MOBILE DEVICE IN ENGLISH LANGUAGE CLASSROOM: A PERCEPTION OF UNDERGRADUATES IN TERTIARY INSTITUTIONS IN RIVERS STATE

By

ROSITA UZOAMAKA IBENEME

Department of Curriculum Studies and Instructional Technology, Educational Technology (Option), Ignatius Ajuru University of Education, Port Harcourt

And

ANGELA DAVIES-OKAREVU

Department of Curriculum Studies and Instructional Technology, Educational Technology (Option), Ignatius Ajuru University of Education, Port Harcourt

Abstract

Mobile device has become an integral part of many students lives that one cannot help but wonder at their attitude towards its usage and the extent to which it influences them. English Language undergraduates are not exceptions. This study titled "Mobile Device in English Language classroom: perceptions of undergraduates of English in Tertiary Institutions in Rivers State" adopted a descriptive survey design with a student population of 74,818. Taro Yamen formula was used to get a sample size of 400. The research work employed six objectives and six research questions. Three hypotheses were formulated to guide the conduct of the study. The questionnaire was the instrument used for data collection. The validity of the study was ascertained and the reliability coefficient value was 0.72 using Pearson product moment correlation (PPMC). Both mean score and Standard Deviation were used to analyze data for Research Questions 1-5. Z test statistics and ANOVA were used to analyze the hypotheses (HO1 -HO3) and were tested at 0.05 level of significance. recommendation is for the university administration to establish an

excellently equipped ICT department which will serve as the centre for information distribution to students and lecturers.

Introduction

Information and Communication Technology (ICT) is the infrastructure that enables us become a part of the digital world. Most gadgets like tablets, laptops, smartphones are information technologies known as mobile devices. They create learning communities between and among the students while they are on the move by providing excellent assistance which enable students acquire desired knowledge and support, all through their learning endeavours. It has brought about a most desired expectation of producing innovative and problem-solving young students (West 2013).

The 21st century undergraduates have taken cognizance of the existence of mobile device as a core pedagogical tool, (El-Hussein &Cronje 2010). The acceptance of this device by some students is not merelyas an object of inclination but as a result of the tool's philosophy and standards (Lan &Huang, 2012 &Little, 2012). Mobile Learning can deliver the right knowledge at the right time better than any other learning/teaching technology yet devised, (Little, 2012). Students maximise the advantage of all available resources in the recent advancement of mobile device as they can receive and send academic instructions through text, images and most commonly voice (Kim, et. al., 2013).

Mobile Devicesaccording to Ibeneme (2020), are used to project a whole lot of consumer electronics. They are used to describe portable devices that are internet friendly and often fit on our lap, in the palm orour pocket. They are also viewed to have the competency to help students do many of the things they do with desktop computer while they are on the move. They include:

Laptop Computers: The laptop has an all-in-one design with in-built touchpad, keyboard, monitor and speakers. Laptops also offer the alternative of connecting to a larger monitor, regular mouse and other peripherals. It carries out the functions of a desktop and much more.

Netbooks: Netbooks have a more compact form, with 10-inch screen sizes or smaller. Netbooks usually have long battery lives and do the most common this billing wife the long list of partial properties. Of the little wife wife the long list of the long battery of the long to the long battery of the long list of

Smartphones: Smartphones, are an upgrade of the commonly used cell phones. With their sensitive-touch, small-screen size and absence of hardware

keyboards, they may be quite challenging to work with for a longer period of time. Example: Apple iPhone, Samsung Galaxy, Sony Ericsson, Blackberry,

Tablets: Early tablet PCs used pen-based computing and ran a tablet-customized version of Windows XP. After Apple's innovation of iPad, tablets are re-directed from running the same operating systems as desktop and laptop PCs, to iOS and Android. The uniqueness of tablet computers is that they don't have keyboards or touchpads though may offer an optional removable keyboard. Example: Apple iPad, Samsung Galaxy Tab.

