Achieving Sustainable Development Goals through Emerging Technologies in Business Education Programme of Universities in Enugu State

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ABSTRACT
The study focused on achieving sustainable development goals through emerging technologies in Business Education Programme of Universities in Enugu State. Survey research design was adopted. Two research questions guided the study. The population for the study was 27 Business Educators in Universities offering Business Education in Enugu State. The population was used as sample for the study. Structured questionnaire containing 16 items was the instrument for data collection. The reliability of the instrument was conducted to check the internal consistency using Cronbach Alpha Reliability Coefficient method. A correlation coefficient of 0.76 was obtained. It was found out that making policies that will make it compulsory for emerging technologies to be incorporated into Business Education Curriculum, setting monitoring team to supervise the integration of new technologies by lecturers during lectures were among the government related strategies for achieving SDGs through emerging technologies in Business Education Programme of Universities in Enugu State. Also, lecturers-related strategies which include lecturers endeavouring to always update their skills on new methods of instruction are among the strategies for achieving SDGs through emerging technologies in Business Education. However, it was recommended among others that government should provide enough funds, computers and peripherals for use of emerging technologies. Also, lecturers should update their skills in new methods of instruction for achieving SDGs.

Keywords: Sustainable development goals, emerging technologies, Business Education.

INTRODUCTION
Sustainable development goals (SDGs) were born at the United Nations Conference on sustainable development held at New York in 2015. The objectives were to produce a set of universal goals that meet the urgent environmental, political and economic challenges facing the world. Sustainable development goals are blue print to achieve a better and sustainable future for all by the year 2030. The implementation began on 1st January 2016. According to United Nations (2015) the seventeen goals to transform the world by 2030 are:
- Poverty eradication
- End hunger and achieve food security
- Ensure healthy living
- Ensure quality and equitable education
- Achieve gender equality and empower all women
- Ensure availability and sustainable management of water and sanitation
- Ensure access to affordable and reliable energy

- Promote decent work and economic growth
- Promote industry and innovation
- Reduce inequality within and among country
- Make cities and communities safe
- Ensure responsible consumption and production pattern
- Combat climate change and its impact
- Conserve life below sea
- Conserve life on land
- Promote peace, justice and strong institution
- Strengthen global partnership to achieve the goals

The SDGs are expected to guide governance as they work to address some of the most pressing challenges facing humanity. The United Nations (2015) noted that the SDGs promote human dignity and prosperity while safeguarding the earth's vital biophysical processes and ecosystem services. They recognized that ending poverty and inequality must go hand-in-hand with strategies that support sustainable economic growth, peace and justice, address fundamental social needs, including education, health, social protection and job opportunities and do all this while also tackling climate change and enhancing environmental protection.

The above goals were keyed into by the Nigerian Nation and hope to be achieved through education. Education is the systematic way of assisting individuals to acquire knowledge, skills, beliefs and habits. Elujekwute (2019) noted that education is universally recognized as the answer to socio-economic problem of the world; nations and individuals look up to education to provide a cure for poverty, ignorance, climatic change, metal deficiency, joblessness, hunger, inadequate shelter, poor governance, poor communication system among others. Etuk, Ering and Ajake in Elujekwute, Aja,

Danburam and Nyitar (2021) defined education as a basic tool for achieving development at all levels. The authors further states that education is the process of acquiring new values and skills for the purpose of effective functioning in the society.

Development cannot take place in human society without education and conversely, no lasting peace and security can be accomplished without development. This implies that for sustainable development goals to occupy in a society both individuals and the state should have access to quality education. Ezeabii and Ekoh-Nweke (2022) noted that the seventeen sustainable development goals aim at reduction of poverty and unemployment, achieving qualitative education and bringing about sustainable development in different countries including Nigeria.

Sustainable development has been defined by (Udo 2017) as development which meets the needs of the present generation without comprising the ability of the future generation to meet their own needs. In essence, to achieve sustainable development in Nigeria, the ingredients for skills development and reduction of poverty should be inculcated into the education curriculum. Agi and Yellowe (2013) asserted that the goals of wealth creation or poverty reduction and value re-orientation can only be attained and sustained through an efficient education system which impacts the relevant skills, knowledge, capacities, attitudes and values. The educational programme that can help achieve these is Business Education.

