

WHATSAPP UTILIZATION AS A LEARNING TOOL FOR BIOLOGY STUDENTS IN FEDERAL COLLEGE OF EDUCATION, ABEOKUTA OGUN STATE, NIGERIA

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Abstract

This paper explored WhatsApp as a learning tool for biology students in Federal College of Education, Abeokuta; the role of WhatsApp in promoting learning cannot be overemphasized. WhatsApp plays an important role in education and most especially in exchanging of instant information among the students. The study is limited to only 200 level Biology students in Federal College of Education Abeokuta. The study adopted descriptive survey research design with a population of 100 biology students. A sample of 20 biology students was used from the School of Science, Federal College of Education Abeokuta. The sampling method used was random stratified sampling. Questionnaire was used for data collection. The results reveal that most biology students used WhatsApp to exchange educational texts and the major challenge encountered is the maintenance of the group for learning purposes. It is therefore recommended that Biology students should align their potential for significant and positive use of WhatsApp for learning. Institutions and government should create awareness or sensitization on the importance of WhatsApp to promoting teaching and learning and how to solve the challenges encountered when accessing WhatsApp through the internet.

Keywords: *WhatsApp, Learning tool and Biology students*

Introduction

Internet technologies are growing phenomenon and they are used in changes of communication and forms of sharing content among users. Social networking applications are extremely popular among younger users and are prevalent across the globe because they provide

accessible socialization. These technologies are changing the concept of user interaction based on their focus and customization which makes them relatable to every individual. Every day, there is an increase in the number of users of such social networking forums which predominantly provide interaction opportunities to individual and groups to understand different worldviews, discussing evolving and differing thought processes. The scope of such networking applications and software is not limited to socializing alone, but also has entered the sphere of education (Aktas & Can, 2019).

In education, one of the importances of social media or networking is to promote teaching and learning. Social media encompasses all the platforms and apps that allow people, creators and business to communicate with one another online, exchange ideas and share contents. Social media has completely revolutionized the way modern- day society communicates and share ideas, information and contents. Every social media platform works differently and has its own unique set of features which can be used in education. The social media includes Facebook, WhatsApp, Instagram, Telegram, goggle classroom, Twitter, Snapchat, TilTok etc.

Among the social media platforms is the WhatsApp tool that is widely used by different people to support their daily activities (Susilo & Sofiarini, 2021). WhatsApp tool can facilitate communication at the education sector by providing a channel through which teachers can achieve faster and seamless communication with students. It can also increase the level of communication between students in classroom situation. As of January, 2017, WhatsApp was rated as the most popular messaging application in the world. It is an Instant Messenger Technology such as SMS with internet data assistance with more attractive supporting features. (Kongchan 2018; Kurniawati, Maolida & Anjaniputra, 2018) The mobile application works across different operating devices IOS, Android, Windows and Java (Alsaleem 2016).

The use of WhatsApp has increased in recent years; the application has the potential to be used as a learning tool among students to boost their academic performance. On WhatsApp, there are different features that support the user to collaborate with others. There

is WhatsApp group, which can facilitate more than fifty students at once; a virtual classroom can be created using the WhatsApp group. WhatsApp groups have pedagogical, social and technological benefits to students. This application provides support in the implementation of collaborative learning. The WhatsApp group allows its users to deliver certain announcements, share ideas, learning resources and support online discussion (Amry, 2014).

WhatsApp tool has come out as a quicker way of sending instant messages and videos across the country. This aspect has resulted in WhatsApp being used much in higher learning institution as a collaborative learning tool, this is due to the fact that majority of students in institution of higher learning use smart phone for communication and for learning. In addition to that, a big number of youths are smart phones owners who are mostly found in institution of higher learning.

Hence, the WhatsApp tool being among educational tools that is freely available to use, has transformed communication to be a two-sided conversation, which is vital to students in learning environment especially students in institution of higher learning.

Purpose of the study

The main purpose of this study is to examine the WhatsApp as a learning tool for Biology students in Federal College of Education, Abeokuta. The study also aimed at;

1. The purpose for which Biology students used WhatsApp for in Federal College of Education, Abeokuta
2. Identify the challenges encountered by Biology Students of Federal of College, Abeokuta in using WhatsApp for learning.

Research Questions

The following research questions are raised for this study;

1. What are the purposes for which Biology students used WhatsApp for in Federal College of Education, Abeokuta?
2. What are the challenges encountered by Biology students of Federal College of Education, Abeokuta in using WhatsApp for learning?

Methodology

Descriptive research design was adopted for the study. Descriptive research design was used because it is analytical and focused in the existing variables without manipulation. Questionnaires were used for data collection.

Population for the study

The population for this study comprises of 200 level Biology students of Federal College of Education, Abeokuta, Ogun State. The total number of Biology students in the school of science is hundred (100) students.

