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THE ROLE OF MOBILE TECHNOLOGY IN ENHANCING BUSINESS ADMINISTRATION PROGRAMMES IN FEDERAL POLYTECHNIC, OKO, ANAMBRA STATE, NIGERIA.

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Abstract
Greater technology in learning has transcended traditional geographical and infrastructural boundaries, allowing access to learning resources from anywhere, anytime. The survey research design was adopted to examine role of mobile technology in enhancing Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria. The population of the study comprised all the 65 staff of the department. The entire population of the study was used due to the relatively manageable size; hence, the study adopted census technique. Three research questions guided the study. A 28-item structured questionnaire was used to collect data from the respondents. Data were analyzed using mean and standard deviation. The finding revealed among other things that the current state of mobile technology integration in Business Administration programmes at Federal Polytechnic, Oko, is relatively low. It was recommended among other things that Business Administration educators should be encouraged to integrate mobile technology in Business Administration programmes since the current level of integration is low.
Keywords: Role, Technology, Mobile Technology, Enhance, Business Administration

Introduction

Education plays an important role in improving the living conditions of individuals, society and the nation at large. It inculcates desirable values, attitudes, skills and knowledge on recipients to enable them adopt new behaviour and be able to survive in the ever- changing and complex society (Ekundayo & Olabisi, 2020). One of the many educational institutions is the polytechnics. The Federal Republic of Nigeria (FRN, 2004) in the National Policy on Education articulates the objectives of Polytechnic education to include the contribution to national development through relevant manpower training, the acquisition, development and inculcation of proper values for the development of intellectual capability of individuals, to understand

and appreciate the local and external environments. The establishment of polytechnic education is generally predicated on the dire need of producing technically oriented personnel who are to be initiators, facilitators and implementers of technological development of a nation by adequately training its citizenry on the need to be technically literate, leading to self-reliance and compelling sustainability (Okoro & Ibiam in Madike & Igbokwe-Ibeto, 2023). One of the courses studied in polytechnics is Business Administration.

Business administration as a course prepares students to have sound theoretical and practical knowledge to carry out a number of activities in a business concern effectively. It equips students with knowledge and ability to for instance identify management problems at appropriate levels, analyze them and design management strategies to overcome them, among others. It covers areas like accounting, finance, human resources, marketing and information technology. This all important course ought to be taught effectively if it must produce positive results. But Qiao *et al* (2024) opined that the integration of mobile technologies in education can significantly boost learners' interest and engagement in learning leading to enhanced learning efficacy and outcomes. This is to say that mobile technology can play an important role in enhancing Business Administration programmes. Role means a function performed by someone or something. To enhance means to improve or increase something. Technology on the other hand means the use of machines, devices and systems to solve problems, improve efficiency and enhance productivity.

Mobile technologies according to Tabowei (2021) are portable two-way communications devices, computing devices and the networking technology that connects them. They are the combination of hardware, operating systems, networking and software that enables technology to be portable. Devices that store these are called mobile devices. Hardware includes PDAs, like Palm Pilot or Hand-

spring, mobile phones, and video game players. Applications are phone books and calendar programmes. Mobile technologies are classified as internet-enabled devices like smartphones, tablets and watches etc. Thus, the term mobile technologies are used interchangeably with "mobile devices" and "mobile gadgets" to refer to smartphones, tablets, and iPads with the wireless technologies such as cellular networks, 4G networking, Wi-Fi, Bluetooth, to enable the mobile devices to share voice, data, mobile application (apps). Chavoshi & Hamidi (2019) noted that educational institutions are exploring the use of mobile technologies to make learning more flexible for both learners and educators. Although mobile technologies do not replace the existing technologies in the institution, it does rather enhance access to learning resources and fosters the adoption of diverse pedagogical methods to support teaching and learning. Mobile technologies such as smartphones, PDA's, tablets etc. has been considered suitable tools for improving education in developing countries because of its portability and mobility, ability to transfer information without physical infrastructure and its widespread use around the globe (Schnauber-Stockmann & Karnowski, 2020). Husnita, *et al* (2023) submitted that greater technology in learning has transcended traditional geographical and infrastructural boundaries, allowing access to learning resources from anywhere, anytime. Students in the view of Alghamdi *et al*, (2020) are no longer limited to the actual classroom environment, as course materials and educational content can be accessed via mobile devices like computer, or tablet connected to the internet. Online learning (Alghamdi *et al*., 2020). With technology, online learning models are becoming more feasible and popular. Mobile technology can then be used in education in many different ways and these include, recording lectures, accessing blogs, conducting online research, downloading study materials, practical sessions and simulations in and outside the classrooms and communication purposes (Schnauber-Stockmann & Karnowski, 2020; Mahmood & Wang, 2021).

