

TECHNOLOGICAL SWITCH-OVER AND INSTRUCTIONAL DELIVERY OF BUSINESS EDUCATION PROGRAMME IN COLLEGES OF EDUCATION, SOUTH- SOUTH, NIGERIA

¹Otomiewo Esther Elo & ²Fewaripamogha Ebimobowei Richard

¹Department of Business Education, Faculty of Education, Ignatius Ajuru University of
Education, Port Harcourt, Rivers State

²Department of Management, Faculty of Management Sciences, Ignatius Ajuru University
of Education, Port Harcourt, Rivers State

¹estherotomiewo@gmail.com & ²ebimobweir@gmail.com

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ABSTRACT

The study examined how technological switch-over can enhance instructional delivery of Business Education programme in Colleges of Education in South-South Nigeria. The paper employed the survey of literatures to achieve the objectives. The study is based on three theories, Castells' Theory of Network Society:(1996), Theory of Technological Determinism was propounded by Marshall McLuhan in (1962). Three research questions and three hypotheses were raised in this study. The population for the study was two hundred and fifty-one business educators in colleges of education in South-South, Nigeria. There was no sampling as the entire population was used in the study while 227 were used for data analysis indicating the number of questionnaires that were returned. The research questions were answered using mean and standard deviation. The mean figures were 3.0 and above which showed a high extent response from the respondents to the questions posed. While the hypotheses were tested using t-test statistical tool at 0.05 significant level. It was found out that male and female, experienced and inexperienced business educators WhatsApp Platforms have high extent of influence on content delivery and supervision, skills development as well as educators' expectations among other findings. It is therefore concluded that technological switch-over highly enhances instructional delivery of Business Education programme in colleges of education in South-South Nigeria. It is therefore recommended that business educators should be trained on the use of these digital technologies for instructional delivery in colleges of education in South-South, Nigeria.

Keywords: Business Education, Technological Switch -Over and Instructional Delivery



*medium, provided the original author
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INTRODUCTION

Nigeria is uniquely positioned to reap the benefits of the digital economy. Nigeria accounts for 47% of West Africa's population, and half of the country's 200 million people are under the age of 30. Nigeria has the largest mobile market in Sub-Saharan Africa, supported by strong mobile broadband infrastructure and improved international connectivity; yet minimal fixed broadband infrastructure and connectivity in rural areas is leaving a significant number of the most marginalized segments of the population without Internet access. The Nigerian citizens and businesses remain excluded from the digital ecosystem as a result of limited access to broadband and non-availability of adequate devices (mobile devices and computers) to fully utilize the Internet. It also highlights good progress in digital infrastructure, finance, skills, and entrepreneurship, among others. Nigeria is home to several high-growth digital companies that provide hopeful examples of the country's digital potential. To deliver on the 2030 aspirations of greater access to the digital economy and to meet the bold objective of creating 100 million jobs in Nigeria, the country needs to increase investment in infrastructure, create an enabling regulatory environment for the digital economy to grow, pursue radical reforms that brings about improved skills and a more competitive digital job market, support public-private partnerships to stimulate and sustain demand for the use of digital platforms, and improve the current business climate to boost more investment opportunities. World Bank (2019).

The electronic media industry to Starks (2017), began its first close examination of digital switchover at a workshop organized by the Broadcasting Commission in March 2008, in Kingston. Main regulatory agencies and policy-makers were also involved; including the Spectrum Management Authority, the Office of Utilities Regulation, Consumer Affairs Commission, Ministry of Industry, Telecommunications, Energy and Commerce, Ministry of Information, and members of academia. The planned transition to the new platform and the eventual switch off of analogue signals is called digital switchover. The biggest impact of this transition is improved television service through better picture quality, improved national coverage, and a wider choice of channels. The spectrum that the switchover liberates presents a significant opportunity for extending internet access (through mobile broadband). If managed effectively, the DSO could boost economic and social development and support the delivery of programs related to the Millennium Development Goals (MDGs) by enabling increased access to and delivery of digital services, for instance, remote educational content. World Bank (2021).

