspires me to be self-employed', statement 5: 'Entrepreneurship education helps to create additional source of income', statement 6, 'Entrepreneurship education gives me confidence that entrepreneurship could be a mainstay for my survival', statement 7, 'Entrepreneurship education programme reduces the quest for white collar job', statement 8, 'Entrepreneurship education is necessary to improve national economic growth and development', statement 9, 'Entrepreneurship education programme increases my understanding of the motives of engaging in entrepreneurial activities' showed positive response to the statements either slightly, below or above average. Hence, high percentage of the students showed positive responses to the impact the entrepreneurship education programme has made on their lives and intentions to start their private businesses in their future endeavours. This corresponds with the findings by Kolvereid & Moen (1997) who reported that graduates with an entrepreneurship

major are more likely to start a new business and have stronger entrepreneurship intentions than other graduates.

Table 3: A Table showing the Results of the Students' Perception on the Curriculum of Entrepreneurship Education

Statement	No. of Strongly Agreed/ Percentage (%)	No. of Agreed/ Percentage (%)	No. of Disagreed/ Percentage (%)	No. of Strongly Disagreed/ Percentage (%)
S10	47 (23.5)	91 (45.5)	52(26)	10 (5)
S11	42 (21)	101 (50.5)	51 (25.5)	6 (3)
S12	39 (19.5)	66 (33)	74 (37)	21 (10.5)
S13	56 (28)	91 (45.5)	33 (16.5)	20 (10)
S14	71 (35.5)	92 (46)	23 (11.5)	14 (7)
S15	32 (16)	107 (53.5)	46 (23)	15 (7.5)

According to Table 3, statement 10, 'The entrepreneurship education programme increases my understanding of writing a business planning', statement 11, 'The entrepreneurship education programme increases my understanding of market research for entrepreneurial ventures', statement 12, 'The entrepreneurship education programme enhances my skills of project analysis', statement 13, 'The entrepreneurship education programme exposes me to various aspect of business financing', statement 14, 'The entrepreneurship education programme increases my understanding of the personal characteristics of entrepreneurs (e.g., risk taking, innovation, etc.)', statement 15, 'The entrepreneurship course enhances my skills to deal with the risks and uncertainties' showed positive response to the statements either slightly, below or above average

Hence, high percentage of the respondents showed positive responses to the wide coverage of the syllabus of the entrepreneurship education programme. Kuratko (2003) emphasised that attention should be paid to what should be taught and how it should be taught. Fiet (2001) suggested that entrepreneurship education should stress theories and principles of entrepreneurship. The contents of the entrepreneurship courses taught in the school correspond to what was proposed by Block & Stumpf (1992) and also

complied with the guides laid down by the National Board of Technical Education (NBTE).

Table 4: A Table showing the Results of the Students' Perception on the Teaching Facilities for Entrepreneurship Education

Statement	No. of Strongly Agreed/ Percentage (%)	No. of Agreed/ Percentage (%)	No. of Disagreed/ Percentage (%)	No. of Strongly Disagreed/ Percentage (%)
S16	24 (12)	67 (33.5)	57(28.5)	52 (26)
S17	21 (10.5)	76 (38)	61 (30.5)	42 (21)
S18	38 (19)	71 (35.5)	50 (25)	41 (20.5)
S19	18 (9)	53 (26.5)	68 (34)	61 (30.5)
S20	30 (15)	70 (35)	66 (33)	34 (17)
S21	26 (13)	67 (33.5)	70 (35)	37 (18.5)
S22	11 (5.5)	27 (13.5)	54 (27)	108 (54)
S23	58 (29)	69 (34.5)	21 (10.5)	52 (26)
S24	66 (33)	57 (28.5)	44 (22)	33 (16.5)
S25	34 (17)	45 (22.5)	50 (25)	71 (35.5)