Ultra-Mobile PCs: UMPCs are mini computers or mini tablets with touch-screen, stylus, and keyboard input options. UMPCs are truly pocketable devices and offer traditional or full-fledged operating systems like Windows and Linux.

Personal Digital Assistant (PDA): PDAs are handheld devices that combine elements of computing, telephone/fax, Internet and networking. Unlike portable computers, most PDAs began as pen-based, using a stylus instead of keyboard for input and incorporated handwriting recognition features. Some PDAs can also use voice recognition technologies.

E-readers: E-book, also called e-readers, are similar to tablet computers, except they are mainly designed for reading digital downloadable books known as e-books. Most e-readers use LCD Display and an e-ink, that makes reading easier than with a traditional computer display. Examples: The Amazon Kindle, Barnes & Noble Nook, and Kobo.

Handheld Gaming Devices: Handheld gaming devices are portable, lightweight video game consoles that have built-in game controls, screen and speakers. With a handheld gaming console, students' favourite console games can be played wherever they are, whether on the move or while watching the Television.

Fundamentally, mobile technology with internet access enables students to acquire desired knowledge at every point in time. By carrying the device everywhere, they regard them as friendly and personal (Traxler 2007). They are portable but rather than focus on an item's portability, the "mobile device" term describes its helpfulness to users: They're small and capable enough not to hinder our mobility. It also connotes wireless connectivity. If a device does not have internet services, it wouldn't probably be considered as being excellently capable of enabling productivity. The connectivity question could now be the thin line between "portable" and "mobile" devices. An external

hard drive or external power bank, for example, might be considered a portable device, while a small wireless hotspot could be considered a mobile device. Mobile devices with the necessary applications could be predominantly utilized for word meaning and phonetics in English language as their portability enables quick access to the meaning of difficult words and pronunciations. There are other numerous apps that instructors could use while solving grammar related issues based on the realization of the connection between today's undergraduates and how mobile device technologies have become central to their existence.

It is quite convenient to consider the integration of the mobile device to education due to benefits such as easiness in accessing content, integration of a broad range of educational activities, support of independent study and students' organization, encouragement of students' enthusiasm, support of classroom-based collaboration and interaction as well as support of inquirybased instruction and learning, to teaching and learning (Roschelle, 2003). Significant projects of this digital age have revealed that mobile device has the power to transform and empower our undergraduates (Oblinger Oblinger, 2005). In the regular classroom sessions, there are language teachers who allow students to use mobile devices to explore electronic dictionaries or to access information for the completion of a given activity. They also encourage the use of available learning software programs with visual features which are sometimes free online. Mobile device with internet connectivity can search thousands of information, provide details of a high degree of accuracy to the reader and as such are made a part of the lives of the users and not just a mere ornament (Dos 2014).

Whether the students use their mobile device for the purpose of learning English or not has become an issue of great concern. Haruna et al (2016) attributes the rate of the failure in English language exams to the extent the students cling to their mobile devices for trendy social activities which distract them from focusing on their academics. Andrew, Jacob and Ary (2015) in their study on 'The Relationship Between Cell Phone Use and Academic Performance' concluded that while controlling for other established predators, realised that as the students increase their use of mobile phone, their academic performance decreased.

There are numerous exhibitions of character of students that are perceived to be the result of the negative effect of the misuse of the mobile device (Kuznekoff and Titsworth, 2013).It is viewed to have a tendency to neutralize

the power against indiscipline and how much it could disrupt school academic activities (Haruna et al, 2016). The researcher is therefore set out to view the different perceptions of the undergraduates of university of Port Harcourt and Ignatius Ajuru University of Education in relation to the use of their mobile device for academic purposes and its possible incorporation into the school system.

