

SMART FACILITY AND INSTRUCTIONAL DELIVERY OF BUSINESS EDUCATION PROGRAMME

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ABSTRACT

The study examined how smart facilities can enhance instructional delivery of Business Education programme in Colleges of Education in Rivers State. The paper employed the survey of literatures to achieve the objectives. It was found out that male and female, experienced and inexperienced business educators Online Presentation Platforms, Smart Facilities has high extent of influence on content delivery and supervision, skills development as well as educators' expectations among other findings. It is therefore concluded that digital 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: Smart Facilities, Instructional Delivery, Business Education

INTRODUCTION

Mohamed (2021), describes the 'digital switchover' as the name given to the process of changing from analogue to digital TV broadcasting. With the advancement of digital technology, digital switch-over facilitates male and female business educators as well as the experienced and inexperienced business educators to enhance electronic teaching that is based on the use of electronic media and devices for improving access to teaching of Business Education programme, the digital instructional delivery of Business Education facilitates the adoption of new ways of understanding; which involves the use of Online Presentation Platforms of hardware and software of the computer or electronic device such as the Microsoft Team, Zoom Meetings and Webinars, Google Classroom, Interactive Whiteboard and WhatsApp Platforms and the Technological Level of Colleges with all operating system such as, iOS, Windows and Android.

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.

Smart Facilities

According to Jeff (2017), An interactive whiteboard is a tool that allows multiple people to engage in a collaborative experience using a touchscreen to take notes, annotate content, and more. Many interactive whiteboards offer on-board programs that help to facilitate sharing and collaboration. They do things that an analog whiteboard simply isn't capable of. In the past, employees would write notes on analog whiteboards and would have to resort to taking photos of the board or slapping "Do Not Touch" signs on it to save their work. Interactive whiteboards remove that hassle – they take the analog notes we're used to and automatically bring them into the digital world. They allow for things to be written down on the surface, shared, archived, and saved as digital content. Some interactive whiteboard solutions even allow for the integration of mobile devices like laptops, tablets, and smartphones. These devices can be connected directly or wirelessly, and you can easily annotate content that will be mirrored on connected devices. It works the other way around as well – draw on the device and see it mirrored on the display in real time. This allows for another layer of collaboration. Sharing content directly from devices easily allows meetings to progress more fluidly and reduces down time. Then you just send the annotated content back to the devices for later use.

An interactive whiteboard, also known as a smartboard, is an interactive display in the format of a whiteboard that reacts to user input either directly or through other devices.

Morgan (2010), Saw an interactive whiteboard as a piece of hardware that looks much like a standard whiteboard but it connects to a computer and a projector in the office/classroom to make a very powerful tool. When connected, the interactive whiteboard becomes a giant, touch-sensitive version of the computer screen. Instead of using the mouse, you can control your computer through the interactive whiteboard screen just by touching it with a special pen (or, on some types of boards, with your finger). Anything that can be accessed from your computer can be accessed and displayed on the interactive whiteboard, for example Word documents, PowerPoint presentations, photographs, websites or online materials. Using special software included with the interactive whiteboard, you can also interact with images and text projected on the board: rearranging them, changing their size, colour, etc.

IQ (2019), observed that, an interactive_whiteboard is the modern replacement to the normal whiteboard that students are used to. It is an interactive display board which is operated by a touchpad that is connected to a computer which is in turn connected to a projector. Some of these interactive whiteboards are independent touchscreen devices equipped to perform different operation and carry out commands. The interactive whiteboard enables instructors to carry out tasks that were previously not possible.

To Julien (2012), interactive whiteboard (IWB), is also known as an electronic or digital whiteboard, it is a large touch sensitive display screen that connects to a computer and projector. To operate the IWB, the user controls it directly from the screen in the same way a mouse is used to control a computer. IWBs also have many multimedia functions, such as Internet access, images, sound and video files.

Instructional Delivery

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.

