

**PROVISION OF INFORMATION AND COMMUNICATIONS TECHNOLOGY AND  
ENTREPRENEURSHIP EDUCATION IN SECONDARY SCHOOLS AS STRATEGY FOR  
SUSTAINABLE YOUTH EMPOWERMENT IN CALABAR METROPOLIS, CROSS RIVER STATE,  
NIGERIA**

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**Abstract**

*The study focused on provision of Information and Communications Technology (ICT) and entrepreneurship education in secondary schools as strategy for sustainable youth empowerment in calabar metropolis, cross river state, Nigeria. The purpose of the study was to determine wheather provision of ICT and entrepreneurship education in secondary schools relate to sustainable youth empowerment in Calabar Metropolis, Cross River State. Two hypotheses were formulated to guide the study. Survey research design was adopted for the study. The population of the study is 2,349 which comprised 1,245 SS2 students, 1,080 teachers and 24 principals in the 24 public secondary schools in Calabar Metropolis. A multistage sampling technique involving Purposive and simple random techniques was adopted in selecting 200 students that formed the sample of the study. A questionnaire titled " ICT and entrepreneurship education in secondary schools for sustainable youth empowerment questionnaire, (ICTEESSSYEQ)" was used for data collection. The data collected were analyzed using simple linear regression. Results showed that provision of ICT and entrepreneurship education in secondary schools significantly predicts sustainable youth empowerment in Calabar Metropolis. Based on the results, it was concluded that the sustainable empowerment of youths in calabar metropolis can be achieved through the provision of ICT and integration of entrepreneurship education in secondary schools. it was recommended among others that government and other stakeholder should endeavour to provide ICT facilities for use in schools..*

**Article History**

Received: March 2024  
Review processes  
April - May 2024  
Received in revised form: July 2024  
Accepted: July 2024  
Published online: July 2024

**KEYWORDS**

- Provision
- Information and Communications Technology
- Youth empowerment
- Infusion
- Entrepreneurship

## Introduction

Education at any level is believed to be crucial to the overall growth and development of any nation. Consequent upon this, managing secondary education is very pertinent with its broad goals of preparing the youth for useful living in the society and for higher education. Nevertheless, youth empowerment and job creation tendencies are clear indicators of achievable secondary education goals and objectives especially in this era of post Covid-19 pandemic. This calls for an enriched school curriculum to embellish in the students or youth full potentials so as to function well in virtually every aspect of human endeavor.

Before the advent of the covid-19, the Federal Republic of Nigeria (2019) in the National Policy on Education had provided for the infusion of more subjects into the school curriculum as a way of preparing the education system to deliver to the youths, the skills and knowledge that can make them relevant and competitive in the modern era of digitalization. For instance, Civil Education metamorphosed into National values comprising of Civic education, Security Education, Social Studies and Religion. Agricultural Science fragmented into Animal Husbandry and Horticulture. Computer Science fragmented into word and data processing. Home Economic fragmented into Food and Nutrition, Fashion and Designing, Cosmetology, and Hair Dressing. Besides, students were also seriously engaged in workshops as well as other youth empowerment programmes for their outshining performance within and outside the school community. All these were also geared towards empowering the youths so as to be able to create job for themselves. The document further acknowledged the dignity of labour and the acquisition of appropriate skills, abilities and competences as

equipment for the individual to live in and contribute to the development of his society.

In this wise, youth empowerment refers to all proactive opportunities which nurture young minds so as to fully develop their potentials. In essence, students get enrolled into school to gain knowledge, skills and competences to better their lives. An Empowered youth mainly showcases creativity and innovative abilities as product of having had contact with the school system. Therefore, reaching an enviable height in this era may not be unconnected with emerging technologies and innovations (Uruo, 2022). Mark (2020) remarked that the future survival of teeming youths and students at secondary schools can be possible through the acquisition of entrepreneurial skills and technological skills. Looking at both sides of the coin, the role of the administrator as well as stakeholders in education remains sacrosanct. Obviously, if Nigeria youths are empowered through entrepreneurship right from the secondary school level, they are likely to create jobs for themselves as a boost to their survival in the society and higher educational pursuit especially in this post Covid 19 pandemic era. Entrepreneurship is therefore an educative cycle which enables the learner to develop positive attitude, innovative and creative skills for self-reliance, employment and actualization of individual's dreams rather than waiting for the government for employment (Uko and Nnaji, 2015).

