

**Teachers Perceived Adoption of Whatsapp as an Educational Tool for Curriculum Content Delivery in Calabar Municipality of Cross River State, Nigeria**

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**Abstract**

This study assessed teachers perceived adoption of WhatsApp as an educational tool and curriculum content implementation in Calabar Municipality in Cross River State, Nigeria. One purpose of the study was stated and converted into one research question. Literature review was carried out based on the variable under study and the descriptive survey research design was used in the study. The accidental sampling techniques was used in the study. The method of data collection was a ten items four point rating scale questionnaire. A sample of 162 respondents was used in the study and the reliability index of the instrument was .85 using the Cronbach Alpha Reliability method. The statistical tool for data analysis was the descriptive statistics of mean and standard deviation. The result of the study showed that teachers often adopt WhatsApp as an educational tool in curriculum content delivery in Calabar Municipality of Cross River State, Nigeria. Based on the finding of the study, it was recommended that government should ensure that school authorities regularly organize

in-service training to train and retrain teachers on current trends in the adoption of whatsapp technologies in the classroom.

**Keywords:** Teachers, WhatsApp, Curriculum content implementation, Social media adoption, Secondary Schools

### **Introduction**

The importance of education to mankind in whatever form cannot be over emphasized most especially in this scientific and technological era as education is a major tool for national development. This assertion is in line with the assertion of the National Policy on Education (FRN, 2013) which stresses that education is an important instrument of change. Therefore, in this current situation of technological growth, Nigeria's dream of educational change will not be achieved without upgrading the state of our educational system at all levels this is because in recent times, technology has permeated every facet of life even the classroom is not left out.

There has been a lot of researches on the challenges of effective curriculum content delivery in secondary schools, some schools of thought have opined that it is due to the dearth of textbooks and obsolete instructional materials in our higher institutions that challenges of effective implementation of curriculum contents keep persisting. There are various definitions of curriculum. Egan (1978, p.16) described curriculum as 'the study of any and all educational phenomena'. Similarly, Bates (2016) regarded curriculum as all the planned and delivered learning experiences. Gwele (2015) referred to curriculum as 'planned learning experiences that the educational institution intends to provide for its learners'. Goodson (2014) defined curriculum 'as a multifaceted concept, constructed, negotiated and renegotiated at a variety of levels and in a variety of arenas'. Although there is no consensus on the definition of curriculum, the above definitions reflected that curriculum is complex and interactive in nature.

The world is ever changing due to the advancement in the realm of science and technology. Some of the most prominent technological innovations are smart phones, laptops and using the internet. They have greatly affected many aspects of our lives. Today the internet continues to grow day by day at an incredible speed. About 37% of the world's population has access to the internet (Howe, 2012). These days it seems hard to escape presence of technology. WhatsApp is one of the changes in technology that is commonly used on specific mobile phones and computers (Cohavi, 2013). This generation that is deeply involved in social media usage as a means of communication, interaction entertainment and collaboration and even for business purposes. The Teacher also must adopt this media that has so engaged these students to reach out to them, create educational content and help implement curriculum.

WhatsApp is a Smartphone application that operates on nearly all current types of devices and operating systems. The application has been on the market since 2010; the declared purpose of the developers was to replace the existing SMS platform for a system that is free of charge in ad-free environment. As a means of sending and receiving messages to and from individuals or groups, WhatsApp includes a variety of functions, such as text messages, attached images, audio files, video files and links to web addresses. Everyday an average of 31 billion messages are sent (Tzuk, 2013). According to Bere (2013), class WhatsApp groups are used for four main purposes: communicating with students; nurturing the social atmosphere; creating dialogue and encouraging sharing among students; and as a learning platform.

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The abysmal performance of students in academics has been linked to many variables such as poor teacher and students' relationship, teachers' teaching method, learning materials, teachers' and students' attitude and learning styles (Dikko, 2019). Aderogba (2012), vouched for effective teaching and learning about geography in Nigerian schools; and was quick to suggest the use of modern technologies. The use of WhatsApp in teaching and learning in our secondary schools is not a luxury but seems to be a necessity. Several efforts have been made by government at all level overtime. These efforts include the introduction of the Universal Basic Education Intervention programmes with the objective to carrying out staff training and development, provision of infrastructures, reading and writing materials, conference attendance and so on. Government has encouraged in-service training and retraining for teachers. Workshops, seminars and other training have also been encouraged. Payments of adequate salaries and so on. But in spite of all these enormous efforts made by government, there has been no serious improvement as it concerns effective curriculum contents delivery in Public Secondary Schools of Cross River State, Nigeria. It is based on this problem and background that this paper examined teachers perceived adoption of WhatsApp as an educational tool and curriculum content delivery in Calabar Municipality of Cross River State, Nigeria.