Statement of Problem

This study seeks to add to the existing knowledge of mobile devices, by giving consideration to how the undergraduates perceive it, which is essential to the realization of this work, bearing in mind that the attitude of students towards the utilization of this all important tool will determine its successful incorporation into the school curriculum in tertiary institutions in Rivers State; a positive attitude towards the use of mobile device for learning English will achieve a positive result while a negative attitude results to a negative outcome. Researcher therefore explores to know how much of a learning tool the devices are in the hand of the undergraduates.

Purpose of the Study

To achieve the purpose of this research the following specific objectives are considered to;

- 1. determine the regularity of use of mobile device for learning among English undergraduates of tertiary institutions in Rivers state.
- 2. ascertain the effect of mobile device for learning among undergraduates of English Language in tertiary institutions in Rivers state.
- 3. investigate the influence of gender on the use of mobile device for learning among English language undergraduates of tertiary institutions in Rivers state.
- 4. ascertain the availability of mobile device for learning among undergraduates of English language in tertiary institutions in Rivers state.
- 5. identify the problems associated with the use of mobile devices among English Language undergraduates in Rivers State.
- 6. find out the possible solutions to the problems associated with the use of mobile device for learning among English Language undergraduates in Rivers State.

Research Questions

The following research questions, which are based on students' perception guided the study:

- 1. what is the regularity of use of mobile device for learning among English language undergraduates of tertiary institutions in Rivers State?
- 2. What is the effect of mobile device on the learning of English language among undergraduates of tertiary institutions in Rivers state?
- 3. To what extent does gender influence the use of mobile device for learning among undergraduates of English language?
- 4. To what extent is mobile device available for learning among English Language undergraduates of tertiary institutions in Rivers State?
- 5. What are the problems associated with the utilization of mobile devices among English Language undergraduates in Rivers State?
- 6. What are the possible solutions to the problems associated with the use of mobile device among English Language undergraduates in Rivers State?

Hypotheses

The following hypotheses are formulated to be tested statistically at 0.05, level of significance:

- HO1. There is no significant difference on the English language undergraduates' perception of the use of mobile device for learning based on the institutions
- HO2. There is no significant difference on the perception of mobile device for learning among English language undergraduates based on gender.
- HO3. There is no significant difference on the students' perception of the influence of mobile device for learning among undergraduates based on levels of study.

Methodology

The design for this study is descriptive survey design. The population of 74,818 for the study comprises 994 students University of Port Harcourt (Uni. Port), Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE) in the department of English language.

The sample size was limited to only 400 undergraduates using Taro Yamen formula and simple random sampling. The instrument used for data collection is divided into sections. Section A elicited information on the respondents' preliminary data while. Section B elicited information from the questionnaire on 'Mobile Device in English Language classroom (QMDELC).

Content and face validity are used to evaluate the instrument validity. The supervisor of this study and other experts from the field of study such as measurement and evaluation, validated, evaluated and confirmed the questionnaires as an authentic instrument.

The reliability of the instruments was confirmed using test-retest method and subjected to the use of Pearson Product Moment correlation, which gave a reliability index of 0.72

Data collected were critically analyzed using the mean score and Standard Deviation for Research Questions 1-6 and z-test statistics for hypothesis (HO1 – HO3) at 0.5 level of significance.

Results

The results were presented according to the research questions and hypotheses

Research Question one: What is the regularity of use of Mobile Devices for learning among English Language undergraduates of Tertiary Institutions in Rivers State?

Table1: Mean and standard deviation analysis of the responses on the regularity of use of Mobile Devices among English language undergraduates.

