Skills Development Needs of Technical Education Lecturers in use of Technology Facilities and Social Media for Instructional Activities in Nigeria

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ABSTRACT

The study investigated the skill development needs of technical education lecturers in use of technology facilities and social media for instructional activities in Nigeria. The study adopted a descriptive survey design. Four research questions and two hypotheses guided the study. The population for the study comprised 75 technical education lecturers from five tertiary institutions offering programs in the South-Western part of Nigeria. A sample of 67 respondents was selected from the five higher institutions for the study. The instrument used for data collection was a structured questionnaire. The instrument was validated by three experts.

A reliability coefficient of 0.74 was obtained using Crombach alpha technique for determining the internal consistency of the instrument. Data collected were analyzed using mean and standard deviation for research questions and Analysis of Variance for testing the hypotheses at 0.05 level of significance. The study found among others with average means of 1.67 and 1.71 that technology facilities are moderately available for lecturers' use and that lecturers are familiar with some social media platforms, respectively.

(Keywords: technology facilities, social medias, skill development, technical education lecturers, instructional activities)

INTRODUCTION

Vocational and technical education is a broad field of study comprising some specialty areas in technical education, business education and home economics education. Odu (2011) and Winer (2000) described vocational and technical education as any kind of education which has the main purpose of preparing students for employment in recognized occupation. On the other hand, Ezekiel and Usoro (2009) described technical education as a program designed to develop skills, abilities, understanding, attitude, work habits and appreciation encompassing knowledge and information needed by workers to enter and make progress in a chosen employment on a useful and productive basis.

Specialized skill areas in technical education include electrical and electronics technology, building and woodwork technology, automobile and metal works technology. These specialized technical skill areas train individuals in knowledge and skill acquisitions for 21st century work place relevance and self-employment (Ezekiel and Usoro, 2009). The 21st century work place activity is largely characterized by technology applications which have changed the requirement for successful industrial operations from ordinary skills to technology skills (Odu, 2007). Hence, the importance of using technology facilities in teaching-learning process.

Shachaf (2008) defined technological facilities as devices and applications used to access, manage, integrate, evaluate, create, and communicate information and knowledge. These devices could be used to initiate services and applications for communication and information processing functions in order to effectively create, manage, and distribute information (Pernia, 2008). Technology has resulted in significant changes in the workplace and has altered the manner of operations across fields among which technical education is not excluded (Abdel-Wahab, Omer and Attalla, 2009).

Each of the specialty areas of technical education requires technological skills for successful operations. Hence, there is a need for the trainers to acquire new and relevant technology-based skills for imparting relevant and required knowledge, and teaching both in and out of the classroom. Abimbade (1998) reported the benefits of technological facilities to lecturers if used as a pedagogically tool for the construction and modeling of knowledge as: increasing the time learners devote to learning, enhancing the speed of availability of data and information, providing immediate feedback, increasing teacher's efficiency and effectiveness.

Technology makes it possible to work, teach or learn from virtual environment and communicate with individuals across the globe (Yusuf, 2005). Flexible work and learning schedules are enhanced through technological means, hence, so many duties and responsibilities can be accomplished from anywhere. This becomes possible because technological devices and application are produced to facilitate different activities including teaching, learning and other academic related activities among others. Some of these prominent technological devices include the use of computer systems, internet, iPad, iPod, webcam, animations, simulations, mobile phones, Video conferencing technology, projectors/Power point application, social medias and software such as Microsoft Word, Excel, Power Point, Corel Draw and Adobe among others. However, application and operation of these technology devices require some level of expertise (Lowther, Inan, Strahl and Ross, 2008).

The dominance of Technology facilities in the world of work has laid credence on the importance of technology adoption and integration into teaching and learning process of the students who are the prospective workforce. Technology facilities could be used to facilitate teaching and learning processes in a more efficient and effective way. Technology facilities as a tool for instructional delivery involve the use of a large array of hardware and software: word processors, graphic packages; digital camera, presentation applications, database and spreadsheet, among others which do not have limited educational purpose, but are designed to help teachers and students extend their abilities during instructional activities (Dynarski, 2007; Wenglinsky, 2006). The use of these technologies in the classroom teaching-learning is very important for it provides opportunities for students to operate, store, manipulate, and retrieve information, encourage independent and active learning, and self-responsibility for learning; it also motivates lecturers to continue facilitating learning outside school hours, plan and prepare lessons and design materials such as course content delivery and facilitate sharing of online information.