Okonji (2017), posits that, since 2006 when the International Telecommunication Union (ITU), a United Nation agency, issued the Geneva 2006 agreement, signaling the development of all digital terrestrial television services, African countries, including Nigeria, have been battling to complete the migration process from analogue television broadcasting to digital television



broadcasting. So far only six African countries have completed the migration exercise, otherwise known as Digital Switch Over (DSO).

Oyedele (2019), Saw that, this switch-over from analogue to digital broadcasting has been concluded necessary, due to the intense quality of digital technology in turning messages, sounds, text, audio and images to digital or binary computer language, with the better application of computer telecommunication technologies, audiovisuals, and electronic gadgets. High level of productivity, increased employment opportunities, internet addition and more improved interactive platforms are other promises of the digital revolution. Ihechu (2020), in Ibulubo (2008), observed that, there are no available stringent measures put in place to make sure all broadcast stations comply, considering the slow approach to issues and projects in Nigeria like reinvigorating the power sector, infrastructural development, offering political solutions, reversing the brain drain syndrome. Digital Skills, Digital Facilities, Digital Environment, knowledge gap and cost of new media technologies and absence of clear-cut policies as challenges facing the digitization process in Nigeria.

Owolabi and Owolabi (2015), observed that, for effective instructional delivery to be catalysed in Nigerian tertiary institutions, male and female business educators, experienced and inexperienced business educators must utilized e-learning. To them, e-learning is an educational delivery system that uses computerised communication as an environment for the exchange of information and interaction between students, educators and the content.

Business Education to Otamiri (2014), has been prone to definitional confusion for some time now. The term has been so freely used, misinterpreted by many and clearly understood by a few. The confusion associated with the appropriate definition of the term originally derives from the confusion of whether it is Business Education or Education for Business or indeed Business Teacher Education. However, he viewed business education as a fusion of pedagogical and managerial preparation. In his opinion, Business Education, different from Business Administration or Business Management is defined as a programme of study which combines the production of business teachers with education for business. Business education therefore involves the study of technologies and related sciences and the acquisition of practical skills including teaching skills attitudes, understanding, and knowledge related to occupation in various sectors of our economy, and social life.

Business Education programme to Ordu (2017), is that aspect of education that gives its students the opportunity to acquire some practical employability skills that will enable them to either gain employment in the industries or maintain the job or self- employed and sustain the operation of the business to him, Business Education provides the student with the basic skills, nurtures the skills that are necessary for various levels of economic development, and of course gives the individuals the skills to live, learn and work as a productive citizen in a global society.



The technological switch-over also looked at the technological level of colleges lecturing skills in Business Education which are designed to enhance the instructional strategies that the business educators apply in preparing students for a variety of careers in the world of work.

Colleges of Education are teacher education institutions for the training of middle level manpower. The Colleges admit and train candidates for three years after Senior Secondary School education for the award of the Nigeria Certificate in Education (NCE). Graduates of the Colleges of Education can teach at the pre-primary, primary and junior secondary school levels of Nigerian educational system (Ibidapo-Obe, 2007; Ololube, 2006). In Blaise, Onwuagboke, Singh, & Fook, (2015).

Statement of the Problem

Technological switch-over is everywhere and is incorporated into every aspect of the individuals live. The clarion calls for technological switch-over and instructional delivery of Business Education programme in this twenty first century is an evolving aptitude that empowers both male and female business educators, experienced and inexperienced business educators to effectively and ethically interpret information, discover meaning, design content, construct knowledge, and communicate ideas in a digitally connected world. Using online presentation platforms in teaching, makes effective instructional delivery easy for both male and female business educators, experienced and inexperienced business educators as it ignites the possible achievement of content delivery, smart facilities for skills development and as well WhatsApp platforms in addressing educator's expectations. The application of digital switch-over resources to teaching of Business Education programme has been attributed to the expansion of online presentation platforms.