Provision of information and communication technology (ICT) facilities is the process of making available to schools current sophisticated technological tools for effective teaching and learning. According to Adams (2022), Information and Communication Technologies refers to all electronic tools and resources used to generate, process, analyze, store and disseminate information. Undoubtedly, ICTS provide scope for opening new sources of

information and empowering individuals for the sustenance of individualized learning at one's own pace and comfortability. Ugwu (2022) asserted that thriving schools are fast embracing ICT because of its numerous benefits. Hence, the need to employ several ICT tools in the post Covid-19 era is very crucial. Some of these ICTs include; computers, smart phones laptop, electronic notice boards, closed circuit television, projectors, modems, internet and other software and hardware resources. Recently information and communication technology has made the world a global family, as such, every face of the school at this is time depends strongly on technology for its sustainability (Ukeh, 2021)

According to the National Policy on Information and Communication Technologies in Education (2010), the teachers and trainers use technology to support all learning, access the curriculum, function as mentors, coaches, advocates and managers of information. In addition, at the declaration of lockdown during the pandemic, students were provided with ICT tools for learning in order to minimize the risk of infection. For instance, power point and computer has the potential to transform how learning occurs in the post Covid 19 pandemic era. At this point, power points and other computer resources if sustained aids in uncovering current events, outlining step by step instructional delivery, visualization of content, reading and writing activities using images and pictures for students to understand. Nnaji et al (2023) asserted that ICT is a tool of empowerment for both students and their teachers. Provision of information and technology tools in educational institutions brings about unique improvements in the teaching and learning process and empowers the learners for lifelong learning (Jekwu,2021). This implies that ICT has provided great improvement in the teaching and learning process. Nevertheless, the role of computer assisted

instruction (CAI) in the stimulated model of teaching has often been over looked.

Omtinari (2023) investigated the impact of ICT on the academic achievement of students in secondary schools in Benue state and discovered that ICT enhances learners understanding of concepts. The study which employed a survey research design and a sample of 500 students and 150 teachers concluded that use of ICT in schools will enhance students acquisition of digital skills for modern jobs. Another empirical study carried out by Sule (2022) in Lagos state revealed that teachers in secondary schools that were provided with ICT facilities are more effective in their lesson delivery, academic advising and counselling of students. The study employed survey research design and used a sample of 600 teachers that were purposively selected. The study concluded that provision of ICT in schools holds the key to knowledge and skill retention. This is a pointer to the significance of ICT in schools.

Provision of ICT facilities and entrepreneurship education are innovative strategies that visionary governments should embrace (Oleu,2020). Innovation requires creative ideas to make a difference. Innovation could be seen as an effective and efficient implementation tool for creative ideas within the school. Nnaji and Ogban (2017) opined that sustainable national development could be achieved if innovative ideas are integrated in the management of functional secondary education. They further recommended that government should organize capacity building training programmes for principals and teachers to orientate them on how best to enhance their creative and innovative capacities.

In Nigeria, one of the hurdles facing secondary education is how to make it responsive to the needs of the society, labour market and

individual students. Secondary school students or graduates need to possess entrepreneurial skills for survival and self-sufficiency while the society and the labour market needs them be functional and contributing members of the social system. This calls for enhancement of entrepreneurship at all levels of education especially at the secondary education level. Entrepreneurship here refers to an act of embellishing entrepreneurial skills, attitudes and competencies in the learners, so as to make them self-reliant and contribute immensely towards the overall growth and development of the country. By so doing youth unemployment and poverty will reduce drastically.

Worried about the lack of skills and inability of products of secondary schools to independently sustain themselves economically in selected local government areas in Kogi State, Adams (2023) carried out a study to find out whether the introduction of entrepreneurship studies in educational institutions has any relationship with youth survival skills. 300 youths who completed secondary education three years before the year of the study were selected as sample for the study. Results from the analysis of data collected revealed that entrepreneurship studies correlates with youth empowerment. In a related study, Ovie (2020) investigated the perception of teachers on the introduction of entrepreneurship education in secondary schools in Lagos State. 800 teachers formed the sample of the study and findings from the study showed that teachers agreed that introduction of entrepreneurship education will empower students with skills of self reliance and resilience for success. According to Mark (2020) the future survival of the teeming youths in the society and the students still at the secondary schools is the acquisition of entrepreneurial skills. Remesi (2022) noted that incorporating ICT education in

schools is an exercise that will equip students for jobs of tomorrow.

However, managing secondary education for youth empowerment and job creation in this post covid 19 era seems to be a herculean task to educational managers. As such it may be wise to redirect the system to recognize the significance of ICT tools and entrepreneurship education in changing the prevalence of youth unemployment in Calabar Metropolis.