The inability of the lecturers to be versatile in the use of these technology devices would hinder higher productivity obtainable through the use of technological devices and platforms. The versatility of technological instruments has the capability not only of engaging students in instructional activities to increase their learning, but to also help them in solving complex problems and enhance their cognitive skills. Reid (2002) indicated that technology devices offers students more time to explore beyond the mechanics of course content allowing them to better understand concepts.

The use of technology devices also changes the teaching and learning relationship. Reid (2002) reported improved relationship between teacher and learner with regards to use of information technology; a relationship which boosts students' confidence to help teachers with technical issues in the classroom. Therefore, technological devices change the traditional teacher centered approach, and requires teachers to be more creative in customizing and adapting their own material. One of the most recently developed technologies which could provide a platform for instructional delivery and facilitation is the social media.

Social media are computer-mediated tools that allow people to create, share or exchange information, ideas, pictures and videos in virtual communities and networks. It is defined as a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, that allow the creation and exchange of user-generated content. Furthermore, social media depend on mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, co-create, discuss, and modify user-generated content. A new development such as the social media has made the internet an innovative way for individuals and families to communicate; people use social media sites such as Facebook, Twitter, and MySpace to create and sustain relationships with others (Boyd, 2007).

Some of the features of the social media platform include creation of personal profiles by users, upload of photographs and videos, posting of ideas and information at any given time, sending personal or public messages to whoever may require such. Thus, social media technologies take on many different forms including blogs, business networks, enterprise social networks, forums, microblogs, photo sharing, products/services review, social bookmarking, social gaming, social networks, video sharing and virtual worlds. These all have features that can improve teaching and learning activities in and outside the four walls of the classroom or school environment (Schmidt, Pempek, Kirkorian, Lund and Anderson, 2008). The use of these social media and other technology devices have so many advantages for education as they open students' ideas and thinking systems and provide a very good awareness on how the world is growing and how they can proffer solution learning problems without help from lecturers.

The use of social media is fast growing among the school age especially tertiary institution students; though, most of the students only use the platform to communicate with family, friends, and even strangers. Observably, students form a large proportion of users on social media networks (Lenhart, Purcell, Smith and Zickuhr, 2010).

Lenhart, et al., (2010) found that 72% of all college students have a social media profile with 45% of college students using a social media site at least once a day. Thus, taken advantage of this technological trend by lecturers for instructional delivery among tertiary institution students could help instructional facilitation and achievement of overall school objectives. Abimbade (1998) ascertained that lecturers need to be literate in the use of technological facilities and platforms to effectively use such for instructional delivery. Agbatogun (2006) claimed that the global technological wave is affecting every aspect of teachers' life which facilitates the need to struggle zealously to be computer literate in order to face the present educational challenges. Since inability of lecturers to employ latest technology in the training of students in technical education which is a technology based program would lead to production of unemployable graduates in this technology-based century, the trainers in this field who are referred to as technical education lecturers require effective technology skill development for utmost delivery of their training responsibilities.

Technical education lecturers are the certified teachers that are saddled with the responsibility of delivering the content of each course in technical education to the students. Technical education lecturers are key players in the instructional delivery and skill acquisition training of students studying various specializations in technical education. The operations of the present educational institutions require that lecturers must be prepared to provide technology-supported learning opportunities for their students.

Schools and classrooms across all levels of education including tertiary institutions requires teachers who are equipped with information and communication technology resources and skills; who can effectively teach the content in subject matter incorporating technological facilities. Yelland (2001) and Edem (2017) claimed that schools that do not incorporate the use of new technologies cannot seriously claim to prepare their students for life in the twenty-first century. This argument is supported by Grimus (2000), who pointed out that by teaching ICT skills in higher educational institutions the students are prepared to face future developments based on proper understanding. In essence, lecturers who are involved in students' preparation for career engagement across fields especially in technical education require appropriate skill training in order to employ requisite technological facilities and platforms for their instructional delivery.

Aduwa-Ogiegbaen (2009) asserted without any doubt that traditional practices can no longer provide prospective teachers with all the required skills for teaching in the classroom while Yelland (2001) argued that traditional education environments do not seem to be suitable for preparing learners to function or be productive in the workplaces of 21st century society. Thus, Tapscott (1999) acknowledge that a whole generation of teachers needs to learn new tools, new approaches and skills. Roberts (1999) ascertained that the exponential increases in computing and telecommunication capacity and new, affordable, technology-based approaches for developing and delivering education and training are challenging the very essence of accepted practice.