Online presentation platforms are the component of the Internet, allowing digital materials to be created, stored, interacted and accessed over the internet, (Bates, 2005). The digital switch – over encompasses the use of computer or electronic devices with Online Platforms such as Microsoft Teams, Zoom Meeting and Webinar, Google Classroom, Smart facilities and WhatsApp Platforms. The technological switch-over and instructional delivery of Business Education programme in Colleges of Education in South-South is faced with problems of producing the needed skills for the world of work; for instance, both male and female business educators, experienced and inexperienced business educators are confronted daily with the challenges of new hardware and software in Switching-Over to Digital Instructional Delivery of Business Education. It is against this background that the present study will be carried out to determine how the independent variables (technological switch-over) with the following dimension of Microsoft teams, zoom meeting and webinar, google classroom, interactive whiteboard and WhatsApp platforms can enhance (instructional delivery of Business Education) with the following proxies, content delivery, supervision of projects, teaching practice and subject matter of content delivery, communication skills, business development skills, digital skills and addressing educators expectations.



This study is apt and novel because it has not been carried out by anyone in South-South Nigeria. Therefore, this study will close the gap that exist in literature and it is going to be of great importance to all stakeholder of Business Education.

Aim and Objectives

The main aim of this study was to ascertain if technological switch-over can enhance instructional delivery of Business Education programme in Colleges of Education in South-South Nigeria. The specific objectives of the study include the following:

- i. Ascertain the extent to which male and female business educators can influence WhatsApp Platforms on content delivery and supervision in instructional delivery of Business Education program in colleges of education, South- South Nigeria.
- ii. Ascertain the extent to which experienced and inexperienced business educators can enhance WhatsApp Platforms to improves skills development in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria.
- iii. Ascertain the extent to which male and female business educators can enhance WhatsApp Platforms to improves educators' expectations in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria.

Research Questions

- i. To what extent do male and female business educators facilitate WhatsApp Platforms on content delivery and supervision in instructional delivery of Business Education program in colleges of education, South- South Nigeria?
- ii. To what extent do experience and inexperienced business educators enhance WhatsApp Platforms to improve skill development in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria?
- iii. To what extent do male and female business educators enhance WhatsApp Platforms improve educators' expectations in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria?

Research Hypotheses

The following null hypotheses were tested at 0. 0 5 level of significance

Ho₁: There is no significant difference in the mean ratings of male and female educators on the influence of WhatsApp platform on content delivery and supervision in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria

Ho₂: There is no significant difference in the mean ratings of experienced and less experienced educators on the influence of WhatsApp platform on skill development in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria

Ho₃: There is no significant difference in the mean ratings of male and female educators on the influence of WhatsApp platform on educators' expectations in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria.

Conceptual Review

Concept of Technological switch-over

Digital switchover' is the name given to the process of changing from analogue to digital TV broadcasting. The term 'digital broadcasting' is a catch-all term for the use of electrical signals for broadcasting that are a sequence of 'discrete numbers. Analogue broadcasting uses electrical signals that vary in a 'continuous way'. The shift from analogue to digital is an inevitable one that has taken place in virtually all electronic systems over the past decades. Digital signals are much more flexible, can be squeezed into smaller spaces, and open up many more opportunities than analogue signals. The case for making the transition is as self-evident and beneficial as was changing transport from horses to motor cars. The change could bring a great deal more channels for viewers, the option of higher quality images, multimedia, and more involving and inclusive television. Zoubi (2021).

Hunt (2021), opined that, digital television transition, also called the technological switch-over or analogue switch-off, is the process in which analog television broadcasting is converted to and replaced by digital television. This primarily involves the conversion of analogue terrestrial television to digital terrestrial. However, it also involves analogue cable conversion to digital cable, as well as analogue to digital satellite. In many countries, a simulcast service is operated where a broadcast is made available to viewers in both analog and digital at the same time. Chachua (2014), observed that, the analogue broadcasting signals we use today were developed to deliver black and white TV with mono sound. As TV got more sophisticated including the addition of colour, stereo sound and multiple channels, the signals had to be adapted to carry the extra information. TV has now evolved to such an extent that the analogue signal is no longer able to carry the full range of features available. This is why ITU has decided that all countries have to move their TV broadcasting to a digital format which is more efficient, delivers clearer picture and sound quality, and a much richer range of features.

Dimension of Technological switch-over.