S/N	Items	Uniport		Decision	IAUE	C	Decision
		Stude	Students		Students		
			(220)		(160)	
		\overline{x}_{1}	SD_1		$\overline{\times}_2$	SD_2	
1.	Social	3.08	0.79	RU	3.82	1.09	RU
	networking						
2.	Dictionary	3.45	0.93	RU	3.45	0.93	RU
3.	Alarms	2.45	0.71	RLU	2.94	0.76	SU
4.	Reading	1.53	0.94	RLU	2.25	0.73	RLU
5.	Text messaging	3.11	0.80	RU	3.51	0.95	RU
6.	Calls	3.29	0.86	RU	3.71	1.04	RU
7.	Notifications	3.45	0.93	RU	3.27	0.85	RU
8.	Demonstrations	1.70	0.87	RLU	1.73	0.86	RLU
9.	Office	3.34	0.88	RU	3.36	0.89	RU
	application						
10.	Learning	3.66	1.02	RU	3.27	0.85	RU

materials							
Aggregate	2.91	0.87	SU	3.13	0.90	RU	

Source: Field Survey, 2020.

Table 1 above focuses on the regularity in the use of Mobile Devices among English language undergraduates in tertiary institutions in Rivers State with an aggregate mean scores of 2.91 and 3.13 which are greater than the criterion mean value of 2.50. They use the devices for different purposes but most frequently for the exploration of learning materials which has a high mean score of 3.66.

Research Question 2: What is the effect of Mobile Devices on the learning of English language among undergraduates in tertiary institutions in Rivers state?

Table 2: Mean Response on the extent Undergraduates perceive the effect of Mobile Devices on the Learning of English Language.

S/N	The following	Uniport	Decision IAU	E Decision
	can be learnt	Students	Stud	ents
	through the use	(220)	((160)
	of mobile	$\overline{\times}_1$ SD ₁	$\overline{ imes}_2$	SD_2
	devices			
1.	Oral English	3.79 1.08	SA 3.82	1.09 SA
2.	Verbal English	3.53 0.96	SA 3.45	0.93 SA
3.	Conversation	3.63 1.01	SA 3.00	0.77 SA
4.	Vocabulary and	3.21 0.84	SA 2.64	0.71 A
	Meaning			
5.	Pronunciation	2.96 0.76	A 3.09	0.10 SA
6.	Comprehension	3.16 0.82	SA 3.15	0.82 SA
7.	Composition	3.03 0.78	SA 3.66	1.02 SA
8.	Essay Writing	3.39 0.90	SA 3.51	0.95 SA
9.	Letter Writing	2.82 0.74	A 3.71	1.04 SA
10.	Lexis and	3.26 0.85	SA 2.66	0.72 A
	Structure			
	Aggregate	3.28 0.77	SA 3.27	0.82 SA

Source: Field Survey, 2020.

The table 2 above indicates that the aggregate mean scores of 3.28 and 3.27 are greater than the criterion mean value of 2.50; this shows that the undergraduates perceived the effect of the use of Mobile Devices for learning English Language to a greater extent as shown on its relevance in the learning of the identified English related topics.

Research Question 3: To what extent does gender influence the use of Mobile Devices for learning among English language undergraduates?

Table 3: Mean Response on the extent to which Gender Influences the Use of Mobile Devices for learning among English Language Undergraduates.

S/N	How does gender	Male		Decision	Fema	ale	Decision
	influence the use of mobile for the	Stud			stude		
	following benefits?	\overline{x}_1	289) SD ₁		$\overline{ imes}_2$	(95) SD ₂	
1.	Enhancing study process	3.50	0.95	SA	3.00	0.77	SA
2.	Enhancing communication	2.97	0.77	A	3.27	0.85	SA
3.	Serving as the world biggest reference library	3.58	0.78	SA	3.36	0.89	SA
4.	Encouraging interactive learning/ team work through social media applications	3.58	0.98	SA	2.90	0.75	A
5.	Facilitating research process	3.53	0.96	SA	3.56	1.07	SA
6.	Helping in completing assignment	3.13	0.81	SA	3.07	0.79	SA
7.	Accessing teaching/l earning materials online	3.24	0.85	SA	3.15	0.82	SA
8.	Resolving academic problems with instructors through calls or messaging applications	3.00	0.77	SA	3.66	1.02	SA
9.	Checking/displaying of students' academic grades	3.21	0.84	SA	3.51	0.95	SA

Rosita Uzoamaka Ibeneme and Angela Davies-Okarevu

	Aggregate	3.16	0.77	SA	3.32	0.90	SA	
	presentations							
10.	Recording of school	1.89	0.80	D	3.71	1.04	SA	

Source: Field Survey, 2020.