Mobile technology has a positive impact on improving accessibility and quality of learning. Accessibility is one of the most important elements in education, especially in developing countries or remote areas of the world. With mobile technology, accessing learning resources have become easier (De Meester *et al*., 2020; Demirgüç-Kunt *et al*., 2020). With smartphones, tablets, and other mobile devices, students and teachers can now access information, course materials, and any educational content from anywhere at any time (Branch, 2020; Javed, *et al*., 2021). They are no longer bound by geographical limitations or educational infrastructure (Demintseva, 2020) mobile technologies has also made online learning (Alencar *et al*., 2020); digital learning resources (Correani *et al*., 2020), and learning process becomes more interactive and fun. Mobile technology enables the use of multimedia, gamification (Ferriz-Valero *et al*., 2020), and other interactive content to facilitate better understanding of the subject. Teachers can also find learning tools and resources and other innovative educational applications to provide students with richer and more engaging learning experiences (Mahmood & Wang, 2021). In the context of inclusive education (Kuyini *et al*., 2020), Mobile technology has opened up opportunities for students with special needs. According to Ahmed *et al* (2021), application and mobile devices can be customized to support learning for people with learning disabilities or physical difficulties. By using mobile technology, education becomes more personalized (De Barcelos Silva *et al*, 2020) and accessible to all individuals regardless of boundaries. Summarily, Husnita, *et al* (2023) posited that mobile devices have many advantages like: creating an environment that encourages student-centered learning, cost effective, enhance students' sense of individuality and community, it is a motivating tool which encourages collaborative learning and socialization, and stimulates a sense of ownership of the content. These advantages can be used to augment the teaching and learning.

Despite the numerous benefits of mobile technology in education, certain challenges hinder its effective integration in education. Amy, *et al* (2019) observed that there challenges faced by educators when attempting to integrate technology in the classroom such as access to resources, training and support, teacher attitudes and beliefs, resistance towards technology in the classroom and so on. Certain strategies must be put in place to address these challenges. Husnita, *et al* (2023) submitted that the successful implementation of mobile technology in learning is highly dependent on teacher support and involvement. This means that one strategy to enhance mobile technology integration in education is to ensure that teachers provide their support and involvement. One way to ensure this is to make teachers skilled in using such technologies because teachers who are skilled in using these technologies are able to create more effective and engaging learning experiences for students. Hew and Brush (2020) also submitted that the strategies to overcome the barriers to mobile technology integration are: developing a shared vision and technology integration plan; overcoming resources constraints by for example creating a hybrid technology setup in classrooms that involve cheaper computer systems; providing teachers with ongoing professional development and aligning technology to state curriculum standards, among others.

Anambra State, with its growing economy and entrepreneurial spirit, presents a unique context for exploring the role of mobile technology in business administration. Also, Federal Polytechnics Oko have the potential to leverage mobile technology to enhance student learning outcomes, improve employability, and contribute to the state's economic development. In Federal Polytechnic Oko, lofty steps have been taken to promote quality educational delivery. For instance, in 2016, TETFUND established CISCO networking academy at Federal Polytechnic Oko for high quality ICT training, industry certification and entrepreneurship. Similarly, Amadi (2023) submitted that no fewer than 220 staff of the institution were trained

on ICT by the ICT unit of the institution in partnership with a global networking expert, CISCO networking academy. However, observation of the teaching and learning activities in the department of Business Administration suggests that mobile technologies are rarely integrated maximally in the teaching and learning process. One wonders if educators really understand the role of mobile technology in enhancing Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria. Hence this study.

Statement of Problem

Ideally, educational institutions ought to integrate mobile technology into their business administration programmes to empower students with cutting-edge skills to drive informed decision-making. Mobile technology would be deeply ingrained in the curriculum, allowing students to access educational resources interact with instructors and collaborate with other students. This will likely make students equipped to leverage mobile technology's transformative potential, drive business innovation, and foster competitiveness.