According to Table 4., statement 16, 'The lecturers did a good job in making the entrepreneurship course relevant to the real world', statement 17, 'The lecturers are experienced in teaching the courses in entrepreneurship', statement 18, 'The methodologies introduced by instructors for the entrepreneurship courses are not very interesting' showed positive response to the statements either slightly, below or

above average, statement 19, 'The lecturers teach a comprehensive business plan model for the subject.' it showed that the total number of students that chose strongly agreed (18) and agreed (53) is 71 which means that below average (35.5%) of the respondents showed positive response to the statement. This showed that majority of the respondents did not enjoy the teaching of business plan model by their facilitators, statement 20, 'The lecturers have an excellent way of presenting the entrepreneurship courses' it showed that the total number of students that chose strongly agreed (30) and agreed (70) is 100 which means that average (50%) of the respondents showed positive response to the statement. This showed that half of the respondents did not enjoy the manner of presentation of the entrepreneurship courses by their lecturers/facilitators, statement 21, 'The lecturers stimulate the interest in entrepreneurship course through the teaching methodologies', statement 22, 'The lecturers take the students for visits to industries to gain more knowledge on the subject', statement 23, 'Practical sessions help a lot in understanding the entrepreneurship subject' showed positive response to the statements either slightly, below or above average, statement 24, 'The Polytechnic does not have adequate facilities to promote the entrepreneurship activities for students' it showed that the total number of students that chose strongly agreed (66) and agreed (57) is 123 which means that majority (61.5%) of the respondents showed positive response to the statement. This showed that majority of the students believed that the institution does not have adequate facilities, statement 25, 'The Polytechnic provides resources to assist students in entrepreneurship' it showed that the total number of students that chose strongly agreed (34) and agreed (45) is 79 which means that below average (39.5%) of the respondents showed positive response to the statement. Hence, the institution should provide adequate facilities with improved teaching methodologies. Jack (2008) argued that the teaching of entrepreneurship should highlight both theoretical and practical aspects of entrepreneurship. Young (1997) argued that entrepreneurship education required experienced-based and practical learning settings. The researchers argued that traditional methods which focus on theory and concepts are not appropriate to teach entrepreneurship, and learning should be proactive with teachers acting as guides or facilitators.

Table 5: A Table showing the Results of the Students' Perception on the Curriculum of Entrepreneurship Education

Statements	No. of Strongly Agreed/ Percentage (%)	No. of Agreed/ Percentage (%)	No. of Disagreed/ Percentage (%)	No. of Strongly Disagreed/ Percentage (%)
S26	29 (14.5)	72 (36)	61(30.5)	38 (19)
S27	33 (16.5)	71 (35.5)	55 (27.5)	41 (20.5)
S28	36 (18)	58 (29)	66 (33)	40 (20)
S29	33 (16.5)	68 (34)	55 (27.5)	44 (22)
S30	80 (40)	81 (40.5)	23 (11.5)	16 (8)

According to Table 5, statement 26, 'My institution is focused towards entrepreneurship', statement 27, 'The policies in the Polytechnic promote entrepreneurship education', statement 28, 'The Polytechnic environment inspires me to develop innovative ideas for new business', statement 29, 'I met a lot of people with good ideas for new businesses in the Polytechnic', statement 30, 'Entrepreneurship courses should be made compulsory in order to stimulate entrepreneurial spirit in the Polytechnic' showed positive response to the statements either slightly, below or above average. Hence, it is evident from the responses that the institution needs to improve on the creation of enabling environment to promote the teaching and learning of entrepreneurship education. The Centennial Global Business Summit (2008) identified many causes of education crisis which include unaccountable teachers, dysfunctional schools, and systemic barriers like lack of political and economic will to drive changes

Table 6: A Table Showing the Relationship between different Learning Factors of Entrepreneurship Education and its Impact

Variables	Pearson Correlation Coefficient (r)	Coefficient of Determination (r ²)	Level of Significance (a)	P-value
Impact and Understanding	0.824	0.679	0.1	0.000

Impact and Teaching Facilities	0.287	0.082	0.1	0.000
Impact and Curriculum	0.792	0.627	0.1	0.000
Impact and Environment	0.343	0.118	0.1	0.000

H01: *There is no relationship between the students' understanding of the significance of entrepreneurship education and its impact.*

The correlation coefficient, $r = 0.824$ showed a positive strong correlation between the students' understanding of the significance of entrepreneurship education and its impact. With P-value of 0.00 which is less than 0.05, the relationship is significant. The Coefficient of Determination, $r^2 = 0.679$ revealed that we are 68% sure that the impact of entrepreneurship education was explained by the students' understanding of its significance.

