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Methodological Needs of Using Mobile Technologies as Tools for Inculcating Green Skills into Technical and Vocational Education and Training (TVET) University Students in Nigeria

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Abstract
The major purpose of the study was to investigate the methodological needs of using mobile technologies as tools for inculcating greening skills into Nigerian TVET university students. Three research questions were formulated to guide the study. The study adopted a descriptive survey design. The study was conducted in university of Nigeria Nsukka. The population for the study was one hundred and sixty four (164) 2016/2017 postgraduate admitted TVET students. The population comprised of seventy two (72) PhD and ninety two (92) Master students. One hundred and sixteen (116) postgraduate students were sampled using Taro Yamane statistical formula. Fifty one (51) TVET PhD and sixty five (65) Masters Students were sampled from population using proportional sampling techniques. Structured questionnaire containing eighty two (82) items was designed and used for data collection. The instruments was validated by three experts and their suggestions where implemented. The internal consistency of the instrument was ascertained using Cronbach Alpha method and reliability coefficient obtained for the instrument was 0.76. Mean and standard deviation were used to analyze research questions. The findings of the study revealed that mobile phones, Laptop, E- book readers, Tablet PC, Palmtop, Web pad, iPods touch, mp3/mp4, Smart Phone, USB device, Video Camera and portable media players are used by TVET university students in University of Nigeria. However, the findings of the study also revealed that ability to be involved in continuous green skill development and ability to reduce energy consumption among others are skill needed by Nigerian TVET university students. The findings of the study revealed that allowing students to use mobile device and encourage students to join educative group to enable them learn better among others are Strategies required for inculcating greening skills into Nigeria TVET university students using mobile technologies. It was recommended that necessary effort should be made by stakeholders of education and curriculum development to integrate the greening skills into the curriculum of Nigeria TVET University students.
Keywords: Green Job, Green skills, Technical and Vocational Education and Training, Mobile Technology and Students

Introduction

The regulation and other measures initiated by international communities to prevent climatic changes and unsustainable nature of people consumption of natural resources among others pave ways for the emanation of green economy and by extension to green job. Pavlova (2012) explained that current economic restructuring to attain a cleaner, more climate resilient, efficient economy that preserves environmental sustainability and provides decent work is visible on the global scale.

Green job emanates due to proclamations on changes in human activities, re-organization of industries, changes in utilization of natural resources and reduction in the effect of climatic changes. The green jobs are the jobs that ensure low carbon emission and moderate uses of natural resources. Greening job according to OECD in Alex and Karlygash (2015) is an activitie which produce goods and services to measure, prevent, limit, minimize or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-system. International Labour Organization, ILO, (2016) opined that green jobs are decent job that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new emerging green sectors such as renewable energy and energy efficiently. Khalid and Nayma (2013) claimed that green jobs are jobs that help to reduce the consumption of energy and raw materials, de-carbonizes the economy, protect and restore ecosystem and biodiversity and minimize the production of waste and pollution. Green jobs help to secure the environment for present generation and generation to come. OECO/ Martinez, Hinojasa and Miranda (2010) submitted that any occupation is considered green as long as it contributes to reducing harmful impact of human activity on the environment either directly or indirectly. Green job helps to protect ecosystems and bio diversity, reduce energy, materials and water consumption through high efficiency strategies, de-carbonize the economy and minimize or avoid generation of all forms of waste and pollution (United Nations Development Programme, 2010). The green jobs are classified into different sectors. There is energy sector, agricultural sectors, manufacturing sectors and waste management sectors among others. ILO in Khalid and Nayma (2013) classified green job into the following sectors: sustainable agriculture, sustainable and participatory forestry, sustainable energy, waste management, and recycling, collection, purification and

distribution of water, climate adaptation activities, manufacturing and energy efficiency, sustainable transportation and sustainable construction. However, industries under each sector stated above will require certain number of competent workforces/human resources who are adequately equipped with green skill for their objectives to be maximally achieved