The table 4.3 above reveals that gender actually influenced the use of Mobile Devices among undergraduate students to a very high extent, with aggregate means scores of 3.16 and 3.32 which greater than the criterion mean value of 2.50.

Research Question 4: To what extent areMobile Devices available for learning among English Language undergraduates of tertiary institutions in Rivers State?

Table 4.4: Mean Response on the extent to which Mobile Devices are available for learning among Undergraduates of English.

S/N	To what extent	Unipo	ort.	Decision	IAUI	E	Decision
	are the following	Stude	ents		Stude	ents	
	available for use?		(220)		(1	60)	
		\overline{x}_{1}	SD_1		\overline{x}_{2}	SD_2	
1.	E-readers	1.95	0.77	LE	1.90	0.80	LE
2.	IPod	2.93	0.95	HE	1.77	0.84	LE
3.	Smart watches	1.79	0.84	LE	2.94	0.76	HE
4.	Mobile phones/	3.29	0.86	VHE	2.25	0.73	LE
	pagers						
5.	Tablets	3.63	1.01	VHE	1.71	0.86	LE
6.	Digital	1.89	0.80	LE	2.04	0.76	LE
	camcorders						
7.	Ultra-mobile pcs	1.21	1.08	VLE	1.91	0.80	LE
8.	Robots	1.79	0.84	LE	1.55	0.93	LE
9.	Personal digital	1.42	0.99	VLE	1.64	0.89	LE
	assistants (PDA)						
10.	Personal	1.58	0.92	LE	1.75	0.86	LE
	navigation						
	display (PND)						
	Aggregate	2.15	0.91	LE	1.95	0.82	LE

Source: Field Survey, 2020.

The table 4 displays an aggregate means score of 2.15 and 1.95 which are both below the criterion mean value of 2.50.

Mobile Device in English Language Classroom: A Perception of Undergraduates in Tertiary Institutions in Rivers State

Research Question 5: What are the perceived problems that militate against the use of Mobile Devices among English Language undergraduates in Rivers State?

Table 5: Mean Response on problems militating against the Use of Mobile

Device among Undergraduates of English language.

S/N	Do the following	Unipo	ort	Decision	IAUE	C	Decision
	militate against	Stude			Stude	ents	
	the use of mobile	((220)			(160)	
	device for	\overline{x}_{1}	SD_1		$\overline{ imes}_2$	SD_2	
	learning?						
1.	Inadequate	3.79	1.08	SA	4.00	1.18	SA
	funding						
2.	Excessive	1.89	0.80	D	2.90	0.75	A
	reliance on						
	mobile device						
3.	Incompetency of	3.21	0.84	SA	3.56	1.07	SA
	staff						
4.	Political and legal	1.73	0.86	D	3.07	0.79	SA
	issues						
5.	Epileptic power	3.26	0.85	SA	3.10	0.91	SA
	supply						
6.	Attitudinal barrier	1.84	0.82	D	1.27	1.05	SD
7.	Regulatory issues	1.92	0.80	D	1.10	1.13	SD
8.	Curriculum	2.79	0.73	A	2.10	0.79	D
	design						
9.	Lack of	1.58	0.92	D	1.82	0.83	D
	infrastructure						
10.	Small keypad	1.58	0.92	D	1.95	0.77	D
	Aggregate	2.36	0.86	D	2.49	0.93	D

Source: Field Survey, 2020.

Table 5 has it that, the actual problems that militate against the use of Mobile Devices among undergraduate English Language students in tertiary institutions in Rivers State are not clearly defined. The conclusive result has aggregate score of 2.36 and 2.49 which are less than the criterion mean value of 2.50.