WhatsApp Platforms

WhatsApp is an archetypical success story. The app was created by Brian Anton & Jan Koom, both Yahoo employees. Supported by an 8-million-dollar investment by Major Sequoia, one of Silicon Valley's most fashionable investors' holding companies, the pair launched WhatsApp in 2009 and have been very successful. WhatsApp (from the English phrase "What's up?", meaning "What's new?") is an instant messaging application for smartphones. It allows users to exchange images, videos, and audio or written messages using their Internet connection. WhatsApp has positioned itself as a superior alternative to SMS messaging, which can be very expensive when used in foreign countries due to roaming charges; WhatsApp, in contrast, relies on the active Wi-Fi network. Barhoumi. (2015).



Dove & Beaton (2021), saw WhatsApp as one of the most popular text and voice messaging apps. It's free to use, and you can send messages, make voice calls, and host video chats on both desktop and mobile devices. Part of what makes this app appealing is that it works on various phone and computer operating systems, helping with messaging. It can also take advantage of Wi-Fi and cellular data to make one-on-one or group calls. Steele (2014), sees WhatsApp as a messaging app that lets use MS text, chat, and share media, including voice messages and video, with individuals or groups. To Filipowicz (2020), WhatsApp is an immensely popular messaging app that allows you to make calls, video chat, send gifs and stickers, and more via Wi-Fi. Here's what you need to know about it. Fernandez (2021), observed that, WhatsApp is a free chat app that launched at the dawn of the smartphone era back in 2009. It wasn't until 2015 that it became the most popular communication app worldwide, but nowadays it's virtually ubiquitous in most of Europe, Latin America, and the Middle East and Africa.

Concept of Instructional Delivery

Ezenwafor & Nwachukwu (2020), opined that, instructional delivery is the interaction among the student, the teacher, the content, the knowledge, skills and dispositions students need for effective teaching/learning outcomes in order to qualify to work together with others in a diverse society and fast changing world. Ezenwafor & Nwachukwu (2020), in Dabbs (2012) explained that instructional delivery is an instructor's personal approach to teaching based on their own professional identity which helps to create a unique classroom culture. Instructional delivery combines the complexities of teaching with institutional expectations and student demand for quality instruction. Instructional delivery embraces all human interactive skills employed by the teacher to promote/facilitate learning in the classroom situation thereby leading to improved performance on the part of the learner. It is a process in which teachers apply repertoire of instructional strategies to communicate and interact with the learners around academic content, and to support student engagement for better learning outcome, (Blaise, Onwuagboke, Singh, & Fook, 2015).

Instructional delivery according to Azar (2017), is to ensure that students receive instruction that is delivered effectively and in a manner that allows content mastery. Effective instructional delivery means that the teacher will build on existing knowledge, differentiate instruction, and incorporate technology into lessons. The primary goal of instructional delivery is to ensure that educators have the skills and knowledge necessary to provide students with effective instruction. The central objective of the instructional delivery standard, is determining a teacher's proficiency in the content delivery.

Instructional delivery has to do with what the teacher does to promote or direct teaching and learning in a particular subject in a school. This is done by the teacher through effective planning of the lesson by preparation of lesson notes, gathering of teaching Aids, employment of teaching strategies and timely use digital facilities to coincide with the teaching. Paulias & Young (1996) described instructional delivery as a means of guiding learners in securing the amount and



quality of experience which will promote the optimum development of their potentials as human beings.

Proxies of the Criterion Variables

Content delivery

Content delivery is one of the most challenging as well as one of the most important aspects of developing an online course. Content is the heart of any course, so how content is presented to students strongly impacts student success and satisfaction. The best way to deliver content varies from course to course, but there are several best practices that can be used to ensure your students are learning the content they need to succeed, regardless of the platform you choose to deliver that content. Many of the best practices in an online content delivery are the same as face-to-face content delivery. CTIL (2020).

Skills Development in Smart Facilities

The basic functions of the Interactive Whiteboard represent “a conglomeration of all previous educational technologies,” replacing traditional chalk or whiteboards, televisions, videos, overhead projectors, and personal computers (p. 106). Due to this integration of previous technologies, interactive whiteboards have become characterized by their multimedia capabilities including: visual displays, audio, and touch sensitivity (Hall & Higgins, 2005), Hayes (2010). Furtherly, Hall and Higgins (2005) Hayes (2010), provided some suggestions regarding the potential use of Interactive Whiteboard in the classroom including: display of web-based resources or video clips to explain a concept, modeling software use, presentation of student work, digital lesson and flip chart creation, text manipulation, handwriting practice, saving of notes, and editing using a computer and projector, the annotation and physical manipulation features inherent in Interactive Whiteboard are an often remarked upon use by teachers.