However, the current state of mobile integration in business administration programmes falls short of this ideal. Despite the growing importance of mobile technology in modern business, many educational institutions struggle to provide comprehensive mobile technology training. Infrastructure gaps, inadequate faculty training and limited institutional support hinder students' ability to develop essential mobile technology skills. As a result, graduates often enter the workforce without the necessary proficiency to effectively utilize mobile technology, limiting their potential impact on business administration. This highlights the need to investigate the role of mobile technology in enhancing Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria.

Research Objectives

The main objective of this study is to examine the role of mobile technology in enhancing Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria. Specifically, the study sought to:

1. Examine the current state of mobile technology integration to enhance Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria.
2. Identify the benefits of mobile technology integration in Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria.
3. Develop strategies for enhancing mobile technology integration to enhance Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria.

Research Questions

The following research questions guided the study:

1. What is the current state of mobile technology integration to enhance Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria?
2. What are the benefits of mobile technology integration in Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria?
3. What are the strategies for enhancing mobile technology integration to enhance Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria?

Methods

A descriptive survey design was adopted for the study. In line with the research design, opinions of Business Administration lecturers on the problem of the study were sought. The study was carried out in Anambra State, South-East, Nigeria using Business Administration department, Federal Polytechnic, Oko. The population of the study comprised all the 65 staff of the department. The entire population of the study was used due to the relatively manageable size; hence, the study adopted census technique.

The instrument for data collection was a questionnaire titled Role of Mobile Technology in Enhancing Business Administration Programmes Questionnaire (RMTEBAPQ) constructed by the researcher based on the research questions. The questionnaire was made up of 28 items and was divided into three parts: Part 1, 2 and 3. Part 1 with 10 items to elicit information on current state of mobile technology integration; Part 2 has 10 items which covered benefits of mobile technology integration and Part 3 has 8 items which covered strategies for enhancing mobile technology integration. The instrument was validated by three experts from the Faculty of Education, Nnamdi Azikiwe University, Awka. The instrument was pilot tested using 20 Business Administration lecturers in Federal Polytechnics Mgbakwu, Anambra state who were not part of the study population. This was done to ensure the reliability of the instrument and the data collected was analyzed using Cronbach Alpha. Overall reliability coefficient of 0.73 was obtained and was considered to be acceptable for the study. The questionnaire was administered by the researchers using direct administration method. Out of the 65 copies of the questionnaire administered only 58 copies were used for analysis representing about 89.23% return rate. The other 07 copies were either not duly filled or not retrieved.

The data obtained were analyzed using mean based on the 4-point scale ranging from very strongly agreed of 4 points to strongly disagree of 1 point. Any item with a mean response of 2.50 and above was considered 'agreed' while an item with a mean response below 2.50 was considered 'disagreed'.

Results

The results from research questions are presented in the tables below

Research question one: What is the current state of mobile technology integration to enhance Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria?

Table 1: Mean Ratings of Respondents on Current State of Mobile Technology Integration to Enhance Business Administration Programmes in Federal Polytechnic, Oko, Anambra State, Nigeria

S/N	ITEMS	X	SD	REMARKS
1	Relevant mobile devices are available for students and educators	1.95	.93	LE
2	Reliable wireless network connectivity	1.84	.94	LE
3	Access to mobile device management systems	1.89	.97	LE
4	Availability of mobile-friendly learning management systems	1.88	.95	LE
5	Adequate budg*et al*location for mobile technology integration	1.81	.94	LE
6	Integration of mobile technology in business administration curriculum	1.77	.93	LE
7	Frequent mobile technology-based assignments and projects	1.95	.92	LE
8	Availability of mobile-friendly educational resources	2.18	.97	LE
9	Regular mobile technology training for department members	2.12	.96	LE
10	Student access to reliable internet connectivity	2.16	.94	LE
	Grand mean	**1.68**	**.91**	**LE**

In table 1, all the items have mean ratings less than 2.50, showing that in the opinions of Business Administration educators, the current state of mobile

technology integration in Business Administration programmes at Federal Polytechnic, Oko, is relatively low.

Research Two: What are the benefits of mobile technology integration in enhancing Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria?