Green skills are required skills which workers of present generation needed for their effective and efficient performance in any job they find themselves. European Centre for the Development of Vocational Training in Odul and Alison (2016) explained that green skills involving the knowledge, abilities, values and attitudes needed to live in, develop and support a society which reduces the impact of human activity on the environment. European Centre for the Development of Vocational Training (2014) claimed that green skills are those skills needed to adopt products, services and process to climate change and the related adjustments, requirement and regulation. Green skills are required ability of potential workers to become functional entrepreneurs or as workers in any establishment. The green skill is dynamic and change with time. This, therefore, prompts workers to engage themselves in a continuous career development. Adrian, Elena, Chris and Kathy (2014) opined that it is widely recognized that for the green economy to develop successfully, new educational curricula will be required to help professionals develop appropriate knowledge and skills. Thus, younger generations who are the potential future workforce of any country need to be acquainted with green skills to become active citizen of their country. However, Technical and Vocational Education and Training TVET, being a tool for skill reorientation, is required. This is because Technical and Vocational Education and Training produces educated, skilled and motivated citizen who can profit society by creating enterprise or gain employment from employers (Yekinni, 2016).

Technical and Vocational Education and Training (TVET) is a type of education design to train young and adults people in order to make them potentially qualified to enter into world of work. TVET, according to United Nation, Educational, Scientific and Cultural Organization (2010), are those aspects of educational process involving, in addition to general education, the study of technologies and related science and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economy and social life. TVET trains people for gainful employment. Meanwhile, evolution of green economy and green job placed serious challenges on TVET globally and specifically in Nigeria. Thus, TVET content of instruction, mode of delivery, human resources and materials resources need to be reorganized, restructured and transformed into one that promote easy acquisition of green skills. United Nations Environment Programme, UNEP, in Adrian, Elena, Chris and Kathy (2014), submitted that there is need to revise educational curricula and training programmes to promote cleaner processes and systems, eco-design, products and services, and to help provide the large numbers of skilled professionals that will be required. Ayonmike, Okwelle and Okeke (2015) reported that as qualitative TVET is increasingly recognized as bed rock of every development, quality assurance is an indispensable process for achieving the national goals in TVET which will in turn lead to the production of qualitative human capital for sustainable national development.

Students specifically in Nigeria, through the TVET system, should be acquainted with greening skills which will qualify them to gain profitable jobs or becoming an entrepreneur. Country through viable policy should strength and streamline Technical and Vocational Education and Training towards preparing students with technical education orientation to meet the manpower needs of the country (Zolkifli, Kamin, Azlan, Yahya, & Awang, 2016). Chen, Telma and Victor (2011) opined that success for TVET in Support of sustainable development is defined as developing a workforce skilled for sustainability. Chen, Telma and Victor stated further that TVET develops workforces for sustainability by embedding in them with sustainability knowledge, skills and attitudes; and adopting relevant pedagogical approaches among others. Recent rapid development in electronics and telecommunication industries supports and makes it becoming more common in the field of general education including Technical and Vocational Education and Training, TVET, the use of mobile technology as a mean of inculcating knowledge and skills.

Mobile technology is an electronics device that is personal and portable which are used for communication or sharing of information between two or more people that are not actually at the same location. Coates etal (2009) defined mobile technology as device that are both transportable and offer instantaneous access to information. Traxles in George, Rena and Keith (2011) supported that mobile technology have connectivity that allows for access of information. Depending on its mode of design, mobile device or technology stores, send and receive information. Some mobile devices perform all the function at a time. These functional qualities make mobile device useful for teaching and learning. This is because teaching and learning activities entails exchange of information between teachers and learners. Jeng, Wu, Huang, Tan, and Yang (2010) claimed that educators strive to facilitate learning by applying mobile technology and appropriate learning strategies. Mobile technology is a tool for acquiring knowledge and skills anywhere and anytime. It can be used at home, school, workplace and even in leisure places. Thus, mobile devices make learning to be more easy and mobile. Samson and Godwin (2013) expressed that in the modern time, teaching involves the process of imparting appropriate, functional and related skills to learners, in any form, place and or time, to enable them function effectively