Logan & Logan cited in Agina-Obu & Onwugbuta-Enyi (2017), described instructional delivery as a creative process which involves an imaginative person, who utilizes prior experiences, combines material, methods, ideas, and media in new and existing ways which help learners integrate learning and reinforce concepts.

Instruction delivery and teaching are synonymous according to Agina-Obu & Onwugbuta-Enyi, (2017), since they require a teacher to get all the necessary things to make teaching and learning more meaningful to make a change in others so as to be more meaningful in wherever they find themselves. Okanu-Igwela & Walson (2019). To Canales & William (2020), Instructional delivery refers to a teacher's use of varied research-based instructional strategies utilized to engage students in active learning

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).

Smart Facilities for Skills Development

Smart facilities in skills development is focusing on the concept of smart technologies and the understanding of this concept by the business educators who are the once implementing smart solutions in their teaching environment, is on the goal to prepare for teaching their students with a clear and comprehensive explanation of what skills development would mean in their specific environment.

Skills Development.

Different types of skills are required for successful work. They include foundation skills acquired through education and family life, technical and professional skills which enable a person to undertake a particular activity or task, business skills required to succeed in self-employment and core life skills, including attitudes, knowledge and personal attributes.

Types of skills as seen by World Health Organization (2010)

Foundation skills are those acquired through basic education and family life. They include, for example, literacy, numeracy, ability to learn, reasoning and problem-solving. These types of skills are needed for work everywhere, in all contexts and cultures, in both formal and informal economies. Technical, vocational and professional skills are those which equip someone to undertake a particular task – how to produce or repair something, or provide some kind of service. Examples are carpentry, tailoring, weaving, metalwork, lathe operation, basket making, tin smithing, shoemaking. More advanced technical skills, such as engineering, medicine, physiotherapy and computer technology, are normally referred to as professional skills. Generally, the more advanced the techniques, the higher the educational level required and the more formal the training, often taking place in technical institutions and resulting in formal certification of competence.

Business skills (also called entrepreneurial skills) are those required to succeed in running a business activity. They include money and people management, as well as planning and organizational skills. They also include risk assessment, market analysis and information-gathering, business plan preparation, goal-setting and problem-solving. These skills usually require a basis of numeracy and

literacy. Training courses which teach trades likely to lead to self-employment, such as carpentry, radio repairs, two-wheel motor mechanics and weaving, have an obligation to teach business skills alongside the technical skills.

Core life skills: consist of the attitudes, knowledge and personal attributes necessary to function in the world. They include: how to relate to customers, how to present oneself, learning how to learn, effective listening and communication, creative thinking and problem-solving, personal management and discipline, interpersonal and social skills, the ability to network and work in a team, and work ethics.

Communication Skills.

When considering the definition of communication skills, it's important to remember that communication occurs in many different ways and contexts. From writing and speaking to body language, we use various skills to convey and obtain information. However, demonstrating strong communication skills is about being able to convey information to others in a simple and unambiguous way. It involves the distribution of messages clearly and concisely, in a way that connects with the audience. Good communication is about understanding instructions, acquiring new skills, making requests, asking questions and relaying information with ease.

An educator will need a range of communication skills, including clarity, active listening and empathy, to name a few. They will need to use their listening skills to understand the difficulties that students are having, along with excellent writing skills to be able to prepare reports and plans for their lessons.

Cohesion and Clarity: Good communication is much more than saying the right thing; it is about communicating messages clearly and concisely.

Empathy: Within the teaching and learning process, students will have their own ideas about how things should be done in an online presentation since they are more digitally inclined, their point of view should be considered and respected. The goal here is to understand where the students are coming from – and respecting their views, even if they are very different from your own.

Empirical Review

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.

The application of such an approach should lead to a better definition of mobile awareness requirements and greater online visibility relative to selection of the appropriate model criteria and requirements. The models will identify online problem definitions, hardware and software advancements, analysis mobile objectives, and the selection of evaluation criteria and requirements to design online mobile awareness. By using technology vicissitudes, online education systems, and mobile device variables that are found in the literature, models can be designed to achieve awareness for online learning and changing technologies. These futuristic models can help to identify the appropriate techniques and methods to be used in facilitating the overall effort in future mobile devices for online learning. Hopefully, seamless technology integration and borderless networks for mobile awareness will motivate and benefit all future online teaching and learning groups.