Sample and Sampling Techniques

Random stratified technique was used to draw the sample from the population of 100 Biology students at the School of Science, Federal College of Education, Abeokuta, Ogun State. The formula for sampling is given as follows

$$S.F = n/N$$

Where, n = the size of the sample to be drawn

N = the population from which the sample is to be drawn

Therefore, the sample fraction is

$$20/100 = 1/20$$

Random stratified sampling technique was adopted to select the Biology students at the School of Science such that each strata will contribute one-twentieth of its size to the sample. This will resulted into a representative sample of 20 Biology students .Questionnaire will be used in collecting data from the respondents for this study. The questionnaire will be WhatsApp as a learning tool for Biology students (WLTBS). The questionnaires are self structured questionnaire which will be administered to Biology students of the School of Science, Federal College of Education, Abeokuta, Ogun State.

The content validity of the instrument was sought by expert's judgment. The instrument was validated through experts in the Department of Curriculum Studies and Educational Technology, Federal College of Education, Abeokuta for logical analysis of the content or the items that make up the construct.

The first section of the questionnaire contains the bio-data variable of the students such as age and gender. The second part of the questionnaire will contain the structured questions and the likert scale ranging from Strongly Agree (SA)(4), Agree (A)(3), Disagree(D)(2), Strongly Disagree (SD)(1)

The trial testing was carried out on 5 Physics students to find out the reliability coefficient of the scale. The data collected will be subjected to Cronbach Alpha of 0.71

RESULTS

Research question one: For what purposes do Biology students use WhatsApp for?

Table 1: *Purposes of using WhatsApp*

ITEMS	SD	D	A	SA	Sum	Mean	Ranking
For exchanging educational text	1	1	26	22	169	3.38	1 st
For boosting students’ creativity	4	3	28	15	154	3.08	6 th
For discussing ideas and assignments	1	0	29	20	168	3.36	2 nd
For sending educational videos and photos	1	5	20	24	167	3.34	3 rd
Enables sharing of files	1	2	27	20	166	3.32	4 th
For tutorials and lectures	1	1	29	19	166	3.32	4 th

Table 1: presents the analyses of Purposes of using WhatsApp or reasons why biology students use WhatsApp. Form the table, students used WhatsApp mostly for exchanging educational text (3.38). Furthermore, other students’ purpose of using WhatsApp include For discussing ideas and assignments (3.36), For sending educational videos and photos (3.34), enables sharing of files (3.32), for tutorials and lectures (3.32) and for boosting students’ creativity (3.08).

Overall, students mostly use WhatsApp for exchanging educational text while they least use it for boosting their creativity.

Research questions two: What are the challenges of using WhatsApp for learning?

Table 2: *Challenges of using WhatsApp for learning*

ITEMS	SD	D	A	SA	Sum	Mean	Ranking
Lack of internet facilities	1	7	22	20	161	3.22	2 nd
Access to smart phones	1	7	23	19	160	3.20	3 rd
Erratic power supply	0	8	27	15	157	3.14	4 th
Lack of technical know-how	3	12	18	17	149	2.98	6 th
Time consuming	4	7	22	17	152	3.04	5 th
Group maintenance	0	9	19	22	163	3.26	1 st

Table 2: presents the challenges of using WhatsApp for learning. Form the table, the main challenge is group management (3.26). Other challenges using WhatsApp for learning based on their hierarchy include lack of internet facilities (3.22), access to smart phones (3.20), dilapidated power supply (3.14), time consumption (3.04) and lack of technical know-how (2.98).

Overall, students'' main challenge of using WhatsApp for learning is how they manage the group while the least challenge is their lack of technical know-how.

Discussion of Findings

Results of the study arrived at students mostly use WhatsApp for exchanging educational text while they least use it for boosting their creativity according to research question one. In accordance with Armry (2014) which states that WhatsApp group allows its users to deliver certain announcements, share ideas, learning resources and support online discussion

Research question two stated that the main challenge encountered by biology students using WhatApp for learning is how they manage the group and least challenge is their lack of technical know-how.

Conclusion

This paper was conducted on Biology students' use of WhatsApp for learning in Federal College of Education, Abeokuta. The data for the study was collected through the use of questionnaire. Based on the findings, the following was put forth;

- 1. WhatsApp is used majorly among Federal College of Education Biology students for learning

2. The purpose for which Biology Students used WhatsApp for is exchanging of educational texts.
3. The challenge encountered by Biology Students of Federal College of Education Abeokuta using WhatsApp is how they group is been managed for learning.

Recommendations

The following was therefore recommended;

1. It is recommended that Biology students should align their potential for significant and positive use of WhatsApp for learning.
2. Biology students must realize that WhatsApp is a very good platform for sending educational texts and discussion
3. Institutions should create awareness or sensitization on the importance of WhatsApp to promoting teaching and learning.
4. Government should provide internet facilities in the school premises for students to have easy access to WhatsApp so as to curb some of the challenges encountered by students.

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