Table 2: Mean Ratings of Respondents on the Benefits of Mobile Technology Integration in Business Administration Programmes in Federal Polytechnic, Oko, Anambra State, Nigeria

S/N	ITEMS	X	SD	REMARKS
1	It makes access to education easier	2.85	.71	Agree
2	Makes it easier for teachers to determine the right way of learning	3.09	.64	Agree
3	Provides flexible learning that can be accessed at any time.	2.81	.69	Agree
4	Motivates students in doing the learning taught by the teacher	2.85	.71	Agree
5	Students are motivated to find out innovative knowledge to support intergenerational competition	3.09	.64	Agree
6	Materials can be accessed through e-learning platforms or educational applications.	2.89	.67	Agree
7	Makes distance learning more accessible	3.07	.62	Agree
8	Students' proficiency in critical thinking related to various learning can be resolved	2.84	.70	Agree
9	Learning is more fun	2.89	.67	Agree
10	Learning objectives can be achieved maximally by using mobile technology well	3.07	.62	Agree
	Grand mean	**2.81**	**.69**	

In table 2, all the 10 items have mean ratings greater than or equal to 2.50, showing that in the opinions of Business Administration educators, they are benefits of mobile technology integration in enhancing Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria

Research Three: What are the strategies for enhancing mobile technology integration to enhance Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria?

Table 3: Mean Ratings of Respondents on the Strategies for Enhancing Mobile Technology Integration to Enhance Business Administration Programmes in Federal Polytechnic, Oko, Anambra State, Nigeria

S/N	ITEMS	X	SD	REMARKS
1	Developing a shared vision of technology integration plan	3.07	.72	Agree
2	Providing ongoing professional development for teachers	2.75	.68	Agree
3	Ensuring teacher support and involvement	2.90	.62	Agree
4	Aligning technology with curriculum standards	2.91	.72	Agree
5	Addressing resource constraints through hybrid technology setups	3.02	.65	Agree
6	Establish polices for mobile device management	2.81	.69	Agree
7	Encourage collaboration among educators and students on mobile technology	2.85	.71	Agree
8	Regular assessment of mobile technology integration effectiveness	3.09	.64	Agree
	Cluster mean	**2.87**	**.67**	

From table 3, it is seen that all the items have means above 2.50. It is therefore evidenced that in the opinions of Business Administration educators, they are strategies for enhancing mobile technology integration to enhance Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria

Discussion of Findings

The study revealed that the current state of mobile technology integration in Business Administration programmes at Federal Polytechnic, Oko, is relatively low. This finding is consistent with previous research like Amy, *et al* (2019) that highlighted challenges faced by educators when integrating technology in the classroom. The low level of integration may be attributed to factors such as inadequate infrastructure, insufficient teacher training, and limited institutional support.

The study also confirmed that mobile technology integration offers numerous benefits in enhancing Business Administration programmes. Specifically, the findings highlighted improved student engagement, enhanced data analysis skills, increased accessibility to educational resources, and personalized learning experiences. These benefits align with existing literature like Husnita, *et al* (2023) and Qiao, *et al* (2024) that emphasizes the potential of mobile technology to transform Business Administration programmes.

Again, the study identified several strategies to enhance mobile technology integration, including: developing a shared vision and technology integration plan; providing ongoing professional development for teachers; ensuring teacher support and involvement; aligning technology with curriculum standards and addressing resource constraints through hybrid technology setups. This aligned with Hew and Brush (2020) and Husnita, *et al* (2023) that submitted that the successful implementation of mobile technology in learning is highly dependent on teacher support and involvement.

Conclusion

The study examined the role of mobile technology in enhancing Business Administration programmes in Federal Polytechnic, Oko, Anambra state, Nigeria. Based on the research objectives, data were collected, analyzed and interpreted. The findings revealed that mobile technology was integrated in Business Administration programmes to a low extent. It was also found out that mobile technology integration was beneficial in enhancing Business Administration programmes and that certain strategies can be put in place to ensure that mobile technology integration enhances Business Administration programmes in Federal Polytechnics Oko, Anambra state, Nigeria.

Recommendations

Based on the findings, the following were recommended:

1. Business Administration educators should be encouraged to integrate mobile technology in Business Administration programmes since the current level of integration is low. The integration of mobile technologies will enhance the programme.
2. Educators should maximize the integration of mobile technology in Business Administration programmes. This is because it is beneficial for enhancing business administration programmes
3. Institutions should provide infrastructures to ensure effective mobile integration to enhance Business Administrations programmes.

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