Business Education is a systematic and organized programme of instruction which aims at transmitting business knowledge, skills, ideas, aptitude and technical know-how to recipients for use in business offices, teaching field and others. Ezeabii (2017)

defined Business Education as an aspect of vocational education which equips individuals with the necessary skills and theoretical knowledge needed for performance in the business world either for job occupations or for self-employment. Recognizing the relevance of Business Education towards the achievement of sustainable development goals, the Federal Republic of Nigeria (2013) identified that one of the objectives of Business Education is to help the recipient to appreciate the world around him and contribute maximally to the social and economic development of the nation. In other words, with skills, knowledge and values acquired from Business Education programme, the recipients will be armed with quality education for acquisition of decent jobs, achieve food security, ensure healthy living, promote decent work and economic growth, promote industry and innovation. All these will lead to reduction in inequality within and among nations, make cities and communities safe and ensure responsible consumption and production, in essence achieve the sustainable development goals.

Business Education programme is carried out in universities in Enugu State. There are public and private universities in the state. The public ones are owned, run and financed by the federal and state government, hence we have federal and state universities. The private universities are owned, run and financed by private individuals and organizations. For Business Education programme to achieve the sustainable development goals, the quality of training given to individuals passing through the programme should be such that can give adequate skills and information needed in the real world sense. Utoware and Kren-Ikidi (2013) opined that there should be continuous curriculum review to ensure quality of Business Education. The review of the curriculum is the integration of emerging technologies.

Technology could be seen as the application of the scientific method to solving problems in our daily lives. Ekoh-Nweke and Ezeabii (2020) defined technology as the application of scientific knowledge to the practical aims of human life activities and to the change and manipulation of the human environment. Ojo & Bashir (2020) opined that in the perspective of Business Education, technology can be seen as the application of scientific method to solving problems regarding impartation of skills to learners to meet the changing needs and demands of the society.

However, emerging technologies are tools, innovations and advancement utilized in diverse educational settings (including distance, face-to-face, and hybrid form of education) to serve varied education-related purposes (eg instructional, social and organizational goals). Bozalek, Ng'ambi and Gachago (2013) defined emerging technologies as those technologies which are likely to have a large impact on teaching, learning or creative inquiry on college and university campuses within the next five years. The authors observed that emerging technologies allow an individualized, flexible and differentiated focus on learning needs and pedagogy and provide a more learner-controlled rather than teacher-controlled one-size-fits-all approach. In other words emerging technologies means new tools with promising potentials. Ezeani and Ishaq (2012) described emerging technologies to include: internet facilities, overhead projectors, network, generator, light pen, fax machine, world wide web (www), video projectors, video cassette, CD-ROM, computer assisted instruction (CAI), telephone line, data management package, e-mail, computer laboratories, application software, electronic scanners, video and audio conference equipment, electronic chalkboard application, stencil electronic machine, computer printer. These emerging

technologies in Business Education are designed to prepare students for variety of careers in high-tech business offices. These emerging new technologies in Business Education are basically from information and communication technology (ICT) perspective. The society generally is ICT-driven and to keep abreast with change, there must be restructuring in the knowledge and skills given to Business Education students for the objectives of the sustainable development goals to be attained.

Nevertheless, Business Education programme in Nigeria and Enugu State in particular is bedeviled with myriad of constraints. These have led to poor implementation of the programme and achievement of the sustainable development goals are put in jeopardy. Ezeani and Ogundola (2016) believed that implementation of Business Education is bedeviled by insufficient fund, low status rating, antagonism by competitors, inadequate supply of books, inability of Business Educators to have functional union, rigid curriculum, poor remuneration of Business Educators and employers ignorance of the benefits of studying Business Education.