Research Question 6: What are the possible solutions to the problems militating against the use of Mobile Devices among English Language undergraduates in Rivers State?

Table 6: Mean Response on possible Solutions to Problems Militating against the Use of mobile devices for learning English Language.

S/N	Are the following,	Unip	ort	Decision	IAUI	Ξ	Decision
	solutions to the				Stu.		
	problems militating	,	220)		,	160)	
	against the use of	\overline{x}_{1}	SD_1		\overline{x}_{2}	SD_2	
	Mobile Devices for						
	learning English						
	language?	1 45	0.71	ap.	1.07	1.05	ap.
51.	Incorporation of mobile	1.45	0.71	SD	1.27	1.05	SD
	device in school						
50	curriculum	2 10	0.02	CA	1 10	1 12	CD
52.	Adequate training for instructors on how to	3.18	0.83	SA	1.10	1.13	SD
	use mobile device for						
53.	teaching and learning Need for regulatory	2 02	0.78	C A	2 20	0.90	S A
33.	commission on the	3.03	0.76	SA	3.39	0.90	SA
	educational use of						
	mobile device						
54.	Need for the support	3.08	0.80	SA	3 66	1.02	SA
54.	from Government,	3.00	0.00	571	3.00	1.02	571
	NGOs, public and						
	private sector						
55.	Ensuring a steady	3.26	0.86	SA	1.90	0.80	D
	Network services in	0.20	0.00	~11	1., 0	0.00	_
	students' mobile						
	devices						
56.	Availability of steady	3.54	0.97	SA	2.04	0.76	A
	power supply						
57.	Legislation of the use	1.79	0.84	D	2.55	0.71	A
	of mobile device.						
58.	Acceptability of mobile	2.89	0.75	A	1.82	0.83	D
	device by leaders						

Mobile Device in English Language Classroom: A Perception of Undergraduates in Tertiary Institutions in Rivers State

	Aggregate		2.85	0.82	A	2.78	0.92	A	
60.	data Affordability		3.05	0.79	SA	3.55	1.07	SA	
59.	Security of	personal	3.20	0.84	SA	3.27	0.85	SA	

Source: Field Survey, 2020.

Table 6 portrays that the above questionnaire items if properly implemented may reduce the problems militating against the use of Mobile Devices among undergraduates of English Language of tertiary institutions in Rivers State, with aggregate mean scores of 2.85 and 2.78 which are greater than the criterion mean value of 2.50.

Hypotheses

Hypothesis 1: There is no significant difference on the English language undergraduates' perception of the use of Mobile Devices for learning based on the institutions.

Table 7: Z- Test analysis of the mean responses of students on the use of mobile devices for the learning of English language based on their institution.

Institutions	N	\bar{x}	SD	DF	Z-	Z-crit.	Sig.	Decision
					cal.			
Uniport	220	2.91	0.87					Significant;
				378	2.38	<u>+</u> 1.96	0.05	Reject Ho1
IAUE	160	3.13	0.90					

Source: Field Survey, 2020.

Data in Table 7 above revealed that, the z-calculated 2.38 is greater than z-critical value ± 1.96 , for degree of freedom 378 and 0.05 level of significance. This signifies that, the difference between male and female undergraduate students is significant at P = 0.05. Therefore, the null hypothesis is rejected.

Hypothesis 2: There is no significant difference on the perception of mobile device for learning among English language undergraduates based on gender.

Table 8: Z- Test analysis of the mean responses of students on the use of mobile devices for the learning of English language based on gender.

Gender	N	\bar{x}	SD	DF	Z- cal.	Z-crit.	Sig.	Decision
Male students	285	3.28	0.77		- Cur.			Not significant;
				378	1.55	±1.96	0.05	Accept Ho2
Female students	95	3.27	0.82					

Source: Field Survey, 2020.