towards meeting the demands of the dynamic society. Yao-Ting, Kuo-En and Tzu-Chien (2016) claimed that mobile computers have gradually been introduced into educational contexts over the past decades. Liu (2007) also claimed that mobile devices have recently advanced significantly and have being integrated into various wireless learning environments that attract many individuals' attention and expectation. Universities have being seeing with greater efforts to support mobile technology as a means of teaching and learning. This is because they view mobile technologies as a better means of engaging both the students and their tutors in teaching and learning related activities with no time and location bound. Liu stated that mobile technologies engaging students in learning related activities in diverse physical location, supporting quick content delivery through wireless technology, improve communication and collaborative learning in the classroom. The use of mobile technology demands that higher education should explore the benefit of mobile technology for enhancing learner engagement and prepares itself to address student expectation for a more mobile learning experience. Yousef and Hamideh (2013) reported that university students used mobile device in and out of classroom and remarked that they understood the content of the instruction better. Helen etal (2015) also reported that the online survey which was conducted on campus students of regional Australian university indicated that students were actively using mobile technologies to support their learning.

However, Nigeria university students and in specific TVET university students are not excluded in the use of mobile learning. Mosiforeba and Olaniyi (2015) argued that the prevalence of mobile technologies among students is transforming the educational system in Nigeria which is regarded as one of the third world countries. Many Nigerian university students, including TVET students, have their personal mobile phone which can function more than calling and which can be used for various learning activities. This is because mobile based device in TVET is mostly considered and preferred as recommended tools (Nahashon, 2016). Francis, Clive and Jey (2013) stated that many people, including educators and students already have mobile phones. Aside from this, some Nigeria universities where Technical and Vocational Education and Training is offering as a course of study are providing helps for their students by increasing students accessibilities to mobile technology and mobile learning through leverages. The research conducted by Joseph and Idown (2014) at Afe Babelola university in Ado Ekiti and Joseph Ayo Babalola university on students in Nigeria indicated that most Nigeria university students use mobile devices, internet service and search engines. However, Technical and Vocational Education and Training students in Nigerian universities use mobile technology for their various academic pursuits.

Thus, greening related subject, being the new knowledge area, need to be explored by Technical and Vocational Education and Training university students using mobile technologies/ devices. TVET students, before graduation, from universities need to be acquainted with adequate knowledge and skills specifically green skills. This however can be done by using mobile devices because mobile device proved to be effective in teaching and learning. GSMA Head Office (2011) reported that vocational schools in Spain have experimented with using mobile technology to increase the communication between trainers and apprentices who often split between their places of training and workplace. GSMA Head Office claimed further that this innovation is efficient, improve motivation and communication and has had an impact on improving the technical infrastructure of the school. Nahashon, (2016) stated that mobile based devices in TVET is mostly considered and preferred as recommended tools. Also, Mosiforeba and Olaniyi (2015) opined that mobile technology offers the ability to engage in learning activities such as communication and content material sharing between students and lecturers, students and subject experts, and among students and their environments.

However, TVET providers in Nigeria have critical roles to be played. The roles will centre on appropriate methods which can be used to provide teaching and learning enabling environments for student to acquire greening skills and knowledge using mobile technology. This may include provision of adequate support to students so that easy accessibility of learning electronics materials is ensured. United Nation Educational, Scientific and Cultural Organization (UNESCO) (2012) stated that planned response to ICT need at institution and systems level call for several kind of ICT readiness such as strategic, pedagogic, organizational and technical readiness. Helen etal (2015) viewed that with more understanding of the extent of students' access to mobile technologies and the ways in which students support their learning with them, educators may become more willing to consider the introduction of mobile learning initiatives. United Nation Educational, Scientific and Cultural Organization (UNESCO) reported that there is a strong case for all TVET planners and providers to consider and respond to the ICT needs of all learners, as these relate both to occupational needs and to wider citizenship and education concerns. With regard to integrating technology into the classroom setting, it is the teacher's main responsibility to facilitate this educational innovation (Chen, Looi and Chen in Montrieux, Vanderlinde, Schellens, & De Marez, 2015). Thus, Teachers need capacity building to enable them be abreast of this digital information technology. Aside from the training, teachers must also be willing to perform their functions because personal willingness of teachers to adopt and integrate innovations into their classroom practice is the key for successful innovation (Montrieux, Vanderlinde, Schellens & De Marez).