Topper (2004), Bowes and D'Onofrio (2006) recommended in their various studies that teachers must be trained to understand and master various modern learning technologies, as

well as demonstrate their competence using extensive behaviors. Studies have ascertained the changing role of teachers in the classroom with the presence of technological facilities and other applications (Wenglinsky, 2006).

Watts-Taffe, Gwinn, Johnson and Horn (2003) found that teachers can act as catalysts or facilitators with the integration of technology. With availability of technological devices, equipment and necessary support, it is required that teachers develop and impart the students with up to date knowledge and skills in their field of study especially technology-based educations (Dynarski2007). However, many teachers have struggled with integration of technology into the classroom because of lack of skills required in the use and applications of those technological facilities (Efaw, 2005). Shazia (2000) found that lecturers feel increasingly unprepared to integrate technology into the classroom, and Efaw (2005) reported that little has been done to prepare reluctant lecturers for the networked computers and other technological facilities useful for effective instructional delivery. Hence, there is skill development need for lecturers especially in technical education program for facilitating instructional delivery in the 21st century classroom and beyond.

Skills development simply implies training provisions tailored towards skill improvement and capacity enhancement of lecturers for effective use and integration of technological facilities into teaching and learning practices (Olaofe, 2005; Onasanya, Shehu, Oduwaiye, and Shehu, 2010). Studies revealed that 10% of individual development comes from training, including classes, seminars, webinars, podcasts and conferences, among others while the other 90% comes from interaction with colleagues and on-the-job activities and action learning (Kirschner and Wopereis, 2003; Kitschner and Davis, 2003).

The major challenge for lecturers in tertiary institutions is Nigeria is no longer in covering the course contents or in adopting appropriate teaching pedagogy, but with having access to technological facilities and using the facilities for instructional delivery (Olaofe, 2005). Kitschner and Davis (2003), Abdel-Wahab, Dainty, Ison, Bowen and Hazlehurst (2008) identified competence to make personal use of technology, master range of educational paradigms that uses technology, and competence to make use of technology as a tool for teaching as the major

competencies required by lecturers in technology application for education. Thus, if lecturers are provided with training which would enhance acquisition of relevant technological skills, effective instructional delivery can be guaranteed in order to enhance students' learning and to prepare them to master high technology society. More importantly, technical education graduates could be better trained to be fit for their relevant field practices especially in the 21st century workplace where only skilled graduates can be considered. To achieve this, there is a need for extensive preparation, adequate time, and ongoing support for teachers to ensure they have the knowledge, skills, and confidence in teaching with ICT (Lowther et al., 2008).

Statement of the Problem

Like many facet of our natural life, education is undergoing constant changes in the advent of information and communication technology (ICT). The arrival of new technologies has heralded a revolution of the world of learning and delivery system in education. This has led to globalization of education. However, as the educational sector is faced with series of changes and reforms; it is good to reflect on matters concerned with dissemination of technical education knowledge in a way that will enhance academic performance of students studying technical education in Nigerian institutions and their relevance to the 21st century society after graduation. Numerous teaching strategies have been developed which correspond to the accommodation of students need and diverse learning, one of such strategies involve the use of technology devices and social media.

The skills needed by academic instructors in actualizing the integration and use of these technological opportunities for effective instructional delivery is the worry of this study. Based on the fact that Nigeria like other developing countries is still in the initial stages of integrating technology devices and social media in teaching-learning process which is limited by a number of barriers among which is information technology illiteracy among teachers in the country which cuts across primary, secondary schools and tertiary institution; this study therefore investigated the skill development needs of technical education lecturers in use of technology facilities and social medias for

instructional activities in tertiary institutions in Nigeria.

Purpose of the Study

The main purpose of this study was to investigate the skill development needs of technical education lecturers in use of technology facilities and social medias for instructional activities in tertiary institutions in Nigeria. Specifically, the study would:

1.   Investigate the technology facilities which technical education lecturers have access to in tertiary institutions in Nigeria.

2.   Investigate the social medias with which technical education lecturers are familiar with.

3.   Identify the skills needed by technical education lecturers in use of teaching related technology facilities for instructional activities.

4.   Identify the skills needed by technical education lecturers in use of social medias for instructional activities.

Research Questions

The following research questions guided the study:

1.   What are the technology facilities that are available for technical education lecturers in tertiary institutions in Nigeria?

2.   What are the social media that technical education lecturers are familiar with?

3.   What are the skills needed by technical education lecturers in the use of teaching related technology facilities for instructional activities?

4.   What are the skills needed by technical education lecturers in the use of social medias for instructional activities?