Subsequently, Ezeani and Ishaq (2012) observed that problems of non-utilization and application of the new technologies stems from lack of fund, equipment/facilities highly expensive, inconsistent power supply, shortage of equipment/facilities, insufficient teacher time, insufficient peripherals, societies negative attitude towards ICT, lack of mechanical manpower, government nonchalant attitude towards ICT curriculum in schools, insufficient number of computers, lack of qualified ICT personnel (teachers), insufficient number of softwares.

Honesty, these constraints if left unattended will jeopardize the achievement of the sustainable development goals through emerging technologies in Business Education. Hence, there is need to determine strategies for combating them and getting the objectives achieved. One will tend to believe that in strategizing, all stakeholders of the programme must be involved. These stakeholders include the government, lecturers (teachers), students, university administration, voluntary organizations and university host communities. However, for the purpose of this research work, government and lecturers were looked into. Ezeani and Ishaq (2012) maintained among other things that for effective utilization of the new technologies teachers should have positive attitude towards adoption and utilization, government should fund and procure ICT tools, training of business teachers on periodic basis, government intervention on ICT curriculum, integration of ICT to instruction by teachers and provision of enough computers and softwares. In another development Utoware and Kren-Ikidi (2013) recommended that teachers should endeavour to always update their skills on new methods of instruction and knowledge to improve on their performances, government should also be ready to allocate substantial amount of money to education from the annual budgets, Business Education teachers should also be recruited and should be allowed to go on regular training and retraining in order to be relevant. These beautiful recommendations notwithstanding, one is not sure about the strategies for achieving sustainable development goals through emerging technologies in Business Education programme of universities in Enugu State, hence the study.

This research work was anchored on Diffusion of Innovation Theory by Rogers 1962 as cited by Bozalek, Ng'ambi and Gachego (2013). The theory originated in communication to explain how overtime an

idea or product gains momentum and diffuses (or spreads) through a specific population or social system. However, people differ in their rate of acceptance of innovation and using that as parameter, these authors categorized people into innovators, early adopters, early majority, late majority, laggards and non-adapters.

The end result of this diffusion is that people as part of a social system, adopt a new idea, behaviour or product. This theory provides a useful framework to unravel the role of decision makers and institutional planners in enhancing technological changes to educational practices. In essence, the stakeholders should plan and organize the framework for the emerging technologies to diffuse and yield the expected outcome in achieving the sustainable development goals.

Statement of the Problem

Emerging technologies interact with the teacher in a friendly manner as to motivate students into learning achievements. These technologies when imbibed in Business Education programme will help recipients acquire relevant skills for employability and relevancy in the ever-changing business environment towards achieving the sustainable development goals. However, the adoption of these new technologies are faced with a lot of constraints which if left unattended will negate the achievement of the sustainable development by year 2030. Hence, there is need to combat the foreseeable bedevilment by involving the stakeholders toward achieving the set objectives hence, the need to determine the strategies for achieving sustainable development goals through emerging technologies in Business Education programme of universities.

Purpose of the Study

The main purpose of this study is to determine the strategies for achieving sustainable development goals through emerging technologies in Business Education programme of universities in Enugu State. Specifically, the study sought to determine the:

1. Government-related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State.
2. Lecturers-related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State.

Research Questions

The following research questions guided the study:

1. What are the government-related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State?
2. What are the lecturers related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State?

Method

Descriptive survey was used for the study. According to Jim, Nwokike and Ezeabii (2017), descriptive survey research design is one in which a group of people or items are studied by collecting and analyzing data from a few people or entire group. The design is considered appropriate for the study since it involves exploring people's opinions by the use of questionnaire for data collection and analysis and the entire group was used as sample of the study. The study was carried out in Enugu State. Enugu State is one of the 36 states in Nigeria. The state habours both public and private universities.

The population for the study consist of 27 Business Educators in the three universities offering Business Education (federal 20,

state 6, private 1). There was no sampling due to the manageable size of the population. The instrument for data collection was researcher's self-structured questionnaire. The items have 4 point rating scale of strongly agree, disagree and strongly disagree. The instrument consists of 16 items. The instrument was trial tested using 10 Business Educators in Anambra State. This is to avoid using the same respondents. The two states have the same educational policies. The reliability coefficient was 0.76 using Cronbach Alpha formula.