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.

Zakharova & Voronin (2021), Looked at the Integration Trend of digitalization of Teachers' Labor in the Practice of Russian Universities. The article examines the features of the organization of the educational process in the context of digitalization, analyzes the integration tendency of teachers' work in the practice of Russian universities, provides a comparative analysis of the practice of the Open University. This paper analyzes the educational experience that has developed in the process of emergency delivery of educational content to students during a pandemic.

The models of mixed, purely distance and duplicate education are analyzed. The article substantiates the idea that there is a need for the formation of criteria for the quality of education online, and, therefore, the criteria for the quality of the organization of the educational process, including the work of teachers, are changing. This paper outlines some steps that are being taken by Russian universities in the field of researching trends related to improving the digital environment as a whole, regardless of the pandemic and other factors.

Menezes & Carvalho (2009). Investigated the Impacts of New Technologies on Free-to-Air TV industry: Lessons from Selected This paper aims to examine the impacts of new technologies, especially of the digital TV, on the industry of terrestrial TV in selected countries. Taking the evolution of information and communication technologies (ICTs) as a background scenario, the transformations provoked by digitization of TV on the following aspects are analyzed: (i) the market structure of terrestrial TV (or free-to-air TV broadcasting), (ii) the plurality and diversity of TV programming.

Based on secondary data and on recent studies on the technological trajectory of terrestrial TV in selected countries, one concludes that digital TV may provide great opportunities for development in such industry, but the magnitude of its benefits is strongly conditioned by socioeconomic factors and by how the service was regulated. Such findings may contribute to Brazilian debate on development opportunities opened by technological change to the television sector.

technological change; diffusion of new technologies; information and communication technologies; free-to-air TV broadcasting; terrestrial television industry; digital terrestrial TV technology; market structure; media plurality or diversity; regulation.

Jain et al (2020), investigated a study on Teachers' Voices on the Impact of COVID-19 on School Education: Are Ed-Tech Companies Really the Panacea? COVID-19 has brought about changes to the education system that impact teachers in multiple ways. The article discusses the views of affected teachers under the three-gap framework: access, usage, and pedagogical skills gap. Between 29 April 2020, and 29 May 2020, an online survey was administered to 550 Delhi and National Capital Region (NCR) teachers, of which 288 responded. The data show that the inequalities between private schools and government schools are sharpened by the move to online education. This is compounded by the fact that students from economically weaker sections of society have become hard to reach, and teachers do not know how to support hard-to-reach students who are also severely affected by the pandemic.

The data also show that teachers have not been trained in online pedagogies. Ed-Tech companies have been stepping in, presenting themselves as a panacea to the problem with further consequences to teachers' profession, standing, and livelihoods. However, Ed-Tech solutions are not relevant for hard-to-reach students or teachers in schools that serve hard-to-reach communities. The article first presents the voices of teachers affected by the pandemic and then critically examines the role of Ed-Tech companies, which pertain to fill the online pedagogical gap.

CONCLUSIONS

It was showed that the areas of instructional delivery that is greatly enhanced by digital switch-over are content delivery and supervision; skills development; and educators' expectations. It was further shown that technological levels of the colleges moderate digital switch-over of the colleges with respect to online presentation platforms, smart facilities and WhatsApp platforms in colleges of education in South-South Nigeria.

RECOMMENDATIONS

1. It is 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.
2. Management of colleges of education must provide alternative sources power such as solar energy and generator which will prevent power outage during instructional delivery when digital technologies are been utilized.