The business educators must be given time to develop their skills in using Interactive Whiteboard in integrating them into their pedagogy for educators to feel confident and experienced in using Interactive Whiteboard. O'Donnell (2015). With the basic skills, Business Educators are advantaged in the use of smart board technology designs for use in spacious work area with group interaction. The enlarged visuals are easily seen due to the size of the Interactive Whiteboard. Participants become both visually and physically engaged as they connect with content and multimedia in a collaborative learning environment. Using special pens, teachers write directly on the screen, manipulate text and images, view websites, cut and paste research information, view video clips, formulate graphs and charts, and design vivid and creative presentations. Competencies in teachers' application of the interactive white board not only enhance effective lesson presentation, it also proffers the development of learners' cognitive and physical abilities in solving problems. Teachers are able to model abstract ideas and concepts in new ways so that learners might respond to the activities and deepen their understanding. Nnadozie (2017).

To Bernabeo & Mateou (2017). Using smart teaching techniques, such as the electronic interactive whiteboard (IWB) is becoming more prevalent in schools, colleges and universities.



Employing this method of technological switch-over provides the students with a different experience by making the classroom more interactive and interesting. Interactive applications are in demand for educators who want to involve their students in learning with this kind of technology.

Empirical Review

Schindler et al (2017), reviewed a literature on Computer-based technology and student engagement. Computer-based technology has infiltrated many aspects of life and industry, yet there is little understanding of how it can be used to promote student engagement, a concept receiving strong attention in higher education due to its association with a number of positive academic outcomes. The purpose of this article is to present a critical review of the literature from the past 5 years related to how web-conferencing software, blogs, wikis, social networking sites (*Facebook* and *Twitter*), and digital games influence student engagement.

We prefaced the findings with a substantive overview of student engagement definitions and indicators, which revealed three types of engagement (behavioral, emotional, and cognitive) that informed how we classified articles. Our findings suggest that digital games provide the most far-reaching influence across different types of student engagement, followed by web-conferencing and *Facebook*.

Findings regarding wikis, blogs, and *Twitter* are less conclusive and significantly limited in number of studies conducted within the past years. Overall, the findings provide preliminary support that computer-based technology influences student engagement, however, additional research is needed to confirm and build on these findings. We conclude the article by providing a list of recommendations for practice, with the intent of increasing understanding of how computer-based technology may be purposefully implemented to achieve the greatest gains in student engagement.

Dyikuk & Chinda (2017). Carried out a study on Digital Terrestrial Television: A Critical Assessment of the Adventures and Misadventures of Nigeria's Digital Switch Over, the global movement from an erstwhile Global Analog Switch Off to a Digital Switch Over which debuted Digital Terrestrial Television viewership unveils how the world has evolved a fascinating digital culture.

Teräs et al (2020) carried out a study on Education and Education Technology 'Solutionism': a Seller's Market. The Covid-19 pandemic and the social distancing that followed have affected all walks of society, also education. In order to keep education running, educational institutions have had to quickly adapt to the situation. This has resulted in an unprecedented push to online learning. Many, including commercial digital learning platform providers, have rushed to provide their support and 'solutions', sometimes for free. The Covid-19 pandemic has therefore also created a sellers' market in ed-tech. This paper employs a critical lens to reflect on the possible problems arising from hasty adoption of commercial digital learning solutions whose design might not always be driven by best pedagogical practices but their business model that



leverages user data for profit-making. Moreover, already before Covid-19, there has been increasing critique of how ed-tech is redefining and reducing concepts of teaching and learning. Cook (2014), undertook a study on Technology and Online Education: Models for Change. This paper contends that technology changes advance online education. A number of mobile computing and transformative technologies will be examined and incorporated into a descriptive study. The object of the study will be to design innovative mobile awareness models seeking to understand technology changes for mobile devices and how they can be used for online learning. These models will take information from technology vicissitudes, online education systems, along with mobile device literature, and build a picture of past, current, and future trends for online learning.