Three research assistant who were briefed on the modalities helped in the distribution of the instrument. Out of 27 copies

distributed, 26 were retrieved giving 96.29 percent return rate. Mean and standard deviations were used to answer the research questions. The decision rule was based on the principles of real limits of the mean. Thus: Strongly Agree (SA) = 3.50 − 4.00, Agree (A) = 2.50 − 3.49, Disagree (D) = 1.50 − 2.49, Strongly Disagree (SD) = 1.00 − 1.49.

Results
Research Question 1
What are the government-related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State?

Table 1: Mean ratings and standard deviations of respondents on government-related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State.

S/N	Government related strategies for achieving SDGs through emerging technologies include:	Mean $\bar{x}$	Standard Deviation SD	Decision
1.	Making policies that will make it compulsory for emerging technologies to be incorporated into Business Education curriculum of universities in Nigeria.	3.73	0.45	Strongly Agree
2.	Setting up monitoring team to supervise the integration of new technologies by lecturers in teaching.	3.35	0.49	Agree
3.	Allocating enough fund to education in annual budget.	3.42	0.64	Agree
4.	Procuring the necessary technologies for use in Business Education programme of universities.	3.46	0.51	Agree
5.	Providing qualified technical personnel for proper maintenance of the tools.	3.54	0.51	Strongly Agree
6.	Making sure there is regular power supply in the universities.	3.58	0.50	Strongly Agree
7.	Providing sufficient peripherals for use of the emerging technologies.	3.23	0.51	Agree
8.	Organize workshops for Business Educators on periodic basis for knowledge update.	3.65	0.49	Strongly Agree
9.	Providing ICT infrastructures in the universities.	3.46	0.58	Agree

| 10. | Motivating Business Educators through enhanced salaries and fringe benefits. | 3.58 | 0.50 | Strongly Agree |
| | Grand Mean and Pull Standard Deviation | 3.50 | 0.53 | Strongly Agree |

Data on Table 1 indicates that the respondents strongly agreed with item numbers 1, 5, 6, 8 and 10 with mean ratings 3.73, 3.54, 3.58, 3.65 and 3.58 and agreed with item numbers 2, 3, 4, 7 and 9 (with mean ratings of 3.35, 3.42, 3.46, 3.23 and 3.46) as government-related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State. The Grand mean of 3.50 indicates a strong agreement to the items. The pull standard deviation of 0.53 indicates homogeneity of responses.

Research 2
What are the lecturers-related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State?

Table 2: Mean ratings and standard deviations of lecturers-related strategies for achieving SDGs through emerging technologies in Business Education programme of universities in Enugu State.

S/N	Lecturers-related strategies for achieving SDGs through emerging technologies include:	Mean $\bar{x}$	Standard Deviation SD	Decision
11.	Endeavouring to always update their skills on new methods of instruction for improvement.	3.50	0.58	Strongly Agree
12.	Having positive attitude towards the adoption and utilization of emerging technologies.	3.42	0.58	Agree
13.	Endeavouring to integrate new technologies in instructional procedures for different lectures.	3.35	0.49	Agree
14.	Learning to develop softwares that will help inculcate the knowledge in students.	3.50	0.71	Strongly Agree
15.	Avoiding rigidity and clearing old methods of instruction.	3.38	0.75	Agree
16.	Develop interest in the use of emerging technologies.	3.35	0.56	Agree
	Grand Mean and Pull Standard Deviation	3.42	0.61	Agree

Data on Table 2 indicates that the respondents strongly agreed with item numbers 11 and 14 (with mean ratings of 3.50 each and agreed with item numbers 12, 13, 15 and 16 (with mean ratings of 3.42, 3.35, 3.38 and 3.35) as lecturers-related strategies for achieving SDGS through emerging technologies in Business Education programme of universities in Enugu State. The Grand mean of 3.42 indicates agreement to the items. The pull standard deviation of 0.61 indicates closeness of opinions.