Problem of the study

Green economy and green job are newly emerging issues which focus on protection of ecosystem and biodiversity, reduction of energy, materials and water consumption, de-carbonization of economy, reduction of wastes, pollutions and climatic changes. Good knowledge, skill and attitude of all these help students after graduation to become good ambassador of sustainable development and to gain employment or become self employed. Thus, Technical and Vocational Education and Training, TVET, are needed. This is because Technical and Vocational Education and Training provides knowledge, skills, value and attitude of any career and occupation needed to students

However, learning materials which students required to complement Technical and Vocational Education and Training, TVET, lecturers' classroom lesson notes are very scarce in the conventional library of various universities in Nigeria. The reasons being that the topic is emerging one. Thus, the major available options which TVET students need is to access learning material related to greening skills electronically through mobile devices. This will help the students to have unlimited access to different greening related materials and by extension widen their knowledge and skills on greening economy.

The need to familiar with various mobile devices using by students, enumerate various knowledge and skills expected to be possessed by students and identify various methods needed to be used to inculcate green skills and knowledge into students become imperative. Thus, these become main focus for the study

The major objective for this study was to investigate the methodological needs of using mobile technologies as tools for inculcating greening skills into Nigerian TVET university students. With regards this, three research questions were formulated to the guide the studies.

1. What are the various mobile technologies Nigerian TVET university students are using to acquire knowledge electronically?
2. What are the greening skills needed by Nigerian TVET university students for job entrance
3. What are the strategies required to inculcate greening skills into Nigeria TVET university students using mobile technologies

METHODOLOGY

The study adopted descriptive survey research design. The study was conducted in university of Nigeria Nsukka. The population for the study was one hundred and sixty four (164) 2016/2017 postgraduate admitted TVET students. The population comprised of seventy two (72) PhD and ninety two (92) Master students. One hundred and sixteen (116) postgraduate students were sampled using Taro Yamane statistical formula. Fifty one (51) TVET PhD and sixty five (65) Masters Students were sampled from population using proportional sampling techniques.

The instrument used for data collection from respondents was a structured questionnaire. The

Questionnaire contained Eighty two (82) items which was used to obtain information from respondent. The questionnaire was divided into four sections: A, B, C and D. Section A was used to obtain personal Information from TVET postgraduate students in University of Nigeria, Nsukka. Section B, C and D consisted of items relevant for answering the research questions posed for the study. Section B, C and D of the questionnaire was structured on four-point rating scale with value as 4, 3, 2, and 1 in descending order.

The response options for the section B: Strongly Used, (SU) _4, Used (U) _3, Not Used (NU) _2 and Strongly Not Used, (SNU) _1

The response options for the section C: Strongly Needed, (SN)_4, Needed(N)_3, Not Needed (NN)_2 and Strongly Not Needed , (SNN)_1

The response options for the section D: Strongly Required, (SR)_4, Required (R)_3, Not Required (NR)_2 and Strongly Not Required , (SNR)_1

The questionnaire was validated by three experts. Cronbach Alpha method was used to determine the internal consistency of the questionnaire items. Thus, a reliability coefficient of 0.76 was obtained which means that the instrument was reliable for the study.

One hundred and sixteen copies of questionnaire were administered to the respondents by the researcher with the help of two research assistants through personal contact with 2016/2017 postgraduate TVET students admitted in University of Nigeria Nsukka. The data collected for this study were analyzed using mean and standard deviation through SPSS data analysis package.

The decision rule for section B, C and D of questionnaire were based on the mean benchmark (cut off point) of 2.50. Thus, for section B, C and D, any item with mean of 2.50 or above was considered Used, Needed and Required respectively. Whereas any item with a mean below 2.50 was considered not Used, Needed and Required respectively.

Result

The presentation and analysis are done in tables and arranged according to the research questions posed for the

study.

What are the various mobile technologies Nigerian TVET university students are using to acquire knowledge electronically?

Table 1: Mean ratings and standard deviation of Responses of postgraduate students on various mobile technologies Nigerian TVET university students are using to acquire knowledge electronically.