REFERENCES

- Aglazor, G., (2017). The role of teaching practice in teacher education programmes: designing framework for best practice global journal of educational research (16) 101-110
[Www.globaljournalseries.com](http://www.globaljournalseries.com)
- Ajoku L I., (2014)., The Place of ICT in Teacher Preparation and Climate Change Curriculum at the Tertiary Education Level in Nigeria journal of Education and Practice ISSN 2222-1735
- Bennett C. (2019). Methods for Presenting Subject Matter <https://www.thoughtco.com/methods-for-presenting-subject-matter-8411>
- Bernabeo R. A., & Mateou S. M., (2017). The use of interactive whiteboards as a pedagogical tool in teaching aviation courses World Transactions on Engineering and Technology Education 2017 WIETE Vol.15, No.1, 2017
- Cox J., (2019). Technology in the Classroom: The Benefits of Smart Boards<https://www.teachhub.com>
- CTIL (2020). Delivering content online <https://citl.illinois.edu/citl-101/online-strategy-development>
- Training of Basic Education Teachers in Nigeria: Issues, Challenges and Prospects.
<https://open.library.okstate.edu>
- Ezeani.N.S., (2012). The Teacher and Skills Acquisition at Business Education: From the Perspective of Accounting Skills DOI:[10.12816/0002256](https://doi.org/10.12816/0002256)
- Ezenwafor, J, I, & Nwachukwu, S.H., (2020). Extent of Utilization of E-Learning Resources for Instructional Delivery by Office Technology and Management Lecturers in Polytechnics in South-East Nigeria, *International journal of teacher education*. 5(1)
www.premierpublisher.org.
- Fernandez, N., (2021). How to use WhatsApp: A step-by-step beginner's guide
<https://www.androidauthority.com/how-to-use-whatsapp-1097088/>
- Iris M. V., Werven, R J., Coelen, E., . Jansen, P.W.A., & Hofman W.H.A. (2021) Global teaching competencies in primary education, Compare: A Journal of Comparative and International Education, DOI: 10.1080/03057925.2020.1869520

- Islas O, and Bernal J, D. (2016). Media ecology: a complex and systemic Meta-discipline.
[file:///C:/Users/ELO/Downloads/philosophies-01-00190%20\(6\).pdf](file:///C:/Users/ELO/Downloads/philosophies-01-00190%20(6).pdf)
- Kristin K., (2021). What makes a good lecturer? Do you have what it takes to be a good lecturer?
Use these tips to improve your teaching skills. <https://www.hotcoursesabroad.com>
- Kumar, S., Kumar, V. & Taylor, S. (2020) A Guide to Online Supervision. UK Council for
Graduate Education. <http://www.ukcge.ac.uk>
- University in Western Kenya International Journal of Humanities Social Sciences and Education
(IJHSSE) 4 (8)
- Oguejiofor, C.S, & Umeh, U.F., (2019). Status Of Business Education In Promoting Reliable and
Sound Economic Growth In The Oil Sector In Delta State: IJRDO - Journal Of Business
Management ISSN: 2455-6661(5)(3)
- Oguzor N, S., & OparaJ, A., (2011). Media technology and vocational education in Nigeria:
problems and prospect Peer-reviewed & Open access journal ATI - Applied Technologies &
Innovations www.academicpublishingplatforms.com (4)(1)
- zoemelam O.C., (2018). Benefits of Interactive Whiteboard (IWB) In Tertiary Institutions.
<https://www.linkedin.com>
- Paulsen T, H., & Schmidt-Crawford A.D., (2017). Enhancing Student Teacher Supervision
Through Hybridization: Adding e-Supervision to the Mix *Journal of Agricultural Education*,
58(2)
- Utung, P, Bobai D, C., & Abdullahi, M, A., (2018). Challenges and Strategies for
Enhancing Quality Nigeria Certificate in Education (Technical) Programme in
Kaduna State, Nigeria ATBU, Journal of science & Technology& Education
(JOSTE); 6 (4)
- Uzoechina G., (2016). Availability of Physical Facilities in Colleges of Education in South East
Nigeria International Journal of Science and Research 5(2)
- Varun B., (2020)What makes WhatsApp the preferred medium of choice for School Continuity?
<https://graymatterscap.com>