H02: *There is no relationship between the effectiveness of instructional facilities available for teaching entrepreneurship education courses and its impact*

The correlation coefficient, $r = 0.287$ showed a positive low correlation between the teaching facilities and its impact on the entrepreneurship education. With P-value of 0.00 which is less than 0.05, the relationship is significant. The available teaching facilities are not adequate enough for the entrepreneurship education programme. The Coefficient of Determination, $r^2 = 0.082$ revealed that we are 8% sure that the impact of entrepreneurship education was explained by the Teaching Facilities.

H03: *There is no relationship between the coverage of the curriculum of entrepreneurship education courses in the institution and its impact*

The correlation coefficient, $r = 0.792$ showed a strong positive correlation between the coverage of the Curriculum and its impact on the entrepreneurship education. With P-value of 0.00 which is less than 0.05, the relationship is significant. The contents of the syllabus are adequate to achieve the desired success of the entrepreneurship education programme. The Coefficient of Determination, $r^2 = 0.627$ revealed that we are

63% sure that the impact of entrepreneurship education was explained by the Teaching Facilities.

H04: *There is no relationship between the environment and its impact on the entrepreneurship education.*

The correlation coefficient, $r = 0.343$ showed a low positive correlation between the environment and its impact on the entrepreneurship education. With P-value of 0.00 which is less than 0.05, the relationship is significant. The environment is not conducive enough for the entrepreneurship education programme. The Coefficient of Determination, $r^2 = 0.1176$ revealed that we are 12%

Table 7: Frequency Distribution Table of the Demographic Section of QUEFIE

Items	Frequency	Percentage (%)
Gender		
Male	37	66.1
Female	19	33.9
Age		
31-35	12	21.4
36-40	14	25
Above 40	30	53.6
Marital Status		
Unmarried	4	7.1
Married	52	92.9
Qualifications		
B.Sc./B.A/B.Ed	15	26.8
M.Sc/M.A/M.Ed	41	73.2
Ranks		
Chief Lecturer	1	1.8
Principal Lecturer	5	8.9
Senior Lecturer	13	23.2
Lecturer I	17	30.4
Lecturer II	14	25
Lecturer III	6	10.7
Years of Experience		

1-5 years	9	16.1
6-10years	16	28.6
10 years and above	31	55.4

According to Table 7, the number of respondents was equally distributed between the selected Departments with two lecturers each. There were more male lecturers in the study (66.1%) than female lecturers (33.9%). The age group above 40 years had the highest number of respondents that covered 53.6% of the population. And this was followed by the age group 36 – 40 years with 25% of the population. The majority of the lecturers (92.9%) were married. Majority of the lecturers (73.2%) selected have Master education and the remaining lecturers have first degrees. It was shown that few senior colleagues were involved in the teaching of the entrepreneurship courses and most lecturers have adequate teaching experience with only 16.1% have lesser working experience of 1-5 years.

Table 8: Frequency Distribution Table of Section B of QUEFIE showing the responses of the Facilitators on the Teaching of Entrepreneurship Courses

Items	Frequency	Percentage (%)
Class Taught		
ND	26	46.4
HND	30	53.6
Years of Teaching Entrepreneurship		
2	4	7.1
3	18	32.1
4	15	26.8
Relevant Academic Certificates		
Yes	10	17.9
No	46	82.1
Special Training Received		
Yes	2	3.6
No	54	96.4
Availability of Instructional		

Materials

Yes	52	92.9
No	4	7.1

Lecture Duration

1 hour	12	21.4
2 hours	44	78.6

Conducive Environment for Teaching

Yes	40	71.4
No	16	28.6

Perception on Special Training for Improvement

Yes	50	89.3
No	6	10.7

Perception on Contents Delivery

Yes	28	50.0
No	28	50.0

Coverage of the Syllabus

Yes	56	100.0
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According to Table 8, lecturers teaching HND entrepreneurship courses were 53.6% in the selected respondents and lecturers teaching ND entrepreneurship courses were 46.4% and majority of the lecturers have been teaching entrepreneurship courses for more than two years. From the table, majority (82.1%) of the lecturers do not have relevant academic certificates to entrepreneurship and majority (96.4%) of the lecturers had not received a special training on the teaching of entrepreneurship. Most facilitators/ lecturers (92.9%) agreed that the instructional materials were available for teaching of Entrepreneurship courses. It was shown that most Departments (78.6%) offered two hours lecture per week for the teaching of entrepreneurship courses. Majority of the lecturers (71.4%) agreed that the environment is conducive for learning and most of them (89.3%) were of the opinion that if the institution could organise a special training on entrepreneurship, it would improve their performances. The responses showed that half of the lecturers acknowledged that the contents