S/N	Mobile Technologies that Nigerian TVET university students are using to acquire knowledge electronically	Post graduate students mean	Standard deviation	Remarks
1	Mobile phones	3.29	0.46	Used
2	Personal digital assistance	2.42	0.65	Not Used
3	Laptops	3.16	0.51	Used
4	E-book readers	2.98	0.62	Used
5	Tablet pc	3.40	0.49	Used
6	Palmtop	2.89	0.61	Used
7	Web pad	2.60	0.66	Used
8	Digital pen	1.93	0.41	Not Used
9	Electronics Pocket dictionary	1.81	0.71	Not Used
10	Classroom Response System	2.23	0.67	Not Used
11	iPods touch	2.71	0.60	Used
12	Mp3 / mp4 players	2.90	0.79	Used
13	Smart phone	3.24	0.55	Used
14	USB device	3.59	0.49	Used
15	Video Camera	3.43	0.52	Used
16	Hand held games consoles	2.31	0.75	Not Used
17	Net book	2.01	0.61	Not Used
18	Ultra book	1.69	0.71	Not Used
19	Portable media player	3.23	0.42	Used

The data presented in table1 one reveled that eleven (11) items have the mean scores ranged between 2.59 and 3.59 which above the cut off value of 2.50. This indicated that students use mobile phones, Laptop, E-book readers, Tablet PC, Palmtop, Web pad, iPods touch, mp3/mp4, Smart Phone, USB device, Video Camera and portable media players are used by TVET university students in University of Nigeria. However, seven items have the mean score ranged between 1.69 and 2.42 which below the cut off value of 2.50. Thus, this indicated that personal digital assistance, digital pen, electronic pocket dictionary, Classroom Response System, Hand held games consoles, Net book and Ultra book are not used by TVET university students in University of Nigeria, Nsukka. Also, the table revealed that items have the standard deviations ranged between 0.41 and 0.79 which indicated that the response of postgraduate students were not far from one another

What are the greening skills needed by Nigerian TVET university students for job entrance?

Table 2: Mean ratings and standard deviation of Responses of postgraduate students on greening skills needed by Nigerian TVET university students for job entrance.

S/N	The greening skills needed by Nigerian TVET university students for job entrance	Post graduate students		Remarks
		Mean	Standard deviation	
1	Knowledge of various energy sources	3.71	0.46	Needed
2	Ability to understand the process and carry out intra industry restructures	3.65	0.50	Needed
3	Having good knowledge of administrative procedures and entrepreneurship skills	3.66	0.48	Needed
4	Ability to carry out Installation and maintenance of low carbon technology	3.69	0.47	Needed
5	Having good Knowledge of environmental policy	3.53	0.50	Needed
6	Having good environmental awareness	3.75	0.44	Needed
7	Ability to use tools and equipment adequately	3.72	0.45	Needed
8	Ability to understand new method of production and services	3.75	0.41	Needed
9	Ability to avoid any form of pollution	3.71	0.46	Needed
10	Ability to avoid any form of wasting of materials	3.42	0.50	Needed
11	Ability to work in a safe working environment	3.73	0.44	Needed
12	Ability to turn scientific knowledge and innovations into application	3.75	0.48	Needed
13	Ability to work with various form of electronically operated equipment	3.69	0.47	Needed
14	Ability to use computer to send, receive, store , analyze, interpreter and report data	3.60	0.49	Needed
15	Ability to adjust and adapt to changing situation	3.78	0.41	Needed
16	Ability to request and provide for consultation services on how to reduce energy consumption	3.46	0.50	Needed
17	Ability to work with technologies that support zero production of carbon dioxide.	3.70	0.46	Needed
18	Ability to work with energy saver system and technology.	3.72	0.45	Needed
19	Ability to take part in formulating energy saver policies	3.70	0.49	Needed
20	Ability to work with renewable sources, solar energy and photovoltaic, wind energy, bio fuel, bio climatic technology and anti pollutants technology	3.60	0.44	Needed
21	Ability to recycle and reduces E-waste such as chips, hardware, mobile phones e.t.c	3.63	0.49	Needed
22	Ability to reduce energy consumption	3.80	0.44	Needed
23	Ability to use innovative equipment and tools	3.73	0.44	Needed
24	Ability to reduce high rate of ecological consumption	3.46	0.50	Needed
25	Ability to carry out sustainable mobility	3.72	0.45	Needed
26	Ability to discourage air, water, waste and site contamination and ensure eco friendly service	3.57	0.50	Needed
27	Ability to use natural resources sustainably	3.47	0.53	Needed
28	Ability to use agric resources sustainably	3.53	0.50	Needed
29	Ability to create more opportunities for full productive and remunerative employment	3.64	0.51	Needed
30	Ability to be involved in continuous green skill development	3.51	0.50	Needed
31	Ability to establish enterprise on green related economy	3.41	0.49	Needed
32	Ability to assemble and disassemble various parts of equipment in the companies	3.54	0.50	Needed
33	Ability to be abreast of new technologies and innovations	3.46	0.50	Needed
34	Ability to be creative and act as agent of sustainability in their place of work and in society	3.40	0.49	Needed
35	Ability to reuse materials whenever possible	3.75	0.44	Needed
36	Having good attitude toward and wiliness to learn about	3.80	0.41	Needed