### **Statement of the problem**

The goal of secondary education is to prepare individuals for useful living, self-sufficiency and higher education by inculcating in them relevant skills and knowledge. It is quite worrisome that products of secondary schools seem not to possess these skills, making it difficult for them to attain independence and self sufficiency. Hence, unemployment and social vices among youths is on the increase. Most youths are also failing external examinations such as the ones conducted by the joint admission and matriculation board (JAMB), West African examination council (WAEC) and National examination council (NECO), making it difficult for them to gain admissions into tertiary institutions because Most of these examinations are computer based and they lack the digital skills to cope with this online examinations. Most of the youths are also unemployed because they lack digital skills which is highly needed in most jobs of today. Some others do not also possess the entrepreneurial skills to start up their own businesses to become self employed and job creators so they remain unemployed.

Government has embarked on a rapid transformation as new curriculum evolved and more teachers employed to cater for these deficiencies amongst youths. However, the problem still persists. It is on this premise that

the present study is carried out to ascertain the extent to which provision of ICT facilities and entrepreneurship education in secondary schools will result to sustainable youth empowerment in Calabar metropolis, Cross River State.

### **Purpose of the study**

The purpose of the study was to determine whether provision of ICT, and entrepreneurship education in secondary schools relate to sustainable youth empowerment in Calabar Metropolis, Cross River State. Specifically, this study sought to find out whether: .

1. provision of ICT facilities in schools significantly predict youth empowerment in Calabar Metropolis of Cross River State.
2. Integration of entrepreneurship education in secondary significantly predict sustainable youth empowerment in Calabar Metropolis of Cross River State.

### **Statement of hypotheses**

The following hypotheses guided the study

1. The provision of ICT facilities in schools does not significantly predict youth empowerment in Calabar Metropolis of Cross River State.
2. Integration of entrepreneurship education in secondary schools does not significantly predict sustainable youth empowerment in Calabar Metropolis of Cross River State.

### **Methodology**

The study area was in Calabar Metropolis, Cross River State. The research design used for this study was the correlational design. The population of the study was 2,349 which comprised 1,245 SS2 students, 1,080 teachers and 24 principals in the 24 public secondary schools in

Calabar Metropolis. The choice of SS2 students is because they were considered to be an advanced class that may not be biased in their responses. Multi-stage sampling procedure involving simple random sampling and purposive sampling was used for this study. In the first stage, random sampling technique was used to select 6 schools which represented 25 percent of the 24 schools in the study area. At the second stage, purposive sampling technique was used to select 25 percent of SS2 students and teachers from each of the 6 selected schools which gave 125 students and 75 teachers. At the final stage, purposive sampling technique was also used to select the 6 principals in the 6 selected schools. This gave a total of 206 study sample.

The instrument for data collection is a research questionnaire titled “ICT and entrepreneurship education in secondary schools for sustainable youth empowerment questionnaire” (ICTEESSSYEQ)”. The instrument was validated by three research experts and the reliability was established at 0.80 using Cronbach coefficient Alpha. The coefficient proved that the instrument was reliable and was used for the study. Copies of the instruments were administered on the study respondents and the obtained data were analyzed with simple linear regression .This tool was used in order to predict the relationship between the dependent and independent variables.

### **Results and findings**

#### **Hypothesis One**

Provision of ICT facilities' do not significantly predict sustainable youth empowerment Calabar metropolis, Cross River State.

**Table 1**

Linear Regression analysis of provision of ICT in secondary schools as significant predictor of sustainable youth empowerment

R-value = .272			Adjusted R-squared = .074		
R-squared = .074			Standard error = 4.3456		
Source of variation	Sum of squares	df	Mean square	F-value	R-value
Regression	1498.608	1	1498.608	15.710*	.000
Residual	18887.716	204	95.393		
Total	20386.324	204			
Predictor variable	Unstandardized coefficient		Std coeff	t-value	p-value
	B	Std error			
Constant	20.585	.872		23.603*	.000
Youth empowerment	.194	.043	.093	4.488*	.000

\* Significant at .05 level  $P < .05$

The results in Table 2 show that the R-value of .272 was obtained, resulting in an R-squared value of .074. This means that the variation in provision of ICT facilities accounted for about 7.4% of the total variation in youth empowerment in Calabar Metropolis of Cross River State. The p-value (.000) associated with the computed F-value (15.710) was less than .05. As a result, the null hypothesis was rejected. This means that the provision of ICT facilities significantly predict

youth empowerment, with both the regression constant (20.585) and coefficient (.194) contributing significantly in the prediction model (t=23.603 & 4.488 respectively,  $p = .000$  &  $.000 < .05$ ).