Hypotheses

1.   There is no significant difference in the responses of lecturers specializing in electrical and electronics technology, building/woodwork technology and automobile/metal work technology

on skill development needs in use of teaching related technology facilities for instructional activities
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2.   There is no significant difference in the responses of lecturers in electrical/electronics technology, building/woodwork technology and automobile/metal work technology on skill development needs in use of social media for instructional activities.

METHODOLOGY

Research Design

The study adopted a survey research design.

Population of the Study

The population for this study comprised 75 technical education lecturers from five tertiary institutions offering the program in South-West, Nigeria.

Sample and Sampling Techniques

The sample for this study comprised of 67 technical education lecturers randomly selected from the five tertiary institutions offering technical education program in South-West, Nigeria.

Research Instrument

The research instrument that was used for the study was a structured questionnaire. The questionnaire consisted of two sections; Section A and Section B. Section A solicited for the demography data of the respondents while Section B consisted of items which elicited information from technical education lecturers on skill development needs in use of technology devices and social media for instructional activities in tertiary institutions in Nigeria.

Items regarding availability of technology devices are developed with a scale of very highly available, highly available, moderately available and not available, while items on social network sites are developed with a scale comprising very familiar, moderately familiar, and Not familiar. The items generated on the skills needs of lecturers both on technology facilities and social

network sites are developed with a scale comprising very highly needed, highly needed, moderately needed and not needed.

Validity of Instrument

The instrument used for the study was s validated by three experts in the field.

Method of Data Collection

The researcher with four research assistants administered the questionnaires to the respondents in the selected higher institutions.

Method of Data Analysis

The data were analyzed using mean and standard deviation for research question while the hypotheses were tested using Analysis of Variance at 0.05 level of significance.

RESULTS

Research Question 1:

What are the technology devices that are available for technical education lecturers in tertiary institutions in Nigeria?

The table presents mean responses on technology devices available for lecturers use for instructional activities. The table revealed that items 1 and 3 are moderately available while item 2 is highly available.

The table shows further that items 4 to 10 are not available. An average mean of 1.67 shows that identified technology devices for lecturers use for instructional activities is moderately available.

Research Question 2:

What are the social network sites that technical education lecturers are familiar with?

The table presents mean responses on the social network sites that technical education lecturers are familiar with. The table reveals that most lecturers are very familiar with only Facebook while they are moderately familiar with twitter, LinkedIn, Myspace, Google Plus+ and Instagram.

The table further shows that lecturers are not familiar with Netlog, Ask.fm, MeetMe and Classmate. An average mean of 1.71 shows that lecturers are moderately familiar with most identified social media.

Table 1: Mean Responses on Technology devices available for Technical Educational Lecturers.

S/N	Item	Mean	S. D	Remark
1	Internet facilities required for aiding research, teaching and learning in the classroom.	2.28	1.14	**MA**
2	Personal laptops for individual lecturer.	3.16	0.81	**HA**
3	Provision of Computer systems in each lecturer's office for academic purpose.	2.02	0.86	**MA**
4	Availability of projector in each classroom of the institution.	1.34	0.54	**NA**
5	Interactive white board for aiding teaching and learning.	1.25	0.50	**NA**
6	AutoCAD software for aiding design and drafting in the programme.	1.36	0.54	**NA**
7	Software such as Corel Draw and Adobe among others for lecturers use.	1.36	0.54	**NA**
8	Microsoft PowerPoint for presentations in each classroom of the institution.	1.29	0.46	**NA**
9	Word processor like Microsoft word in each classroom and lecturers offices in the institution.	1.49	0.66	**NA**
10	IPad and IPods for lecturers use to aid research	1.15	0.36	**NA**
Mean Average		1.67		

Table 2: Mean Responses on Social Network Sites that Technical Educational Lecturers are Familiar with.

S/N	Items	Mean	S.D	Remark
1	Facebook	2.79	0.41	**VF**
2	Twitter	2.42	0.61	**MF**
3	LinkedIn	1.64	0.60	**MF**
4	Netlog	1.39	0.55	**NF**
5	Myspace.	1.51	0.66	**MF**
6	Google Plus+	1.88	0.79	**MF**
7	Instagram	1.83	0.73	**MF**
8	Ask.fm	1.18	0.46	**NF**
9	MeetMe	1.36	0.51	**NF**
10	Classmates.com	1.14	0.34	**NF**
Mean Average		**1.71**		

Table 3: Mean Responses on Skill Development Needs of Technical Education Lecturers in the Use of Technology Facilities for Instructional Activities.