delivery was not total and all the lecturers agreed that the coverage of the syllabus is adequate to achieve the objectives of entrepreneurship education programme as laid down by the National Board for Technical Education (NBTE).

7 Conclusions and Recommendations

The negative consequences of unemployment and increasing number of people living below poverty line are enormous on the individuals and the nation at large. Youth unemployment constitutes a formidable challenge for national governments to deal with and poses a lot of social problems. Despite that entrepreneurship education has been an integral part of tertiary education curriculum in Nigeria for almost a decade, the unemployment rate is on a continuous rise. And there has been no study that investigates how the entrepreneurship education is being implemented in the Nigerian Polytechnics. This prompted the researcher to investigate the perceptions of the students and their facilitators on the implementation of entrepreneurship education and its impact on the students of The Polytechnic Ibadan, Ibadan, as an integral part of Nigerian graduates. The students of The Polytechnic, Ibadan are now aware of the significance of entrepreneurship education programme as it positively affects individuals and the nation at large, towards improving national economic growth and development. The analysis of the two instruments showed that the curriculum of entrepreneurship education is adequate and detailed enough to have significant impact on the students. Due consideration of the contents of the syllabus each of the entrepreneurship courses offered at all levels confirmed the result of the findings (see Appendices IIA, IIB, IIC & IID). It was also revealed from the students that the provisions of the teaching facilities are not adequate to effectively contribute to the impact of the programme on the students of the institution. This result was supported by lecturers/facilitators and that majority of them neither have any relevant academic qualifications on Entrepreneurship nor have received any special training with regard to the implementation and teaching of entrepreneurship education. It was noted that most senior staff of the status of Chief Lecturer or Principal Lecturer who are expected to have more knowledgeable and experienced, do not involve in the teaching of the entrepreneurship courses in their various Departments. Their presence in the class could have lent more credence to the importance of the entrepreneurship education programme.

The policy and other environmental factors should be constantly reviewed and improved upon towards achieving the objectives of the entrepreneurship education programme in the institution. Based on the findings of this study, the following recommendations are made to improve the entrepreneurship education programme in The Polytechnic, Ibadan.

- (i) The institution should provide more infrastructures to ease both the teaching and learning processes
- (ii) The lecturers/facilitators should be well trained through organizing workshops and conferences, sponsoring them for Master and Doctor of Philosophy in Entrepreneurship and other relevant courses. This building of human capacity development will enhance effective teaching with improved teaching methodologies
- (iii) The institution should create enabling environment for market entrepreneurship products (e.g. ideas, innovations, inventions) as this will encourage start – up entrepreneurs. The institution should start commercializing the research findings instead of leaving them in the Libraries and shelves
- (iv) There should be a Gown-Town relationship such that experts and successful entrepreneurs are invited to share their wealth of experience with staff and students of the institution
- (v) A robust mentoring programme and consultancy services should be established
- (vi) There should be a monitoring and evaluation programme to follow-up the progress of the students and graduates of the institution that practice entrepreneurship
- (vii) Establishing a business hub or an enterprise by the institution will demonstrate what we are teaching to the students. And it will also serve as a means of employment for the qualified and interested students/graduates of the institution
- (viii) Development of entrepreneurship internship programme through which students are matched with the locally successful entrepreneurs to acquire more practical knowledge
- (ix) Establishing an academic Department that awards Diploma certificates and also plays a

supervisory role on VSESC will go a long way to foster entrepreneurship education towards professionalism

- (x) All the stakeholders (local, state and federal governments, industries, education managers, parents etc.) should form a synergy towards achieving the national objectives of entrepreneurship education in Nigeria.

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