### **Purpose of the study**

The purpose of this study is to examine teachers perceived adoption of WhatsApp as an educational tool and curriculum content delivery in Calabar Municipality of Cross River State, Nigeria.

### **Research questions**

How often do teachers adopt WhatsApp as an educational tool in curriculum content delivery in Calabar Municipality of Cross River State, Nigeria

### **Literature review**

QAA (2011) further stated that all interactions among students and staff should be based on mutual dignity and respect and that the environment should be safe for exploring new ideas and providing feedback. Using technology to enhance learning can be an important means to encourage students to engage fully in their learning (QAA, 2011). Hammersley, Tallantyre and Le Cornu's (2013) guide commissioned by the Higher Education Academy (HEA) also claimed that through technology, institutions can offer a contemporary learning environment to meet the needs and expectations of learners. The popularity of new communication tools such Facebook, Whatsapp, Skype etc have redefined modes of instructional delivery (Akpan & Ezinne, 2017). Fraser and Dutta (2008, cited in Akpan and Ezinne, 2017, p.44) pointed out some of the advantages of social networking sites: 'Creation of communication and collaborative forum for learners; improvement of social relationship among learners; sharing of information like video, audio, text, photos etc'.

Compared to traditional learning management systems that provide less opportunities for learners to develop and maintain their own learning activities, learning platforms based on social media paradigms place the control of learning into the hands of the learner (Li et al., 2012). Among them, Whatsapp has been regarded as one of the most effective collaborative tools for teaching and learning, and it can help students to construct their own knowledge, enhance their communication,

creativity, critical thinking and problem-solving skills (Akpan & Ezinne, 2017). Rambe (2012) claimed that social media provides teachers with personalised learning environments for diagnostic and prognostic assessment of students' mastery of content and deep learning. Amry (2014) explored the impact of using Whatsapp mobile learning activities on the achievement and attitudes of online students using mobile devices at the university and her study demonstrated the effectiveness of a Whatsapp learning group in comparison to face-to-face learning in the classroom.

Plana et al. (2013) examined the use of Whatsapp in English language studies among students in Spain and their findings showed that students reported a rise in motivation and a greater enthusiasm for reading in a foreign language. Whatsapp has become a shared platform that enhances accessibility, encourages cooperation, and intensifies motivation to take an active part in academic assignments (Rambe and Bere, 2013). Although the use of Whatsapp has proved to be effective in enhancing students' learning, it also has its weaknesses. Tulika and Dhananjay (2014) concluded that a small number of married students felt that learning everywhere and anytime occasionally disrupted their family life. A study by Gon and Rawekar (2017) concluded Whatsapp could be problematic in so much students felt overwhelmed by message flooding and even eye strain.

A related study by Etim, Udosen and Ema (2016) examine the effect of WhatsApp utilization on academic performance of geography students in secondary schools in Uyo Educational Zone, Akwa Ibom State-Nigeria. The study adopted the pre-test-post-test non randomised control group design. Two research hypotheses were formulated to direct the study. 180 geography students were drawn from two schools out of 13 public secondary schools in the study area and used for the study. Two research instruments namely; Geography Performance Test (GPT) and Teachers Attitude Towards the use of WhatsApp Questionnaire (TATWAQ) were used to gain data for the study. The instruments were validated by experts in geography and Measurement and Evaluation and had a reliability co-efficient of .72 and .86 respectively for (GPT) and (TATWAQ). The two experimental groups were treated with WhatsApp instructional module and the other two control groups were taught using expository instructional strategy. The analysis of data showed a significant effect of use of WhatsApp module on academic performance of geography students. The study also showed the Teachers attitude to the use of WhatsApp Instructional module affect students' academic performance in Geography. Based on the findings, it was recommended among others; teachers should be trained on the use of WhatsApp chat room in their lesson delivery and also that social media resource materials should be provided in schools for teachers and students to use chat rooms in teaching and learning.

Ajuwon, Pimmer, Odetola, Gröbriel, Oluwasola and (2018) determine the feasibility of using the Mobile Instant Messaging (MIM) platform, WhatsApp, to provide supervision and support for student nurse tutors during a teaching practice placement in Nigeria. A descriptive qualitative method was used to design and evaluate a six-week WhatsApp group discussion intervention among 19 student nurse tutors. Two pre-intervention focus group sessions (n=9 and n=10) and a workshop were conducted to assess the students' content needs and media usage, and to develop a short online supervisory curriculum. To evaluate the intervention, two focus group sessions (n=9 and n=9) were carried out, transcribed verbatim, and analysed together with the actual WhatsApp conversations using thematic content analysis. The participants found the WhatsApp-enabled learning space valuable, in particular for the transfer and application of knowledge in their day-to-day teaching practice and, more generally, for their professional development. There were rich and multifaceted

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indicators of learning and professional development in evidence which were mostly triggered by specific facilitation techniques. The four themes from the WhatsApp conversations are: (1) sharing and discussing “tricks of the trade”; (2) providing direction and triggering reflective (teaching) practice; (3) sparking professional discussions and announcing professional development opportunities; and (4) maintaining a continuous moderating and teaching “presence”. Despite some technical challenges centred mainly on the accessibility of the MIM space, the study identified indicators of good supervision practice and the results point to the feasibility and value of MIM to enhance supervision during teaching practice.