Data in Table 4.8 above reveals that, z-calculated 1.55 is less than z-critical value ± 1.96 , for degree of freedom 378 and 0.05 level of significance. This implies that, the difference between male and female undergraduates' perception was not significant at P = 0.05 and the null hypothesis was upheld.

Hypothesis 3: There is no significant difference on the students' perception of the influence of Mobile Devices for the learning of English language based on their levels of study.

Table 9: ANOVA analysis of the mean responses of undergraduates on the use of mobile devices for the learning of English language based on their levels of study.

		Sum	of Df	Mean	F	Sig.
		Squares		Square		
YEAR2	Between Groups	157.717	3	52.572	24.467	2.021
	Within Groups	.000	123	.000		
	Total	157.717	126			
	Between Groups	42.394	3	14.131	16.349	.000
YEAR3	Within Groups	106.315	123	.864		
	Total	148.709	126			
	Between Groups	5.215	3	1.738	3.234	.025
YEAR4	Within Groups	65.586	122	.538		
	Total	70.802	125			

Source: SPSS version 21.

P is Significant at 0.05 (2-

Tails)

Data in the Table above demonstrated that the z-calculated 0.78 is greater than z-critical value ± 1.96 for degree of freedom 378 at 0.05 level of significance. This means that, there is no difference between the mean scores of male and female students on the perceived solutions to the problems associated with the use of Mobile Devices for the learning of English Language. Hence, the null hypothesis was accepted.

Discussion of findings

The findings of the table above indicate that students regularly access the phone applications. This is not far from the views of Lan & Huang (2012) that the ability of the students to access the applications, philosophy and standards of mobile device is what makes mobile learning acceptable to the learner community and increase the regularity of use. Also, Haruna et al (2016) who observed that having the tools as an integral part of the students' lives has made it easy for them to use it for numerous activities. How regularly the undergraduates use their mobile device invariably determines how familiar they become with the device and how well they maximize the benefits of the numerous applications in the learning of English language.

The findings of the research question two revealed that students could use it to explore some aspects of English language like conversation skills, oral English, verbal English, pronunciation of words and many more. The mean score for Conversation skills was the highest (3.63) probably because they related its relevance to the constant calls they make with their mobile device. This is not far from the understanding of Kim et al (2013) that having mobile device as an instructional as well as a communicative tool is a very convenient way, considering also the rate of advancement in technology which enables one to send instructional messages through text, voice or even images.

The finding of research question 3 showed that both male and female undergraduates of the tertiary institutions in Rivers State, to a high extent use mobile device to study English language.

Research question four observed that phones and tablets are commonly available while e-readers, robots, personal navigation display, Personal digital display and digital camcorders are not very common devices.

The identified problems of research question five are in line with Mutala(2004) who observed that the issue of inadequate funding drastically affect mobile learning and Osang et al(2013) who reiterate that not only does it affect teaching and learning but also the development of mobile learning in

Nigeria. Issa et al (2011) also has the opinion in their study that even if Nigerians decide to import mobile devices and the technology experts to maintain them, it remains challenging without the competent hands that would teach students with the tools.

The findings of research question six revealed among others, the need to make the device affordable for students. The finding has the support of Adeyeye et al (2013) who suggest that the success of mobile technology lies in making the technology available and giving support to concerned institution.

Conclusion

Based on the results of the study, the researcher concludes as follows: (1)that the perception of English undergraduates in Rivers state, on the use of Mobile Devices for learning differ from one another. (2) gender does not significantly influence the use Mobile Devices for learning among English undergraduates of Rivers State. (3) there is a significant difference in the perception of year two students of the influence of Mobile Devices for learning when compared with their year three and year four counterparts.