Discussion of Findings
From the study, it was found out that the respondents agreed with the 10 items under government-related strategies for achieving

SDGS through emerging technologies in Business Education programme of universities in Enugu State. These items include: making policies that will make it compulsory for emerging technologies to be incorporated into Business Education curriculum ($\bar{x} = 3.73$), setting up monitoring team to supervise the integration of new technologies by lecturers during lectures ($\bar{x} = 3.35$), allocating enough fund to education in annual budget ($\bar{x} = 3.42$), procuring the necessary technologies for use in Business Education ($\bar{x} = 3.46$). Others include: providing technical personnel for proper maintenance ($\bar{x} = 3.54$), making sure there is regular power supply ($\bar{x} = 3.58$), providing sufficient peripherals for use ($\bar{x} = 3.23$), organizing workshops on periodic basis for Business Educators ($\bar{x} = 3.5$), providing ICT infrastructures ($\bar{x} = 3.46$) and motivating Business Educators through enhanced salaries and fringe benefits ($\bar{x} = 3.58$).

This is in agreement with the views of Ezeani and Ishaq (2012) who noted that problems of non-utilization and application of the new technologies stems from lack of fund, equipment/facilities highly expensive, inconsistent power supply, shortage of equipment/facilities, insufficient teacher-time, insufficient peripherals, societies negative attitude towards ICT, lack of mechanical manpower, government nonchalant attitude towards ICT curriculum in schools, insufficient number of computers, lack of qualified ICT personnel (teachers), insufficient number of softwares.

In addition, the findings of the research indicates that respondents agreed with the six items under lecturers-related strategies for achieving SDGS through emerging technologies in Business Education programme of universities in Enugu State. These items include: endeavouring to always update their skills on new methods of instruction for improvement ($\bar{x} = 3.50$), having positive attitude towards the adoption and utilization of emerging technologies ($\bar{x} = 3.42$), endeavouring to integrate new technologies in instructional procedures for different lectures ($\bar{x} = 3.35$), learning to develop softwares that will help inculcate the knowledge in students ($\bar{x} = 3.50$), avoiding rigidity and clearing old methods of instruction ($\bar{x} = 3.38$), and developing interest in the use of emerging technologies ($\bar{x} = 3.35$). This is in agreement with the opinions of Ezeani and Ishaq (2012) who maintained among other things that for effective utilization of the new technologies, teachers should have positive attitude towards its adoption and utilization, government should fund and procure ICT tools, training of business teachers on periodic basis, government intervention on ICT curriculum, integration of ICT to instruction by teachers and provision of enough computers and softwares. The above result also agrees with the views of Utoware and Kren-Ikidi (2013) who recommended that teachers should endeavour to always update their skills on new methods of instruction and knowledge to improve on their performances, government should also be ready to allocate substantial amount of money to education from the annual budget, Business Education teachers should be recruited and should be allowed to go on regular training and retraining in order to be relevant.

Conclusion
Development cannot take place without education, likewise no standing peace can be achieved without development. For sustainable development to be achieved, the ingredients for skills development and poverty reduction should be inculcated into the educational curriculum using emerging technologies. Sustainable development goals can be achieved through emerging technologies in Business Education programme of universities. However, the stakeholders which include the government and lecturers should be seriously involved

and their parts played very well in order to make achievement of the goals a reality and not a mirage.

Recommendations

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

1. The government of Nigeria should provide enough funds, computers and peripherals for use of emerging technologies in Business Education.
2. Government should motivate Business Educators through enhanced salaries and fringe benefits, organize workshops for them on periodic basis for knowledge update. This will enhance utilization of emerging technologies for achievement of the sustainable development goals.
3. Lecturers (Business Educators) should cultivate positive attitude towards the adoption and utilization of new technologies and integrate same in their lectures.
4. Lecturers should update their skills on new methods of instruction for the achievement of the sustainable goals.

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