Yao-Ting. et al (2016), investigated the effects of integrating mobile devices with teaching and learning on students' learning performance. Mobile devices such as laptops, personal digital assistants, and mobile phones have become a learning tool with great potential in both classrooms and outdoor learning. Although there have been qualitative analyses of the use of mobile devices in education, systematic quantitative analyses of the effects of mobile-integrated education are lacking. This study performed a meta-analysis and research synthesis of the effects of integrated mobile devices in teaching and learning, in which 110 experimental and quasi-experimental journal articles published during the period 1993–2013 were coded and analyzed. Overall, there was a moderate mean effect size of 0.523 for the application of mobile devices to education. The effect sizes of moderator variables were analyzed and the advantages and disadvantages of mobile learning in different levels of moderator variables were synthesized based on content analyses of individual studies. The results of this study and their implications for both research and practice are discussed.

METHODOLOGY

This study adopted descriptive survey research design. The target population for the study comprises of 251 Business Educators. Therefore, the study covered Business Education lecturers in colleges of education in South-South Nigeria, The South -South comprises of six (6) States Namely, Edo, Delta, Bayelsa, Rivers, Akwa Ibom and Cross Rivers State. There was no sampling. The population size was considered manageable. Therefore, the study was a census study. The major instrument for data collection was a structured questionnaire titled: “Technological switch-over and Instructional Delivery of Business Education Programmes. (TSOIDBE) developed by the researcher. A test re-test reliability method was used to establish the reliability of the instrument, the data collected after both administrations were analysed using Pearson Product Moment Correlation Coefficient, which yielded a coefficient of 0.78. Mean and Standard Deviation was used to test the univariate variables whereas t-test was used to test the bivariate variables at 0.05 level

DATA PRESENTATION AND ANALYSIS/RESULTS



WhatsApp Platforms

Research Question One: To what extent do WhatsApp Platforms facilitate content delivery and supervision in instructional delivery of Business Education program in colleges of education, South- South Nigeria?

Table 1: Summary of mean and standard deviation on WhatsApp platforms and content delivery/supervision

N=227

S/N	Items	VHE	HE	ME	LE	VLE	Mean	SD	Decision
1	WhatsApp platforms enhance content delivery and supervision	104	79	21	15	8	4.18	0.85	High Extent
2	WhatsApp platforms enhance subject matter delivery	109	84	14	16	4	4.15	0.75	High Extent
3	WhatsApp platform enhances content delivery and the supervision of teaching practice	102	88	16	12	9	4.09	0.78	High Extent
4.	WhatsApp platform enhance content delivery and supervision of projects	119	73	15	10	10	4.07	0.78	High Extent
Grand Mean & SD							4.12	0.79	High Extent

Results in table 1 show WhatsApp Platforms facilitate content delivery and supervision in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria to a high extent. The result indicated the item mean for this subscale ranged from 4.07 (SD=0.78) to 4.18(SD=0.85). The highest scored item in this subscale was ‘WhatsApp platforms enhance content delivery and supervision’ 4.18(SD=0.85). This implies that ‘WhatsApp platforms enhance content deliver and supervision in instructional delivery of business education programme. The lowest scored item was ‘WhatsApp platform enhance content deliver and supervision of projects’ 4.07(SD=0.78) respectively. This implies that “WhatsApp platform enhance content delivery and supervision of projects when utilized in instructional delivery’ but was the least factors among others. Although, all the items are rated high extent with their various means>3.00 and a grand mean of 4.12(SD=0.79) far above the criterion mean. In summary, WhatsApp platforms facilitate content delivery and supervision in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria to a high extent.

Research Question Two: To what extent do WhatsApp Platforms improve skills development in the instructional delivery of Business Education program in Colleges of Education, South-South Nigeria?