	issues and challenges of sustainable development			
370	Ability to coordinate and manage skill toward designing solution to meet economic, social and ecological objectives.	3.72	0.45	Needed
38	Having entrepreneurial skills to identify opportunities of low- carbon technologies	3.71	0.47	Needed
39	Having innovative skills to identify opportunities and create new strategies to repaid to green challenges	3.39	0.49	Needed
40	Having good knowledge of the role of science, technology, engineering and mathematics, contribution to greening economy and society.	3.67	0.47	Needed
41	Having engineering and technical knowledge of design, construction and assessment of technology.	3.77	0.42	Needed
42	Having monitoring skills concerning the observation of technical criteria and legal regulatory requirement.	3.63	0.49	Needed
43	Ability to choose materials and system with consideration of its environmental consequences	3.71	0.46	Needed

The data presented in table 2 revealed that all 43 items have the mean scores ranged between 3.39 and 3.80 which above the cut off value of 2.50. This indicated that all 43 greening skill are needed to be acquired by TVET university students of University of Nigeria. Also, the table revealed that items have the standard deviations ranged between 0.41 and 0.51. This indicated that the responses of postgraduate students were not far from one another on greening skill needed to be acquired by Nigeria TVET University students of University of Nigeria.

What are the strategies required to inculcate greening skills into Nigeria TVET university students using mobile technologies?

Table 1: Mean ratings and standard deviation of Responses of postgraduate students on Strategies required for inculcating greening skills into Nigeria TVET university students using mobile technologies.

S/N	Strategies required to inculcate greening skills into Nigeria TVET university students using mobile technologies	Post graduate students mean	Standard deviation	Remarks
1	Allow students to use mobile device	3.61	0.48	Required
2	Encourage students to use mobile device	3.41	0.49	Required
3	Supply course content to students in diverse file formats to meet the needs of variety of phone and their operating system	3.61	0.54	Required
4	Lectures should be recorded as podcasts	3.67	0.47	Required
5	Make website and learning management system mobile- friendly	3.57	0.50	Required
6	Provide compressive list of website which students can access as easily as possible	3.59	0.49	Required
7	Recommend some useful application and software to students	3.64	0.48	Required
8	Provide application and software that are not readily available but useful for students.	3.60	0.49	Required
9	Encourage students to join educative group to enable them learn better.	3.52	0.50	Required
10	Recommend further resources (materials) which can compliment lessons delivered in the classroom.	3.01	0.32	Required
11	Organize short term training for student on how to use mobile devices to enhance learning	3.41	0.52	Required
12	Identification of topics required to be learn by students	3.46	0.50	Required
13	Provide the rule and regulations surrounding the use of mobile device in learning	3.43	0.49	Required
14	Give soft copy of lecture note to student to study.	3.40	0.52	Required
15	Mandate the use of mobile device to students	3.73	0.47	Required
16	Provide technical support to student on how to use mobile device appropriately.	3.52	0.50	Required
17	Provide a procedure for the management of mobile device for students	3.75	0.46	Required
18	Encourage the submission of assignment through the use of internet service	3.61	0.48	Required
19	Announce due dates for assignment through internet	5.53	0.50	Required
20	Give Feed back to students on their performance using internet service.	3.70	0.45	Required