Cifuentes and Lents (2011) reported that about seventy percent of students are benefiting from the application of whatsapp to education compared to physical classroom lectures. This implies that whatsapp is convenient for teaching and learning in tertiary institutions particularly, in this era of COVID-19 pandemic. To buttress this fact, Johnson and George (2014), reported that student could remain at various geographical locations and share unlimited ideas through lecture, text messages, making voice calls and uploading documents and images, at a relatively lower cost compared to the transportation costs required for students to connect on their university campuses for discussion.

In an extensive study carried out by Barhoumi (2015), whatsapp was found effective in enhancing students learning through discussions and collaboration at home in a blended mobile lecture, which facilitates the creation of a class publication from course modules for students to edit collaboratively. Given the growing and diverse use of zoom cloud application and whatsapp, a social media with accessible, cheap and fast functions across ages, it has become important to explore how it can positively enhance the academic instructional delivery in university business education classroom. In consonance, Mbah (2016), indicated that technology-based multimedia (zoom and whatsapp inclusive) can improve learning and retention of material presented during a class session or individual study period, as compared to traditional lectures or study materials that do not use technology. Sullivan (2012), highlighted the following advantages of using zoom cloud application and whatsapp technology: increase in students interest and motivation, support a deeper processing of the information presented, the technological learning environments enable instruction that is adapted to the learners preferences and cognitive needs.

However, researchers like Crompton (2013) and Cohari (2013) observed that the misapplication of whatsapp conference video calls in teaching and learning may induce disorientation and cognitive overload that could interfere with learning rather than enhance learning. In spite of the short falls that might arise from the misapplication of whatsapp in teaching and learning in classroom, studies by Chipunza (2013), and Mbah (2016), have confirmed that the utilization of whatsapp video conferencing in the classroom would provide the teachers with a more effective way to transfer knowledge and information to students, and also enable the students to learn in a more productive way.

### **Methodology of the research**

The descriptive survey research design was utilized in the study. The design is concerned with critical analysis of the characteristics of the entire population through a selected sample. The design was also considered appropriate for this study as it allows the researcher to assess views, beliefs, emotions, perception and interaction of respondents. The area of the study is Calabar Municipality Local Government Area of Cross River State. The study area has a projected

population of 1,623 public secondary school teachers (Cross River State Secondary Education Board, 2021). There are sixteen (16) public secondary schools in Calabar Municipal Local Government Area. Accidental sampling technique was used to sample 162 respondents. A validated 10 items four point modified likert scale questionnaire titled; Perceived adoption of WhatsApp and curriculum content delivery Questionnaire (PAWCDQ)" was used for the collection of data. The instrument was divided into two parts. Part A and B. Part "A" was a personal bio-data of the respondents qualification, gender and Age. while Section "B" is a 10 items questions on teachers perceived adoption of WhatsApp. The instrument's reliability index was .85 when checking the degree of consistency of the instruments using Cronbach Alpha reliability method. The statistical tool for data analysis was the descriptive analysis of mean and standard deviation.

### **Result/Discussion**

The result from the data analysis was better presented in order of the research questions for better understanding of the result. Therefore, the result is presented and interpreted according to the analysis from the data collected for each research question. The descriptive analysis of frequency, percentage (%), mean ( $\bar{x}$ ) and standard deviation ( $S^2$ ) was employed for each item to answer the research question.

This research question is interested in assessing how often teachers adopt WhatsApp as an educational tool in curriculum content delivery in Calabar Municipality of Cross River State, Nigeria. The result is presented in Table 1.

The responses of the respondents indicate that 85 respondents representing 52.2%, 34 respondents representing 21.0%, 28 respondents representing 17.3% and 15 respondents representing 9.3% agreed that they frequently, most times, sometimes and not at times respond to their students questions for better understanding in the group . The mean and standard deviation ( $\bar{x} = 3.17$ ,  $S^2 = 1.02$ ) indicates that teachers often adopt WhatsApp as an educational tool in curriculum content delivery in the research area.