Table 2: Summary of mean and standard deviation on WhatsApp platforms and skills development

N=227



S/N	Items	VHE	HE	ME	LE	VLE	Mean	SD	Decision
1	WhatsApp platform enhance skills development	123	68	17	10	9	4.21	0.77	High Extent
2	WhatsApp platform enhance communication skills	109	94	8	12	4	4.26	0.75	High Extent
3	WhatsApp platform enhance business development skills	107	83	11	15	11	4.10	0.82	High Extent
4.	WhatsApp platform enhance digital skills	117	73	17	12	8	4.13	0.80	High Extent
Grand Mean & SD							4.18	0.79	High Extent

Results in table 2 show WhatsApp platforms enhance skills development in instructional delivery of business education program in colleges of education in South-South Nigeria to a high extent. The result indicated the item mean for this subscale ranged from 4.10 (SD=0.82) to 4.26(SD=0.75). The highest scored item in this subscale was ‘WhatsApp platforms enhance communication skills’ 4.26(SD=0.75). This implies that ‘when WhatsApp platforms are utilized in business education instructional delivery it enhances communication skills. The lowest scored item was ‘WhatsApp platforms enhance business development skills’ 4.10(SD=0.82) respectively. This implies that “WhatsApp platforms enhance business development skills when utilized in instructional delivery’ but was the least factors among others. Although, all the items are rated high extent with their various means>3.00 and a grand mean of 4.18(SD=0.79) far above the criterion mean. In summary, WhatsApp platforms improve skill development in the instructional delivery of Business Education program in Colleges of Education, South- South Nigeria to a high extent.

Research Question Three: To what extent do WhatsApp Platforms improve educators’ expectations in instructional delivery of Business Education program in Colleges of Education, South- South Nigeria?

Table 3: Summary of mean and standard deviation on WhatsApp platforms and educators’ expectation

N=227									
S/N	Items	VHE	HE	ME	LE	VLE	Mean	SD	Decision
1	WhatsApp platforms enhance delivery of course, content	115	83	10	11	8	4.20	0.78	High Extent
2	WhatsApp platforms enhance delivery of course content and lecture updates	111	87	12	11	6	4.17	0.77	High Extent
3	WhatsApp platforms enhance evaluation of assignment	99	82	16	18	14	4.10	0.85	High Extent
4.	WhatsApp platforms enhance delivery of instructions	108	75	15	15	14	4.12	0.82	High Extent
Grand Mean & SD							4.12	0.81	High Extent

Results in table 3 show that WhatsApp Platforms improve educators’ expectation in instructional delivery of Business Education program in colleges of education, South- South Nigeria to a high extent. The result indicated the item mean for this subscale ranged from 4.10



(SD=0.85) to 4.20(SD=0.78). The highest scored item in this subscale was ‘WhatsApp platforms enhance delivery of course content’ 4.20(SD=0.78). This implies that ‘WhatsApp platforms enhance delivery of course content in instructional delivery of business education programme. The lowest scored item was ‘WhatsApp platforms enhance evaluation of assignment’ 4.10(SD=0.78) respectively. This implies that “WhatsApp platforms enhance evaluation of assignment when utilized in instructional delivery’ but was the least factors among others. Although, all the items are rated high extent with their various means>3.00 and a grand mean of 4.12(SD=0.81) far above the criterion mean. In summary, WhatsApp platforms improve educators’ expectation in instructional delivery of Business Education program in colleges of education, South- South Nigeria to a high extent.

Multivariate Analysis

WhatsApp platforms influence on (content delivery and supervision, skills development and educators’ expectations)

To examine the significant difference between WhatsApp platforms and (content delivery and supervision, skills development and educators expectations) based on gender and years of experience, the null hypothesis H₀₇, H₀₈ and H₀₉ are tested as shown below

Table 4: Summary of t-test of difference between WhatsApp platforms and (content delivery and supervision, skills development and educators expectations) based on gender and years of experience in colleges of Education, South-South, Nigeria

Variables	Variable	N	Mean	SD	Df	T	p-value	Remark
CDS	Male	94	109.01	10.58	225	0.154	0.543	Not Significant
	Female	133	104.13	9.44				
SDp	Experience	146	103.21	8.22	225	-0.754	0.122	Not significant
	Less experience	81	107.14	9.88				
EE	Male	94	106.54	10.32	225	-0.112	0.302	Not significant
	Female	133	102.31	9.04				

Key: CDS= content delivery and supervision, SDp= skills development, EE=educators’ expectations, N=sample size, SD=standard deviation, Df= degree of freedom