The data presented in table 3 revealed that all 20 items have the mean scores ranged between 3.01 and 3.75 which above the cut off value of 2.50. This indicated that all 20 Strategies are required to inculcate greening skills into Nigeria TVET university students using mobile technologies. Also, the table revealed that items have

the standard deviations ranged between 0.32 and 0.54. This indicated that the responses of postgraduate students were not far from one another on Strategies required to inculcate greening skills into Nigeria TVET university students of University of Nigeria using mobile technologies.

Discussion of the findings

The finding of the study revealed that eleven mobile technologies are commonly used by TVET university students in University of Nigeria. This finding is in line with the finding of Mosiforeba and Olaniyi (2015) who carried out a study on Perception of undergraduates on the adoption of mobile technologies for learning in selected universities in Kwara state, Nigeria and reported that out of 182 respondents used for the study, 162 (89%), 132 (72.5%), 129(70.9%), 105(57.7%), 128(70.3%) have personal access to cell phone, android, smart phones, Mp3 players and laptop respectively. The finding was in line with the finding of Mark, Grainne and Teresa (2014) who carried out a study of evaluating the use of ipads with first year medics where it was found that 96% of the first year medics who are using ipads to support their learning had little or no difficulties on initially setting of the ipads. They stated further that 85% of these students felt supported in the use of their ipads. The finding of the study are also in consonance with the finding of the study conducted by Kim , Hagashi , Carillo, Gonzales, Makany, Lee and Gàrate (2010) on the impact of tablet devices on student learning who indicated that tablet devices have the potential to support learners by offering them a context in which they can construct and share knowledge in media-rich and stimulating environments

The finding also indicated that 43 green skills are needed by TVET University students of University of Nigeria. The finding is in agreement with the finding of Klas, Sverker, Annika and Johan Klas, Sverker, Annika and Johan (2013) on a study Learning for the Future? Effects of Education for Sustainable Development (ESD) on Teacher Education Students where the authors reported that the fourth core educational science course of the first semester at the University of Gothenburg, focusing on SD, induces at least a short-term increase in almost all attitudes and perceptions, including moral obligation to do something about SD problems and willingness to (individually) contribute to SD, among the students

The finding of the study claimed that 20 Strategies are required to inculcate greening skills into Nigeria TVET university students using mobile technologies. The finding confirmed the finding of Tabisa (2013) on a study of potential use of mobile technology: enhancing accessibility and communication in a blended learning course where the author reported that students frequently accessed courseware and facebook using laptop and mobile device in contrast to desktop computer.

Conclusion

Nigeria is one of country with high rate of unemployment. The reason according to series of report is lack of adequate skills, specifically greening skills, required by youths to gain employment or to be self dependent or self employed. However, unemployment issues in Nigeria can be solved if Nigerian youths undergo adequate training which can equip them with necessary greening skills that will enable them gain entrance into and progress in a selected occupation or which will enable them to be self employed. However, the study identified green skills needed for the training of Nigerian TVET university students. The study also identified mobile devices that can ease the acquisition of greening skill. And finally, the study identifies required strategies to inculcate greening skills into Nigeria TVET university students using mobile technologies.

Recommendation

In line with the findings of the study, the following recommendations were made:

Necessary effort should be made by stakeholders of education and curriculum development to integrate the greening skills into the curriculum of Nigeria TVET University students.

Nigerian Universities in collaboration with Nigerian government and other stakeholders should always be helping low socio economical background TVET university student gain access to mobile devices that can enhance teaching and learning for TVET student.

All TVET educators in Nigerian Universities should be given necessary training on how to use mobile devices to inculcate knowledge and skills into Nigerian University TVET student.

ICT experts should always be ready to help Nigeria TVET University educators and students on any matter relating to the uses of mobile technology for the teaching and learning activities

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