S/N	Items	Mean	S. D	Remark
1.	Identifying different technology devices required for each educational purpose	3.52	0.71	**VHN**
2.	Accessing the internet.	3.58	0.63	**VHN**
3.	Surfing the internet.	3.40	0.68	**HN**
4.	Operating an e-mail account.	3.39	0.85	**HN**
5.	Powering a computer system.	3.28	0.74	**HN**
6.	Installing different software.	2.91	0.85	**HN**
7.	Manipulating software programs for educational purposes.	3.12	0.73	**HN**
8.	Powering a projector.	2.90	0.86	**HN**
9.	Preparing power point slides.	3.63	0.67	**VHN**
10.	Using power point accessories for enriching presentation.	3.57	0.63	**VHN**
11.	Skills for effective use of Microsoft Word.	3.79	0.51	**VHN**
12.	Skills for effective use of Corel Draw	2.43	1.09	**MN**
13.	Skills for effective use of AutoCAD and other application software.	2.42	1.12	**MN**
14.	Downloading and uploading information on the internet.	3.30	0.74	**HN**
15.	Skills in use of iPod and iPads features for academic activities.	3.06	0.82	**HN**
Mean Average		**3.22**		

Research Question 3:

What are the skills needed by technical education lecturers in the use of teaching related technology facilities for instructional activities?

The table presents mean responses on skills needs of technical education lecturers in the use of technology facilities for instructional activities. The table revealed that items 1, 2, 9, 10 and 11 are very highly needed while item 3, 4, 5, 6, 7, 8 and 14 are highly needed. Furthermore, items 12 and 13 are moderately needed while none of the items is considered not needed. An average mean of 3.22 shows that skills development in use of technology facilities are highly needed by technical education lecturers for instructional activities.

Research Question 4:

What are the skills needed by technical education lecturers in the use of social network sites for instructional activities?

The table presents responses on skills needs of technical education lecturers in the use of social network sites for instructional activities. The table revealed that items 1 is very highly needed while item 2 to 10 are highly needed. An average mean of 3.32 shows that skill development in use of social medias are highly needed by technical education lecturers for instructional activities.

Table 4: Mean Responses on Skill Development Needs of Technical Education Lecturers in the Use of Social Network Sites for Instructional Activities.

S/N	Item	Mean	S. D	Remark
1.	Identifying usable social network site for educational purposes.	3.61	0.52	**VHN**
2.	Registering with a social network site.	3.40	0.52	**HN**
3.	Supplying personal information on the site.	3.18	0.83	**HN**
4.	Uploading personal pictures and relevant pictures on the site.	3.24	0.80	**HN**
5.	Posting information on the sites.	3.34	0.67	**HN**
6.	Sending messages to different users on the sites.	3.25	0.70	**HN**
7.	Blogging with group members and other users.	3.30	0.63	**HN**
8.	Chatting with other social network site users.	3.21	0.77	**HN**
9.	Creating groups for personal/educational purposes.	3.30	0.72	**HN**
10.	Creating chat rooms or discussion forum on educational purposes.	3.31	0.63	**HN**
11.	Sending instant messages to social network users	3.24	0.74	**HN**
12.	Uploading videos on educational programs for other users	3.40	0.61	**HN**
13.	Downloading pictures and videos on educational programs from the site.	3.36	0.60	**HN**
14.	Receiving and responding to messages from other users from the site.	3.40	0.61	**HN**
15.	Accessing and using updates on the sites.	3.28	0.74	**HN**
	Average Mean	**3.32**		

Table 5: Analysis of Variance Showing Differences in Responses of Lecturers Specializing in Electrical/Electronics Technology, Building/Woodwork Technology and Automobile/Metal Work on Skill Development Needs in Use of Technology Facilities for Instructional Activities.

Program Specialization	Sum of Squares	df	Mean Square	F	Sig.	Remark
Between groups	11.903	3	3.968			
Within groups	4071.006	64	63.609	.076	.927	NS
Total	4082.909	67				

Hypotheses One:

There is no significant difference in the responses of lecturers specializing in electrical and electronics technology, building/woodwork technology and automobile/metal work on skill development needs in use of technology facilities for instructional activities.

The table presents the difference in the responses of lecturers in electrical/electronics technology, building/woodwork technology and automobile/metal work on skill development needs in use of technology facilities for instructional activities. The table revealed a non-significant difference between the groups (df = 64; F = .076; p>0.05).