Recommendations

With due consideration to the findings of this research work, it is recommended that:

- 1. the university administration establishes an excellently equipped information and communication technology department which will serve as the centre for information distribution to students and lecturers.
- 2. the educators adopt educational theories that can enable them integrate the use of mobile device into the school curriculum and incorporate strategies to harness the potentials of the students as well as increase their quest to learn.
- 3. the school and home font synergize to ensure the students do not derail from the basic academic purpose of their mobile device.
- 4. the administrator continually train and retrain students and their instructors on the use of mobile devices for academic purposes by organising conferences, workshopsand talk shows.

References

Adeyeye, A.D., Jegede, O.O., Akinwale, Y.O. (2013). The Impact of Technology Innovation and R&D on Firms 'Performance: An

- *Empirical Analysis of Nigeria's Service Centre*. https://doi.org/10,22504/IJTLID.2013.060873.
- Andrew, L. Jacob, E. B, & Ary. C.K (2015). *The Relationship Between Cell Phone Use And Academic Performance:* In A Sample Of USA College Students. DO: 10.11.77/2158244015573169. Sgo.Sagepub. Com
- Dos, B. (2014). The Relationship Between Mobile Phone Use, Metacognitive Awareness and Academic Achievement. *European Journal of Educational research*, 3(4), 192-200. http://files.eric.ed.gov/fulltext/EJ1085990.pdf.
- El- Hussein, M. O. M., & Cronje, J. C. (2010). *Defining Mobile Learning in the Higher Education Landscape*. *Educational Technology & Society*, 13(3),12–21. http://www.ifets.info/journals/13 3/3.pdf.
- Haruna, R., Aisha I. M., Yunusa, U., & Hadiza, T. A. (2016). Impact of Mobile Phone Usage on Academic Performance among Secondary School Students in Taraba State, Nigeria. *European scientific journal*. 12(1).
- Ibeneme, R. U. (2020). Mobile Device and Academic Performance among English Language Undergraduates in Tertiary Institutions in Rivers State. (Unpublished Master's Thesis) Ignatius Ajure University, Rivers State.
- Issa, A.O., Ayodele, A.E., Abubakar, U., & Aliyu, M.B. (2011). *Application of Information Technology to Library Services at The Federal University of Technology*, Akure library, Ondo State, Nigeria. Library philosophy and practice, http://unllib.unl.edu
- Kim, D., Rueckert, D., Kim, D. J. & Seo, D. (2013). *Student' Perceptions and Experiences of Mobile learning. Language Learning & Technology*, 17(3), pp. 52–73. http://llt.msu.edu/issues/october2013/kimetal.pdf.
- Kuznekoff, J., & Titsworth, S. (2013). *The Impact of Mobile Phone Usage on Student Learning*. Communication Education, 62(3), 223-252.

- Lan, Y. F., & Huang, S. M. (2012). *Using Mobile Learning to Improve the Reflection: A Case Study of Traffic Violation*. Educational Technology & Society, 15(2), 179–193.
- Little, B. (2012). Effective and Efficient Mobile Learning: Issues and Tips for Developers. Industrial and Commercial Training 44(7).
- Mutula, S. (2004). IT diffusion in Sub-Saharan Africa: Implications for developing and managing digital libraries. New Library World, 105 (7/8), pp.281-289.
- Oblinger, D.G., & Oblinger, J. (2005). *Educating the next generation*. Boulder, Co: EDUCAUSE. http://www.educause.edu/ir/library/pdf/pub7101.pdf
- Osang, F. B., Ngole, J.& Tsuma, C. (2013). 'Prospects and Challenges of Mobile Learning Implementation in Nigeria. Case Study National Open University of NigeriaNOUN' International Conference on ICT for Africa, Harare Zimbabwe.
- Traxler, J. 2007. Defining, Discussing and Evaluating Mobile Learning: The moving finger writes and having writ....The International Review of Research in Open and Distance Learning 8 (2).
- West, D.M. (2013). *Mobile Learning: Transforming Education, Engaging Students, and Improving Outcomes*, Brookings Policy Report.