### Hypothesis two

Integration of entrepreneurship education in secondary schools does not significantly predict sustainable youth empowerment in Calabar metropolis, Cross River State.

**Table 2**

Linear Regression analysis of entrepreneurship education as significant predictor of sustainable youth empowerment

R-value = .289			Adjusted R-squared = .083		
R-squared = .082			Standard error = 4.5643		
Source of variation	Sum of squares	df	Mean square	F-value	R-value
Regression	1675.875	1	1675.875	17.745*	.000
Residual	18710.449	204	94.497		
Total	20386.324	206			
Predictor variable	Unstandardized coefficient		Std coeff	t-value	p-value
	B	Std error			
Constant	25.786	.987		26.126*	.000
Youth empowerment	.256	.093	.123	2.753*	.000

\*Significant at .05 level.  $P < .05$

The results in Table 2 show that the R-value of .289 was obtained, resulting in an R-squared value of .083. This means that the variation in infusion of entrepreneurship accounted for about 8.3% of the total variation in job creation. The p-value (.000) associated with the computed F-value (17.745) was less than .05. As a result, the null hypothesis was rejected. This means that the infusion of entrepreneurship significantly predict youth empowerment among students, with both the regression constant (25.786) and coefficient (.256) contributing significantly in the prediction model ( $t=26.126$  &  $2.753$  respectively,  $p=.000$  &  $.000 < .05$ ).

### **Discussion of findings**

The result of the first hypothesis stated that, the provision of ICT facilities' significantly predicts youth empowerment in Calabar Metropolis, Cross River State. The utilization of ICT facilities in teaching and learning at the secondary school level remain vital. This is due to the fact that technology empowers the youths (students) to meet the challenges of the day. This finding is in line with that of Omtinari (2023) who investigated the impact of ICT on the academic achievement of students in secondary schools in Benue state and concluded that use of ICT in schools will enhance students acquisition of digital skills for modern jobs. The study also agrees with Sule (2022) who concluded in a study that provision of ICT in schools holds the key to knowledge and skill retention among the students This shows that provision of ICT in schools will help teachers to effectively deliver their services while student can use ICT resources such as computers and other hard and softwares to acquire various digital skills.

This finding is also in line with Remesi (2022) who noted that incorporating ICT

education in schools is an exercise that will equip students for jobs of tomorrow. This confirms that ICT is a tool of empowerment for the students.

The result of the second hypothesis showed that the integration of entrepreneurship education in secondary schools significantly predicts youth empowerment. This implies that integrating entrepreneurial education in secondary school curriculum can enhance the empowerment of students. Empowering students in entrepreneurial skills is a way of making students self-reliant or potential job creators. Entrepreneurship is therefore an educative cycle which enables the learner to develop positive attitude, innovative and creative skills for achieving self-reliance, self employment and actualization of an individual's dreams rather than waiting for the government for employment. This finding aligns with Adams (2023) whose study revealed that entrepreneurship studies correlated with youth empowerment. This shows that entrepreneurship education will go a long way in empowering youths with the skills of problem identification and problem solving in order to become self employed and job creators after leaving secondary school. This study is also in line with that of Ovie (2020) whose investigation of the perception of teachers on the introduction of entrepreneurship education showed that teachers agreed that introduction of entrepreneurship education will empower students with skills of self reliance and resilience for success. This is an indication that a school that succeeds in inculcating entrepreneurial skills in students is sure to produce active citizens. This finding is also in agreement with Uko and Nnaji (2015) who stated that it is obvious that if Nigeria youths are empowered through entrepreneurship right

from the secondary school level, they are likely to create jobs for themselves as a boost to their survival in the society and higher educational pursuit especially in this post Covid 19 pandemic era.

### **Conclusion**

Based on the findings of this study, it is concluded that:

Provision of ICT facilities and integration of entrepreneurship education in secondary schools are significant predictors of sustainable youth empowerment in Calabar Metropolis.

Youth unemployment, youth vices and other depravities by youths will be greatly curbed if ict facilities are provided for use in secondary schools and entrepreneurship education integrated into secondary school curriculum.

### **Recommendations**

On the basis of study finding, the following recommendations were made

- Entrepreneurship programme should be introduced into secondary school curriculum in order to promote job creation among students.
- Government and educational stakeholders should endeavour to provide adequate ICT facilities in secondary schools so as to improve students' creativity.

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