Thus, hypotheses one was rejected. Hence, there is no significant difference in the responses of lecturers in electrical/electronics technology, building/woodwork technology and automobile/metal work on skill development needs in use of technology facilities for instructional activities.

Hypotheses Two:

There is no significant difference in the responses of lecturers in electrical/electronics technology, building/woodwork technology and automobile/metal work on skill development needs in use of social medias for instructional activities.

Table 6: Analysis of Variance showing Differences in Responses of Lecturers Specializing in Electrical/Electronics Technology, Building/Woodwork Technology and Automobile/Metal Work on Skill Development Needs in Use of Social Media for Instructional Activities.

Program Specialization	Sum of Squares	df	Mean Square	F	Sig	Remark
Between Groups	10.466	3	3.489	.216	.382	NS
Within Groups	4132.411	64	64.569			
Total	4142.877	67				

The table presents the difference in the responses of lecturers in electrical/electronics technology, building/woodwork technology and automobile/metal work on skill development needs in use of social medias for instructional activities. The table revealed a non-significant difference between the groups (df = 64; F= .216; p>0.05). Thus, hypothesis two was rejected. Hence, there is no significant difference in the responses of lecturers in electrical/electronics technology, building/woodwork technology and automobile/metal work on skill development needs in use of social medias for instructional activities.

DISCUSSION OF FINDINGS

The results obtained from statistical analysis on technology facilities available for technical education lecturer's use indicated with an average mean of 1.67 that new technologies that can help in instructional delivery and learning of the students are not adequately provided. This is in concordance with the view of Pernia (2008) who assert that ICT are technologies used to communicate in order to create, manage and distribute information, they are devices and applications used to access, manage, integrate, evaluate, create and communicate information and knowledge and should be provided for effectiveness of work delivery. Also, Shachaf (2008) asserted that advances in technology facilitate communication and the sharing of information among team members; it may also impact team effectiveness and are therefore required in the 21st century workplace.

The results obtained on lecturers' familiarity with the top ten social medias indicated with an average mean of 1.71 that technical education lecturers are fairly familiar with some but are more familiar with Facebook. This is in line with the opinion of Boyd (2007) who discovered that these social media sites let those who use them create personal profiles, while connecting with other users of the sites and can upload photographs, post what they are doing at any given time, and send personal or public messages to whomever they choose which makes more people to use it.

The result obtained on skill development of technical education lecturers in the use of technology devices for instructional activities with an average mean of 3.22 indicated a highly needed skill development with a non-significant difference in the responses of lecturers from different fields of the program on the skill development needs. Also, the result obtained on the skill development needs of technical education lecturers in the use of social network sites for instructional activities with an average mean of 3.32 indicated a highly needed skill development with a non-significant difference in the responses of lecturers from different fields of the program on the skill development needs.

This agrees with the findings of Kitschner (2003) who identified the following competencies required by lecturers in ICT application in education. These include: competence to make personal use of ICT, competence to master range of educational paradigms that make use of ICT, sufficient competence to make use of ICTs as mind tools, competence to make use of ICT as a tool for teaching, competence in mastering a range of assessment paradigms which make use of ICT, competency in understanding the policy dimensions of the use of ICT for teaching and learning. Also, Lowther (2008) identified three important characteristics needed to develop good quality teaching and learning with technology devices: autonomy, capability, and creativity.

CONCLUSION AND RECOMMENDATIONS

The study identified that technology facilities which are required to facilitate effective instructional activities are not available in good proportion and that most social medias are not

effectively explored by lecturers. It can be deduced that most lecturers are not competent in the use of most technology facilities as they are not available for use and are not vast in the use of most social media sites as they are not familiar with them. Thus, skill development is therefore needed in use of these technologies and social medias for effective instructional delivery in this 21st century classrooms which determines the quality of education acquirable in schools.

Based on the findings, it is therefore recommended that:

1. more technology facilities should be provided for carrying out instructional activities most especially in technical education programs in Nigeria higher institutions.

2. skills development training programs should be organized to train lecturers in the use of technology facilities and mostly used social media platforms for instructional facilitation.

3. lecturers should take advantage of students' involvement in use of social media to package their instruction in that direction.

4. classrooms and offices should be furnished with appropriate technology facilities for effective instructional activities.

5. provision of required software needed in carrying out various academic activities should be provided without delay to aid improved education delivery in the country.

6. lecturers should be trained on each new technology developed which can be used in facilitating teaching and learning.

7. skills development programs should constantly be organized on use of latest technologies for academic activities.

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