The responses of the respondents also indicate that 35 respondents representing 21.6%, 81 respondents representing 50.0%, 33(20.4) and 13 respondents representing 8.0% agreed that they frequently, most times, sometimes and not at times share some videos that will be more explanatory to their students. The mean and standard deviation ( $\bar{x} = 2.85$ ,  $S^2 = .85$ ) indicates that teachers often adopt WhatsApp as an educational tool in curriculum content delivery in the research area.

Furthermore, the responses of the respondents indicate that 38 respondents representing 23.5%, 64 respondents representing 39.5%, and 60 respondents representing 37.0% respectively agreed that they frequently, most times, sometimes and not at times respectively give instruction on how assignments should be submitted. The mean and standard deviation ( $\bar{x} = 2.86$ ,  $S^2 = .77$ ) indicates that teachers often adopt WhatsApp as an educational tool in curriculum content delivery in the research area.

Again, the responses of the respondents indicate that 50 respondents representing 30.9%, 61 respondents representing 37.7%, 35 respondents representing 21.6 and 16 respondents representing 9.9% respectively agreed that they frequently, most times, sometimes and not at times respectively that they share some materials that they have downloaded for their students. The mean and standard deviation ( $\bar{x} = 2.99$ ,  $S^2 = .96$ ) indicates that teachers often adopt WhatsApp as an educational tool in curriculum content delivery in the research area.

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The responses of the respondents again indicate that 71 respondents representing 43.8%, 33 respondents representing 20.4%, 24 respondents representing 14.8 and 34 respondents representing 21.0% respectively agreed that they frequently, most times, sometimes and not at times that they review most of the difficult topics taught in class in the group. The mean and standard deviation ( $\bar{x} = 2.87$ ,  $S^2 = 1.19$ ) indicates that that teachers often adopt WhatsApp as an educational tool in curriculum content delivery in the research area.

Considering the grand mean of 2.93 as against expected mean of 2.5, the research question can therefore be answered that teachers often adopt WhatsApp as an educational tool in curriculum content delivery in Calabar Municipality of Cross River State, Nigeria. The finding of this result is in line with Mbah (2016) that technology-based multimedia can improve learning and retention of material presented during a class session or individual study period, as compared to traditional lectures or study materials that do not use technology. This is also in line with Rambe (2012) that social media provides teachers with personalised learning environments for diagnostic and prognostic assessment of students' mastery of content and deep learning. Cifuentes and Lents (2011) reported that about seventy percent of students are benefiting from the application of whatsapp to education compared to physical classroom lectures. This implies that whatsapp is convenient for teaching and learning in tertiary institutions particularly, in this era of COVID-19 pandemic. To support this result, Johnson and George (2014), reported that student could remain at various geographical locations and share unlimited ideas through lecture, text messages, making voice calls and uploading documents and images, at a relatively lower cost compared to the transportation costs required for students to connect on their university campuses for discussion.

However, the result of researchers like Crompton (2013) and Cohari (2013) contradict this study that the misapplication of whatsapp conference video calls in teaching and learning may induce disorientation and cognitive overload that could interfere with learning rather than enhance learning. In spite of the short falls that might arise from the misapplication of whatsapp in teaching and learning in classroom, studies by Chipunza (2013), and Mbah (2016), have confirmed that the utilization of whatsapp video conferencing in the classroom would provide the teachers with a more effective way to transfer knowledge and information to students, and also enable the students to learn in a more productive way.

**TABLE 1**  
**Descriptive analysis of teachers' perceived adoption of WhatsApp as an educational tool and curriculum content delivery**

S/ N	Variable Items	Freq (%)	MT (%)	ST (%)	NAT (%)	$\bar{x}$	SD	Remarks
1.	How often do you use WhatsApp to; Respond to your students questions for better understanding in the group	85(52.5)	34(21.0)	28(17.3)	15(9.3)	3.17	1.02	Often

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2.	Share some videos that will be more explanatory to the students	35(21.6)	81(50.0)	33(20.4)	13(8.0)	2.85	.85	Often
3.	Give instruction on how assignments should be submitted	38(23.5)	64(39.5)	60(37.0)	0(0)	2.86	.76	Often
4.	Share some materials that you have downloaded for your students	50(30.9)	61(37.7)	35(21.6)	16(9.9)	2.90	.96	Often
5.	Review most of the difficult topics taught in class in the group	71(43.8)	33(20.4)	24(14.8)	34(21.0)	2.87	1.19	Often
<b>Grand Mean = 2.93</b>								

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### Conclusion

Based on the finding of the study, it was concluded that teachers often adopt WhatsApp as an educational tool in curriculum content delivery in Calabar Municipality of Cross River State, Nigeria.

### Recommendations

Based on the finding of the study, it was recommended that government should ensure that school authorities regularly organize in- service training to train and retrain teachers on current trends in the adoption of whatsapp technologies in the classroom.

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