The result in table 4.16 shows the summary of t-test difference based on gender and years of experience on WhatsApp platforms influence on (content delivery and supervision, skills development and educators expectations) in instructional delivery in colleges of education in South-South, Nigeria. It shows that there is no significant difference between male and female educators’ ratings on the influence of WhatsApp platforms on content delivery and supervision



in instructional delivery in colleges of education in South-South, Nigeria at 0.05 level of significance ($t=0.154$, $p=0.543$), the null hypothesis was therefore accepted as $p>0.05$. Similarly, the result also showed that there is no significant difference between experienced and less experienced educators' ratings on the influence of WhatsApp platforms on skill development in instructional delivery in colleges of education in South-South, Nigeria at 0.05 level of significance ($t= -0.754$, $p=0.122$), the null hypothesis was also accepted as $p>0.05$. Finally, the result showed that there is no significant difference between male and female educators' ratings on the influence of WhatsApp platforms on educators' expectations in instructional delivery in colleges of education in South-South, Nigeria at 0.05 level of significance ($t= -0.112$, $p=0.302$), the null hypothesis was therefore accepted as $p>0.05$. This implies that there is no significant difference between WhatsApp platforms and (content delivery and supervision, skills development and educators expectations) in instructional delivery in colleges of education in South-South, Nigeria based on gender and years of experience.

Discussion of Findings

WhatsApp Platforms and Instructional Delivery

The purpose of this study is to examine the above. This was verified by research questions seven, eight and nine. It was also tested with hypotheses seven, eight and nine. Items 25-36 on the B part of the questionnaire were carefully constructed to answer these questions. The result include grand means of {4.12 (SD=0.79)} for research question 7, {4.18 (SD=0.79)} for research question 8 and {4.12 (SD=0.81)} for research question 9 respectively. The results in table 4.16 { $t= 0.154$, $p=0.543$, $p>.05$ }, { $t= -0.754$, $p=0.122$, $p>.05$ } and { $t= -0.112$, $p=0.302$, $p>.05$ } in this chapter shows high extent and not significant at .05 alpha level. Since their respective $P>.05$, we have sufficient evidence to accept the null hypothesis. This implies that there is high extent influence of WhatsApp platforms on (content delivery and supervision, skills development and educators' expectations) in instructional delivery of business education program in colleges of education in South-South, Nigeria which is not significant based on gender and years of experience of the educators.

This study is in line with the statement of Hulst (2020) who observed that, around the world, WhatsApp have facilitated educators and students in adjusting to virtual education, in many cases, many teachers have been using WhatsApp to give course content, deploy online resources for assignments and instructions as well used the WhatsApp platforms to send lecture notes.

To Hinojosa (2019), WhatsApp is useful for keeping in touch with our students and their parents. With WhatsApp, the classroom becomes a boundless virtual space. It helps us provide our students with improved feedback and support them in achieving success in their academic and integral education. Shin (2017) opined that; WhatsApp can support students throughout their learning journey, engaging students, ensuring all students are learning, even online courses, retains a 'human touch' is vital in education

Conclusions

Based on the objective of the study, the following conclusion can be drawn.

Technological switch-over highly enhances instructional delivery of Business Education programme in Colleges of Education in South- South Nigeria. It also showed that the areas of instructional delivery that is greatly enhanced by technological switch-over are content delivery and supervision; skills development; and educators' expectations. It was further shown that technological levels of the colleges moderate technological switch-over of the



colleges with respect to online presentation platforms, smart facilities and WhatsApp platforms in colleges of education in South-South Nigeria. Colleges of education should therefore embrace full digitalization of instructional delivery so as to improve the quality of the graduate been produced.

Recommendations

Based on the findings of the study, the following recommendations have been made.

1. Federal and State governments in collaboration with donor agencies need to provide information and communication technology facilities for the purpose of using digital technologies in instructional delivery in the various colleges.
2. Curriculum planners and developers must incorporate utilization of digital technologies in future review of business education curriculum so as to give credence to technological switch-over.
3. Special allowances should be given to educators who utilize digital technologies so as to encourage smooth migration towards technological switch-over by business educators.

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